

The Offshore Oil and Gas Industry  
Market Response – Part Two

October 29, 2010

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## **INTRODUCTION**

This report reviews the market response to the Deepwater Horizon oil spill in April. The following three questions were addressed in Part One of our report:

- a) What were the share prices before and after the accident?
- b) What are major factors driving share prices?
- c) How do these factors impact share prices in terms of timeline?

The following three questions are addressed in this report:

- d) Can comparisons be made between the oil and gas industry and other regulated industries?
- e) What pressures do financial markets impose on companies that may provide them with incentives to self-regulate?
- f) What is the relationship between share price and insurance premiums?

## **KEY FINDINGS**

- The airline and oil and gas industries are comparable in multiple respects as both are capital intensive, their stock prices are heavily influenced by commodity prices and general macroeconomic conditions, and safety is a critical risk area that must be properly managed for financial growth.
- Stock markets react rationally to unanticipated, catastrophic events. Both the airline and petroleum industries have experienced catastrophic events that severally impacted the industries' aggregate financial and stock performance. In these circumstances, institutional investors in both industries rushed to sell shares of airline and petroleum companies in fear

that the events would severally impact long term sustainable growth and cash flow. This demonstrated that markets react rationally to news of events that can potentially and materially impact a company's future financial performance and position.

- Only a finite number of investors really matter when predicting stock price movements. It is well known that share prices of corporate equity securities rise when demand for a stock is greater than supply (buyers outnumber sellers) and fall when supply is greater than demand. However, not every buyer or seller matters in the supply and demand equation since a maximum of only 100 current and potential investors typically exert a significant influence on the share prices of most large companies. Executives can predict how shareholders will react to announcements and more accurately estimate the direction of stock prices by identifying critical individual investors and understanding their motivations.
- Insurance premiums and stock prices are inversely related. As insurance premiums rise, profit margins, operating cash flow, and stock prices decline. For some petroleum companies, insurance is the largest component cost of their cost structure. If premiums increase by a significant percentage, it is likely to prompt consolidation within the market since only large, integrated oil and gas companies will be able to continue to operate in the deepwater Gulf.
- Similar to the petroleum industry, the airline industry's financial and stock performances are cyclical since its profitability is driven by economic conditions such as oil prices, consumer and corporate spending. Also, both industries have enormous fixed costs, generally are highly leveraged and prone to huge profit swings.

## **Q: CAN COMPARISONS BE MADE BETWEEN THE PETROLEUM INDUSTRY AND OTHER REGULATED INDUSTRIES?**

Certain attributes of the petroleum industry are comparable to other regulated industries, such as the airline industry. Like oil and gas producers, airline companies operate in a heavily regulated environment, although prices are not controlled. Characteristics of the airline industry are examined below, as well as separate major events that have impacted both industries' stock performance at different time periods. This paper examines the profile of airline companies and stock performance before and after September 11, 2001 so as to identify and explain factors that influence intuitional investors' decisions to buy or sell large quantities of stock.

The airline industry is similar to the oil and gas industry in that it experiences low probability but high-impact accidents. The attacks on September 11, 2001 had a large impact on specific companies within the airline industry. Markets react rationally to news of events that can potentially and materially impact a company's future financial performance and position. We discuss below the contributing factor of how concentration of equity ownership drives stock prices up or down. Changes in stock prices for both the airline and oil and gas industries are generally a result of a large concentration of few shareholders, who are savvy institutional investors having specialized industry experience.

### **Airline Industry Profile**

The Air Transport Industry is primarily comprised of domestic air carriers that focus on passenger service. Its participants range from major international airlines with annual revenue run rates of over \$10 billion, down to smaller intra-domestic carriers with revenue bases as low as \$575 million. Large, traditional

(legacy) carriers operate through a hub-and-spoke system, whereby many flights go through one of their main hubs dispersed throughout the U.S. Smaller players may utilize a point-to-point system, serving leisure destinations from smaller airports. These passenger airlines' financial prospects and profitability are largely impacted by broader economic conditions.

In reviewing the events that have impacted stock prices of airlines it should be noted that the airline industry also includes the large package shippers, FedEx Corp. (**FDX**) and United Parcel Service (**UPS**). These firms' financial prospects are similar to the passenger airlines in that profitability is largely a byproduct of the broader economic situation. However, their earnings are significantly more consistent, and as such they are not included in this analysis. There are also several specialist companies in the industry, including cargo and personnel transporters.

**Delta Air Lines** (DAL) is the largest passenger carrier in terms of revenues, following its October 2008 merger with Northwest Airlines. More recently, in 2010, **UAL Corp.** (UAA) and **Continental Airlines** (CAL) agreed to merge and form a carrier that rivals Delta as the nation's largest. Consolidation activity has been spurred by rising competition, particularly on intra-U.S. routes, from smaller, more cost-efficient carriers. Furthermore, the desire for horizontal integration increases when economic conditions decline. Other majors affected by this trend include **AMR Corp.'s** (AMR) American Airlines and **US Airways** (LCC).

Currently, the domestic airline industry is relatively concentrated, due to the large capital investment necessary for market entry and start up. But, it is also increasingly characterized by point-to-point carriers that are able to undercut the average airfare charged by larger carriers. These include **JetBlue Airways** (JBLU), **Southwest Airlines** (LUV), and **AirTran Holdings** (AAI). Additionally,

on foreign routes, competition from local carriers can constrain revenues-per-available-seat-mile and impact overall revenues.

Over the past decade an increasingly globalized economy has boosted the need for international air travel, providing new avenues for growth. U.S. carriers have increased their presence abroad. In March 2008, the U.S./EU “open skies agreement”<sup>1</sup> became effective, allowing carriers to operate between any two points in the two regions. This deregulation has facilitated the expansion by airlines into foreign markets and enhanced competition on transatlantic routes.

Increasing competition and the growing demand by travelers has encouraged the formation of global alliances, of which currently three sizable ones exist. These alliances allow carriers to retain their market shares by offering access to markets not served directly by any individual carrier.

Generally, revenues from ticket sales rise and fall with air traffic (revenue passenger miles). Airfares fluctuate according to the seating supply/demand balance and are oftentimes matched by competitors. The average fare is also affected by the mix of business to leisure passengers. Along those lines, excess seating capacity (measured in available-seat-miles) can force airlines to discount ticket prices. Load factors (occupancy) indicate a carrier’s efficiency in altering capacity to meet demand.

The airlines also derive a small portion of their revenue - 3% to 4% - of the total -- from cargo transport. Airlines earn a modest amount of revenue from bag check and flight change fees. Carriers can aggressively increase these ancillary

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<sup>1</sup> The **EU-US Open Skies Agreement** is an air transport agreement between the European Union and the United States that allows any airline of the European Union and United States to fly between any point in the European Union and any point in the United States. As a result the London Heathrow Airport was opened to full competition ending an exclusive right granted for only two U.S. airlines and two UK airlines to fly transatlantic services out of Heathrow. This greatly helped US Airlines grow in reach and expand revenue.

charges as a means of offsetting the impact of elevated fuel costs and other cost increases. Margins are hard to predict and depend on the carrier's cost structure.

Oil prices are another important component of overall costs, as they directly factor into fuel costs. When oil prices and the operating costs are relatively low, profits can be sizable.

After fuel, labor is the next largest cost outlay. Strong unions often set wage rates and scheduling rules that may be incongruent with the current operating climate. In response, carriers can take cost-cutting and revenue-boosting steps, such as tacking fuel surcharges onto fares, hedging fuel prices and furloughing employees.

Air Transport stock prices reflect the significant risks within this industry to shareholders similar to those of petroleum companies. Foremost, airline companies' earning profiles are volatile and usually highly unpredictable. As such, institutional investors examine individual airline company's historic earnings and current market conditions to rate earning predictability. The same holds true for institutional investors holding equity in petroleum companies. Institutional investors also evaluate an airline's capital position relative to financial leverage to assess a company's level of safety. This is also true for petroleum institutional investors. Given that airline and petroleum companies often have sizable capital spending requirements, cash levels may decline precipitously, especially during the seasonably slow December and March quarters. Accordingly, most airlines often issue new shares, carry a sizable debt balance, and may be at risk of credit defaults if conditions worsen severely. Although the petroleum industry supports capital investments with a high proportion of debt finance, the industry generally has a better capital position than that of the Air Transport industry. However, many institutional investors

review each airline carrier's and petroleum company's long-term debt-to-capital ratio to assess risk levels.

Air Transport stocks' performances generally mirror the broader market, but can also move sharply when the price of oil changes. They typically trade at low price-earnings (P/E) ratios, and, depending on the airline, stock prices may rise more than the market average when operating conditions improve or oil prices drop. Likewise, as noted in part one of the finance report, stock value of petroleum companies is often more dependent upon the movement of a macro variables such as the commodity price of oil and growth in the underlying economy than it is on firm specific characteristics. More important, the value of an oil company is inextricably linked to the price of oil.

Appendix A contains a more detailed review of several airlines.

## **Conclusion**

Both the airline and petroleum industries historically have experienced catastrophic events that severally impacted each industry's aggregate financial and stock performance. Institutional investors in both industries rushed to sell stock shares of airline and petroleum companies in fear that the events would severally impact long term sustainability and cash flow. This demonstrates that markets react rationally to news of events that can potentially and materially impact a company's future financial performance and position. This suggests that firms would benefit in the long run by devoting resources to safety, business controls, and environmental risk management in both industries. Its financial results depend on management's ability to minimize the inherent risks of oil, gas, petrochemical and air travel operations, as well as control effectively its business activities. Otherwise, shareholders will punish companies for poor management

by driving the cost of capital higher through lower valuation multiples (P/E) and limiting access to capital that is needed to finance operations. For example, the petroleum industry may attempt to minimize spills through a combined program of effective operations integrity management, ongoing upgrades, key equipment replacements, and comprehensive inspection and surveillance to retain favorable shareholder opinion. Similarly, the airline industry implemented cost-effective new technologies and adopted new operating practices to increase air safety, not only in response to government requirements but also to address air travelers concerns and priorities. By addressing those issues the airline industry improved its stock performance and recovery time through the end of fiscal year 2004. Both industries benefit from maintaining a disciplined framework of internal controls and apply a controls management system for monitoring compliance with internal framework. If they are not successful in managing risks then substantial liabilities and other adverse impacts from catastrophic events could have a material impact on sustainability as an ongoing entity and adversely impact stock prices.

**Q: WHAT PRESSURES DO FINANCIAL MARKETS IMPOSE ON COMPANIES THAT MAY OFFER INCENTIVES FOR THEM TO SELF-REGULATE?**

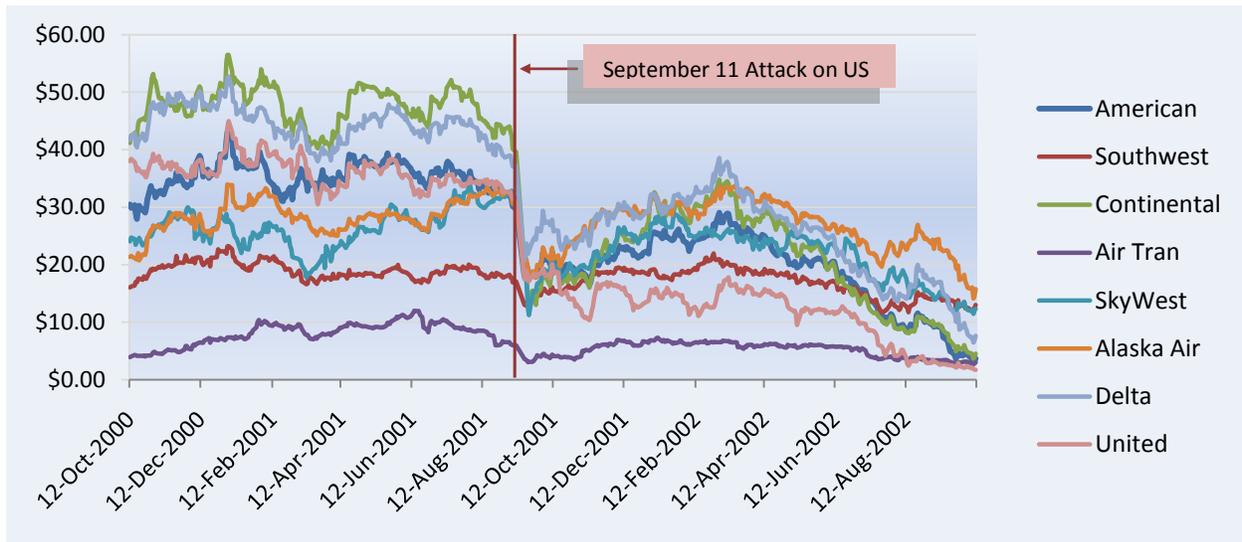
As discussed in Part One of our market report, shareholders of large publicly owned petroleum companies rushed to sell ownership interest of companies operating in the Gulf soon after the BP Horizon disaster, which drove down the stock prices of the respective companies. Markets apply financial pressure on companies through various means. For example, the cost of capital significantly rises as a result of falling stock price. Intentional investors may maintain pressure through depressed stock evaluation until management takes corrective action that satisfies shareholders. In the event of the BP oil spill, shareholders focused their attention on governance, compliance, and management systems needed to minimize risk in deepwater offshore oil and gas drilling around the world. A stream of letters from more than 50 global investors to oil companies operating in both the Gulf of Mexico and the North Sea demanded information about companies' response plans for dealing with offshore accidents. The stakeholders are seeking evidence that companies have robust spill contingency plans and clear guidelines for contractor selection and oversight. Investors also want compensation and incentive packages for senior management to include specific links to environmental, health and safety targets.<sup>2</sup> Stock prices for certain companies are not expected to rebound to pre-oil spill levels until such policies are implemented to shareholders satisfaction.

The airline industry felt similar effects of financial pressure from shareholders in wake of September 11. Stock prices did not start to rebound until shareholders felt that safety measures were instituted by the industry and federal government.

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<sup>2</sup> Henshall, Angela. "Deep Water, Deep Trouble" [The Wall Street Journal](#). October 5 2010

**Figure 1: Stock Price Movements of Major US Airline Companies**



Data Sources: FT Times, FINRA and Capital IQ

### **Stock Market Reaction to Adverse Airline Events**

The events that unfolded on September 11, 2001 demonstrate that stock markets react rationally to unanticipated, catastrophic events. Participants in the stock market reacted by selling major positions of publicly held stock belonging to major airline carriers. Analyzing stock price performance and the volume of shares traded reveals that the market reacts with rational pricing and suggesting that the market differentiated among various air-transport firms. A significant drop in market value for the entire airline industry the next trading day after September 11, 2001 suggest that the market was concerned about the increased likelihood of financial distress in the wake of the attacks and distinguished between airlines based on the level of their cash reserves. Also, the period immediately thereafter the Air Transportation Safety and System Stabilization Act was passed by Congress and signed into law further demonstrates that the market believed the major airlines benefited from the act, while the small airlines did not. As a result of this perception, stock prices of major airlines rose slightly while those of

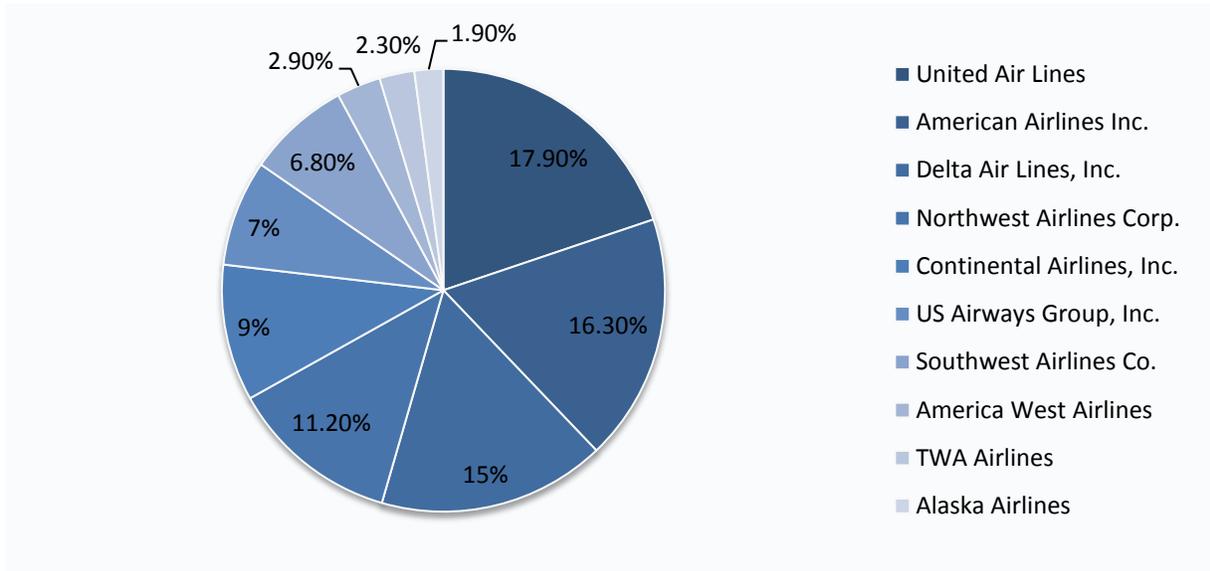
smaller airlines did not. This result is consistent with the notion that the market distinguished among the airlines, implying that investors believed the effects of the September 11 attack would affect the various airlines differently. There is a significant positive relationship between stock returns of airlines after September 11, 2001 and the ratio of cash and equivalents to total assets. Institutional investors distinguished between airlines based on their ability to cover short-term obligations using available liquidity. Rational pricing of airlines' stock was based on a company's ability to avoid bankruptcy by meeting short-term obligations in the wake of the September 11 attack, which was institutional investors' primary concern. Without sufficient liquidity to cover current debt obligations a company's long term sustainability and future cash flow, needed to pay dividends, were questionable. Larger airlines had a higher ratio of liquid assets to current liabilities than that of smaller airlines. Thus, larger airlines were perceived as being safer than smaller and less liquid airlines and commanded a price premium as demonstrated by a higher Price to Earnings (P/E) ratio.

The markets were partly influenced by the flight ban, imposed by the U.S. government on September 11 that cost the airlines hundreds of millions of dollars. Further, the attacks raised the possibility of significant declines in airline revenue due to steep declines in passenger traffic fueled by fears of further attacks, as well as by worsening economic conditions.<sup>3</sup> The attacks have shown that airlines are exposed to risks that were not taken into consideration prior to September 11, 2001. As a result, buyers have factored such risks into share prices as demonstrated by a lower price-earnings (P/E) ratio. Investors are willing to pay less on each stock share per company's earnings in order to compensate for higher risk. The price reaction to the event and the industry's current low valuation per share of earnings is consistent with rational pricing.

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<sup>3</sup> Carter, David: The Effect of September 11, 2001; Oklahoma State University, Department of Finance: April, 2002

**Figure 2: Top 10 U.S. Airlines by Market Share, 2001**



\*Ranked by: Share of U.S. revenue passenger miles, in percent. Data Source: SEC 10K Filings

Following September 11, President Bush gave the industry \$15 billion for much needed liquidity to stabilize the airline industry and restore market confidence. The airlines had a very specific liquidity problem. For example, American Airlines, held by AMR, and United Airlines, held by UAL, were close to running out of cash. The financial markets were not available to the airline companies because institutional investors were reluctant to provide capital due to the potential large liability that faced the entire airline industry and were awaiting the government implemented plan that would act as a shield to protect airlines from third-party claims.<sup>4</sup>

The second problem that the industry faced was low confidence in future business. Neither the industry nor institutional investors knew how quickly

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<sup>4</sup> Barney, Lee: The Daily Interview; Airlines Could Be Headed for a Grounding; September 21, 2001; Wall Street Journal

passenger levels would be restored. Timing of their return was critical to the industry's sustainability. As a result, every airline in the nation was at risk of going bankrupt. The financial troubles at Delta and United, for example, included having their stock delisted from the stock exchange as well as filing for Chapter 11.

With regard to the petroleum industry, institutional investors sold large volumes of stock shares driving prices down in fear that the BP oil spill would lead to new legislation that would significantly increase oil and gas companies' costs and severally impact the industry's profitability and cash flow. Future liability and uncertainty also contributed to shareholder fears. To manage investors' expectations, oil and gas company executives need to manage with transparency the safety, business, and environmental risks associated with their companies. Companies need to apply rigorous management systems and continuous focus to workplace safety and avoid spills or other adverse environmental events to keep share prices from falling. Otherwise, low share prices will drive up the cost of capital through lower valuation multipliers (P/E) and limit access to the capital needed to finance firm operations. As such, the petroleum industry has an incentive to self regulate because markets react rationally to news of events that can potentially and materially impact a company's future financial performance.

## **Q: WHAT IS THE RELATIONSHIP BETWEEN SHARE PRICE AND INSURANCE PREMIUMS?**

There is an inverse relationship between insurance premiums and stock prices. This section explains that as insurance premiums rise, profit margins, operating cash flow and stock prices decline. Some regulatory proposals include increasing the federal liability cap for an oil spill to \$10 billion, or removing the cap altogether. If the proposed changed becomes a reality it is likely to prompt consolidation within the market since only large integrated oil and gas companies may be able to continue to operate in the deepwater Gulf. A number of companies will need to address whether their risk profiles and the corresponding cost profiles align with their strategy. For some petroleum companies, insurance is the largest piece of their cost structure.<sup>5</sup> Moody's Investors Service estimated offshore insurance premiums could increase by as much as 50%, which would severely impact already low profit margins. Higher insurance rates means higher day rates for deepwater rigs. It also could translate into a higher capital costs for gulf operators if investors and creditors demand higher returns in exchange for a perceived higher risk level. This higher cost would place further pressures on margins and conversely on stock prices.

### **Overview of Offshore Energy Insurance Market**

Within the ocean marine insurance market, there are eight subline markets: cargo, hull, war, primary marine liabilities, excess liabilities, yacht, protection and indemnity (P&I), and offshore energy. Traditionally, operators of offshore energy facilities will self insure or purchase pollution liability coverage and excess liability

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<sup>5</sup> Dittrick, Paula. "Higher costs, consolidation expected in Gulf of Mexico." August 28, 2010

limits in the surplus market or the international marine insurance market. Insurance sold in the surplus market is typically on a subscription basis through specialized brokers who negotiate with underwriters in the energy field. The offshore energy insurance market is well-syndicated, with insured losses spread across a broad spectrum of global insurers and reinsurers based principally in London and Bermuda.

There are five types of insurance coverage commonly used in the offshore energy insurance market each of which are relevant to the Deepwater Horizon incident: 1) offshore physical damage coverage for physical damage or loss to offshore fixed platforms, pipelines, and production and accommodation facilities; 2) Operator's Extra Expense (OEE); 3) Excess Liability Insurance; 4) business interruption; and 5) worker's compensation. Protection and Indemnity (P&I) insurance is sold by P&I clubs (mutual associations of vessel owners) to protect owners and operators of vessels from third-party liabilities.

The table below illustrates ocean marine global premiums by class for first-party physical damage coverage and does not include third-party liability coverage for bodily injury and property damages and clean up/containment of oil spills. The aforementioned data is not readily available given that the main market players are based in London and Bermuda and beyond the radar of state insurance regulators. In conversations with offshore energy insurance brokers, Rawle O. King, author of a congressional research study entitled "*Deepwater Horizon Oil Spill Disaster: Risk, Recovery, and Insurance Implications*" estimates that total offshore energy property insurance premiums for the entire industry ranges between \$3 billion and \$3.5 billion annually. In addition to the marine insurant policy that all operators carry, sources also estimate that there is an additional \$500 million annually in third-party liability capacity and that most operators of mobile offshore drilling units (MODUs) typically carry between \$500 million and \$300 billion of operator extra expense insurance. The size of this added

coverage depends on the size of the company, as well as the scope and location of the covered project.

**Figure 3: Ocean Marine Global Insurance Premiums by Class**

(\$ in millions)	<b>2006</b>	<b>2007</b>	<b>Estimated 2008*</b>	<b>Estimated 2009*</b>
Global Hull	\$5,282	\$5,919	\$6,633	\$7,433
Transport/Cargo	\$10,724	\$11,958	\$13,334	\$14,868
Marine Liability	\$1,381	\$1,420	\$1,460	\$1,501
Offshore/Energy	\$2,736	\$2,806	\$2,878	\$2,951
<b>Total</b>	<b>\$20,124</b>	<b>\$22,103</b>	<b>\$24,277</b>	<b>\$26,664</b>

\*Estimates are based on the percent change between 2006 and 2007 premiums. Source: International Union of Marine Insurance

Moody's Investor Service reported in June 2010 that the Deepwater Horizon oil spill will have a meaningful impact on the market for offshore energy-related insurance coverage, with early reports indicating a 15% to 25% increase in property coverage for rigs operating in shallow waters (as in the Gulf of Mexico) and up to 50% higher for deep water rigs. At the shallow water level, this would result in annual offshore energy property insurance coverage ranging between \$345 billion and \$375 billion up from \$300 billion and a deepwater coverage increase from \$300 billion to \$450 billion annually. Third-party liability and OEE coverage will see an increase from the current \$500 million to as much as \$750 million annually.

## ***The Impact of Increased Insurance Premiums on Oil Company Stock***

The 1990 Oil Pollution Act (OPA) limits an offshore facility's liability for economic and natural resources damages to \$75 million per incident although responsible parties are liable for all removal costs. Damages in excess of the cap could be paid by the Oil Spill Liability Trust Fund (OSLTF), which is financed primarily through a fee on domestic and imported crude oil. The fund is limited to payouts of \$1 billion per incident and \$500 million for natural resource damages.

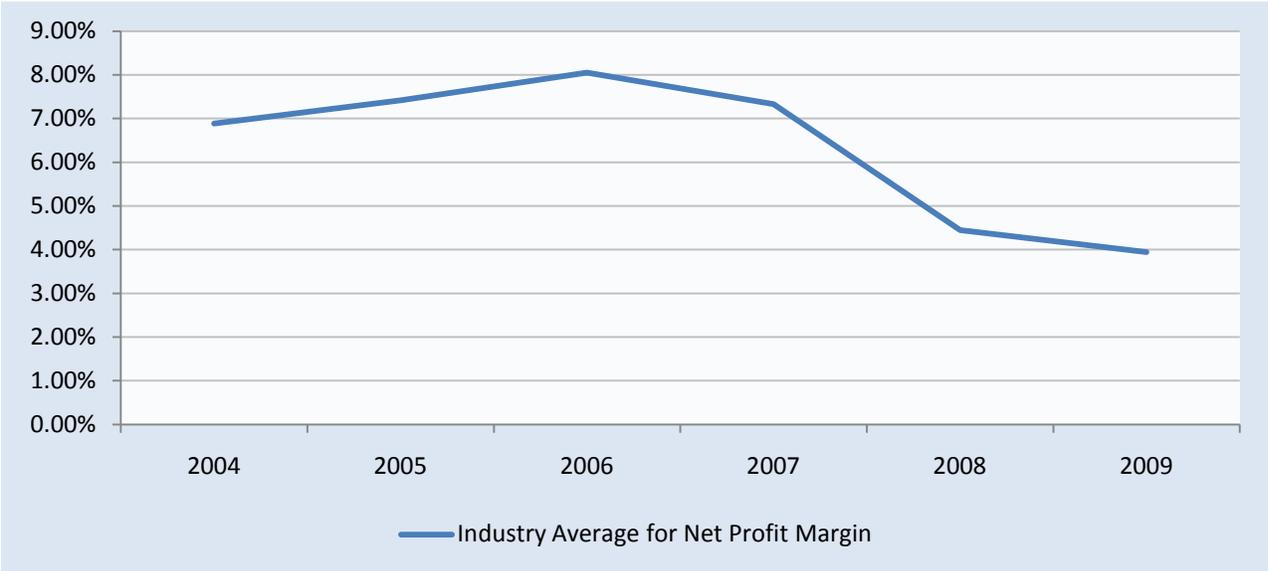
Lease holders of a covered offshore facility (COF) must demonstrate a minimum amount of oil spill financial responsibility (OSFR) of \$35 million per 35,000 barrels of "worst case oil-spill discharge" up to a maximum of \$150 million for COF located in the Outer Continental Shelf (OCS) and \$10 million in state waters (Transocean of Switzerland owned the Deepwater Horizon rig and leased it to BP). OSFR can be secured in various ways including surety bonds, guarantees, letters of credit, and in some cases self insurance, but the most common method is by means of an insurance certificate.

Congress has been called upon to reconcile two policy issues: 1) the desire to remove the limitations of liability for operators of offshore energy facilities for economic losses caused by oil pollution damage and raise the criteria for demonstrating OSFR; and 2) the limited capacity of offshore energy insurance and reinsurance to cover loss of well control, cost to redrill a blowout well, and pollution liability facing operators of offshore energy facilities. Legislative measures (S. 3305, H.R. 5214, H.R. 5629) currently seek to raise the limit of environmental liability on responsible parties from the existing \$75 million or, in some cases abolishing the limit altogether.

Concerns have been raised that higher limits of liability and corresponding higher financial responsibility (insurance) requirements in an environment of limited offshore energy insurance capacity will deter smaller companies from offshore oil

and gas exploration and production resulting in increased industry consolidation and continued growth by the largest companies.

**Figure 4: Oil and Gas Industry Net Profit Margin Average**

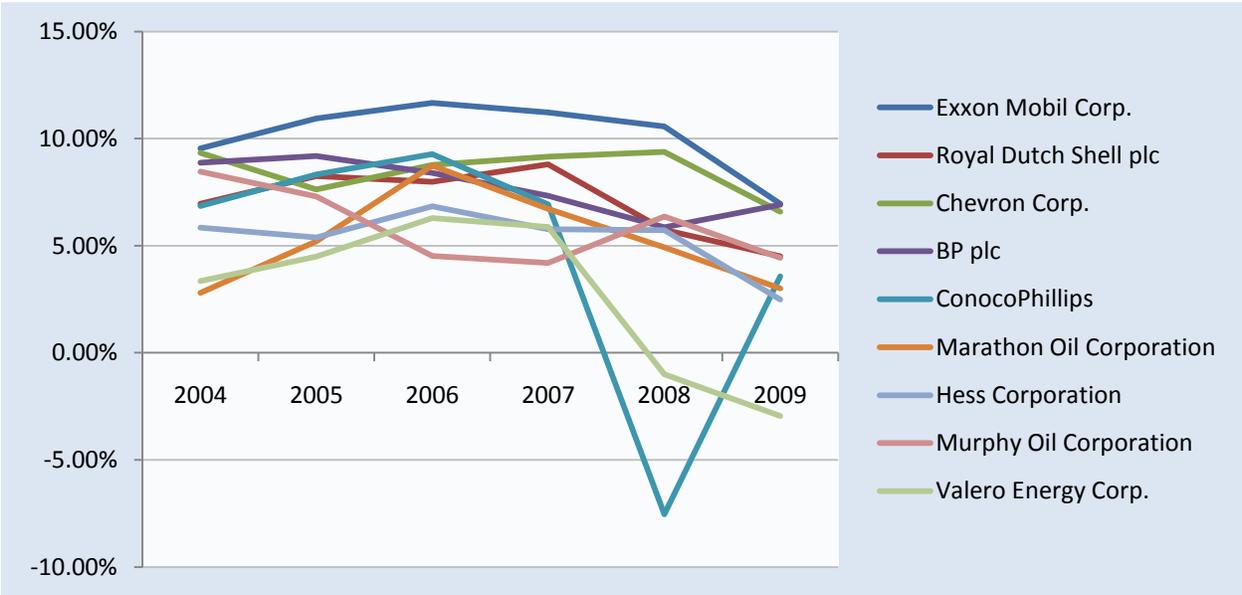


Data Sources: Individual company’s 10K form filings with the SEC

As demonstrated in figure 4, the net profit margins of the industry have fallen over the last five years as the total costs incurred to acquire, explore, develop and insure oil and gas fields have risen and caused margins to compress. The drop in oil prices over the last several years also contributed to lower margins. The Deepwater incident leaves oil companies vulnerable to further shocks that will reduce margins even more resulting from the higher-cost structure brought about by increased insurance. In addition to mounting insurance premiums, other variables that will affect the economics of offshore oil and gas development include rig availability, discoveries, regulatory requirements, and capital availability, all of which will compound the reduction in domestic offshore energy production and will have a threefold effect on price/demand of oil and natural gas: 1) lower domestic supply of oil and gas will lead to more imports and higher fuel costs; 2) increased U.S. reliance on foreign oil will mean greater U.S.

dependency on OPEC and National Oil Companies (NOCs), potentially resulting in less price stability; and 3) Futures prices will adjust upward reflecting the new costs that will make crude more costly to extract from the ground.

**Figure 5: Company Net Profit Margins**



Data Sources: Individual company's' 10K form filings with the SEC

This industry contains several of the world's largest companies, some mid-tier players, and a handful of pure refiners. Balance sheets tend to be strong, with a moderate amount of leverage. However, as figure 5 demonstrates, profit margins of all companies have fallen since fiscal year 2004. To reduce pressure on margins most of the international oil giants have assumed modified variations of the integrated business model by lightening up on low-margin refining or economically sensitive chemicals manufacturing. One reason that companies are less eager to own refineries, especially in mature regions, is because the high cost of purchasing crude oil tends to dampen returns. The need to upgrade plant and equipment to meet tightening environmental standards is another deterrent. Going forward any exploration and production company that operates offshore is expected to face reduced margins from a higher cost structure from increased

taxes, regulation, and insurance.<sup>6</sup> Reduced profit margins will have an adverse effect on cash flows, earnings and dividend yields, all of which are used in determining the value of the stock. A higher oil spill liability limit may discourage entry and drive out smaller producers reducing efficiency and oil production which will, in turn, have a negative impact on supply and thus, investor optimism. Reserve levels, which influence investors' long-term sector expectations, will decline as high insurance premium levels discourage domestic production. The price of Futures will increase reflecting the higher cost of retrieving barrels and thus, forecasting tighter profit margins. The net result may be a downward trend in the price of oil stock. Should oil stock prices dip down due to lower profit margins of firms in the industry, some investors may see this as an opportunity to buy low, once again permitting market forces to help re-stabilize prices at least temporarily.

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<sup>6</sup> 1 Congressional Research Service, "*Deepwater Horizon Oil Spill Disaster: Risk, Recovery, and Insurance Implications*", Rawle O. King, July 12, 2010.

## APPENDIX A

### Individual Airline Company Profiles

The airline industry closed its books in 2001 as the worst year in its history. Before the attacks of September 11 and the economic recession that plagued 2001, 1992 was the worst year, with \$4.7 billion in total U.S. airline losses. 2001 nearly double that. The Air Transport Association estimated \$8 billion to \$9 billion in losses by the U.S. majors by the end of 2001 compared with an industry profit of \$2.6 billion in 2000. The three years prior generated an unprecedented period of wealth for the industry, with more than \$15.4 billion in total combined earnings for the U.S. major airlines.

American Airlines (Ticker: AMR)



Data Sources: FT Times, FINRA and Capital IQ

### Company Profile

AMR Corporation, through its subsidiaries, operates as a scheduled passenger airline in the United States. The company, through its principal subsidiary, American Airlines, Inc., provides scheduled jet service to approximately 160

destinations throughout North America, the Caribbean, Latin America, Europe, and Asia. American Airlines also operates as a scheduled air freight carrier, providing a range of freight and mail services to shippers. AMR Corporation, through its subsidiary, AMR Eagle Holding Corporation, owns and operates two regional airlines with approximately 1,500 daily departures, offering scheduled passenger service to approximately 150 destinations in North America, Mexico, and the Caribbean. The company also serves 250 cities in 40 countries with approximately 3,400 daily flights. As of December 31, 2009, it had a combined network fleet of approximately 900 aircrafts. The company was founded in 1934 and is headquartered in Fort Worth, Texas.

### **Financial and Market Analyses**

AMR Corp. (NYSE: AMR), the parent company of both American Airlines, Inc. and TWA Airlines LLC, reported a 2001 third quarter net loss of \$525 million before special items, or a loss of \$3.40 per share . This compares with net earnings of \$322 million, or \$1.96 per share diluted, in the third quarter of 2000. Management noted that the company's poor financial performance was a result of the financial effects of the September 11 terrorist attacks and the prolonged weakness of the U.S. economy.<sup>7</sup>

Management further stated that the economy was weak while fuel prices were relatively high that caused the entire industry to experience a very difficult financial quarter even before the September 11 attacks. The attacks and their aftermath further weakened air traffic that lead to a staggering effect on the company's overall financial performance, producing the largest quarterly loss in AMR's long history.

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<sup>7</sup> Form 10K filed with Securities and Exchange Commission: Dated December 31, 2001

AMR took a number of steps to respond swiftly to the crisis and restore the company's depressed stock price. First, American cut its daily flight schedule by about 20 percent to better align its capacity with reduced demand. Second, the company advanced the retirement of older aircraft and deferred delivery of new aircraft, sharply reducing capital spending. Costs were further cut by closing facilities, trimming food service, and aggressively reducing overhead. Additionally, AMR eliminated the equivalent of about 20,000 jobs around its system. The company took steps to limit the number of people affected by the reductions, and used a portion of the federal aid payments to put together a package of payments and other benefits for those who were affected. Also as part of the cost-cutting effort, AMR's CEO announced that he and the entire Board of Directors would not take compensation for the rest of 2001, and that every senior officer and officer of the company had taken voluntary pay cuts. AMR also created an "American Heroes" program that allows employees to take voluntary pay reductions to help the company. Cost cutting helped shore up short term problems but the key to restoring long term profitability and its stock price was winning back the company's customer's and easing fears of airline safety.

Southwest Airlines (Ticker: LUV)



## **Company Profile**

Southwest Airlines Co. operates as a passenger airline that provides scheduled air transportation in the U.S. As of December 31, 2009, it operated 537 Boeing 737 aircraft and provided service to 68 cities in 35 states. The company also sells Frequent Flyer credits and related services to companies participating in its Rapid Rewards Frequent Flyer program, including car rental agencies, hotels, restaurants, and retail locations. Southwest Airlines Co. was founded in 1967 and is headquartered in Dallas, Texas.

On February 23, 2010, the St. Joe Company and Southwest Airlines Co. announced a strategic alliance providing for the commencement of low-fare air service to the new Northwest Florida Beaches International Airport.

## **Financial and Market Analyses**

Southwest Airlines was the sole carrier to remain profitable for the third quarter and 2001 fiscal year. The Dallas-based low-fare airline made \$63.5 million in the quarter and \$511 million for the 2001 year. Compare that to the aggregated losses of American, US Airways, Northwest and Continental of \$3.88 billion in 2001.

Southwest's status in financial markets was well established, and the confidence of equity investors was mirrored in the debt market. The company was one of the few airlines with an investment grade credit rating in 2001 and 2002. Standard & Poor's rated the group's senior unsecured debt at A since it emerged from the aviation crisis with an enhanced competitive position.

As noted earlier, the airline industry moved alarmingly into the red before September 11, piling up billions of dollars of losses resulting from the economic

slowdown. The terrorist attacks in the US plunged the industry much deeper into crisis. A wave of feared bankruptcies was only staved off by the US government's \$15 billion bail-out of the industry. Although Southwest itself was not immune to the industry's wider problems, it managed to avoid the sweeping cuts in capacity and the tens of thousands of job cuts announced by most other carriers. Southwest remained in the black for the full year of 2001, and it was the only one of the big seven U.S. airlines that remained profitable in the fourth quarter of fiscal year 2001. Its financial performance in 2001 marked the group's 29th consecutive year of profitability and its tenth year of increased profits. As a precautionary measure, however, the company delayed part of its planned fleet expansion until passengers returned to air travel through special low fare sales.

The company's stock price dropped dramatically in line with the entire industry as a result of the September 11 attacks. However, unlike stock prices of competing airlines, Southwest's stock price quickly rebounded as a result of the company's strong financial performance. The stock price also benefited from management's announcement of the company's 101st consecutive quarterly dividend at the end of fiscal year 2001.

Southwest was the only large U.S. carrier to make both net and operating profits during the last crisis in the airline industry in the early 1990s triggered by the Gulf War and recession. As a result of the company's ability to manage through tough economic conditions, shareholders enjoyed positive, long-term stock performance through fiscal year 2004. However, higher insurance and security costs hurt low-cost carriers such as Southwest. Their lean cost structure made it harder for them to absorb the higher costs, which depressed profit margins and impacted stock performance after fiscal year 2004.

## Continental Airlines (Ticker: CAL)



Data Sources: FT Times, FINRA and Capital IQ

### Company Profile

Continental Airlines, Inc., an air carrier, engages in the transportation of passengers, cargo, and mail in the United States and internationally. As of June 30, 2010, it operated a fleet of 337 mainline jets and 251 regional aircraft; and flew to 117 domestic and 126 international destinations, as well as offered additional connecting service through alliances with domestic and foreign airlines. The company operates its domestic route system primarily through its hubs at Newark Liberty International Airport in the New York metropolitan area; George Bush Intercontinental Airport in Houston, Texas; and Hopkins International Airport in Cleveland, Ohio. It directly serves destinations throughout Europe, Asia, Canada, Mexico, Central and South America, and the Caribbean. The company was formerly known as Varney Speed Lines and changed its name in July, 1937. Continental Airlines, Inc. was founded in 1934 and is based in Houston, Texas. As of October 1, 2010, the company operates as a subsidiary of United Continental Holdings, Inc.

## Financial and Market Analyses

Hurt by the disruptions after September 11, Continental lost \$149 million in the fourth quarter of 2001. Its full-year 2001 loss was \$95 million, but that was modest in comparison with the losses of \$1.8 billion at AMR Corp., parent of American Airlines, and \$2.1 billion for UAL Corp., parent of United Airlines.

Freight and mail generated \$327 million in revenue for Continental, down from \$387 million in 2000. Most of the decline came in the fourth quarter, largely due to a 50% drop in postal traffic after the Federal Aviation Administration barred domestic passenger flights from carrying pieces of mail weighing more than 16 ounces. With a key source of income gone, Continental only generated approximately \$300 million in cargo revenue in fiscal year 2002. Continental Airlines also incurred significant losses in the first quarter of 2002, driving its stock price downward, and continued to lose money for the fourth quarter and full year as fare sales and slumping business traffic push its breakeven load factor higher. The airline had a daily cash burn of \$2 million through the end of the first quarter of 2002 and had not generated positive cash flows from operations since September 11. Low ridership and high fuel cost added pressure to profit margins, which kept the company's stock price at depressed levels. The company also took a \$52 million first-quarter charge to ground and retire its DC-10-30 fleet permanently as a result of reduced air passenger travel. To help defer cost and alleviate pressure on margins and cash outflow, Continental finalized an agreement with Boeing in the first quarter of 2002 to defer certain aircraft deliveries from 2003 and beyond.

By April 2002, the carrier restored most of the flights it dropped after the terrorist attacks, particularly on trans-Atlantic routes from its hub at Newark International Airport. This helped improve profitability and operating cash flow resulting in higher expectations from institutional investors and stronger price appreciation

though the end of fiscal year 2002. Moreover, Continental replaced its narrow-body aircraft on many routes with 12 new wide-bodies in order to increase cargo capacity, lift net profits and diversify its revenue source. Continental opened a 70,000-square-foot cargo terminal at Kennedy International Airport in June 2002. Although Continental did not fly into JFK, the New York airport is the airline's largest facility for international cargo. Twelve trucks a day ferry cargo generated by JFK-based forwarders to Newark International Airport, where Continental opened a new cargo terminal in March 2001. Continental also began construction of a new cargo terminal at Bush Intercontinental Airport in Houston that opened late in 2003. Additional security procedures were proposed by Transportation Security that added to the cost of handling cargo for most airlines. However, Continental did not invest in X-ray equipment at that time because management waited to see what the new Transportation Security Administration would require to protect profit margins.

AirTran (Ticker: AAI)



Data Sources: FT Times, FINRA and Capital IQ

## **Company Profile**

AirTran Holdings, Inc., through its subsidiary, AirTran Airways, Inc., provides scheduled airline services in the United States. It operates scheduled airline service primarily in short-haul markets in the eastern United States, with flights originating and terminating at its hub in Atlanta, Georgia. The company serves both the leisure and business traveler. It has also diversified its network operations in various business markets, such as Baltimore/Washington (BWI), Milwaukee (MKE), Indianapolis (IND), New York (LGA), and Chicago-Midway (MDW), as well as adding a number of new direct routes from Florida. As of February 1, 2010, the company operated 86 Boeing B717-200 and 52 Boeing B737-700 aircraft offering approximately 700 scheduled flights per day to 63 locations in the United States. AirTran Holdings serves its customers through the Internet, travel agencies, and its reservation call centers. The company was founded in 1992 and is headquartered in Orlando, Florida.

## **Financial and Market Analyses**

For the entire fiscal year of 2001 AirTran suffered a net loss of \$2.8 million versus a \$47.4 million profit in 2000. Operating revenues climbed 6.6% to \$665.2 million and operating profit fell 56% to \$35.7 million. The company reported a loss of \$10.6 million, or 15 cents per share, for the third quarter that ended September 30, 2001. That compares with earnings (net profit) of \$8.9 million, or 13 cents per diluted share, in third-quarter 2000. Operating revenues fell 6.7% to \$150.7 million and operating profit totaled \$1.8 million versus \$17.1 million in the same period of the previous year. Executive management noted in the company's 10Q filed with the SEC that the loss was attributable to the

September 11 terrorist attacks. Before the attacks, the company achieved 11 consecutive profitable quarters. AirTran's third-quarter loss included special charges directly related to September 11, which derailed what otherwise would have been a profitable quarter. As a result of the poor operating performance, the company's stock price remained low through the end of the third quarter of 2001. To help stem cash outflow and manage profit margins, AirTran responded to the travel industry downturn that followed the attacks by reducing its daily flight schedule by 20 percent and having employees volunteer for wage reductions.

AirTran's financial performance in the fourth quarter of 2001 did not fare better than the previous quarter. The company posted a \$14.2 million fourth-quarter net loss versus a \$13.1 million profit in the previous year period as cost-cutting measures failed to offset plunging revenues and yields. Operating revenues dropped 20.3% to \$135 million and it reported an operating loss of \$6.5 million versus a \$20.6 million operating profit a year earlier. AirTran restored normal pay and work weeks for its pilots and mechanics starting in 2002, ending temporary cost-cutting measures implemented following the attacks.

AirTran benefited from sharp capacity reductions by competitors in its Northeast markets in 2002 and 2003. Regional carriers looked more attractive to institutional investors because the big airlines cut service to secondary markets. Investors that thought an economic recovery was imminent were also attracted to the major regional airlines like AirTran, which drove the company's stock price higher in 2002 and 2003. AirTran's company's valuations were also very appealing to institutional investors because its stock was trading below its Sept. 10 levels. After dropping nearly 40 percent of its value from \$6 to \$3.62 per share, AirTran stock hit a 52-week low on Sept. 20, 2001. AirTran's price continued to climb as the economic and industry outlook improved, reaching a stock price of \$6.31 per share at the end of the first quarter in 2002. Analysts

had estimated a price target of \$8.50 by fiscal year end 2002, however, an unforeseen rise in fuel costs compressed margins, reduced operating cash flows and drove the company's stock price down in the last two quarters of fiscal year 2002.

Similar to the petroleum industry, the airline industry's financial and stock performances are cyclical since its profitability is driven by economic conditions such as oil prices, consumer and corporate spending. Also, both industries have enormous fixed costs, generally are highly leveraged and prone to huge profit swings.