

The Impact and Cost of International Terrorism  
on the Economies of the  
United States and the European Union:  
2001 - 2004<sup>1</sup>

by  
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## I. Introduction

Although the terrorist attacks of September 11<sup>th</sup>, 2001 on the Twin Towers and the Pentagon have by far not been the only attacks committed by international terrorists, they have been the most influential on the economies of the United States of America and the European Union. The reason why no other terrorist attack affected the Western economies as highly as 9/11 is that for the first time the country with the strongest economy in the world, the United States, was directly attacked. Therefore, the material presented in this paper mostly relates to the impact of September 11<sup>th</sup>. However, it also takes into account the outlook of further acts of terrorism all over the world, the cost of prevention measures, the impact of terrorism within the European Union's boundaries, and the cost of the aftermath of the September 11 attacks.

The most significant impacts of the September 11<sup>th</sup> attacks and other terrorism related problems are being felt by the airline sector and the tourism industry. Although other sectors have to manage the problems of September 11<sup>th</sup> as well, this paper concentrates on those two main industries and the problems and costs facing those industries. The terrorism attacks of 9/11, however, did not only produce a negative impact on the economy. There are sectors like the Defense and Security industry which profited, and still profit, from increased defense spending and a higher demand for security equipment.

## II. The airline industry

### i. United States

Not only the 9/11 terrorist attacks, but also the war in Iraq and the continuing occupation as well as the threat of new terrorist acts, the persistent war on terrorism and lately the continuing rise in fuel prices have had a powerful impact on the airline industry. In 2000 Commercial Aviation Facilities contributed about \$800 billion<sup>2</sup> to the United States Gross Domestic Product (GDP), which equals a share of 8%<sup>3</sup>.

After September 11, 2001, the air transportation system was completely shut down for four days, costing the airline industry an estimated \$1.4 billion, although this estimate might be calculated too high.<sup>4</sup> From 2000 to 2001 the total number of employees by US airlines have decreased from 732,049 (2000) to 653,488 (2001). Another reduction caused the number to drop to 642,797 in 2002. Therefore, 89,252 employees have been terminated in the two years following the terrorist attacks<sup>5</sup>. This figure does show the lay-off of about 100,000 employees right after 9/11. Departures of US airlines dropped from 706,038 in August 2001 to 528,731 in September 2001 due to the terrorist attacks, which

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<sup>2</sup> All prices are in US dollars if not indicated otherwise.

<sup>3</sup> *see graph (Appendix (1))*: Commercial Aviation Facilitates Economic Growth, Air Transport Association of America, Inc., Statement on the State of the Airline Industry, 3 June 2004, p.8, available from [http://www.air-transport.org/ga/files/State\\_of\\_the\\_Industry\\_Statement\\_rev.pdf](http://www.air-transport.org/ga/files/State_of_the_Industry_Statement_rev.pdf). Internet accessed 9 October, 2004

<sup>4</sup> “The actual loss from the four-day shut down was probably between \$850 million and \$1.1 billion, not the \$1.4 billion estimated by the industry.” Assessing Losses for the Airline Industry and Its Workers in the Aftermath of the Terrorist Attacks, Joint Economic Committee (Democratic Staff), Senator Jack Reed – Vice Chairman, p. 1, 3 October 2001, available from <http://jec.senate.gov/democrats/Documents/Reports/airlinebailout1.pdf> ; Internet accessed on 10 October 2004

<sup>5</sup> Number of Employees, Certified Carriers, Year End Data 2000- 2002, Bureau of Transportation Statistics, summary from [http://www.bts.gov/programs/airline\\_information/number\\_of\\_employees/certificated\\_carriers/2000emp.html](http://www.bts.gov/programs/airline_information/number_of_employees/certificated_carriers/2000emp.html);  
[http://www.bts.gov/programs/airline\\_information/number\\_of\\_employees/certificated\\_carriers/2001emp.html](http://www.bts.gov/programs/airline_information/number_of_employees/certificated_carriers/2001emp.html);  
[http://www.bts.gov/programs/airline\\_information/number\\_of\\_employees/certificated\\_carriers/2002emp.html](http://www.bts.gov/programs/airline_information/number_of_employees/certificated_carriers/2002emp.html).

means a decrease of approximately 25%. Simultaneously, passenger revenue decreased from around \$66.7 billion to \$38.0 billion in only one month, a 43.2% decrease<sup>6</sup>.

Even in 2004, statistics show that airline revenues remain still far below the pre-9/11 levels. According to the Bureau of Transportation Statistics, in the second quarter of 2001, U.S. airlines had total operation revenues that were just under \$129 billion, while in the second quarter of 2003 quarterly revenues fell as low as \$104 billion. In the first quarter of 2004, revenues could be raised to just under \$120 billion. However, this figure is still \$9 billion less than the level of revenue before the 9/11 attacks. While the airline industry still incurs losses on a net basis, the first quarter of 2004 has been the first time since 9/11 that the industry – not every airline by itself - has earned an operating profit instead of a loss<sup>7</sup>.

After September 11, 2001, Congress passed the Aviation and Transportation and Security Act (ATSA), which made aviation security part of national security, and also established the Transportation Security Administration (TSA). The TSA provides airline passenger and baggage screening, a service previously provided by air carriers. By charging airlines Aviation Security Infrastructure Fee (ASIF), TSA is paying for the increased security measures<sup>8</sup>. An industry's estimate calculates the cost to support the TSA to be \$4.5 billion annually, plus another \$7 billion to ensure airport and cargo security: \$4 billion will be needed to secure airport perimeters and personnel while \$3

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<sup>6</sup> Airline Travel Statistics, September 2001, Major Form 41 Carriers and Percent Change from August 2001, Bureau of Transportation Statistics, available from [http://www.bts.gov/programs/airline\\_information/indicators/airtraffic/special/sept\\_traffic.html](http://www.bts.gov/programs/airline_information/indicators/airtraffic/special/sept_traffic.html); Internet accessed on 10 October 2004.

<sup>7</sup> Ackman, Dan, "For Airlines, It's Still 9/11", *Forbes.com*, 13 September 2004, available from [http://www.forbes.com/2004/09/13/cx\\_da\\_0913topnews.html](http://www.forbes.com/2004/09/13/cx_da_0913topnews.html); Internet accessed 10 October 2004.

<sup>8</sup> Aviation Security Infrastructure Fees (Air Carrier Fees), Transportation Security Administration, available from [http://www.tsa.gov/public/interapp/editorial/editorial\\_0238.xml](http://www.tsa.gov/public/interapp/editorial/editorial_0238.xml); Internet accessed 10 October 2004.

billion go toward cargo security measures<sup>9</sup>. Moreover, in 2004 a 138% increase in the taxes, that are paid by airlines under the ASIF program, are debated by Congress.

Another financial burden for the airline industry in connection with terrorism is the expiration of the Federal War-Risk Insurance Program. The Federal Aviation Administration (FAA) currently provides “war risk hull loss and passenger, crew and third-party liability insurance as required by the Homeland Security Act of 2002”. However, this program is to be discontinued by December 31, 2005<sup>10</sup>. Air carriers are mandated to have war-risk coverage. Since this kind of insurance has been provided by a federal program up until now, no competitive or reliable market has been developed. Furthermore, the existing war-risk insurance providers accommodate only limited utility. Therefore, a private war-risk insurance program will cost the airline industry several hundred millions of dollars annually.

Due to persisting terrorist warnings, security mandates and measures inflicted upon the airline industry are still on the rise. Although the federal government put aviation security under national security, those new measures are not funded by the federal government. Not only do airlines incur greater out-of-pocket costs by paying for those measures, they are also foregoing important revenues. The Air Transportation Association (ATA)<sup>11</sup> names some of those mandates which include “maintaining ‘watch lists’; employing staff to verify documents at checkpoints and monitor exit lanes; conducting employee background checks; enhanced security training; modifying aircraft

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<sup>9</sup> Gillies, Andrew T., “Business In The Beltway - Airlines: Too Much Security?” *Forbes.com*, 1 September 2004, available from [http://www.forbes.com/services/2004/09/01/cz\\_ag\\_0901beltway.html](http://www.forbes.com/services/2004/09/01/cz_ag_0901beltway.html); Internet accessed 10 October 2004.

<sup>10</sup> “Extension of Coverage of the FAA War Risk Insurance until December 31, 2004”, FAA Aviation War Risk Insurance Program Office, [FAA.gov](http://insurance.faa.gov/), available from <http://insurance.faa.gov/>; Internet accessed on 10 October 2004

<sup>11</sup> ATA represents 14 passenger and 8 cargo U.S. airlines (plus 5 non-U.S. airlines)

cabins; cargo screening on passenger airplanes; screening of private charter passengers and baggage; screening catering supplies; ramp/airplane/airfield security procedures; and crew manifest security procedures”<sup>12</sup>. In addition, airports are also not reimbursed by the federal government for increased security costs. By passing on the cost to the airlines in the form of higher landing fees and terminal charges, airports do get compensated for their costs, while the airline industry again is left with even more costs to cope.

Finally, another by-product of the 9/11 terrorist attacks continues to have a great impact on the airline industry: a constant increase in fuel prices. The average price per barrel of oil rose to an average \$31 in 2003 from an approximately \$26 average in 2002. The ATA expects a \$38 average per barrel for 2004<sup>13</sup>. On October 1, 2004 crude oil prices rose above \$50 closing at \$50.12 per barrel at the NYMEX (New York Mercantile Exchange)<sup>14</sup>. Due to this increase in fuel prices, the International Air Transport Association (IATA) predicts a total increase in costs of \$3-4 billion for US and international airlines for this year (2004). This means that gains made by cutting various costs, will likely be outweighed by high fuel prices.<sup>15</sup> American Airlines for example, recovering from Chapter 11 bankruptcy in part due to the aftermath of the 9/11 terrorist attacks, could face up to \$400 million in extra fuel expenses. Chief Financial Officer

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<sup>12</sup> Statement on the State of the Airline Industry, Air Transportation Association of America, 3 June 2004, p.14/15, available from [http://www.air-transport.org/ga/files/State\\_of\\_the\\_Industry\\_Statement\\_rev.pdf](http://www.air-transport.org/ga/files/State_of_the_Industry_Statement_rev.pdf); Internet accessed 10 October 2004

<sup>13</sup> Post-2001 Fuel Prices Soaring to Record Highs, Air Transport Association of America, Inc., Statement on the State of the Airline Industry, 3 June 2004, p.16. [http://www.air-transport.org/ga/files/State\\_of\\_the\\_Industry\\_Statement\\_rev.pdf](http://www.air-transport.org/ga/files/State_of_the_Industry_Statement_rev.pdf).

<sup>14</sup> “Crude oil closes at record high of \$50.12 per barrel.” newratings.com, 1 October 2004, available from [http://www.newratings.com/analyst\\_news/article\\_474057.html](http://www.newratings.com/analyst_news/article_474057.html); Internet accessed 10 October 2004.

<sup>15</sup> “High fuel prices to cost airline industry up to \$4 bn this year.” Newratings.com, 28 September 2004, available from [http://www.newratings.com/analyst\\_news/article\\_472143.html](http://www.newratings.com/analyst_news/article_472143.html); Internet accessed 10 October 2004

James Beer claims that “Each cent rise in a gallon of jet fuel adds about USD\$33 million to its expenses”<sup>16</sup>.

ii. European Union

The European Union’s airline industry was faced with the same problems the US airlines battle with: huge losses in revenue due to public fears about the safety of air travel, heightened security expenditures and more expensive insurance costs, as well as the increase in fuel prices.

Without a combined annual GDP it is hard to calculate the impact of terrorism in the field of aviation for the European Union as a whole. But certain examples clarify that the same trend can be observed in Europe as it can in the United States. As a direct impact of the September 11 attacks most of the large airlines laid-off employees.

According to BBC News bankrupt Sabena and Swissair cut 12,000 and 9,000 employees respectively. While British Airways cut 7,000 jobs immediately, it might lay-off another 10,000 soon. Although German airline Lufthansa was the only large European carrier that did not cut staff right after 9/11, it is considering a 4,000 employee lay-off for the near future<sup>17</sup>. Right after the attacks Italy’s Alitalia imposed a “crisis surcharge” of \$5.50<sup>18</sup> for each leg of an air journey. Although it has always struggled to make a profit rather than a loss in the past 12 years, the pressure of terrorism, rising fuel prices combined with the

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<sup>16</sup> “American Air Hit Hard By Fuel Prices.” Airwise (Reuters), 16 April 2004, available from <http://news.airwise.com/stories/2004/04/1082069781.html>; Internet accessed on 10 October 2004

<sup>17</sup> “Aviation job losses reach 400,000.” BBC News, 21 January 2002, available from <http://news.bbc.co.uk/1/hi/business/1773253.stm>; Internet accessed on 10 October 2004.

<sup>18</sup> Hayes, Harry. “Economic Costs of Terrorism.” International Review. 29 January 2002. available from <http://www.geocities.com/Paris/Rue/4637/terr25a.html>. internet accessed 10 October 2004.

fierce price competition and fears of diseases like SARS make Alitalia head for bankruptcy in the near future<sup>19</sup>.

The European Regions Airline Association (ERAA) estimates in its European Air Transport Industry Policy “Funding of Anti-Terrorist Security Measures” some of the costs airlines were forced to bear after the 9/11 attacks to provide greater security: For staff screening, which includes both personnel and equipment, the Paris airports paid € 19.2 million (approximately USD \$23 million<sup>20</sup>) in 2002, € 26.4 (≈ \$31.7 million) in 2003 and expects the cost to rise to € 30 million (≈ \$36 million) for 2004. For Frankfurt Airport, the estimate for staff screening is € 5.5 million (≈ \$6.6 million), which, however, excludes “necessary construction costs for modifying the layout of buildings”. Those airport costs will be distributed to the airlines in the form of higher landing fees and terminal charges (compare with US airline industry). European Airlines also have to pay directly or indirectly for anti-terror training of their air crews as well as for “security and awareness training for all staff working at airports”. British Airways for example spends € 1.2 million (≈ \$1.44 m.) per year on such training only for its operational bases, London Heathrow and London Gatwick, while KLM spent about € 4 million (≈ \$4.8 m.) in the two years before April 1, 2003. Lufthansa spent an additional € 2.5 million (≈ \$3 m.) since September 11, 2001 only for crew training. Another mandate security feature that airlines have to provide for are reinforced cockpit doors. Considering parts and labor, not however dedicated aircraft downtime, British Airways spent € 14.7 million (≈ \$ 17.6 m.),

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<sup>19</sup> “Brussels probes Alitalia fare row.” BBC News, 9 August 2004, available from <http://news.bbc.co.uk/1/hi/business/3548580.stm>; Internet accessed 10 October 2004.

<sup>20</sup> Euros (€) converted into United States dollars (\$) under the assumption € 1= \$1.20

KLM approximately € 16 million ( $\approx$  \$19.2 m.) and Lufthansa € 16.5 million ( $\approx$  \$19.8 m.)<sup>21</sup>.

Like in the United States, European airlines also have to cope with the possibility of losing national insurance coverage. As of today the European Commission was still debating whether or not to restart state guarantee of insurance coverage for risks linked to the use of an aircraft as a terrorist weapon. Like in the US, this policy was enforced after the September 11<sup>th</sup> terrorist attacks. However, it was discontinued about a year after 9/11 and therefore airlines had to return to private insurers that now charged escalated prices for such high-risk coverage. The Association of European Airlines (AEA) estimates that the insurance premiums paid by European airlines to obtain coverage for the risk of war and terrorism rose from € 80 million ( $\approx$  \$96 m.) in 2001 to around € 400 million ( $\approx$  \$480 m.) in 2003.

The fuel-price problem is the same in the European Union as it is in the United States. As a consequence, Lufthansa for example is considering another fuel surcharges after the one introduced in August 2004. Then, Lufthansa increased prices by € 2 (\$2.46) on domestic and short-haul flights. Also, Lufthansa Cargo, the company's air freight division, raised prices by 20 % in the beginning of October 2004<sup>22</sup>.

### III. The Tourism industry

#### i. United States

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<sup>21</sup> "Funding of Anti-Terrorist Security Measures – European Air Transport Industry Policy." Airports Council International – European Region, Association of European Airlines (AEA), European Association of Aerospace Industries (AECMA) et al., 1 December 2003, p.4-6, available from <http://www.eraa.org/031216extjointseceuposn.pdf>; Internet accessed 10 October 2004

<sup>22</sup> "European airlines seek aid for terror insurance coverage." EU business, 26 August 2004, available from <http://www.eubusiness.com/afp/040826150739.00ai5cqt>; Internet accessed 10 October 2004

The impact and cost of terrorism on the tourism industry can probably most easily be described by using the most distinct example, the city that suffered most from the recent acts of terrorism, New York City. Naturally, not every destination in the United States has to battle with the aftermath of the 9/11 terrorist attacks like New York. A short overview of the American tourism industry will serve as an introduction to this topic.

In 2000, the tourism industry employed more than 18 million people and tourism and travel was a \$582 billion industry, which generated almost \$100 billion in federal, state and local tax revenue<sup>23</sup>. In the nation's top 100 metro areas, travel and tourism generated \$263.4 billion in revenues. New York City alone accounted for 17.6 billion therefore being the largest contributor. It was followed by Chicago (\$14 billion), the Los Angeles-Long Beach Region (\$13.6 billion), and Atlanta, which contributed \$11.2 billion in 2000. Tourism employed 3.9 million people in the nation's 100 largest metro areas, of which 198,998 were provided in New York. Chicago even employed 207,436 people, Los Angeles-Long Beach 177,264 people, and Atlanta supported 172,954 jobs.

Not only terrorism, especially the 9/11 attacks, but also the slowdown in the economy must be held responsible for the significant decrease in travel. The combination of both led to the cutting of more than 536,000 tourism-related jobs in the top 100 metro areas through 2002. Job losses in this area have been especially rigorous in Phoenix (-27.2%), Orlando (-24.5%), San Diego (-23.8%), Lancaster (-22.9%), and Houston (-22.7%). It is estimated that the reduced number of international visitors to the metro areas has generated economic losses that exceed \$22.6 billion. \$12.5 billion, or 55.3%, of the losses can be attributed to the September 11<sup>th</sup> terrorist attacks. Cities that were damaged

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<sup>23</sup> "Survey shows Traveler Confidence returning; Concerns over the Economy's Health is primary Reason Consumers are avoiding travel." Press Release NYC & Company, 2002, available from <http://www.nycvisit.com/content/index.cfm?pagePkey=794> ; Internet accessed 10 October 2004

economically the most severe include New York, where \$3.3 billion (or approximately 60%) of the \$5.9 billion losses can be traced to the terrorist attacks, San Francisco (\$2.1 billion in losses, \$1.2 billion attributed to 9/11), Los Angeles (\$1.75 billion in losses, \$970 million attributed to 9/11), and Miami (\$1.6 billion in losses, \$861 million attributed to 9/11)<sup>24</sup>.

When taking a closer look at New York City, it becomes evident the city was still recovering from the terrorist attacks in 2001. According to NYC & Company, the city's official tourism marketing organization<sup>25</sup>, the total number of visitors (domestic and international) in 2001 equaled 35.2 million, a decrease of 1 million people compared to the year 2000. However, a slight increase in domestic visitors can be observed, which is due to a strong first three quarters of the year 2001 and an increase in people visiting friends and family after the terrorist attacks. The number of international visitors on the other hand decreased from 6.8 million in 2000 to 5.7 million in 2001 (-16.2%)<sup>26</sup>. This decrease has a great effect on the tourism industry in New York City. Although international visitors made up only 18% of the total number of visitors in 2000, they were responsible for 42% of total visitor spending according to NYC & Company<sup>27</sup>.

A year after the terrorist attacks, an increase in domestic visitor numbers can be observed. However, visits to New York City have been shorter in 2002 and spending has

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<sup>24</sup> "Tourism Key to U.S. Metro Economies." U.S. Conference of Mayors, The Travel Business Round Table, IACVB; 17 October 2002, available from [http://www.usmayors.org/uscm/news/press\\_releases/documents/atlanta\\_release\\_101702.pdf](http://www.usmayors.org/uscm/news/press_releases/documents/atlanta_release_101702.pdf); Internet accessed 10 October 2004.

<sup>25</sup> **NYC & Company**, the city's official tourism marketing organization, is a private, non-profit membership group dedicated to building New York City's economy and positive image through tourism and convention development, major events and the marketing of the city on a worldwide basis

<sup>26</sup> NYC Statistics, NYC & Company, 2004, available from <http://www.nycvisit.com/content/index.cfm?pagePkey=57>; Internet accessed 10 October 2004.

<sup>27</sup> "New York City's Tourism Industry: one year after Sept 11." Press Release – NYC & Company, 4 September 2002, available from <http://www.nycvisit.com/content/index.cfm?pagePkey=786>; Internet accessed 10 October 2004

also decreased. This continues to affect revenues for businesses, generated tax revenue, and the number of jobs in a negative way. The total number of visitors increased slightly by 100,000 people from 2001 to 2002, only however because again, more domestic visitors came to New York. The number of international visitors fell again by 600,000 to 5.1 million in 2001. The trend one year after the 9/11 attacks showed a change in the visitor pattern that is continuing today. While more domestic travelers come to New York, the international visitor numbers declined until 2003 (to 4.81 million). Finally, however, the forecast for 2004 predicts an increase in both international and domestic travelers (all figures from NYC Statistics, see footnote 24).

Not only the declining number of profitable tourists provided for the slowdown of the tourism industry in New York. Another reason is the relatively low rate for hotel rooms after 9/11. In the summer of 2002, the average room rate of New York City hotels still remained 10-15% below the rate of pre-9/11. While in 2000 the average daily rate for a hotel room was \$233, in 2001 it declined to \$203 and furthermore fell in 2002 to \$195 and in 2003 to \$192<sup>28</sup>. The rooms filled declined from 19.9 million in 2000 to 18 million in 2001. However, due to the lowered rates and an increase in domestic travelers that took advantage of the lower prices, rooms filled increased to 18.9 millions in 2002 and to 19.5 millions in 2003<sup>29</sup>. The occupancy in percent remains at a low level and is only slightly increasing since 2000. While hotel rooms were occupied at an average 84.7% in 2000, this number decreased to an occupation of 73.6% of the rooms in 2001<sup>30</sup>. In

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<sup>28</sup> Strong Hotel Market, Average Daily Rate (\$), NYC & Company, 2003, available from: [http://www.nycvisit.com/\\_uploads/docs/numberscharts2003.pdf](http://www.nycvisit.com/_uploads/docs/numberscharts2003.pdf)

<sup>29</sup> Strong Hotel Market, Rooms filled (millions), NYC & Company, 2003, available from: [http://www.nycvisit.com/\\_uploads/docs/numberscharts2003.pdf](http://www.nycvisit.com/_uploads/docs/numberscharts2003.pdf)

<sup>30</sup> Strong Hotel Market, Occupancy (%), NYC & Company, 2003, available from: [http://www.nycvisit.com/\\_uploads/docs/numberscharts2003.pdf](http://www.nycvisit.com/_uploads/docs/numberscharts2003.pdf)

September 2001 after the terrorist attacks, total room nights decreased by 30% from September 2000, and total room sales were down 45%<sup>31</sup>. Only minor increases can be observed for 2002 (+ 2% occupancy of hotel rooms) and 2003 (+0.4% occupancy of hotel rooms) The occupancy of hotel rooms was also down 1.3% to 1.54 million rooms-filled when compared to 2001, and the money spent on those hotel rooms decreased from \$295 million (2001, pre-9/11) to \$264 million (-10.5%).

In terms of generated tax revenue of the hotel industry in New York, this meant a \$15.7 million loss in 2001 when compared to 2000. While in 2000, \$227.9 million were paid by the hotel industry, in 2001 this number was only \$212.2 million, and decreased further in 2002 to \$198.5 million. However, tax revenue increased in 2003 in accordance with increasing visitor numbers to \$204.5 million, which still means approximately 10% less than in the year 2000<sup>32</sup>.

## ii. European Union

Although countries of the European Union do also experience terrorist attacks - even though not in the great dimensions of September 11<sup>th</sup> - the tourism industry so far has recovered faster from those attacks than the American counterpart. The bombing of trains in Madrid on March 11, 2004, for example, in which almost 200 people were killed and more than 1,200 were wounded<sup>33</sup> did not pose a major economic problem for Spain.

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<sup>31</sup> "New York City's Tourism Industry: one year after Sept 11." Press Release – NYC & Company, 4 September 2002, available from <http://www.nycvisit.com/content/index.cfm?pagePkey=786>; Internet accessed 10 October 2004

<sup>32</sup> Strong Hotel Market, Taxes Generated (millions of \$), NYC & Company, 2003, available from: [http://www.nycvisit.com/\\_uploads/docs/numberscharts2003.pdf](http://www.nycvisit.com/_uploads/docs/numberscharts2003.pdf)

<sup>33</sup> The numbers vary by date and source: CNN reported that at least 192 people were killed and at least 1,400 wounded. <http://www.cnn.com/2004/WORLD/europe/03/11/spain.blasts/>; Fox news reported 200 people killed and more than 1,600 wounded <http://www.foxnews.com/story/0,2933,114489,00.html>; CBS

In a survey conducted by Exceltur<sup>34</sup>, a lobby group representing the main Spanish tourism companies, between March 15 and April 8, 2004 only about one third (34.4%) out of 1,200 Spanish tourism operators was affected by the bombings and recognized a decrease in sales following the days of the Madrid train bombings, and for 50% of those observing any effects, the impact had been less than 5%. The ones affected also mentioned that sales had completely recovered on April 8, the closing day of the survey. Less than 25% of the tourist concerns needed to account for losses of more than 10%. The remaining two thirds of the tourism operators did not notice an impact at all. However, the figures for Madrid itself demonstrate a more severe impact on the tourism industry. More than 80% experienced sales losses; approximately one third reported a decrease of more than 30%. Moreover, about 80% of the accommodation business (hotels, motels, Bed & Breakfasts etc.) in Madrid observed a short term sales drop. Three weeks after the bombing, two thirds of them had not returned to normal sales. On the Madrid stock exchange tourist business stocks had recovered within days and in some cases even exceeded pre-March 11 standings<sup>35 36</sup>.

These figures show that the impact of the bombings was concentrated in Madrid, while it was minimal on the tourist areas on the Mediterranean coast, the Balearic Islands

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News reported 191 killed people and more than 1,800 wounded; however, even those numbers changed following the days and the investigation of the bombings. Therefore the numbers used are only estimates

<sup>34</sup> **Exceltur**, Alianza para la Excelencia Turística” (“Alliance for the Excellency in Tourism”), is a new lobby group that represents 29 of the main Spanish tourist groups and companies. Structured as a non profit association, EXCELTUR pretends to be considered as a reference in the Spanish tourist sector, providing all efforts to the existing present ones in order to guaranty the level and profitability of the Spanish tourism in a medium term period. <http://www.wttc.org/news41pdf.pdf>

<sup>35</sup> “Tourism emerges largely unscathed from Madrid bombings.” Agence France-Presse, USA Today.com, 3 May 2004, available from [http://www.usatoday.com/travel/news/2004-05-03-spain-tourism\\_x.htm?POE=TRVISVA](http://www.usatoday.com/travel/news/2004-05-03-spain-tourism_x.htm?POE=TRVISVA); Internet accessed 10 October 2004, and Browne, David, “Spain bounces back from Madrid bombings.” Travelmole.com, available from [www.travelmole.com/news\\_detail.php?news\\_id=100439](http://www.travelmole.com/news_detail.php?news_id=100439); Internet accessed 10 October 2004

<sup>36</sup> Zoreda, Jose Luis, “Business Evaluation of the Terrorist Attacks of March 11 on Spanish Tourist Sector.” May 2004, p. 2, 4, 10 respectively, available from <http://www.wttc.org/news41pdf.pdf>; Internet accessed 10 October 2004.

and Canary Islands. The sales in the initial days following the Madrid bombings of tourism in the Balearics and the Canaries, which together account for 50% of the total international tourism market in Spain, were only scarcely affected in the short-term by an 8.2% and 9.8% loss respectively. Antonio Nieto, the General Director for Tourism for the region of Madrid defended Spain's peaceful response to the bombings at the World Travel & Tourism Council (WTTC) in Doha, Qatar and stated international tourist figures for March 2004. According to the Spanish National Institute of Statistics, the number of international tourists increased by 7.4% in March 2004 compared to March 2003, which -as indicated by Antonio Nieto- "clearly demonstrates that Madrid, as a tourist destination did not collapse and sends an optimistic message that the impact has been much lower than was expected in the first few days"<sup>37</sup>

Spain's example illustrates that terrorist attacks within the boundaries of a country do not necessarily affect the tourism industry in such a negative way as September 11<sup>th</sup> did. However, the terrorist attacks in New York City had a considerably larger effect on the European Union's countries.

French's Club Méditerranée<sup>38</sup> (Club Med), was severely shaken by the attacks of September 11<sup>th</sup>. Due to a drop in winter bookings following the three weeks of 9/11, Club Med decided to temporarily or permanently close 15-19 villages of its 100 villages in about 10 countries all over the world<sup>39</sup>. Some were closed temporarily only for winter season or the year following the 9/11 attacks due to insufficient booking levels. Four or

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<sup>37</sup> Browne, David, "Spain bounces back from Madrid bombings." Travelmole.com, available from [www.travelmole.com/news\\_detail.php?news\\_id=100439](http://www.travelmole.com/news_detail.php?news_id=100439); Internet accessed 10 October 2004

<sup>38</sup> **Club Méditerranée**: largest French leisure travel group; Club Med - the brand name of the Club Méditerranée group – offers all-inclusive vacations since 1950, owns hundred or so villages, villas and cruise ships in 40 countries around the world. Club Méditerranée is listed on the Paris stock exchange.)

<sup>39</sup> Hayes, Harry. "Economic Costs of Terrorism." International Review. 29 January 2002. available from <http://www.geocities.com/Paris/Rue/4637/terr25a.html>. internet accessed 10 October 2004.

five villages were closed provisionally where the outlook for occupancy could generate significant losses. The other village closures were due to renovation plans (temporary closure) or expiration of the lease contract (definitive closure). Those closures led to some 300 job losses and announced a reduction of summer 2002 capacity by a further 8% by shutting six more clubs<sup>40</sup>. Club Med also incorporated other measures in order to lower costs. The months following September 11<sup>th</sup>, Club Med estimated its financial losses to be around € 25 million (approximately \$30 million)<sup>41</sup>. Net losses for the year ended October 2001 were already € 70 million (≈ \$84 million), while the Club Med Group generated a € 59 million (\$71 million) profit the year before.

The financial information released for the first half of the year 2002 confirms the expected losses of Club Med due mostly to the losses after the 9/11 attacks. Revenues dropped by 14.8% from € 958 million (≈ \$1150 million) in the first half of 2001 to € 816 million (≈ \$980 million) for the first half of 2002<sup>42</sup>. The annual report of Club Med for the year 2002 (the fiscal year ended October 31, 2002) states total revenue losses of about 12.2% from € 1,985 million (≈ \$2,382 million) to € 1,744 million (≈ \$2,093 million), and a drop of operating income from € 50 millions (≈ \$60 million) to negative € 3 million (≈ \$3.6 million). Even in 2003, two years after the terrorist attacks of New York City, Club Med has not recovered. This however, is not only due to 9/11, but also the fears of terrorist attacks by tourists (for example the Bali bombings), health issues (SARS) and

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<sup>40</sup> “Club Med plunges into red, cuts capacity again.” FVWNews.com, 14 January 2002, available from <http://www.fvw.com/index.cfm?ID=419>; Internet accessed 10 October 2004.

<sup>41</sup> “Club Méditerranée announces measures in response to the crisis provoked by the September 11 terrorist attacks.” Press Release - Club Méditerranée, 19 October 2001, available from [http://www.clubmed.net/upload/presentations/a1024583093CP\\_rebound\\_GB\\_19OCT.doc](http://www.clubmed.net/upload/presentations/a1024583093CP_rebound_GB_19OCT.doc); Internet accessed 10 October 2004.

<sup>42</sup> First half results for 2002, Press Release - Club Méditerranée, 18 June 2002, available from [http://www.clubmed.net/upload/presentations/a1024583093CPGB\\_18\\_06\\_02.doc](http://www.clubmed.net/upload/presentations/a1024583093CPGB_18_06_02.doc); Internet accessed 10 October 2004.

the global economic downturn. The revenues for Club Med in 2003 dropped again, this time by 3.5% to € 1,609 million ( $\approx$  \$1,931 million)<sup>43</sup>.

#### IV. Defense and Security Industry

##### i. United States

Not every industry like the airline or tourism business suffers from terrorism. There are also those companies in certain industries that derive a profit from higher security measures and the “war on terror”. Most of these companies can be found in the defense sector and are companies that are main contractors to the United States’ government. The so-called nation’s “Big Three” weapon-makers –Lockheed Martin, Boeing and Northrop Grumman, are among those companies making a profit by selling their defense equipment to the government.

In 2000, the national defense budget reserved \$304.1 billion (\$329.9 billion when adjusted for 2003 inflation) for budget authority<sup>44</sup> and \$294.5 billion (\$319.5 billion when adjusted for 2003 inflation) for outlays<sup>45</sup>. This is a total of almost \$600 billion (almost

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<sup>43</sup> “Club Méditerranée – Financial Information – Key Figures”, those figures are derived from the financial statement from 2002 and 2003. For 2002: “2002 Annual Results.” Press Release - Club Méditerranée. 17 December 2002, available from <http://www.clubmed.net/upload/presentations/a1024583093Communique-RA2002GB.doc>; Internet accessed 10 October 2004. For 2003: “2003 Results.” Press Release - Club Méditerranée, 15 December 2003, available from <http://www.clubmed.net/upload/presentations/a1024583093CPUK03.doc>; Internet accessed 10 October 2004.

<sup>44</sup> **Budget Authority** -- BA is the authority to incur legally binding obligations of the Government which will result in immediate or future outlays. Most Defense BA is provided by Congress in the form of enacted appropriations; “National Defense Budget – Estimates for FY2003.” Office of the Under Secretary of Defense (Comptroller), March 2002, available from [http://www.defenselink.mil/comptroller/defbudget/fy2003/fy2003\\_greenbook.pdf](http://www.defenselink.mil/comptroller/defbudget/fy2003/fy2003_greenbook.pdf); Internet accessed 10 October 2004

<sup>45</sup> **Outlays** -- Outlays, or expenditures, are the liquidation of the Government's obligations. Outlays generally represent cash payments. Outlays in a given fiscal year may represent the liquidation of obligations incurred over a number of years. There is a time lag between budgeting funds (congressional appropriation), signing contracts and placing orders (obligations), receiving goods or services and making payments (liquidating obligations). For major acquisition and construction programs, the

\$650 billion when adjusted for 2003 inflation) for the national defense in 2000. Until 2003, the national defense budget rose to \$396.8 billion for budget authority and \$379.0 billion for outlays, which means a total defense budget of approximately \$775.8 billion. This is an increase of almost 20% from 2000<sup>46</sup>. A large portion of this budget is received by the “Big Three”. In 2002, \$42 billion in Pentagon contracts went to the “Big Three”, of which Lockheed Martin received \$17 billion, Boeing \$16.6 billion and Northrop Grumman \$8.7 billion. This means an increase of nearly one third when compared to the year 2000, but also that the “Big Three” receive one out of every four dollars the Pentagon spends on defense equipment<sup>47</sup>.

Another government authority, which promises lucrative contracts for the big defense and security companies like Boeing is the Department for Homeland Security (DHS). In 2001, the federal government spent \$20 billion on security activities; in 2004 this amount has more than doubled. For the 2005 budget, President George W. Bush requested \$47 billion for homeland security<sup>48</sup>.

In its first year of existences, the Department of Homeland Security paid at least \$5 billion<sup>49</sup> to private contractors to make America safer from terrorist attacks. \$13

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Department operates under a "full funding" policy by which Congress approves, in the year of the request, sufficient funds to complete a given quantity of items, even though it may take a number of years to actually build and deliver these items. Thus, in extreme cases (such as building an aircraft carrier), final outlays may be recorded a decade after the budget authority for the program is approved; “National Defense Budget – Estimates for FY2003.” Office of the Under Secretary of Defense (Comptroller), March 2002, available from [http://www.defenselink.mil/comptroller/defbudget/fy2003/fy2003\\_greenbook.pdf](http://www.defenselink.mil/comptroller/defbudget/fy2003/fy2003_greenbook.pdf); Internet accessed 10 October 2004

<sup>46</sup> National Defense Summary - Budget Authority and Outlays. “National Defense Budget – Estimates for FY2003.” Office of the Under Secretary of Defense (Comptroller), March 2002, available from [http://www.defenselink.mil/comptroller/defbudget/fy2003/fy2003\\_greenbook.pdf](http://www.defenselink.mil/comptroller/defbudget/fy2003/fy2003_greenbook.pdf); Internet accessed 10 October 2004

<sup>47</sup> Hartung, William D., “Making Money on Terrorism.” Nation, 23 February 2004, Vol. 278 Issue 7, p 19.

<sup>48</sup> Buchanan, Wyatt, “Boeing seeks prize Homeland Security contract.” Seattle Post-Intelligencer, 28 May 2004, available from

<sup>49</sup> John Pike, director of GlobalSecurity.org, a nonpartisan research organization: “Their publicly released budget information is incoherent. I like to call it a budget-like object.”

million went to the department's purchase for small caliber ammunition from the Federal Cartridge Company of Anoka, Minnesota, the largest supplier of this kind of ammunition to the government. In 2000, Federal Cartridge produced 350 million rounds of ammunition; in 2004 it expects to produce 1.2 billion rounds and expectations for 2005 are as high as 1.5 billion. This increase is not only due to the need for Homeland Security's armed agents but also to the fact that even non-front-line troops need to be qualified riflemen ("Jessica Lynch-effect"). The largest category of Homeland Security's expenditures was at least \$792 million for chemical detection and automated alarm systems. The second largest single payment went to Pearson Government Solutions of Arlington, Virginia. The DHS paid \$276 million, which was part of a \$700 million-contract to hire and screen 64,000 employees for the new Transportation and Security Administration (TSA) who after 9/11 started to screen baggage and check passengers at major airports<sup>50</sup>.

The largest single payment leads back to a company also mentioned in connection with Pentagon contracts, Boeing. In 2003, the DHS paid \$294 million to Boeing Service Co., part of a multi-year, \$2 billion commitment to install and maintain explosive detector systems (EDS) and chemical trace detectors. This contract was made in June 2002 and until December 31, 2002 Boeing installed more than 6,000 EDS at more than 400 U.S airports. It also trained more than 25,000 baggage screeners for the TSA. Boeings contract for the deployment, installation and maintenance of aviation security equipment has been extended in late August 2004 until December 31, 2004. This extension grants Boeing another \$198 million of the DHS's budget. In June 2003, Boeing

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<sup>50</sup> Hargrove, Thomas, "Homeland Security spent \$5 billion on private contracts in first year." GlobalSecurity.org, 20 May 2004, available from <http://www.globalsecurity.org/org/news/2004/040520-homsec-spending.htm>; Internet accessed 10 October 2004

received a \$4.2 million contract for a pilot project to display cargo container security systems by tracking shipments from foreign ports to the United States. The contract is for the port of Los Angeles, one of the ports which Congress designated to test new technologies for securing containers. Boeing is also to implement this DHS Operation Safe Commerce (OSC) pilot program at the port of New York City/New Jersey. Congress has allocated \$58 million for this project including major ports in the United States<sup>51</sup>.

ii. European Union

The defense industry in Europe also benefited from the United States' "war on terror" following the September 11 attacks. On one hand this is due to the demand in European countries for better and advanced defense technologies, on the other hand it also involves direct or in direct contracts with the United States' department of defense. Britain's defense industry and BAE Systems, the biggest British defense group, give an excellent example of how both inner-country demand, and outside cooperation are managed.

The four largest defense companies dominating the European market are BAE Systems (primarily British), Thales (primarily French), EADS (European Aeronautic Defence and Space Company, which is a French-German-Spanish entity ) and Finmeccanica (primarily Italian), which are also among the 10 largest defense companies in the world. Combined revenues in 2003 accumulated to about \$40 billion, while the top four US companies accounted for \$93 billion<sup>52</sup>.

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<sup>51</sup> Hasson, Judy, "Boeing to pilot cargo security system." FCW.com, 17 June 2003, available from <http://www.fcw.com/fcw/articles/2003/0616/web-boeing-06-17-03.asp>; Internet accessed 10 October 2004.

<sup>52</sup> Vlachos Dengler, Katja. "Europe Must Set Its Defence Industry Free." Financial Times. 7 September 2004.

Britain has the second largest defense industry in the world (as percentage of GDP) holding 20% of the world's defense market and employing some 345,000 people. However, Britain's defense industry cannot only rely on contracts with the British department of defense, more importantly export is crucial to sustain the industry. According to the Ministry of Defence (MoD), the profits from exports help to diffuse the cost of the UK's research and development, and therefore decrease the defense budget by up to £400 million<sup>53</sup> ( $\approx$  \$720 million). Moreover, approximately 40% of the defense industry's output is meant for export. In 2001 these 40% amounted to £4.1 billion ( $\approx$  \$7.4 billion)<sup>54</sup>. In the 2000/01 period, defense expenditures dropped slightly from £24.9 billion ( $\approx$  \$44.8 billion) to £24.6 billion ( $\approx$  \$44.3 billion) in the 2001/02 period. However since then they have been increased to £26.1 billion ( $\approx$  \$47.0 billion) in 2002/03 and are estimated to be equal to £28 billion ( $\approx$  \$50.4 billion) in 2003/04<sup>55</sup>. The increase in defense expenditures after 2001/02 can partly be attributed to needs for better defense systems and the participation of the British in the war against terrorism after the 9/11 attacks. A closer look into the largest defense company of the United Kingdom will illustrate this thesis.

BAE Systems is a defense and aerospace company, primarily focusing on arms sales, and the world's fourth largest defense and aerospace firm behind Boeing, Lockheed Martin and EADS. It derives only 20% of its revenues from civil aerospace, while 80% are drawn from defense. Following the 9/11 attacks in the United States, BAE Systems,

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<sup>53</sup> British Pound (£) converted into United States dollars (\$) under the assumption £ 1= \$1.80

<sup>54</sup> "Head to head: 'Why the defence industry is vital.'" BBC News. 9 September, 2003. available from: <http://news.bbc.co.uk/1/hi/uk/3093158.stm>. Internet accessed 14 October 2004

<sup>55</sup> "Total Managed Expenditures By Government Functions" UK Defence Statistics 2004 – Ministry of Defence. 2004. available from <http://www.dasa.mod.uk/natstats/ukds/2004/c1/sec1tab12.html>. internet accessed 14 October 2004

which owns 20% of Airbus Industries, the world's second-largest aircraft maker (behind Boeing) announced a lay-off of 1,667 people due to the closure of its regional jet production facilities in the United Kingdom. The job losses and the plant closures cost BAE systems an approximate £250 million (≈ \$450 million). Furthermore, BAE Systems predicted a decrease of commercial airline deliveries from 320 in 2001 to 300 in 2002<sup>56</sup>  
<sup>57</sup>. According to BAE System's five-year summary of financial data, sales in Commercial Aerospace suffered a heavy decrease following the 2001 terrorist attacks. Numbers dropped from £3,051 million (≈ \$5,492 million) in 2001 to £2,716 million (≈ \$4889 million) in 2002, and only started to recover in 2003 when sales slightly increased to £2,904 million (≈ \$5227 million). However, the order book for BAE Systems including the group's joint ventures shows that after £43.8 billion (≈ \$78.8 billion) were recorded for 2001, the number dropped by approximately 3% to £42.5 billion (≈ \$76.5 billion) in 2002. For 2003, however, numbers are up to £46.0 billion (≈ \$82.8 billion), an all-time high<sup>58</sup>.

One quarter of the British defense budget is awarded to BAE Systems every year, which will remain unchanged for the next several years, according to Erik Britton, author of the Oxford Economic Forecasting study. He estimates that the MoD spent about £2.2 billion (≈ \$4.0 billion), or 23%, of its annual procurement budget on BAE in 2002<sup>59</sup>.

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<sup>56</sup> "BAe slashes 1,700 jobs." Guardian Unlimited. 27 November 2001. available from <http://www.guardian.co.uk/recession/story/0,7369,607644,00.html>. Internet accessed 14 October 2004.

<sup>57</sup> "BAE Systems sheds jets, jobs." CNN Money. 27 November 2001. available from <http://money.cnn.com/2001/11/27/international/bae/>. Internet accessed 14 October 2004.

<sup>58</sup> "Five Year Summary." BAE SYSTEMS Annual report 2003. p. 92. available from <http://ir.baesystems.com/bae/storage/fiveyearssummary.pdf>. internet accessed 14 October 2004.

<sup>59</sup> "BAE to hold on to large slice of MoD budget, says report." Evening News. 11 February 2004. available from <http://news.scotsman.com/topics.cfm?tid=740&id=167232004>. internet accessed 14 October 2004.

In December 2002, BAE Systems received a £70 million ( $\approx$  \$126 million) contract from the MoD to perform technical upgrades on existing Harrier aircrafts flying with the Royal Navy and Royal Air Force. One month later, it was awarded a £150 million ( $\approx$  \$270 million) contract by the MoD for further upgrade of the Harrier warplane, which could be worth more than £500 million ( $\approx$  \$900 million) through a series of further contracts until 2005<sup>60</sup>. Increases in sales for Customer Solution and Support as well as in Programs confirm the importance of this part of BAE System's business. According to BAE System's five-year summary of financial data, Customer Solutions & Support sales rose from £1,978 million ( $\approx$  \$3,560 million) in 2001 to £2,133 million ( $\approx$  \$3,839 million) in 2002. Although sales for Programs fell from £2,817 million ( $\approx$  \$5071 million) in 2001 to £2,060 million ( $\approx$  \$3708 million) in 2002, sales are recovering and climbed to £2,374 million ( $\approx$  \$4,273 million) in 2003<sup>61</sup>.

In May 2004, BAE Systems secured a £17 million ( $\approx$  \$30.6 million) contract to supply a self-defense weapon station for the Future Command and Liaison Vehicle program by Alvis Vickers<sup>62</sup>. It was also awarded a contract worth around £115 million ( $\approx$  \$207 million) by the Ministry of Defence to do radar support work. Under a £45 million deal, BAE will refurbish radars for Tornado F3 fighter aircraft while Crewe Toll will also bring in £70 million for a new MoD radar sustainment program<sup>63</sup>. In August 2004, BAE was competing for a multi-billion dollar contract to protect commercial aircrafts from missile attack. It was awarded £25.1 million ( $\approx$  \$45.2 million) by the Department of

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<sup>60</sup> Rutter, John. "BAE lands £150 million Harrier contract." 24 January 2003. available from <http://news.scotsman.com/topics.cfm?tid=740&id=94942003>. internet accessed 14 October 2004.

<sup>61</sup> "Five Year Summary." BAE SYSTEMS Annual report 2003. p. 92. available from <http://ir.baesystems.com/bae/storage/fiveyearsummary.pdf>. internet accessed 14 October 2004.

<sup>62</sup> "BAE clinches £17m boost." Evening News. 28 May 2004. available from <http://news.scotsman.com/topics.cfm?tid=740&id=608412004>. internet accessed 14 October 2004.

<sup>63</sup> Martell, Peter. "BAE in £100m MoD deal." Evening News. 26 may 2004. available from <http://news.scotsman.com/topics.cfm?tid=740&id=597012004>. internet accessed 14 October 2004.

Homeland Security to develop technology to counter the terrorist threat and will produce a prototype within the next 18 months<sup>64</sup>. In October 2004, BAE Systems won a \$28 million contract with the U.S. army to provide anti missile systems. Although initially BAE will provide 50 systems, the contract could eventually grow to a value of \$500 million as the army considers a further 484 units over the next five years<sup>65</sup>. Furthermore, BAE Systems has been chosen a prime contractor to provide some technical software, hardware and support services to the U.S. Air Force for the F-16 fighter jet. The contract is worth as much as \$175 million<sup>66</sup>.

BAE not only profits from MoD contracts but as seen earlier also from contracts with the U.S. authorities. In September 2004, BAE Systems announced a \$600 million takeover of a leading US supplier of secure computer networks to the Pentagon, DigitalNet. This takeover stresses the importance of the American market to BAE: Although DigitalNet's sales for the first half of 2004 were £178 million ( $\approx$  \$320 million) and therefore less than 2% of BAE's £6.13 billion ( $\approx$  \$11.03 billion), growth in North America is a priority for BAE Systems as U.S. defense spending exceeds western Europe's defense expenditures combined and is growing faster. The acquisition of DigitalNet will give BAE North American unit about \$1.2 billion in combined revenues from federal IT (Information Technology) contracts. DigitalNet also sells networks to US

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<sup>64</sup> Bevens, Nick. "BAE in line for multi-billion dollar US defence contract." Evening News. 27 August 2004. available from <http://news.scotsman.com/topics.cfm?tid=740&id=1003732004>. internet accessed 14 October 2004.

<sup>65</sup> "BAE wins US army contract." Evening News. 13 October 2004. available from <http://news.scotsman.com/topics.cfm?tid=740&id=1190612004>. internet accessed 14 October 2004.

<sup>66</sup> "BAE wins F-16 support contract." Reuters UK. 13 October 2004. available from <http://reuters.co.uk/newsPackageArticle.jhtml?type=businessNews&storyID=602409&section=finance>. Internet accessed 14 October 2004.

intelligence services and the US Justice, Treasury and State Departments. Employing 2,200 staff, DigitalNet had sales of \$292 million in 2003.<sup>67</sup>

## V. Conclusion

As described previously, international terrorism affects many industries in a country's or union's economy. However, impacts are not necessarily always negative and surely not definite. Although most of the cases in this paper are related to the September 11 attacks, some generalizations can be made as to how economies react to similar terrorist attacks.

The airline industry together with the tourism industry obviously suffered the most from the terrorist attacks. Passengers' or tourists' fear of terrorism attacks kept people away from flying or vacationing. Higher security measures furthermore increased prices and led to higher costs for these industries. Terrorism, for these industries, posed and poses one more burden in times of a slow economy and international health threats.

For the Defense and the Security industry, however, international terrorism does not only pose a threat but also an opportunity. The war on terror favors the defense industry which delivers the means by which terrorism is fought. Stricter, more effective security measures must be developed and delivered. Even though the U.S. defense industry seems to benefit more from the aftermath of the 9/11 attacks, European companies by entering into the U.S market also receive their share in the war against terror.

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<sup>67</sup> Flanagan, Martin. "BAE unveils \$600m takeover deal as it targets growth in US." Evening News. 14 September 2004. Available from <http://news.scotsman.com/topics.cfm?tid=740&id=1077572004>. internet accessed 14 October 2004.

International terrorism, however, will not permanently damage an industry. Airlines and the tourism sector slowly recover from the effects of the 9/11 attacks. Madrid, for example has already recovered from the March 11, 2004 attacks. Consumer confidence eventually returns as long as the acts of terrorism are not constantly committed in the same area of the world.

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## VII. Appendix

### (1) Commercial Aviation Facilitates Economic Growth

#### **Commercial Aviation Facilitates Economic Growth** GDP Contribution ~ \$800B (8%) in 2000

<u>Component</u>	<b>GROSS DOMESTIC PRODUCT*</b>		
	<u>Impact (\$Billions)</u>	<u>Implicit Multiplier</u>	<u>Share (%)</u>
The Industry (Direct)	306.4	—	3.1
The Source Chain (Indirect)	224.7	1.7	2.3
The Income Impact (Induced)	<u>270.9</u>	1.5	2.7
<b>TOTAL GDP IMPACT</b>	<b>802.0</b>	<b>2.6</b>	<b>8.1</b>

\*U.S. GDP in CY2000 was \$9.9 trillion.

Source: Global Insight (formerly DRI-WEFA). The National Economic Impact of Civil Aviation (July 2002)

### (2) Number of Employees - Certificated Carriers - Year End Data 2000-2002

Year	CARRIER GROUP NAME	FULL TIME	PART TIME	TOTAL
2000	Total Form 41 Carriers	603,507	128,542	732,049
2001	Total Form 41 Carriers	545,574	107,914	653,488
2002	Total Form 41 Carriers	538,761	104,036	642,797

### (3) Airline Traffic Statistics - September 2001 - Major Form 41 Carriers

Carrier	Year	Month	Available Seat Miles (Thousands)	Revenue Passenger Miles (Thousands)	Load Factor (Percent)	Enplanements (Thousands)	Departures
Total System	2000	September	79,199,302	55,094,010	69.6	48,074	659,778
Total System	2001	August	86,739,235	66,968,088	77.2	58,045	706,038
Total System	2001	September	64,907,784	38,032,523	58.6	31,603	528,731

Source: Bureau of Transportation Statistics

### Percent Change from August 2001

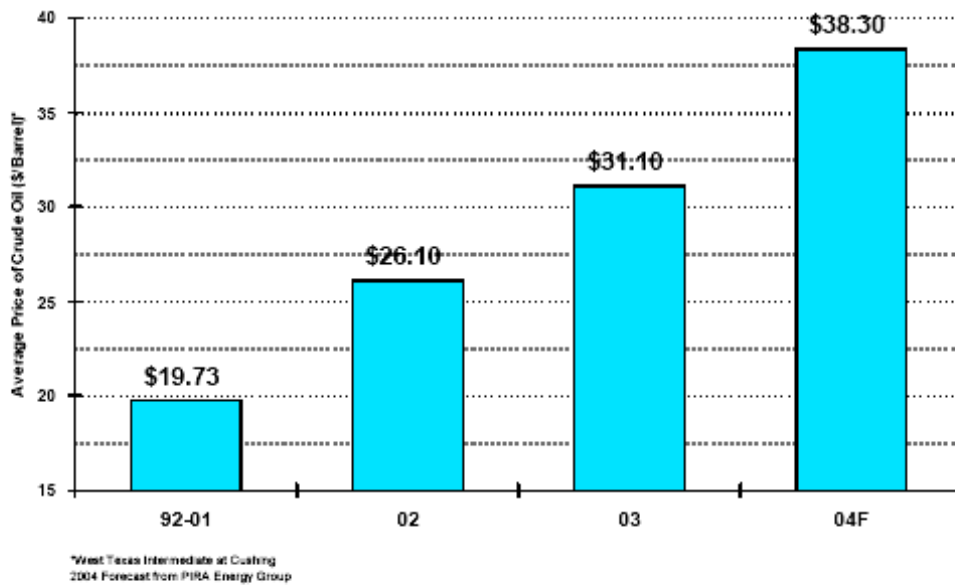
Carrier	Date	Available Seat Miles (Percent)	Revenue Passenger Miles (Percent)	Load Factor (Percent)	Enplanements (Percent)	Departures (Percent)
Total System	August - September, 2001	-25.2	-43.2	-24.1	-45.6	-25.1

Source: Bureau of Transportation Statistics

### (4) Post-2001 Fuel Prices Soaring to Record High

### Post-2001 Fuel Prices Soaring to Record Highs

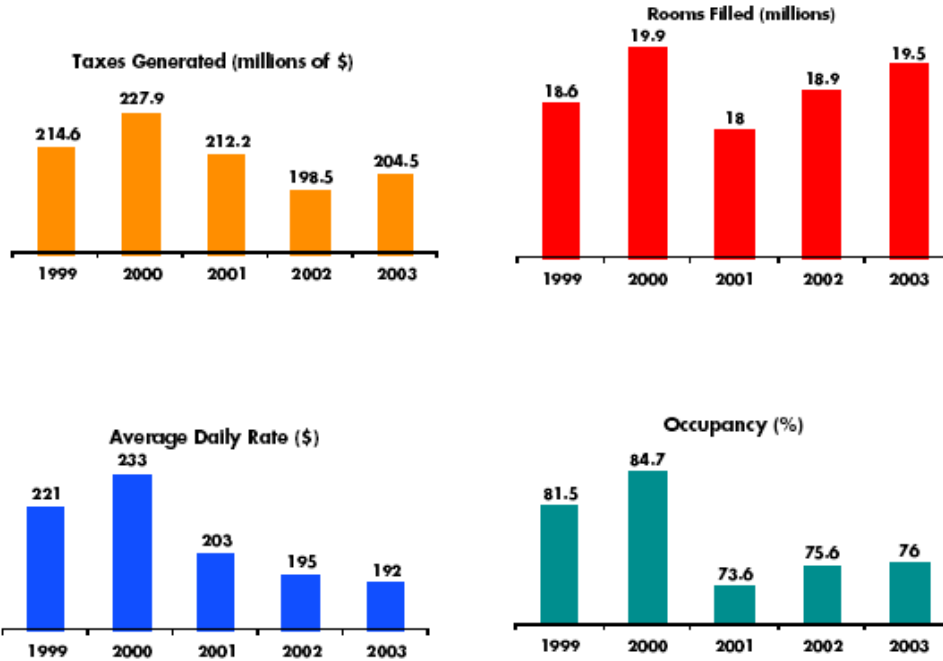
Crude Oil Market Price Hovering Near \$40/barrel



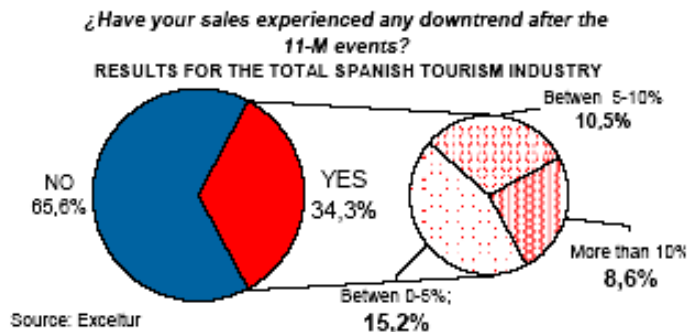
(5) Strong Hotel Market



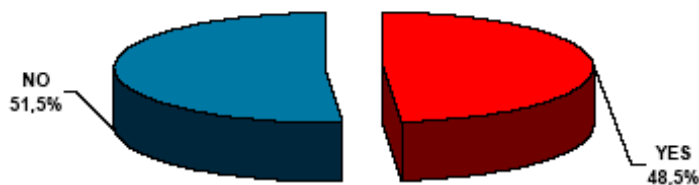
# STRONG HOTEL MARKET



(6) Data related to Madrid bombings – tourism

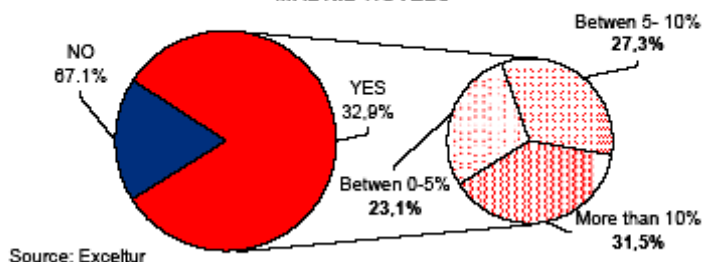


For those who have been affected:  
 Have you experienced a recovery of your sales after the 11-M events?  
 RESULTS FOR THE TOTAL SPANISH TOURISM INDUSTRY



Fuente: Exceltur

¿Have your sales experienced any downtrend after the  
 11-M events?  
 MADRID HOTELS



Source: Exceltur

(7) Club Méditerranée - Financial information - KEY FIGURES

Year ended October 31

Millions of Euros	2001	2002
<b>Total Revenues</b>	<b>1 985</b>	<b>1 744</b>
<b>Operating income</b>	<b>50</b>	<b>(3)</b>
Net financial result	(33)	(32)
Net exceptional result	(71)	(8)
Amortization of goodwill	(8)	(10)
Income Tax	(6)	(6)
Minority interests	(2)	(3)
<b>Group net result</b>	<b>(70)</b>	<b>(62)</b>
Capital expenditure	239	151
Net debt	(396)	(421)
Free cash Flow	(52)	(12)

(in millions of Euros)	31/10/ 02	31/10/ 03
Revenues	1 744	1 609
Operating income	(3)	(6)
Net financial result	(32)	(45)
Net exceptional result	(8)	(56)
Tax	(6)	21
Goodwill amortisation	(10)	(8)
Minority interests	(3)	-
Net income	(62)	(94)
Free Cash Flow*	(12)	42
Net debt	(421)	(389)

\* funds generated by transactions (after investments and disposals)

(8) National Defense Summary

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Table 1-11  
**NATIONAL DEFENSE SUMMARY**  
**BUDGET AUTHORITY AND OUTLAYS**  
(\$ Millions)

	Fiscal Year Budget Authority				Fiscal Year Outlays			
	2000	2001	2002	2003	2000	2001	2002	2003
<b>Current Dollars</b>								
DoD Appropriations Act 1/	283,947	302,514	321,108	370,897	274,636	283,875	318,822	351,791
Military Construction Act	8,649	9,106	10,605	8,987	8,528	8,494	9,456	9,885
OMB Rounding/Scoring Difference	-38	3,031	3,116	-2	-11	3,015	3,856	296
Proposed Legislation	0	0	0	0	33	197	284	308
Other Defense Related Activities	13,300	15,711	17,395	17,710	12,958	14,208	17,080	17,537
Offsetting Receipts & Other	<u>-1,721</u>	<u>-1,337</u>	<u>-1,501</u>	<u>-792</u>	<u>-1,650</u>	<u>-1,257</u>	<u>-1,511</u>	<u>-805</u>
<b>TOTAL NATIONAL DEFENSE</b>	<b>304,136</b>	<b>329,025</b>	<b>350,722</b>	<b>396,801</b>	<b>294,495</b>	<b>308,533</b>	<b>347,986</b>	<b>379,012</b>
<b>FY 2003 Dollars</b>								
DoD Appropriations Act 1/	308,241	318,695	328,274	370,897	298,213	299,117	325,485	351,791
Military Construction Act	9,116	9,420	10,782	8,987	8,984	8,773	9,584	9,885
OMB Rounding/Scoring Difference	-41	3,192	3,185	-2	-12	3,175	3,936	296
Proposed Legislation	0	0	0	0	33	197	284	308
Other Defense Related Activities	14,428	16,544	17,781	17,710	14,060	14,963	17,434	17,537
Offsetting Receipts & Other	<u>-1,806</u>	<u>-1,378</u>	<u>-1,521</u>	<u>-792</u>	<u>-1,729</u>	<u>-1,288</u>	<u>-1,527</u>	<u>-805</u>
<b>TOTAL NATIONAL DEFENSE</b>	<b>329,939</b>	<b>346,474</b>	<b>358,501</b>	<b>396,801</b>	<b>319,549</b>	<b>324,936</b>	<b>355,194</b>	<b>379,012</b>

1/ DoD Appropriations Act includes CIA Retirement & Disability Fund and Community Management Staff

(9) Total Managed Expenditure by Government Function

	VAT Inclusive at current prices (£ billion)						
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
						Outturn	Estimate
<b>Total Expenditure on Services</b>	<b>322.7</b> <sup>r</sup>	<b>332.7</b> <sup>r</sup>	<b>343.6</b>	<b>367.1</b> <sup>r</sup>	<b>390.5</b> <sup>r</sup>	<b>418.9</b>	<b>459.0</b>
<i>Of which</i>							
Social Protection	113.6	114.4	122.0	127.4	136.0	143.8	152.4
Health	44.4	47.0	49.6	54.3	59.9	66.3	75.6
Education	37.4	38.8	40.8	44.4	49.7	53.8	59.5
Defence	20.9	23.7	24.1	24.9	24.6	26.1	28.0
Public Order and Safety	17.0	17.9	18.4	20.4	23.0	24.9	27.7