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## The U.S. Airways Group: A Post-Merger Analysis

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## THE U.S. AIRWAYS GROUP: A POST-MERGER ANALYSIS

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### Research Highlights

- The financial and operating performance of the US Airways Group from Q4 2005 to Q4 2013, the post-merger period, has improved.
- The stock returns of the US Airways Group substantially outperformed the S&P 500 and XAL in 2006 and 2007, the two-year period immediately following the merger, and for at least four years between 2008 and 2013.
- The stock returns of the US Airways Group outperformed the stock returns of Delta Air Lines and Southwest Airlines from 2010 to 2013 and United Airlines' stock returns from 2012 to 2013.

# THE U.S. AIRWAYS GROUP: A POST-MERGER ANALYSIS

## Abstract

America West Airlines acquired the bankrupt US Airways on September 27, 2005 to form the US Airways Group. Our paper analyzes the post-merger performance of the US Airways Group using airline operating metrics and financial ratios for the period 2005 to 2013. While the airline has still a long way to go to improve its leverage and liquidity ratios, its capital structure and ability to pay its obligations have improved since 2005. Moreover, although the airline is still inefficient in utilizing its assets, the efficiency improvements achieved since the merger have resulted in profits and positive returns to investors. Its share prices have also largely outperformed the S&P 500 and XAL since the merger, an indication that investors are pleased with how the merger is developing over time. In view of the US Airways Group's improving financial and operating performance, the merger is, essentially, a success.

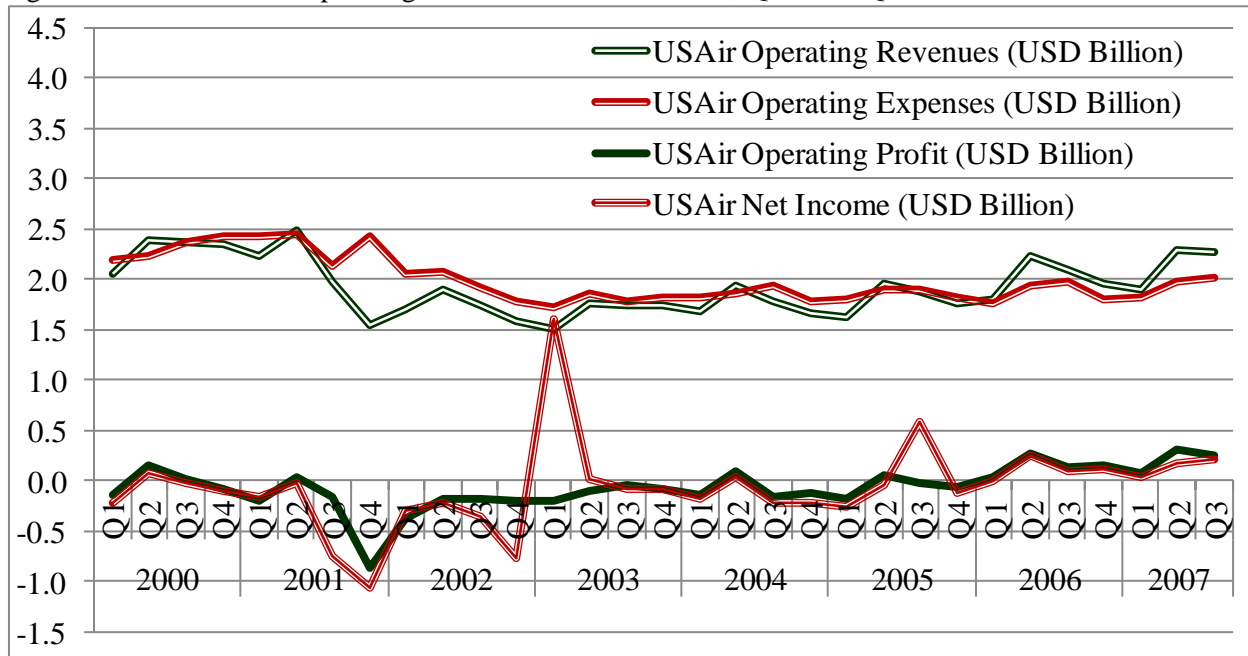
KEYWORDS: Airline Financial Analysis, Airline Merger, Post-Merger Performance

## 1 Introduction

The number of airlines designated as major carriers in the United States (US) has always been relatively small and virtually no carrier has achieved this status without acquiring or merging with another carrier at some point in its history. While most airlines acquired assets and expanded operations through organic growth, US Airways (USAir) is an exception. Although USAir can trace its origin as part of All American Aviation, its growth can almost entirely be attributed to a series of mergers and acquisitions (M&As) including a merger with Lake Central Airlines in 1968 and the acquisition of Mohawk Airlines in 1972, making USAir one of the world's largest carriers at that time (US Airways Group, 2005). Still more M&As followed with Pennsylvania Commuter Airlines in 1985, Reading Aviation Service in 1986, Pacific Southwest Airlines in 1987, and Piedmont Airlines in 1989, and at the time of its approval, the USAir merger with Piedmont was the largest airline merger in US history (US Airways Group, 2005). The Piedmont deal is considered one of the most expensive and unsuccessful deals in US airline history and USAir's share prices began to drop as the airline amassed huge operating losses, in part trying to equalize salaries between USAir and Piedmont (Jones and Jones, 1999). The airline hovered on the brink of bankruptcy until British Airways acquired 24.6% of its stock in 1994.<sup>1</sup> Unfortunately, the first decade of the 21<sup>st</sup> century proved even more tumultuous for USAir, which filed for bankruptcy twice. In August 2002, USAir filed for Chapter 11 bankruptcy protection and reorganization, and in September 2004 the airline filed for another Chapter 11. At the time of the second filing, many expected the carrier to eventually sink into Chapter 7 liquidation because only one US airline, Continental Airlines, has ever survived two bankruptcy filings (De Lollis, 2004). Despite dire predictions, however, USAir managed to beat the odds to become the target of a 2005 acquisition by America West (Jones and Jones, 1999). Figure 1 shows the financial performance of USAir from the first quarter (Q1) of 2000 to the third quarter

(Q3) of 2007, which includes the two four-quarter periods immediately following USAir’s 2002 and 2004 Chapter 11 filing. Figure 1 indicates that USAir’s financial performance improved in 2003 and 2005, with net income rising substantially in Q1 2003 and Q3 2005. From the fourth quarter (Q4) of 2005, which coincides with USAir’s merger with America West Airlines (AWA), its financial performance improved—operating revenues have outpaced operating expenses while operating profit and net income have been non-negative (see Figure 1).

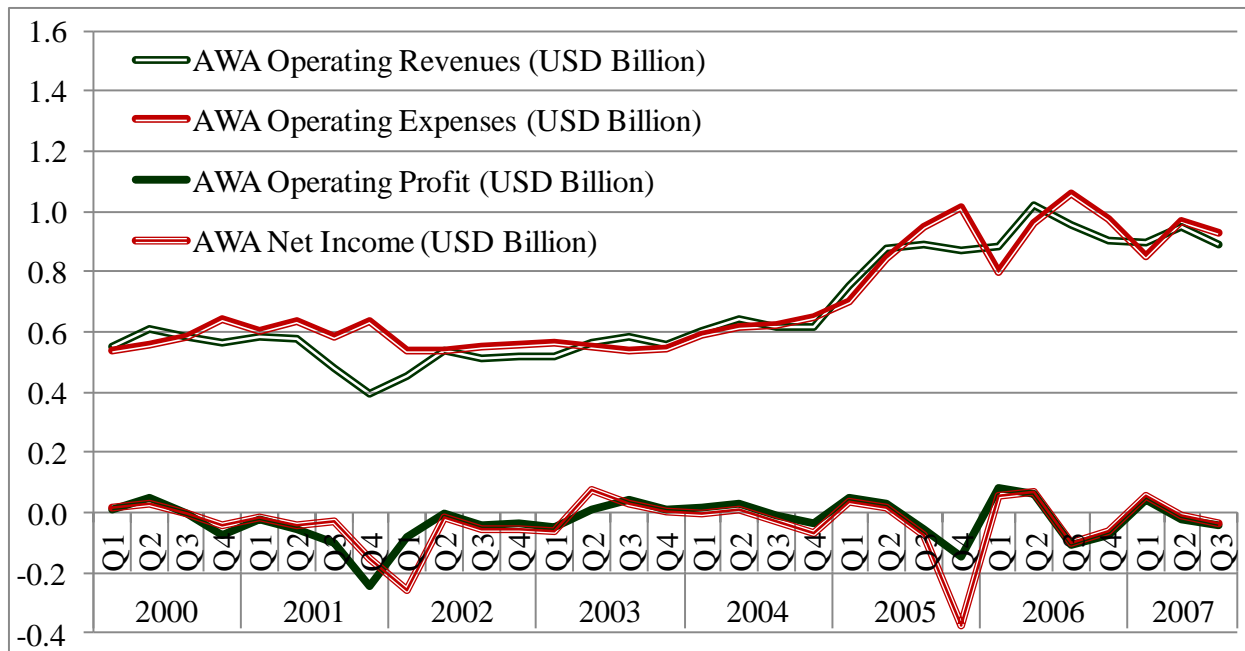
Figure 1 USAir’s Operating Revenues and Net Income, Q1 2000–Q3 2007



Data source: masFlight

America West, a low-cost airline that acquired USAir in September 2005, has performed better compared with USAir in the same period (see Figure 2). While America West’s net income decreased in Q4 2005 and Q3 and Q4 2006, these declines are attributed to its acquisition of USAir while the two airlines merged their operations and financial systems, completing the process in Q4 2007.

Figure 2 AWA’s Operating Revenues and Net Income, Q1 2000–Q3 2007



Data source: masFlight

The Airline Deregulation Act of 1978 played a significant role in the restructuring of the US civil aviation industry. While the majority of passengers benefited from the reduction in fares and expansion of services following deregulation, most US airlines struggled to survive under intense competition (Graham et al., 1983). By the time America West acquired USAir, there had already been 20 major airline M&As since 1978 and only one of these has been judged truly successful in terms of improving financial and operating performance (Maruna and Morrell, 2010; Steffy, 2007). The airline industry has also been plagued by bankruptcy—the 2013 US Government Accountability Office (GAO) report on airline mergers states that 194 airline bankruptcies occurred between 1979 and 2012 including airlines such as Delta Air Lines (DAL), Northwest Airlines, United Airlines (UAL), and USAir. While deregulation is a success based on expanded networks with more frequent departures, increased carrier efficiency, and consistently high safety records, financial turbulence in the aviation industry has resulted in increased instability in the industry structure, loss of employment, and deterioration of service quality (Goetz and Vowles, 2009). Smaller cities and shorter-haul routes have also experienced higher fares and less frequent airline service (US GAO, 2010 and 2013). Currently, there are only three major network airlines remaining in the US: American Airlines (AAL), Delta, and United.

This research analyzes the US Airways Group’s post-merger financial and operating performance to identify evidence of a merger effect for America West and USAir. The analysis will include the following.

- Share price performance against the Standard and Poor’s (S&P) 500 and the NYSE ARCA AIRLINE INDEX Airline Index (XAL),
- Financial performance using financial ratios, and
- Airline operations metrics.

We argue that the US Airways Group’s financial and operational performance improves over time, all other things held constant, since most airline consolidations are presumed to result in

increased revenues, due in part to improved access at more airports, and reduced costs, due mainly to shared facilities and optimized labor arrangements.

## 2 Mergers and Acquisitions

Merger and acquisition is an external integration strategy, where legally and financially independent companies combine to form a larger entity with hierarchical decision making (Delfmann et al., 2005). Following this strategy, one of the entities gives up its financial and legal independence. The motives for integration can include increasing revenues, improving management efficiency and capital investment performance, and eliminating a competitor from the market (Delfmann et al., 2005). The literature on M&As suggests that mergers involving publicly traded companies occur in waves, which are preceded by unexpected or exogenous industry shocks (Lipton, 2006; Ovtchinnikov, 2013).

A new wave of merger activity in the airline industry occurred in 2005, beginning with the acquisition of USAir by America West in September 2005, followed by the merger of Delta and Northwest in October 2008, and United and Continental in October 2010 (Manuela Jr. and Rhoades, 2014), as well as Southwest’s acquisition of AirTran in May 2011 (Manuela Jr. and Rhoades, 2013), and the US Airways Group and American Airlines in December 2013 (US District Court for the District of Columbia, 2013). Two main views exist in the literature to address what drives airline M&As—efficiency gains for merging airlines or market power gains (Clougherty, 2002). While the first view emphasizes the ability to reduce costs by enhancing hub-and-spoke networks, the other view notes the enhanced ability to raise fares. Airline mergers are driven by financial and competitive pressures, and are seen as strategies to increase profitability and financial stability (US GAO, 2010), while Park (2013) argues that airline M&As are necessary to minimize asset devaluation to prevent a domino effect, as most major US airlines are “too big to fail.” Table 1 presents the M&A history of the “too big to fail” major carriers in the US.

Table 1 M&As in the US Airline Industry

<b>US Airways</b>			
1939	All American Aviation	1989	Piedmont and USAir merger
1972	Acquired Mohawk Airlines	1998	Purchased Shuttle Inc.
1986	Acquired Empire Airlines	2005	Merged with America West
1987	Purchased Pacific Southwest Airlines	2013	Merged with American Airlines
1988	Merged into USAir		
<b>American Airlines</b>		<b>Delta Air Lines</b>	
1929	The Aviation Corporation	1929	Founded
1934	American Airways became American Airlines Inc.	1953	Merged with Chicago and Southern Airlines
1970	Merged with Trans Caribbean Airways	1972	Merged with Northeast Airlines
1986	Acquired Air California	1987	Merged with Western Airlines
1990	Acquired Eastern Airlines Latin routes	1991	Purchased Pan Am transatlantic routes and shuttle
1999	Acquired Reno Air	2000	ASA and Comair
2001	Acquired TWA	2008	Acquired Northwest Airlines
2013	Merged with US Airways		
<b>United Airlines</b>		<b>Southwest Airlines</b>	
1934	Founded	1971	Founded

1961	Merged with Capital Airlines	1985	Acquired Muse Air
1963	Merged with Capital Airlines	1994	Acquired Morris Air
1986	Purchased Pan Am Pacific routes	2008	Acquired certain assets of ATA Airlines
1990	Purchased Pan Am London routes	2011	Acquired AirTran
1991	Purchased Pan Am Latin American routes		
2010	Merged with Continental Airlines		

Source: US GAO (2013), p. 4

Maruna and Morrell (2010) investigate 18 major US airline mergers between 1978 and July 2005 and conclude that the integration of Delta Air Lines and Western Airlines in 1987 was the only successful merger during this period while the literature suggests that 50% to 80% of all mergers fail to meet the goals they set out to achieve. Their analysis of post-merger integration between America West and USAir demonstrates that unit costs rose substantially in the year following the merger, although this increase is compensated for by higher yields as a result of declining capacity. Overall Maruna and Morrell (2010) conclude that the merger of America West and USAir should be able to achieve profitability by improving efficiency and fleet restructuring. If the performance record of airline M&As is so poor, however, then what are the benefits and what accounts for the ‘failures’?

## 2.1 Benefits and Challenges of M&As

One of the primary goals of M&As is to increase shareholder value. The literature suggests that this is often not the case, however, since size alone is not a good indicator of improved performance (Agrawal et al., 1992). Firms looking at changes in ownerships should analyze whether the consolidation will increase shareholder value (Langetieg, 1978) and whether private equity funds investing in airlines will be able to generate target returns (Tarry, 2007). In a 2007 survey of Aircraft Finance Forum delegates, Tarry (2007) reports that 62% of respondents consider that consolidation results in higher shareholder value while 72% considers that M&As would miss their targets within the required period.

A meta-analysis of 93 empirical studies of M&A performance suggests that “M&A activity does not create superior post-acquisition performance for acquiring firms and is consistent with the non-value-maximizing arguments often advanced to explain M&A activity” (King et al., 2004: 192–193). Nevertheless, target and acquiring firms realize positive abnormal returns on the merger announcement date (Franks and Harris, 1989; Houston and Ryngaert, 1994), indicating an initial expectation that M&A activity will create longer-term synergy. The returns for acquired firms are extremely high, however, while the returns for acquiring firms are much lower (King et al., 2004). Despite anticipated gains at the time of the announcement, market returns to the acquiring firm after the acquisition including return on assets (ROA), return on equity (ROE), and return on sales, are generally a zero-sum game and the expected synergies from the merger announcement date are not realized by acquiring firms, indicating that acquisitions have no significant effect or even a slightly negative effect on an acquiring firm's financial performance in the post-announcement period (King et al., 2004; Malatesta, 1983).

Proponents of airline mergers cite a number of benefits, however. Merkert and Morrell (2012) state that domestic markets experience slower growth and air service agreements limit the growth outside the home country. M&As can lead to an increase in revenues by extending the

airlines' network, increasing market share, charging higher fares on some routes, improving network connectivity, increasing frequent flyer loyalty, better aircraft utilization, and other measures (US GAO, 2013).

One of the primary benefits of M&As is cost reduction, which comes from combining complementary assets, eliminating duplication in services and labor, or eliminating unprofitable routes (Merkert and Morrell, 2012). Benefits can also result from operating similar fleet, facility consolidation, balance sheet restructuring including renegotiation of aircraft leases, and more effective management of capacity (Mercado, 2011). Additionally, airlines can gain complementary routes, giving them the competitive advantage over their rivals (Liang, 2013). Thus, the benefits of M&As usually include the following (Liang, 2013; Mercado, 2011; Merkert and Morrell, 2012).

- Efficiency increase and cost reduction
- Market share increase
- Increased demand from an expanded network, which serves more city-pair markets. M&As provide airlines with complementary routes, which result in a stronger platform.
- Revenue increase, e.g., capacity reduction in some markets after the merger provides an opportunity to generate additional revenue from increased fares.
- Elimination of competition
- Access to airport slots and facilities
- Access to aircraft
- Better customer service

The chief benefit of M&As, in general, is the perceived improvement in the overall performance of the merged firm due to the removal of underperforming activities and the development of more efficient financial and operational structures (Packalen and Sen, 2013). Airline mergers may result in consolidation of route networks and hub operations, as well as in 0.5% fare increase and 1% increase in passenger traffic by improving product quality and offering more direct flights (Ryerson and Kim, 2013; Martin, 2011), while routes can be served with larger aircraft at lower frequencies resulting in fuel savings of up to 28% (Ryerson and Kim, 2013). Airlines may become too large to produce at optimal efficiency and operate at their full potential in terms of technical efficiency, however, resulting in diseconomies of scale, which suggests that the optimal size, in terms of the number of available seat kilometers (ASKs), is between 32 billion and 54 billion ASKs and airline mergers that result in size of at least 100 billion ASKs do not benefit in terms of scale efficiency, and in such cases other strong motives for M&As exist to justify the merger (Merkert and Morell, 2012).

While some stakeholders may support the merger initially, they can also change their mind due to a number of factors (Mercado, 2011). M&A failure can be attributed to many factors including clashing company cultures, union resistance, and other operating factors (Merkert and Morell, 2012) since shareholders, customers, employees, and communities often possess competing interests.

Fleming (2011) lists three main challenges airline M&As have:

1. Workforce integration including pilots, flight attendants, and mechanics. The labor groups often oppose mergers fearing the loss of employment and seniority or salary reduction.



2. Fleet integration could be costly. Combining two fleets may increase costs due to pilot training, maintenance, and additional spare parts.
3. Information technology integration.

Given the poor results of most M&As the success of the America West and USAir merger is not a certainty and answering questions about its performance requires careful consideration of a number of factors.

### **3 Data and Method**

We collected the quarterly financial and operations data of America West and USAir from 2000 to 2007, and the US Airways Group (stock ticker symbol LCC) from 2005 to 2013, as well as the daily closing indices of the S&P 500, XAL, and the daily closing prices of America West, USAir, and the US Airways Group for the same period. We divided the stock performance data into three periods: the transition period of the newly merged airline, including six months leading to the merger, from March 2005 to December 2007, the first three years of the merger from January 2008 to December 2010, and the succeeding years until the US Airways Group's merger with American Airlines on December 9, 2013. While America West acquired the bankrupt USAir on September 27, 2005, the two airlines did not consolidate their operations and financial reports until Q4 2007. Consequently, we added the operations and financial data of America West to the operations and financial data of USAir from Q4 2005 to Q3 2007 and included this merger transition period in the operations and financial performance analysis of each airline.

Four groups of financial ratios—leverage ratios, liquidity ratios, efficiency ratios, and profitability ratios—for USAir, America West, and the US Airways Group, using the formulas in Brealey, Myers, and Allen (2011), were computed to examine the financial performance of USAir and America West before the merger as well as the financial performance of the US Airways Group after the merger. Please refer to the Appendix for the financial ratio formulas. The graphs of the financial ratios show the financial performance of the three airlines across time to facilitate the interpretation and comparison of the financial ratios.

The graphs of the operations metrics data of USAir and America West before the merger as well as the US Airways Group's operations metrics after the merger show the operating performance of each airline in the observation period and facilitate the interpretation and comparison of operations metrics data.

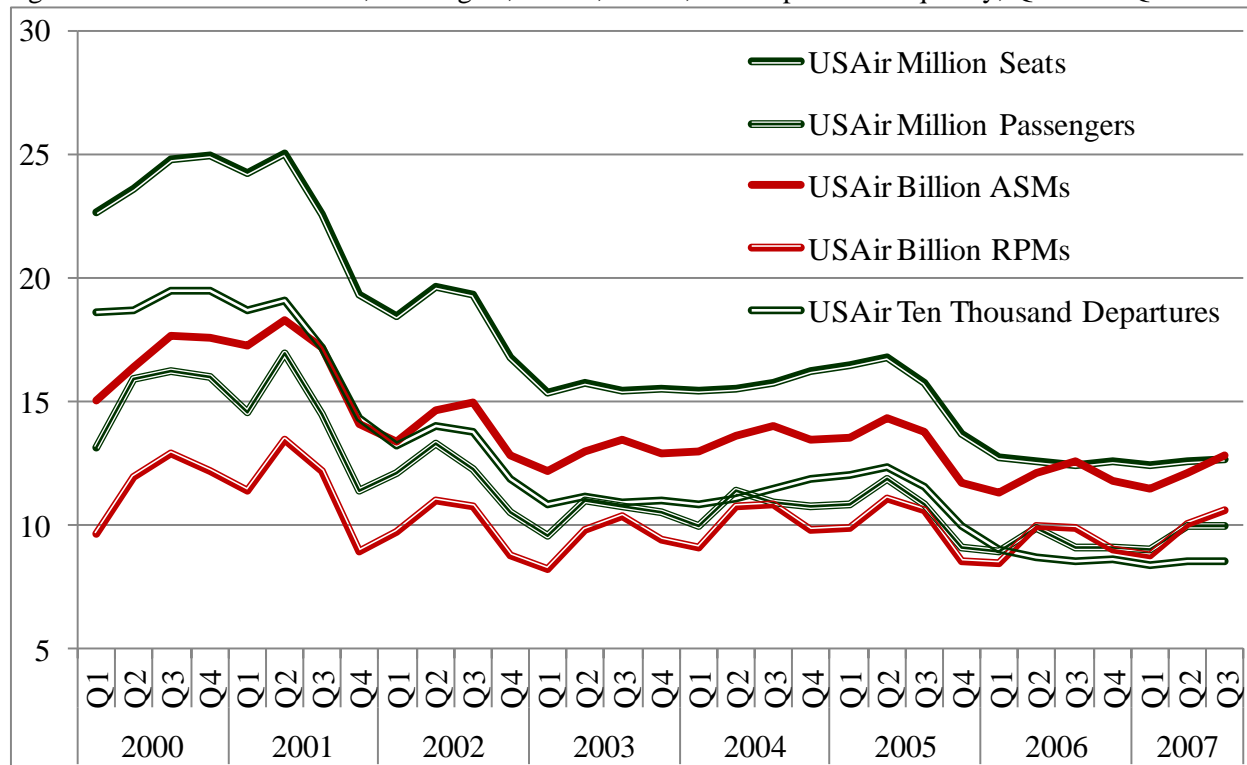
While daily abnormal returns (DARs) and cumulative abnormal returns (CARs) are the usual metrics in examining short-run stock performance, we computed the end-of-the-month trading day abnormal returns for America West-US Airways Group because our intention is not to compute and analyze the daily performance of the airline's stock price against the S&P 500 and XAL, but to show the trend of its share price performance from March 2005 to December 2013. This means that we are not just interested in the abnormal returns of the airline's share prices per se, but more on its share price performance in the long term. We also computed the end-of-the-month trading day cumulative abnormal returns for Delta, United, and Southwest for comparison. We did not include the share price performance of American Airlines because its share price collapsed after filing for Chapter 11 in November 2011 (Milford et al., 2011).

## 4 US Airways and America West Airlines

The history of USAir goes back to 1939, as All American Aviation brought the first airmail service to small western Pennsylvania and Ohio Valley communities and in 1949 made the transition from airmail to passenger service with the new DC-3, while on the other side of the continental US 44 years later, America West began its operation in Phoenix, Arizona in August 1983 with three 737s (US Airways Group, 2013).

### 4.1 USAir's Operating Performance

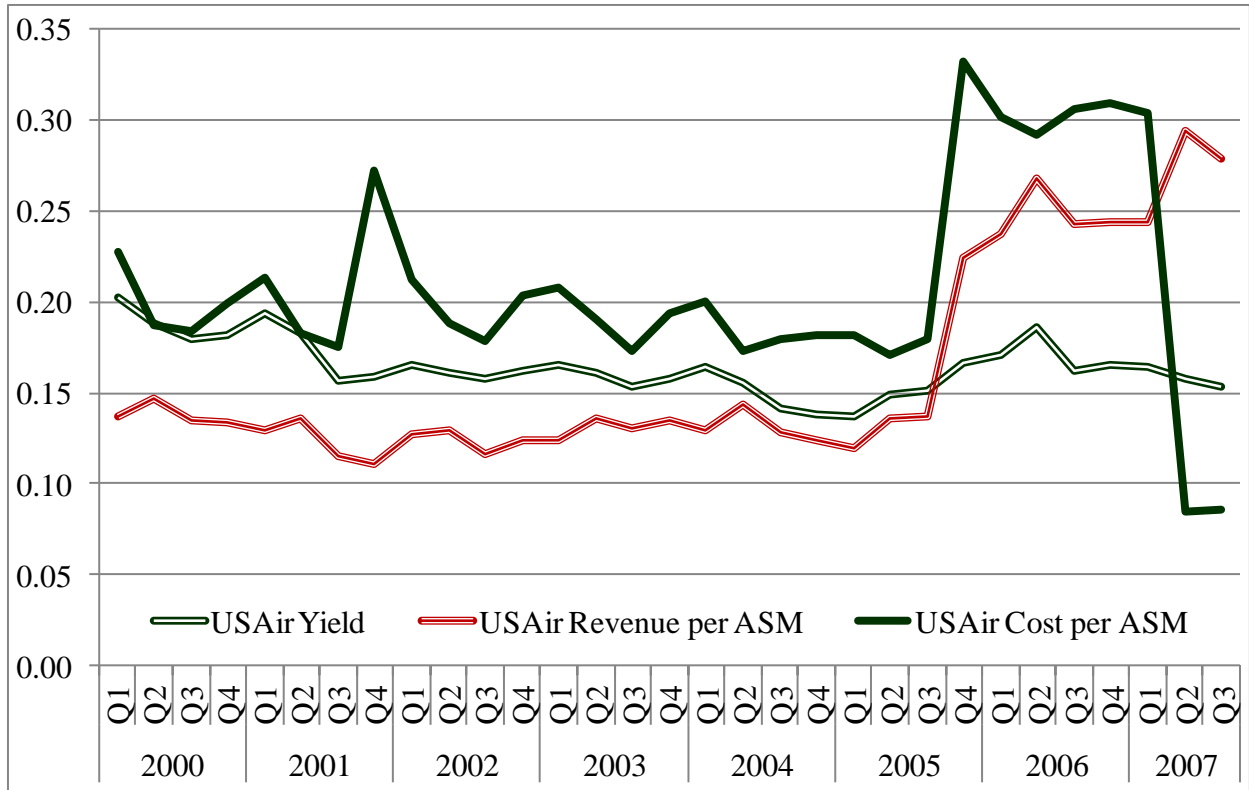
Figure 3 USAir's Seats, Passengers, ASMs, RPMs, and Departure Frequency, Q1 2000–Q3 2007



Data source: masFlight

Figures 3 to 5 show the operating performance of USAir from Q1 2000 to Q3 2007, which includes the transition period from the time America West acquired USAir in September 2005 up to the consolidation of the operations and financial systems of the two airlines as the US Airways Group in Q3 2007. The decline in the number of passengers between Q2 2001 and Q1 2004 compelled USAir to reduce its departure frequency in the same period, resulting in declining available seat miles (ASMs) and revenue passenger miles (RPMs), although its ASMs and RPMs increased between Q2 2004 and Q3 2005 from their Q1 2003 levels (see Figure 3). While USAir's departure frequency continued to decline from Q3 2005 to Q3 2007, its ASMs and RPMs show an increasing trend in the same period, indicating USAir's shift to larger aircraft, a move that improves cost efficiency.

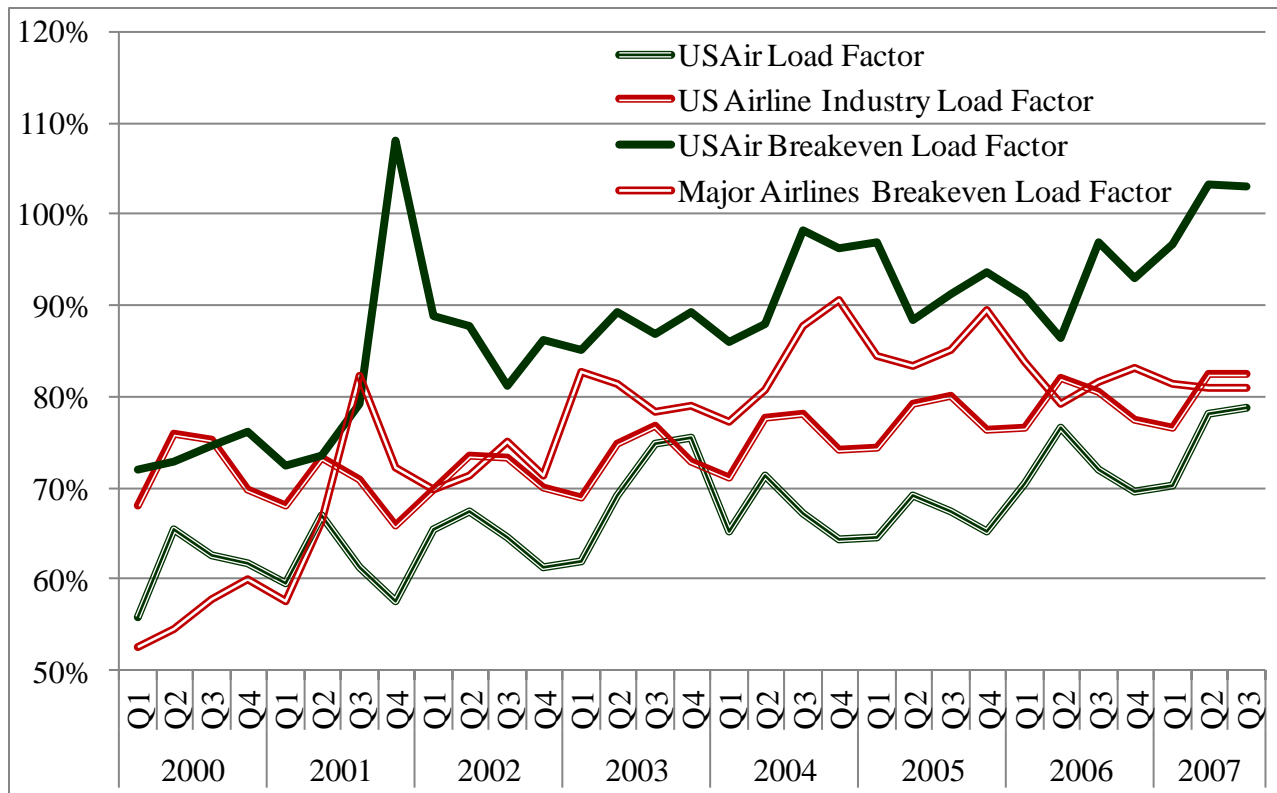
Figure 4 USAir's Yield, Revenue per ASM, CASM, and Departure Frequency, Q1 2000–Q3 2007



Data source: masFlight and Diio Mi

USAir’s yield (passenger revenue per RPM), revenue per ASM, and cost per ASM (CASM) show a somewhat stable trend between Q1 2000 and Q3 2005, except for a spike in CASM in Q4 2001 due to a 14% increase in USAir’s operating cost while its ASMs declined 18% in the same period (see Figure 4). The spike in USAir’s CASM from Q4 2005 to Q1 2007 is attributed to operational difficulties during the transition period of its merger with America West. USAir’s CASM is higher than its yield and revenue per ASM for the period Q1 2000 to Q1 2007, underscoring USAir’s operational inefficiency and dire financial situation, although its yield and revenue per ASM improved since its acquisition by America West in September 2005.

Figure 5 Load Factors of USAir and the US Airline Industry, Q1 2000–Q3 2007



Data source: masFlight, Diio Mi, and the US Bureau of Transportation Statistics. The breakeven load factors of AAL, DAL, and UAL were used in the calculation of the “major airlines breakeven load factor.”

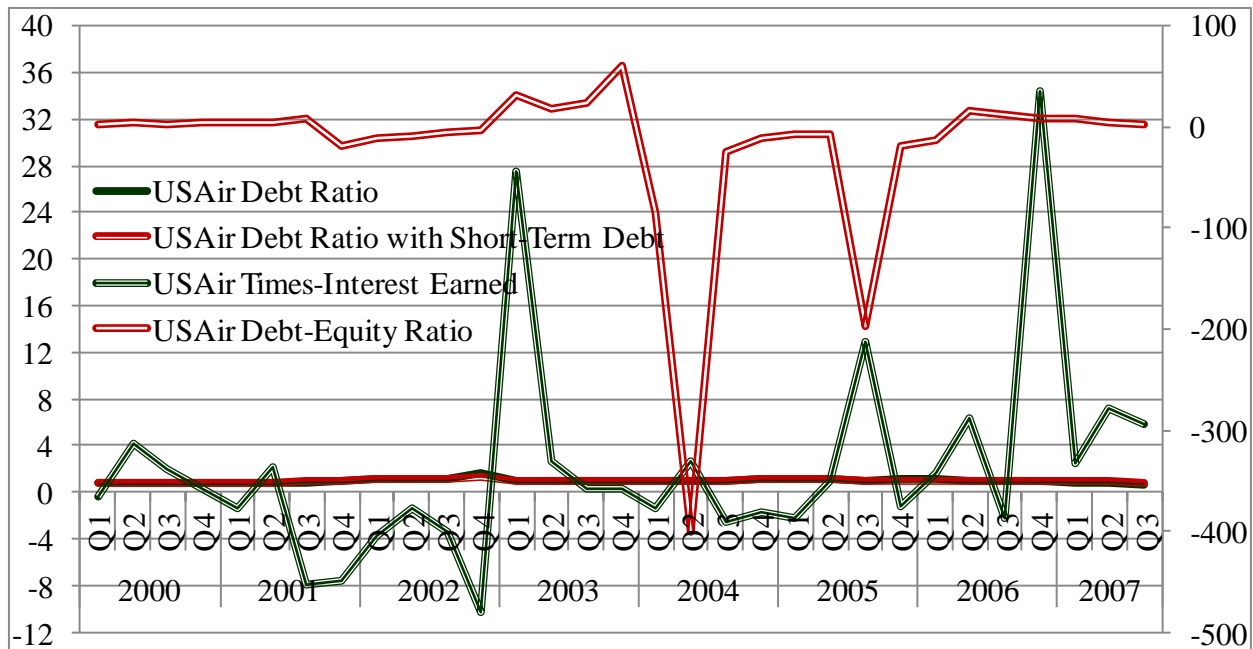
Although USAir reduced its ASMs and departure frequency to match passenger demand (see Figure 3), resulting in higher load factors in Q3 and Q4 2003 when USAir achieved a load factor of 75%, matching or slightly exceeding the load factor of the US airline industry in the same period (see Figure 5), its load factor, on average, trails the US airline industry’s by at least seven percentage points for the period Q1 2000 to Q3 2007. USAir’s breakeven load factors are higher than the weighted average breakeven load factors of major airlines—American, Delta, and United—indicating that USAir has a higher cost structure than these airlines.

In general, USAir’s operating performance indicates that the airline is doing poorly both at generating revenues and reducing costs, resulting in losses or minimal profit, except for Q1 2003, for the period Q1 2000 to Q3 2007 (see Figure 1).

#### 4.2 USAir’s Financial Performance

The deteriorating operating performance of USAir from Q1 2000 to Q3 2007 resulted in its poor financial performance in the same period. The continuous decline in USAir’s number of passengers and RPMs, as well as its inability to achieve load factors that match the US airline industry’s, resulted in the deterioration of its leverage, liquidity, efficiency, and profitability ratios.

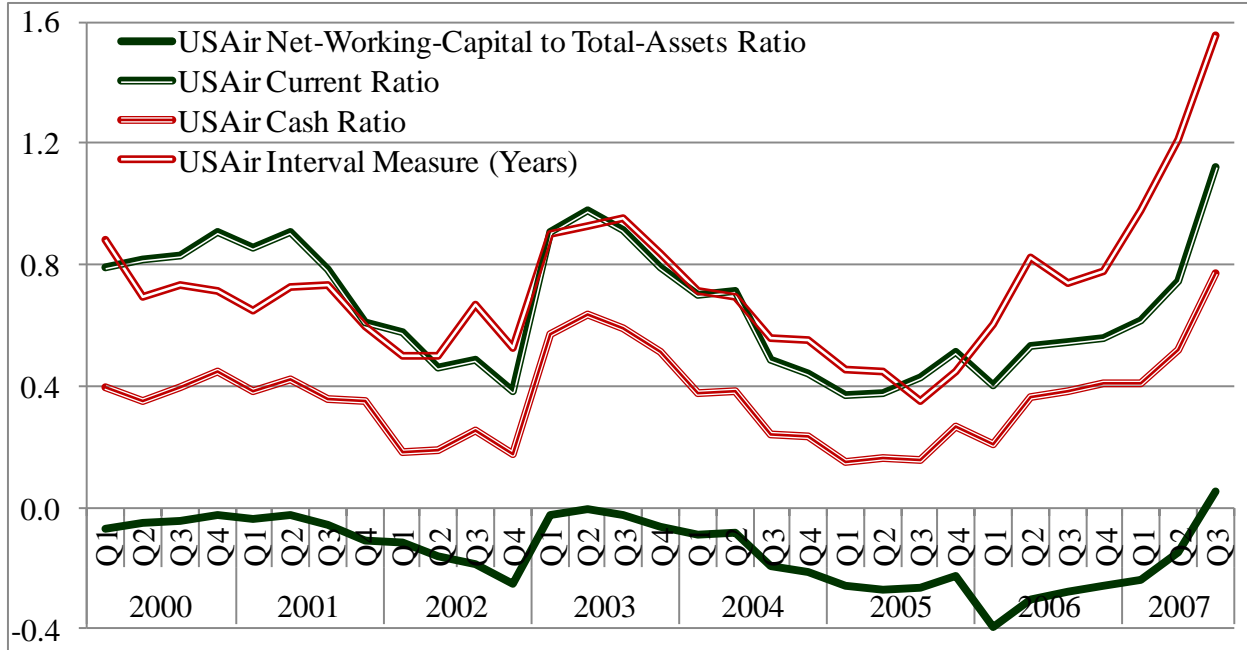
Figure 6 USAir’s Leverage Ratios, Q1 2000–Q3 2007



Data source: masFlight.

USAir's debt ratio and debt ratio with short-term debt average 0.97 and 0.98, respectively, from Q1 2000 to Q3 2007, indicating that the airline relies heavily on debt to finance its operations, while its negative times-interest earned ratio (see Figure 6), except for Q4 2006, indicates that the airline has difficulty making interest payments on its debt, implying that the airline may default on its financial obligations. The spike in USAir's times-interest earned ratio in Q1 2003 is due to its lower interest payments as a result of its Chapter 11 filing in 2002 while the spike in Q4 2006 is due to its higher earnings before taxes and lower interest payments. The highly negative debt-equity ratios for Q2 2004 and Q3 2005 are due to USAir's shrinking negative net shareholder equity. Overall USAir's leverage ratios indicate a heavy reliance on debt to finance its assets, suggesting that USAir's financial risk is high and may result in a higher cost of capital, exacerbating its already dire financial situation.

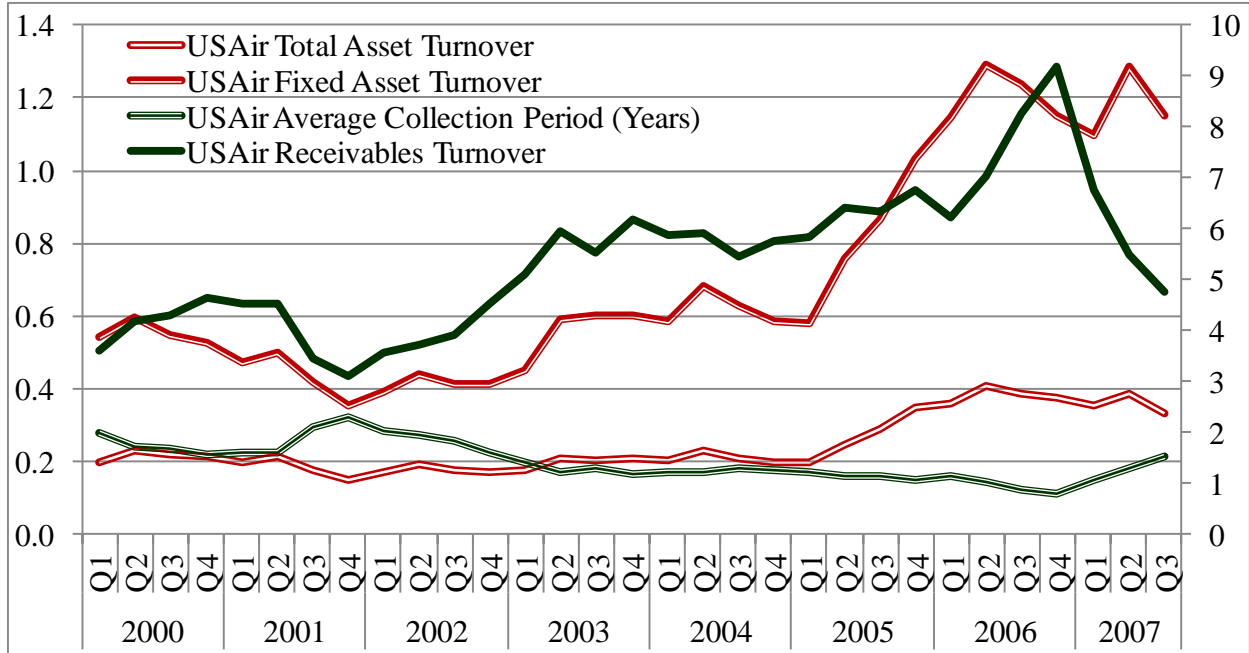
Figure 7 USAir's Liquidity Ratios, Q1 2000–Q3 2007



Data source: masFlight

While airlines usually use debt to acquire aircraft, equipment, and other assets, USAir’s debt burden appears to negatively impact its ability to meet its financial obligations as indicated by its deteriorating liquidity ratios, although its 2002 and 2004 Chapter 11 filings improved its liquidity ratios in 2003 and 2005, respectively (see Figure 7). USAir’s negative net working capital to total assets ratio indicates that USAir has difficulty meeting its short-term financial obligations. Its current ratio of less than 1.0 implies that USAir is unable to pay its liabilities in the short term. Although USAir’s liquidity ratios show an improving trend since its acquisition by America West, overall, its liquidity ratios indicate that the airline may have difficulty meeting its short-term obligations.

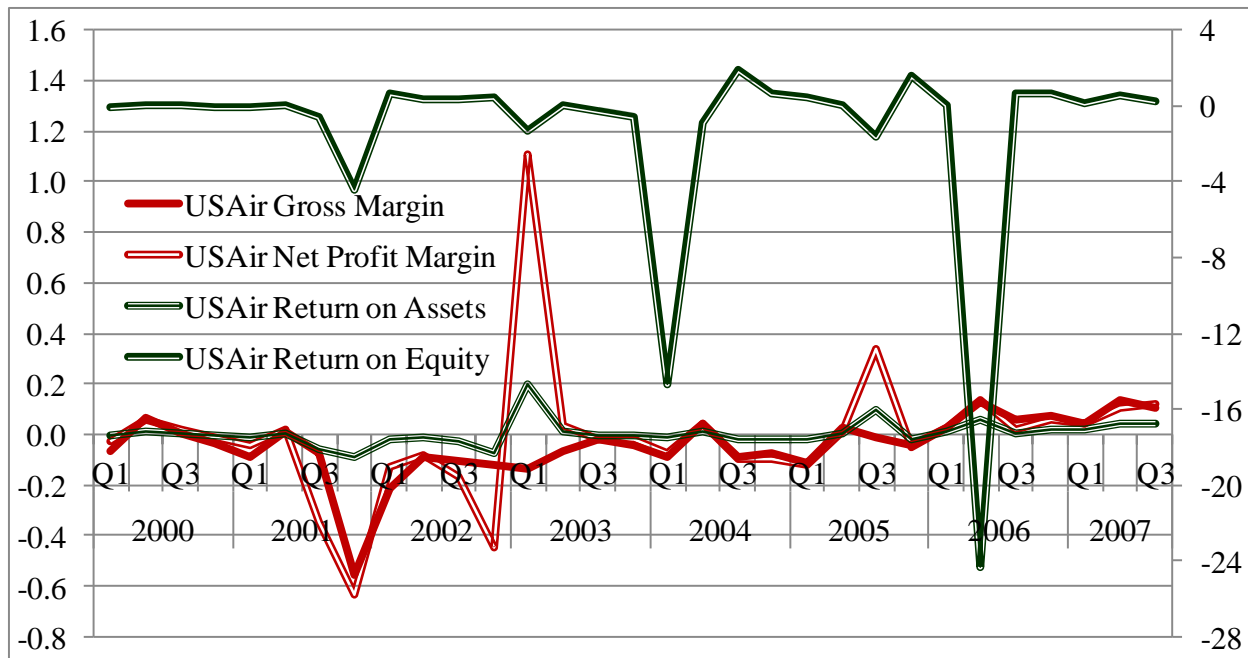
Figure 8 USAir’s Efficiency Ratios, Q1 2000–Q3 2007



Data source: masFlight

The negative impact of USAir’s lower revenue per ASM compared to its CASM from Q1 2000 to Q3 2007 and its declining or stable but low yield from Q1 2000 to Q3 2005 (see Figure 4) on its revenues indicates that the airline is not efficient in using its assets—USAir generates revenues of USD 0.25 for every dollar of assets (refer to total asset turnover in Figure 8). USAir’s efficiency ratios indicate that the airline is grossly mismanaged, making USAir a good candidate for acquisition or takeover by a rival airline that can employ its resources and capabilities (Barney, 1991; Grant, 1991) more effectively and efficiently. USAir’s efficiency ratios improved since its acquisition by America West, specifically between Q4 2005 and Q4 2006, while the deterioration of its receivables turnover and longer collection period in 2007 (see Figure 8) may be attributed to the difficulties in merging USAir’s and America West’s financial systems.

Figure 9 USAir’s Profitability Ratios, Q1 2000–Q3 2007



Data source: masFlight

USAir's inefficient use of its assets results in decreasing profitability, except in Q1 2003 and Q3 2005 as a result of its 2002 and 2004 Chapter 11 filing (see Figure 9). Although USAir's gross margins and net income improved since America West acquired USAir, its inability to generate sufficient revenues and its reliance on debt to finance its assets negatively impact profitability—ROA and ROE have been close to zero or negative and its highly negative ROE in Q1 2004 and Q2 2006 may be due to the USD 181 million loss and negative equity, respectively. Overall USAir's profitability ratios indicate that the airline is not a good investment.

The foregoing operating and financial performance of USAir suggests that its management has not been effective and efficient in operating USAir's resources and capabilities. This may be the reason behind America West's decision to acquire the airline, especially when investors have driven USAir's share prices lower, making the airline cheaper. One of the reasons for M&As is that acquiring firms consider their target firms grossly mismanaged and expect to manage the target firms more efficiently once they gain control of these firms. While the merger between a legacy carrier (USAir) and a low-cost airline (America West) may seem strange, as a low-cost carrier that understands how to run an airline more efficiently, America West's management has the capability of turning the merger with USAir into a financially rewarding venture for its shareholders and USAir's.

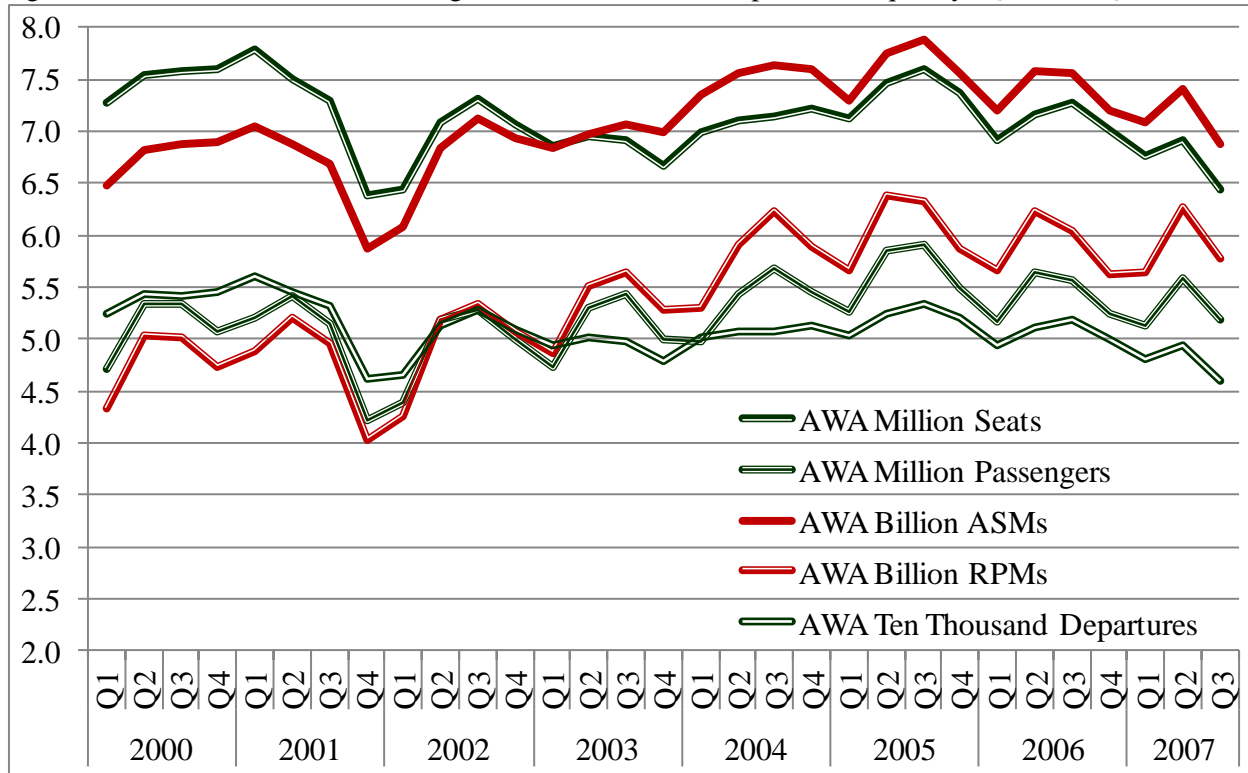
#### 4.3 America West Airlines' Operating Performance

America West's operating performance is much better than USAir's (compare Figures 10 to 12 with Figures 3 to 5). The airline's number of passengers and RPMs show an increasing trend between Q1 2002 and Q3 2005 while its departure frequency is generally stable in the same period (see Figure 10). America West's seat capacity and ASMs tend to follow passenger demand resulting in increasing yield since Q4 2004 and revenue per ASM since Q1 2002 (see Figure 11). The airline's attempts at capacity discipline resulted in load factors averaging almost



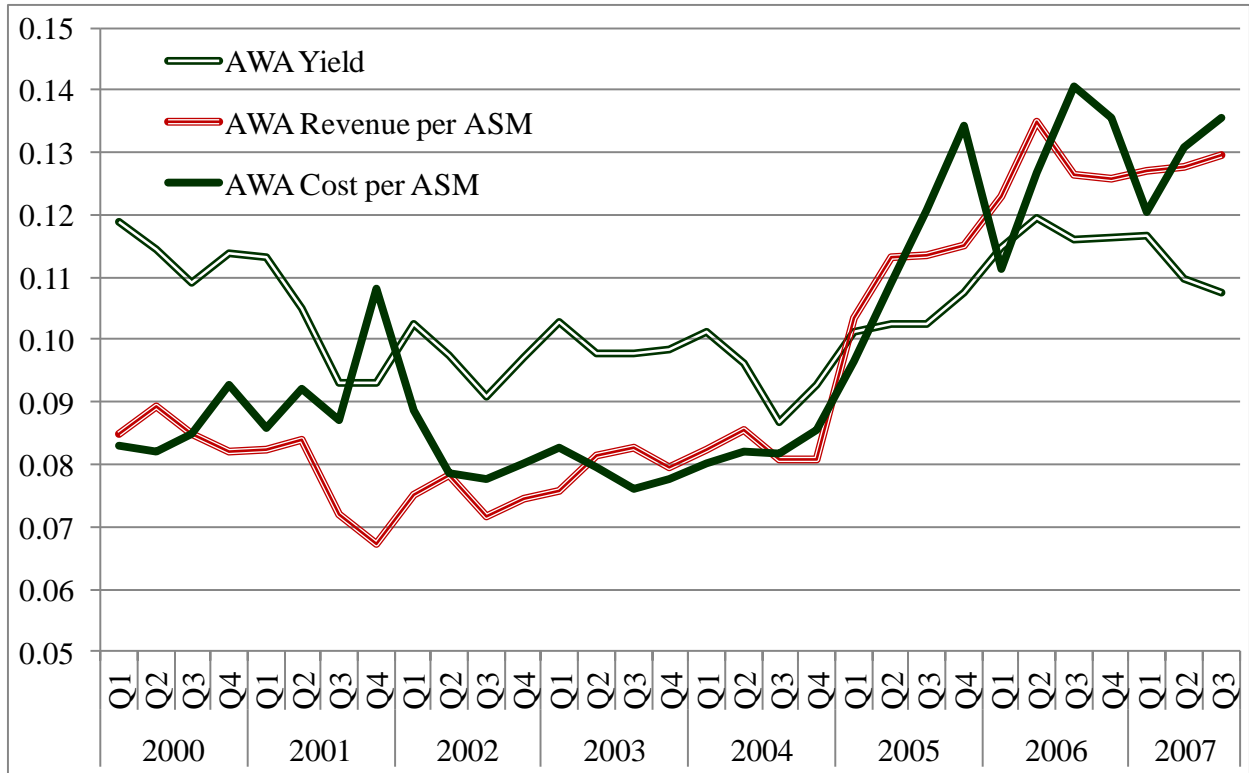
73% from Q1 2000 to Q3 2007, which generally matched the US airline industry's load factors (see Figure 12). These results indicate that America West is able to adjust its capacity to passenger demand reasonably well as indicated by its increasing RPMs and load factors since Q4 2001 and Q1 2003, respectively (see Figures 10 and 12). The airline's improving operating performance suggests that its management is capable of improving the operating performance of USAir and its acquisition of USAir may further improve America West's competitive position in the US airline industry.

Figure 10 AWA's Seats, Passengers, ASM, RPM, and Departure Frequency, Q1 2000–Q3 2007



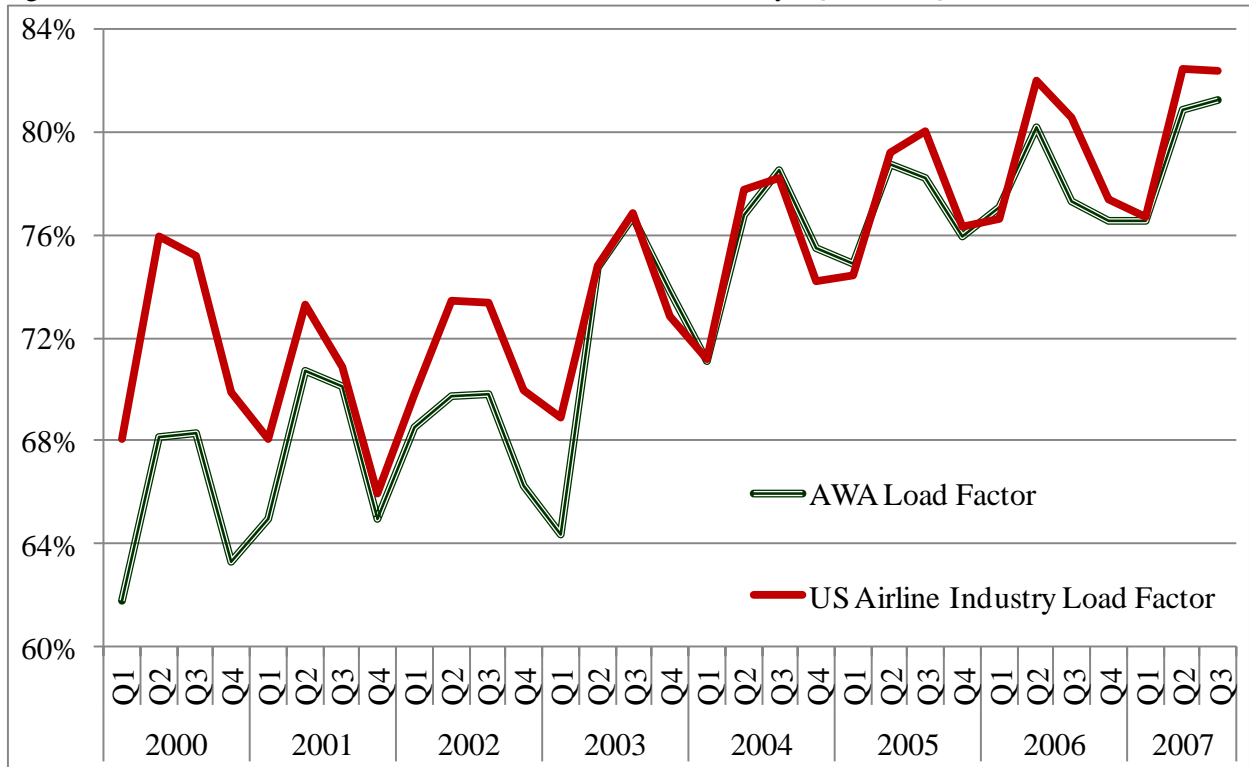
Data source: masFlight

Figure 11 AWA's Yield, Revenue per ASM, CASM, and Departure Frequency, Q1 2000–Q3 2007



Data source: masFlight

Figure 12 Load Factors of AWA and the US Airline Industry, Q1 2000–Q3 2007

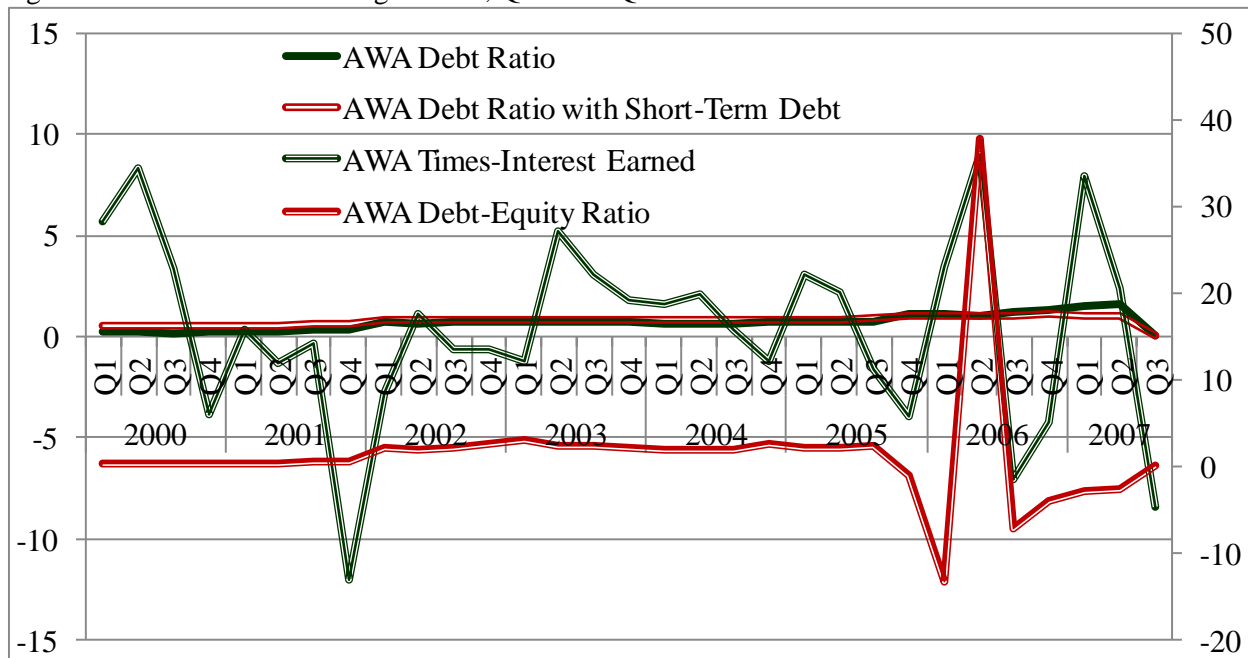


Data source: masFlight and the US Bureau of Transportation Statistics

#### 4.4 America West Airlines' Financial Performance

America West's leverage ratios (see Figure 13) indicate that the airline's assets and operations are heavily financed by debt and its debt burden appears to hamper its ability to pay interest on its debt (refer to Times-Interest Earned ratio in Figure 13). The highly positive debt-equity ratio in Q2 2006 is due to America West's very low net equity (USD 15.8 million). The highly positive times-interest earned ratios in Q2 2000, Q2 2006, and Q1 2007 are due to the airline's higher earnings before interest and taxes (EBIT) plus depreciation, while the highly negative times-interest earned ratio in Q4 2001 is due to its highly negative EBIT. America West's leverage ratios generally indicate a high financial risk, suggesting that its cost of capital will increase as the airline takes in more debt, resulting in lower returns to investors. America West's debt ratio and debt-to-equity ratio show improving signs between Q1 and Q3 2007, however, indicating that its acquisition of USAir may turn out well.

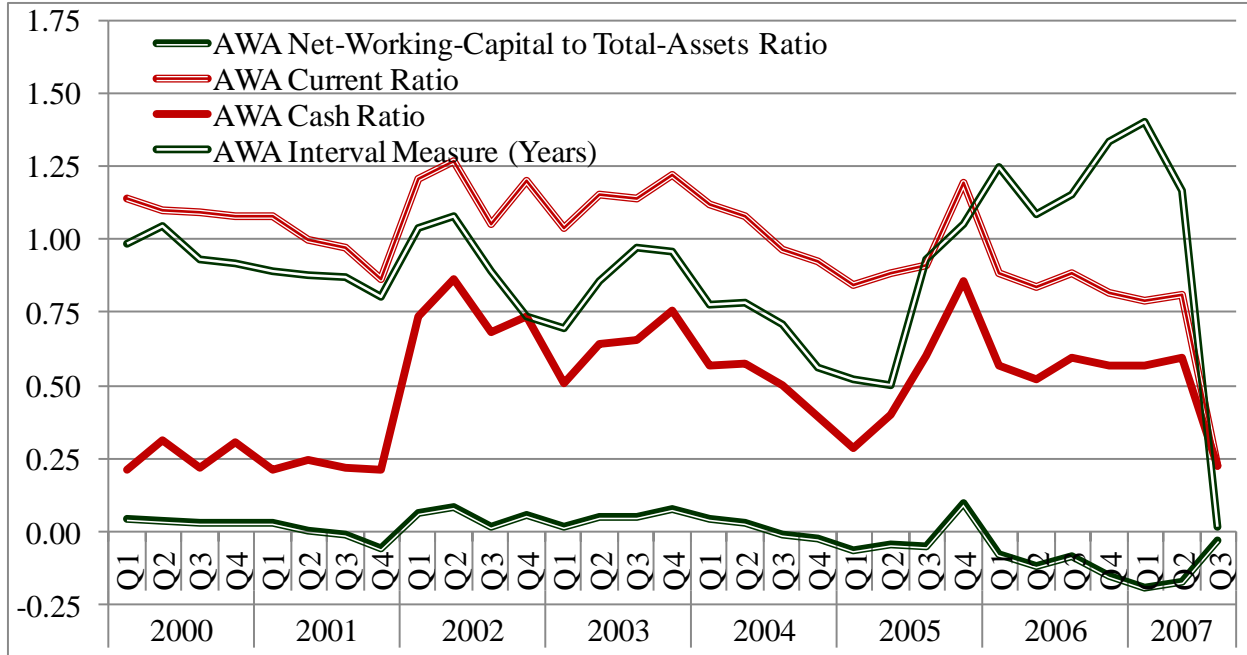
Figure 13 AWA's Leverage Ratios, Q1 2000–Q3 2007



Data source: masFlight

America West's liquidity ratios indicate that the airline has difficulty meeting its short-term financial obligations as indicated by its close to zero net working capital to total assets ratio, lower than 1.0 cash ratio, and just above 1.0 current ratio (see Figure 14), consistent with its highly leveraged capital structure (see Figure 13). Its interval measure indicates, however, that the airline has enough cash to operate, without additional borrowing, for at least half a year, except in Q3 2007. While America West's liquidity ratios are much better than USAir's, its liquidity ratios suggest that the airline may have difficulty meeting its financial obligations in the short term, which even deteriorated in Q2 and Q3 2007 (see Figure 14) when the airline merged its operations and financial system with USAir's.

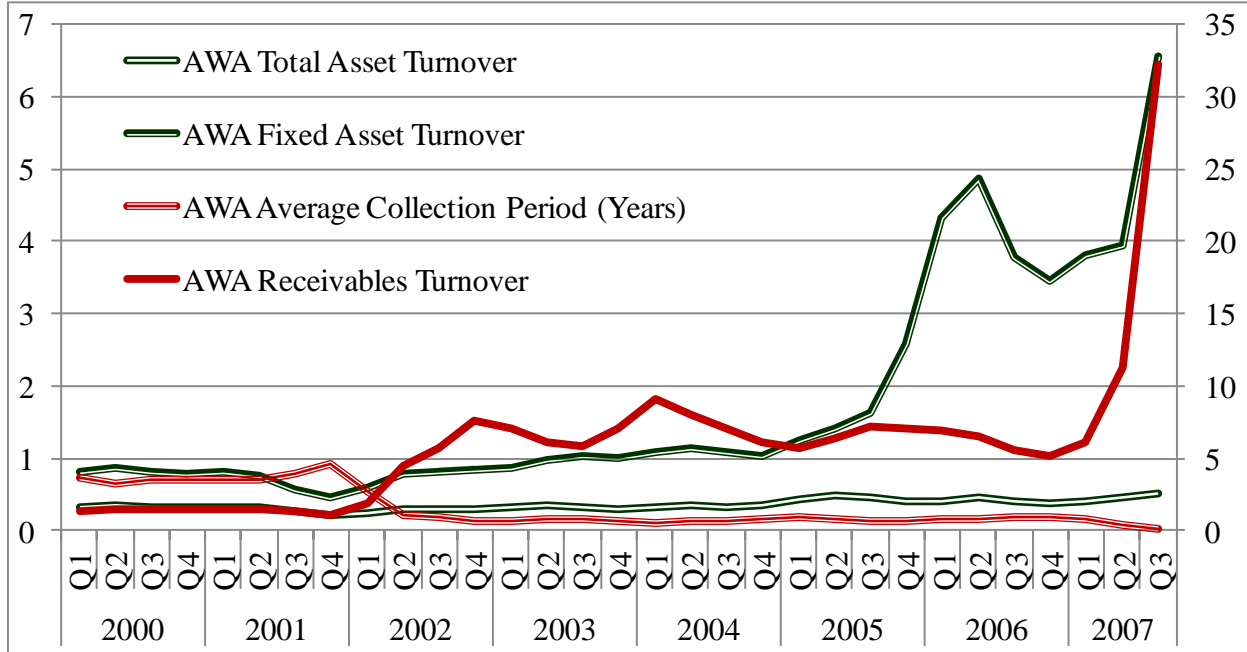
Figure 14 AWA's Liquidity Ratios, Q1 2000–Q3 2007



Data source: masFlight

America West’s efficiency ratios have improved since Q1 2002 (see Figure 15), indicating that, as a low-cost carrier, the airline has efficiently managed its assets to stay competitive. America West generates revenues of USD 0.35 per dollar of assets, on average, from Q1 2000 to Q3 2007, USD 0.10 more than USAir’s, while its average collection period decreased from 267 days to just 11 days between Q1 2000 and Q3 2007, indicating a much improved collection efficiency.

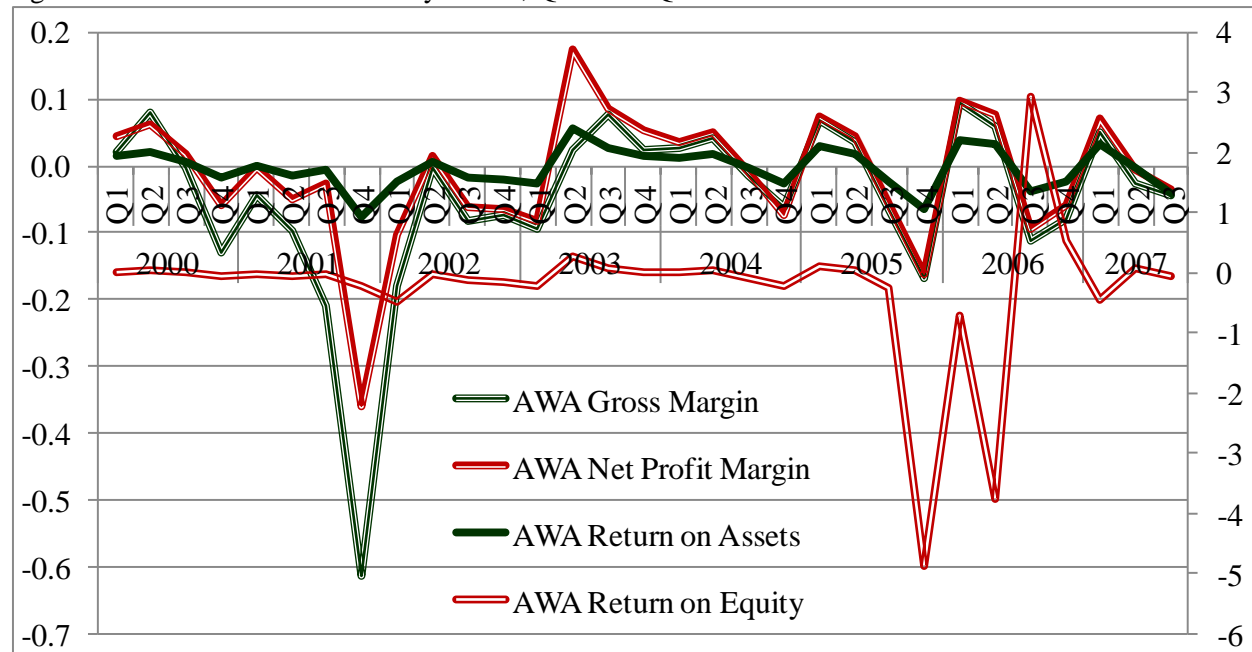
Figure 15 AWA’s Efficiency Ratios, Q1 2000–Q3 2007



Data source: masFlight

Although America West's efficiency ratios improved since Q1 2002, its profitability ratios have remained low or negative, indicating that the airline has not been a good investment (see Figure 14). America West's ROA has averaged -0.3% per quarter from Q1 2000 to Q3 2007 while its ROE has averaged -24.6% per quarter in the same period due to a very high negative ROE from Q4 2005 to Q2 2006 caused either by its negative shareholders' equity or huge losses. Its highly negative net profit margin results from losses of USD 155 million and USD 375 million in Q4 2001 and Q4 2005, respectively.

Figure 16 AWA's Profitability Ratios, Q1 2000–Q3 2007



Data source: masFlight

In 2004, a year before the merger, America West lost USD 85.26 million while USAir lost USD 577.86 million. In order to survive in a more competitive environment, a new strategy is needed and the merger seems like a feasible opportunity. The anticipated cost per passenger mile for the merged airline is expected to be 9.5 to 10 cents while in 2004 American had a cost per passenger mile of 9.8 cents, Delta 11.6 cents, Northwest 11 cents, Continental 10.6 cents, and United 10.1 cents (Airline Business Report, 2005), indicating that the merger of America West and USAir will result in one of the lowest costs among US full-service airlines. The merged airline, though expected to do better than major airlines, would still have costs above low-cost carriers such as Southwest, which had costs of 7.7 cents, and JetBlue with 6.7 cents in 2004 (Airline Business Report, 2005). Some 58 aircraft were planned for removal from the merger of America West and USAir, resulting in improved utilization of the remaining aircraft, while the combination of their route networks would allow the two airlines to provide more efficient and seamless east-to-west flying experience for passengers (Airline Business Report, 2005).

On September 27, 2005 the America West Holdings Corporation, the parent company of America West, acquired the bankrupt USAir to form the US Airways Group, which includes US Airways and its subsidiaries PSA Airlines Inc. and Piedmont Airlines Inc. that operate under the US Airways Express brand, becoming the fifth largest US domestic airline at that time (US Airways

Group, 2005). The two airlines' operating certificates were merged in late 2007 (US Airways Group, 2013). The US Airways Group head office remained at America West's head office in Tempe, Arizona and America West executive management team and board members are in control of the merged company (US Airways Group, 2005 and 2013). The acquisition by America West, which has a strong presence in the western part of the US, complemented USAir's routes in the Northeast, the Caribbean, and Europe (US Airways Group, 2013). The shares of America West and USAir closed at USD 8.70 and USD 0.16, respectively, on September 26, 2005 and the following trading day, September 27, the official merger date, the newly formed US Airways Group closed at USD 19.30 using a new ticker symbol LCC (Manuela Jr. and Rhoades, 2014). Under the newly formed airline, the US Airways Group, US Airways Shuttle, and US Airways Express operated approximately 3,800 flights per day and served more than 230 destinations in the US, Canada, Europe, the Caribbean, and Latin America (US Airways Group, 2005).

Other benefits of the America West and USAir merger include but not limited to the following (PR Newswire, 2005):

- Single-branded product offering a large network of worldwide destinations,
- Financial stability with more than USD 2.5 billion in restricted and unrestricted cash,
- The Star Alliance membership comprising of 16 airlines offering more than 15,000 daily flights to 795 destinations in 139 countries at the time of the merger,
- Dividend Miles frequent flyer program,
- First class cabins on both domestic and international flights with advance seating assignments and in-flight amenities, and
- Seventeen US Airways Clubs providing a quiet and comfortable place to work or relax.

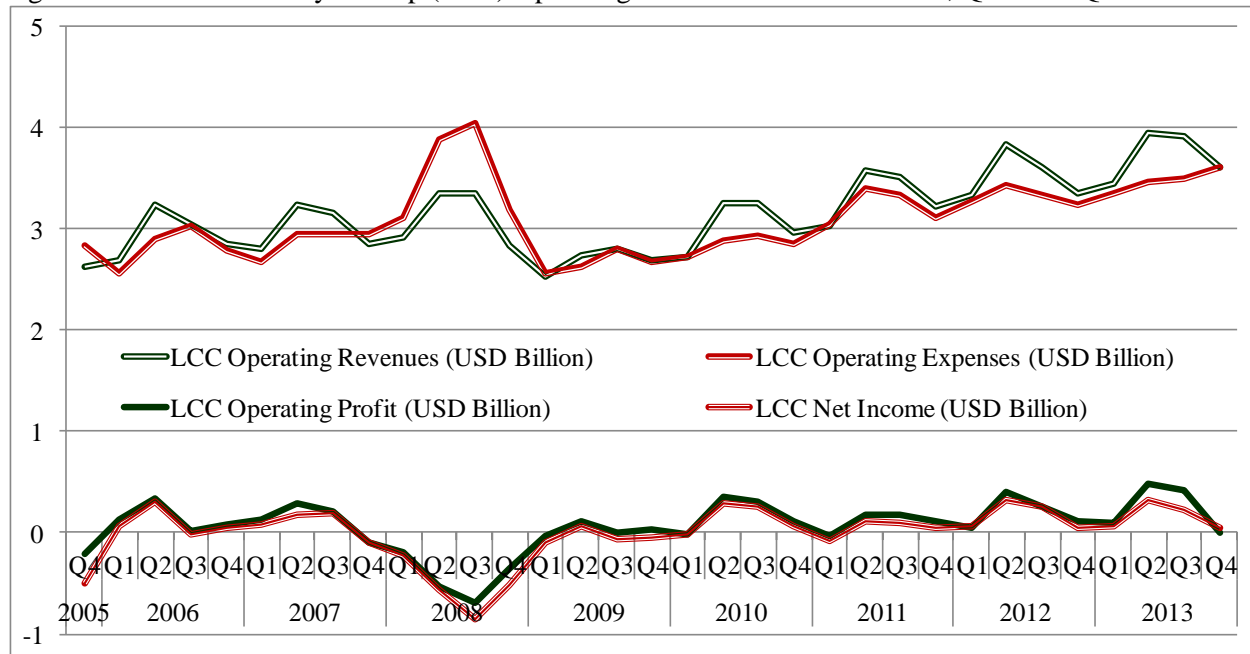
The America West and USAir merger potentially reduces costs by USD 600 million due to synergies—the merger closed with new equity of USD 867 million from investors and another USD 830 million in partner and other financial support that by the end of October 2005, the US Airways Group had over USD 2.5 billion in total cash (US Airways Group, 2005). In 2011 the US Airways Group stated that the industry had too many competitors prior to 2005, which caused an “irrational business model” and “fewer airlines is a good thing” (US District Court for the District of Columbia, 2013). The grand restructuring plan was far from over, however, and in 2006, the newly formed US Airways Group proposed to purchase Delta Air Lines. The proposed deal was rejected by Delta's board of directors (US Airways Group, 2013).

Any merger is not without challenges, however, and the issue of seniority and job security in the employee ranks are a cause for concern. The integration of employee groups was one of the most challenging tasks for America West and USAir (Ferrick-Roman, 2005; Fitzpatrick, 2005) because younger employees at America West were worried that without seniority, the older workers from USAir would get the top jobs, while less-experienced workers would lose their positions or would have to accept lower pay (Fitzpatrick, 2005). Moreover, mechanics and customer service agents were not represented by the same national union, and despite the seniority of USAir pilots, America West pilots were given priority since America West was acquiring USAir, not the other way around, and given that USAir was in Chapter 11 bankruptcy protection and its fleet was contracting at the time of the merger, USAir's management was not in the best position to negotiate for a better deal for its pilots (Airline Business Report, 2005).

## 5 Results and Analysis: The US Airways Group

The US Airways Group seems to have benefited from the merger. Figure 17 shows the airline’s financial performance from Q4 2005 to Q4 2013, indicating that operating revenues have been higher than operating expenses since Q2 2010, resulting in net income since Q2 2011. Overall the financial performance of the US Airways Group improved since Q1 2006, except from Q4 2007 to Q1 2009 when the US economy faltered.

Figure 17 US Airways Group (LCC) Operating Revenues and Net Income, Q4 2005–Q4 2013

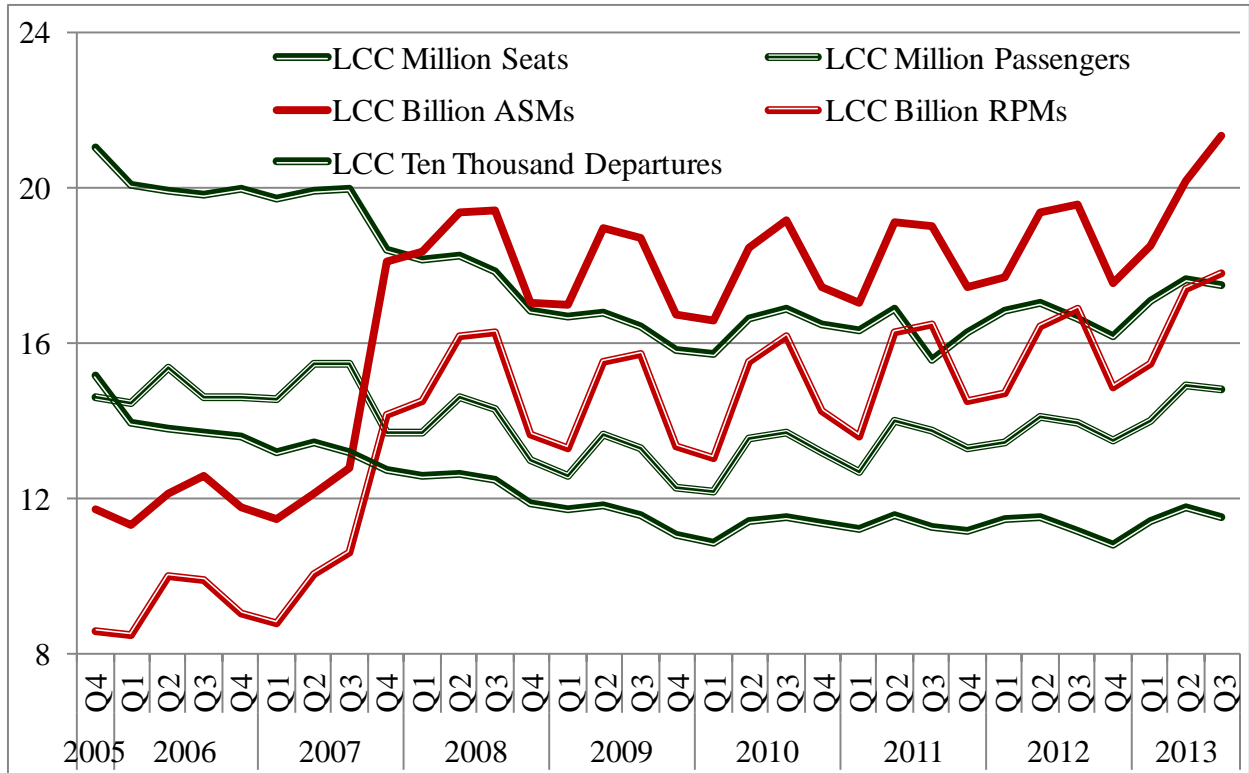


Data source: masFlight and Diio Mi

### 5.1 US Airways Group’s Operating Performance

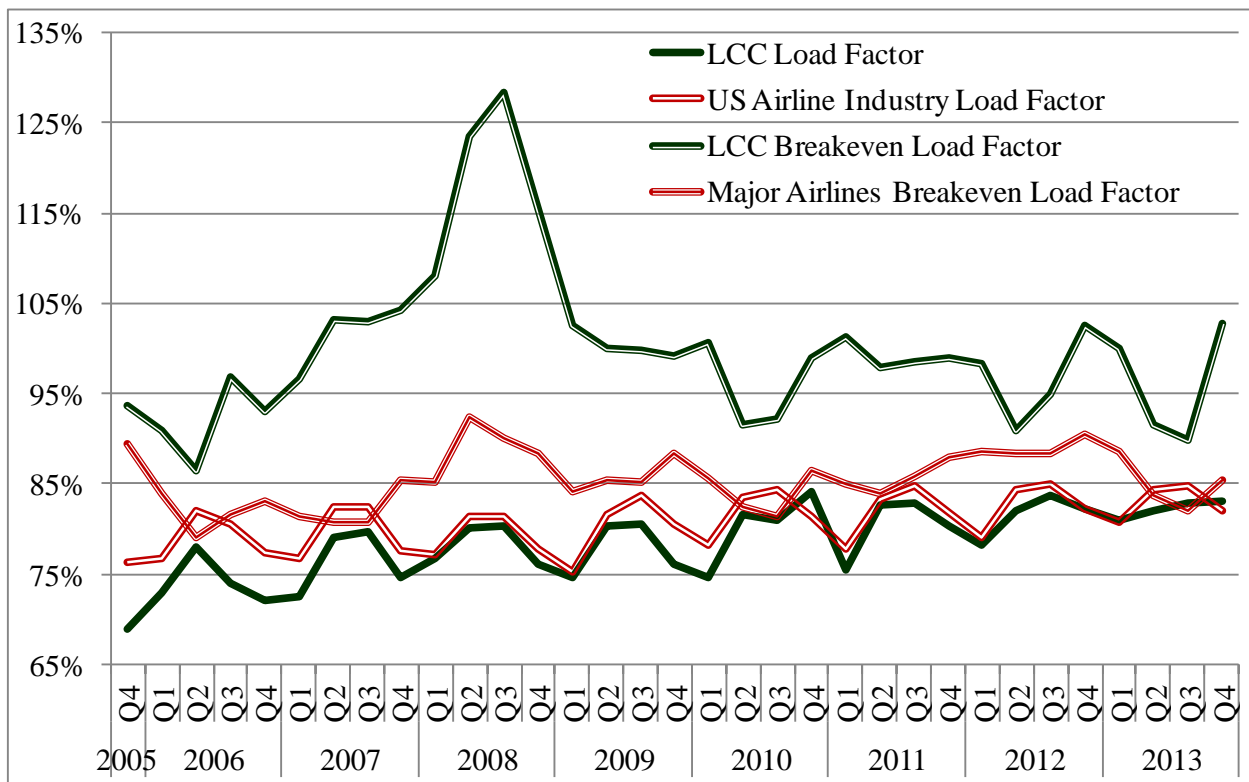
While the US Airways Group’s number of passengers decreased between Q4 2007 and Q1 2010 because of the US recession, passenger demand has increased since Q2 2010 (see Figure 18). The airline’s departure frequency declined between Q4 2005 and Q4 2009 but has been stable since Q1 2010 while RPMs and ASMs have increased, indicating the US Airways Group’s shift to relatively larger aircraft or relatively longer-haul destinations. Moreover, attempts to reduce the number of seats since Q4 2007 have resulted in increasing load factors that are not much different from those of the US airline industry (see Figure 19). The US Airways Group’s breakeven load factors, however, are much higher than those of the major airlines, indicating that the US Airways Group still lags behind its major competitors on operational efficiency and cost management. The spike in the breakeven load factor of the US Airways Group in 2008 is due to the US recession.

Figure 18 US Airways Group (LCC) USAir Seats, Passengers, ASM, RPM, and Departure Frequency, Q1 2000–Q3 2007, Q4 2005–Q3 2013



Data source: masFlight and Diio Mi

Figure 19 US Airways Group (LCC) and the US Airline Industry Load Factor, Q4 2005–Q4 2013

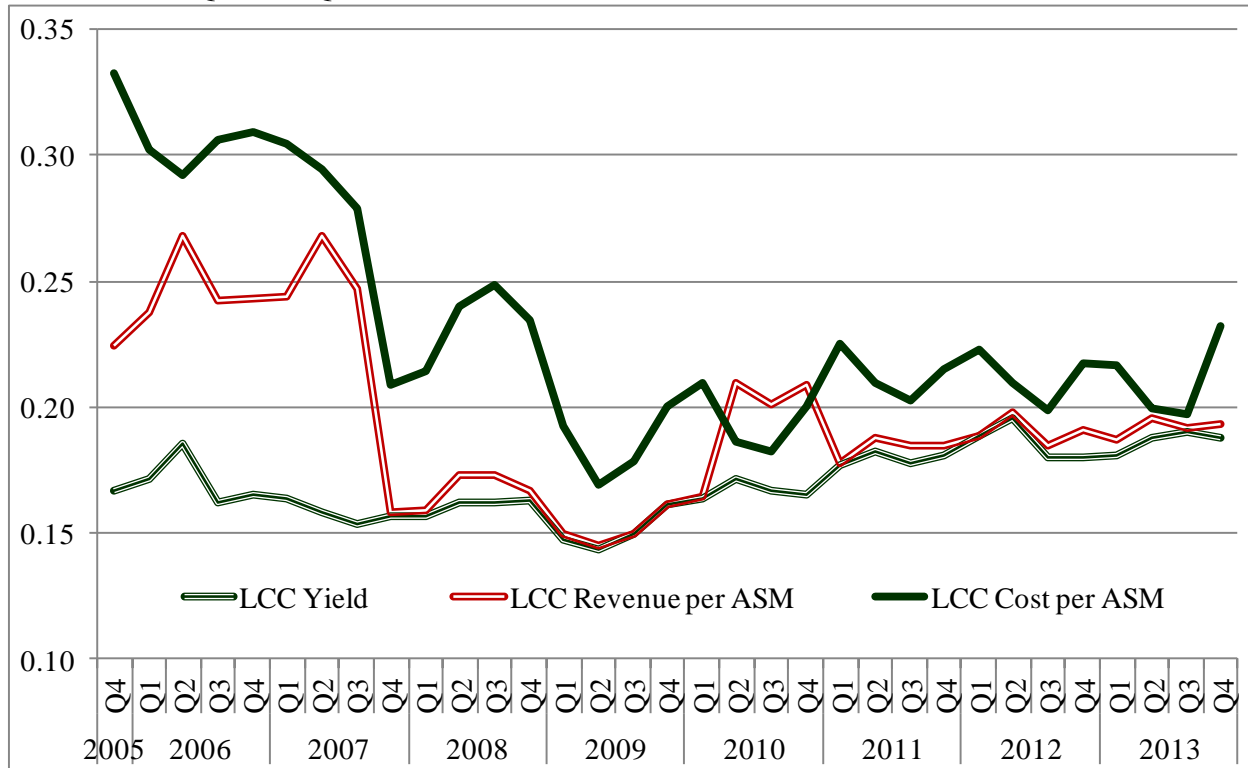




Data source: masFlight, Diio Mi, and the US Bureau of Transportation Statistics. The breakeven load factors of AAL, DAL, and UAL were used in the calculation of the “major airlines breakeven load factor.”

Figure 20 shows that the US Airways Group’s yield has been increasing since Q3 2009, while its CASM decreased between Q4 2005 and Q2 2009 and has been quite stable since Q3 2009. Although the US Airways Group has a higher CASM than revenue per ASM, the difference has narrowed since Q1 2010, indicating the airline’s ability to control its operating costs.

Figure 20 US Airways Group (LCC) Yield, Revenue per ASM, CASM, and Departure Frequency, Q4 2005–Q3 2013



Data source: masFlight and Diio Mi

The improving operating performance of the US Airways Group indicates that two struggling and underperforming airlines (America West and USAir) may be able to improve operating performance by combining their resources and capabilities (e.g., managers and employees and their knowledge and skills, financial resources, route network, airport slots, and aircraft) and managing their strategic resources and capabilities effectively and efficiently (Barney, 1991; Grant, 1991; Mahoney, 1995) and finding ways to reduce costs by rationalizing their combined route network, aircraft, and sharing airport facilities, among others.

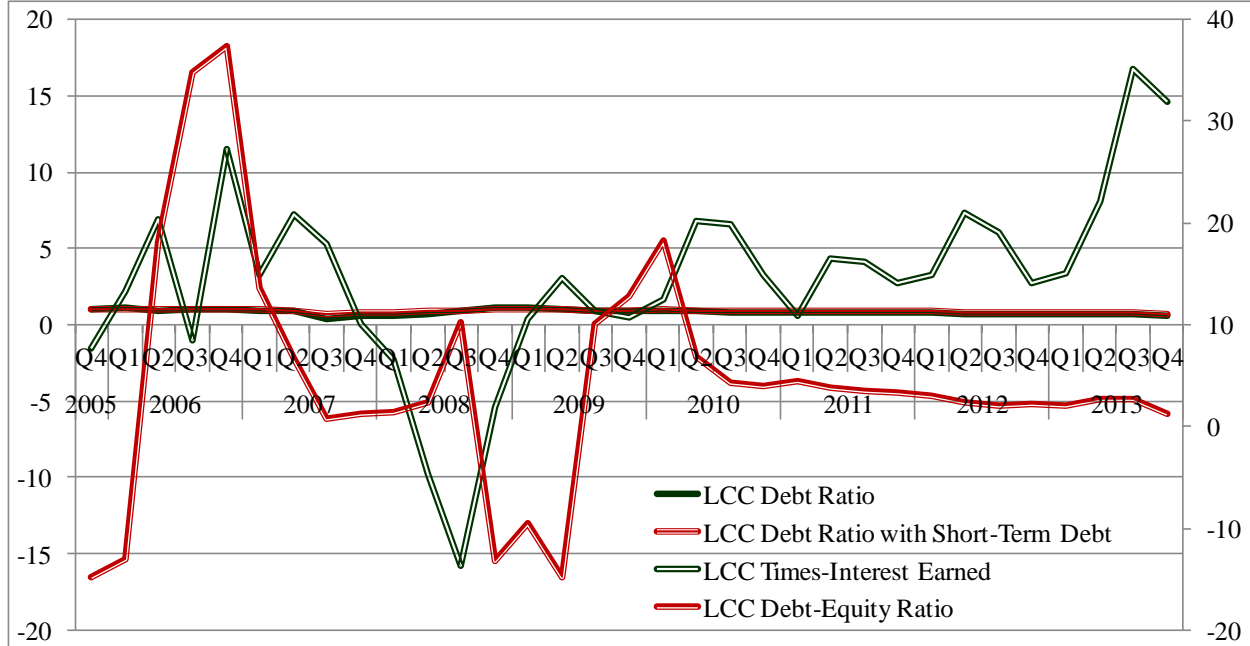
## 5.2 US Airways Group’s Financial Performance

The US Airways Group’s leverage ratios, while not enviable, are an improvement over the leverage ratios of either America West or USAir. Since Q1 2007, the US Airways Group has reduced its reliance on debt and improved its ability to pay interests on its debts (see Figure 21). The highly negative times-interest earned and debt-equity ratios from Q2 2008 to Q2 2009 are

due to its negative net shareholders' equity, exacerbated by the US recession in the same period. The airline's debt ratio since Q3 2009, even when short-term debt is included, is below 1.0, indicating that the US Airways Group has been reducing its reliance on debt, resulting in lower financial risk. This is a positive development for the airline since lower financial risk may translate into lower cost of capital. Overall the US Airways Group has achieved better leverage ratios than its component airlines and appears to be heading in the right direction.

5.2 US Airways Group's Financial Performance

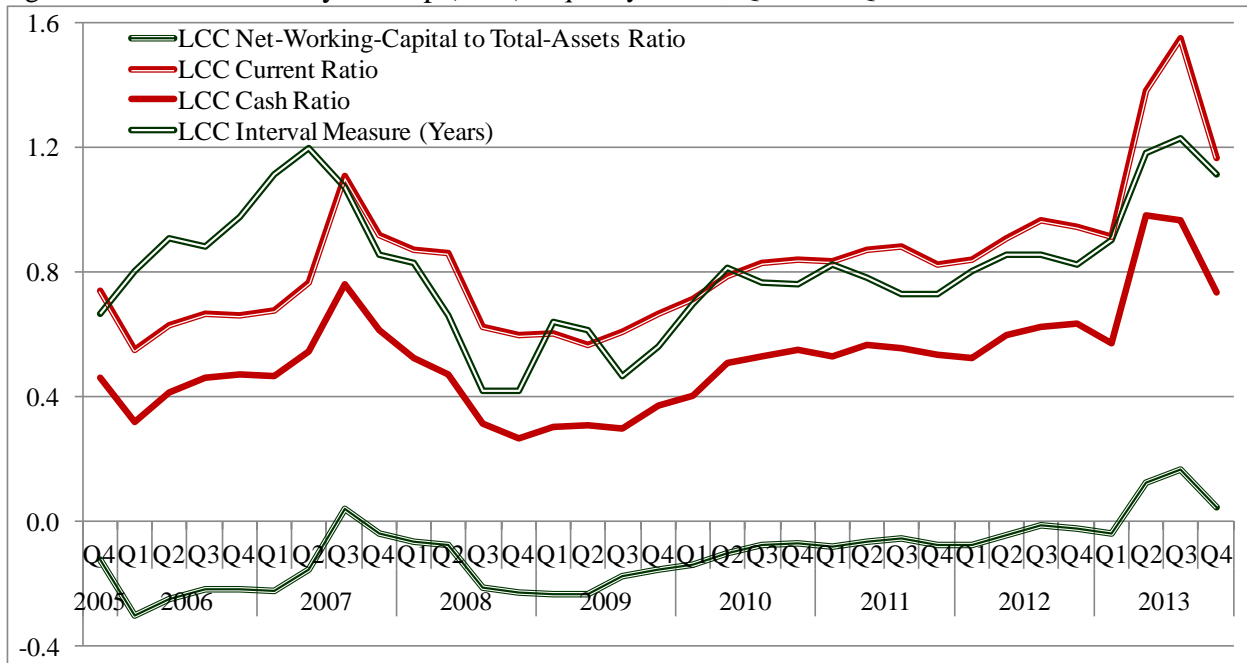
Figure 21 US Airways Group (LCC) Leverage Ratios, Q4 2005–Q4 2013



Data source: masFlight and Diio Mi

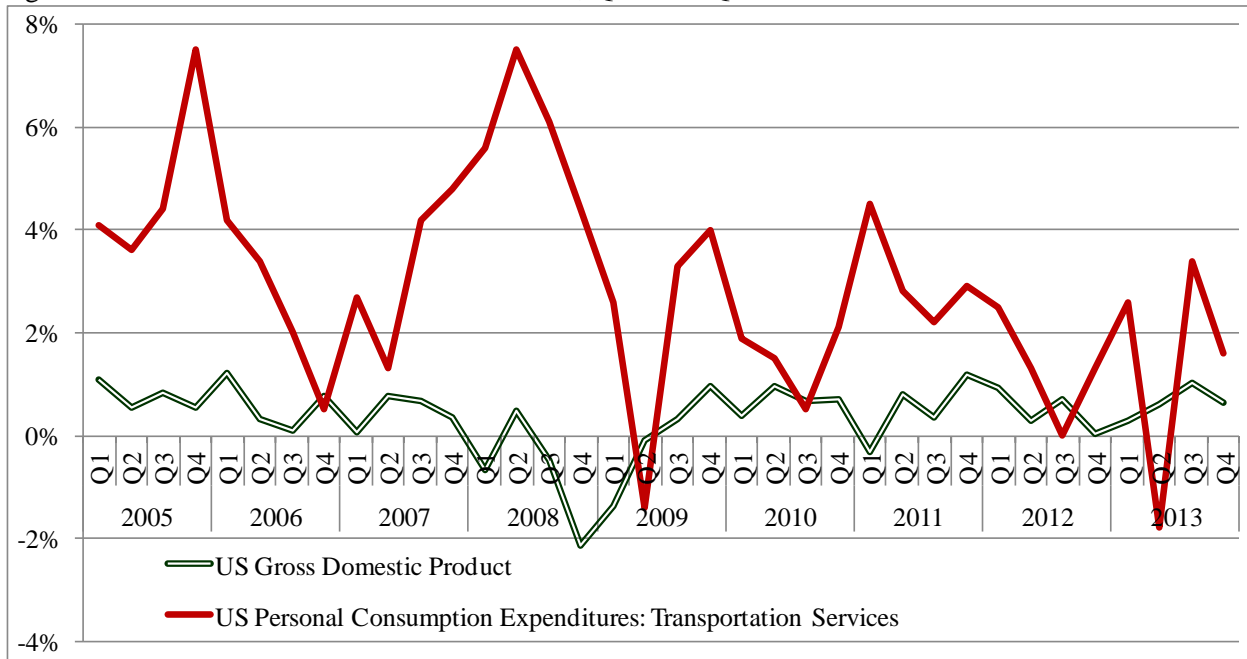
The US Airways Group's liquidity ratios appear to be improving (see Figure 22), although the weakening US gross domestic product (GDP) from 2008–2009 (see Figure 23) seems to complicate the airline's financial performance in the same period. All four measures of liquidity have improved since 2009 and while the airline has not achieved enviable liquidity ratios by Q4 2013, the increasing trend indicates an improving ability to meet short-term financial obligations.

Figure 22 US Airways Group (LCC) Liquidity Ratios, Q4 2005–Q4 2013



Data source: masFlight and Diio Mi

Figure 23 US GDP and PCE Growth Rates, Q1 2005–Q4 2013

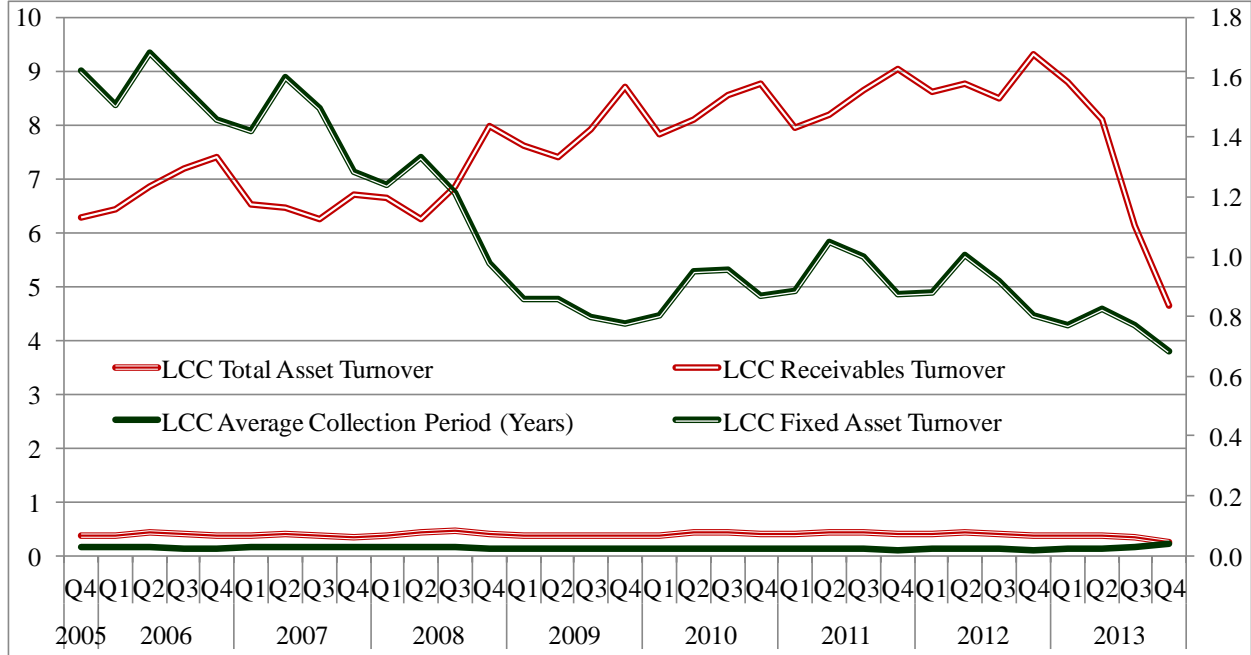


Data source: OECD.StatExtracts and the US Bureau of Economic Analysis

The US Airways Group generates revenues an average of USD 0.39 for every dollar of assets (refer to total asset turnover in Figure 24), higher than America West’s USD 0.35 or USAir’s USD 0.20. Moreover, the airline’s receivables turnover has been increasing from Q3 2008 to Q4 2012. While the US Airways Group is still relatively inefficient in using its assets, the airline is performing better than either America West or USAir before the merger. Overall the US Airways

Group’s efficiency ratios indicate that the airline is on its way to becoming a better managed airline, which may result in higher net income (see Table 2) and better returns to its shareholders (see Figure 25).

Figure 24 US Airways Group (LCC) Efficiency Ratios, Q4 2005–Q4 2013

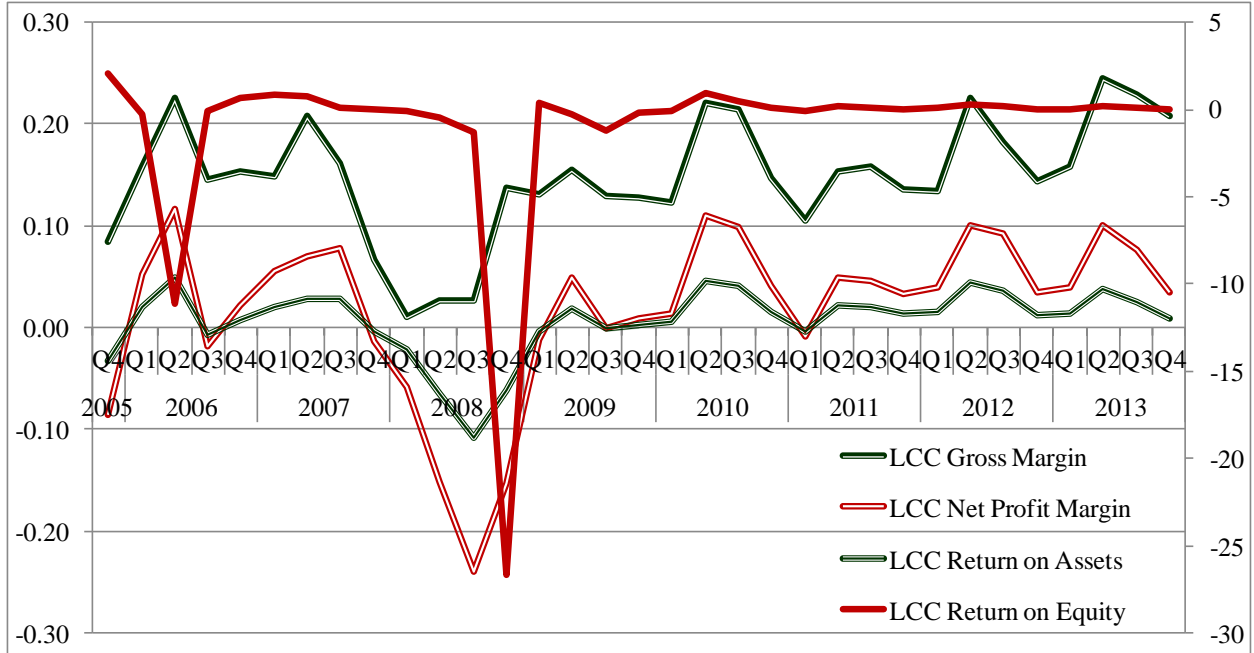


Data source: masFligh and Diio Mi

The US Airways Group’s improving efficiency ratios resulted in higher returns to investors. While the airline’s profitability ratios were highly negative or almost zero during the financial crisis in the US, its net profit margin, ROA, and ROE have been positive since Q2 2011 (see Figure 25). The highly negative profitability ratios in 2008 are due to the US recession. While not necessarily a stellar performance, the airline’s 2013 gross margin is 21.0%, net profit margin 6.3%, ROA 2.1%, and ROE 8.1%.

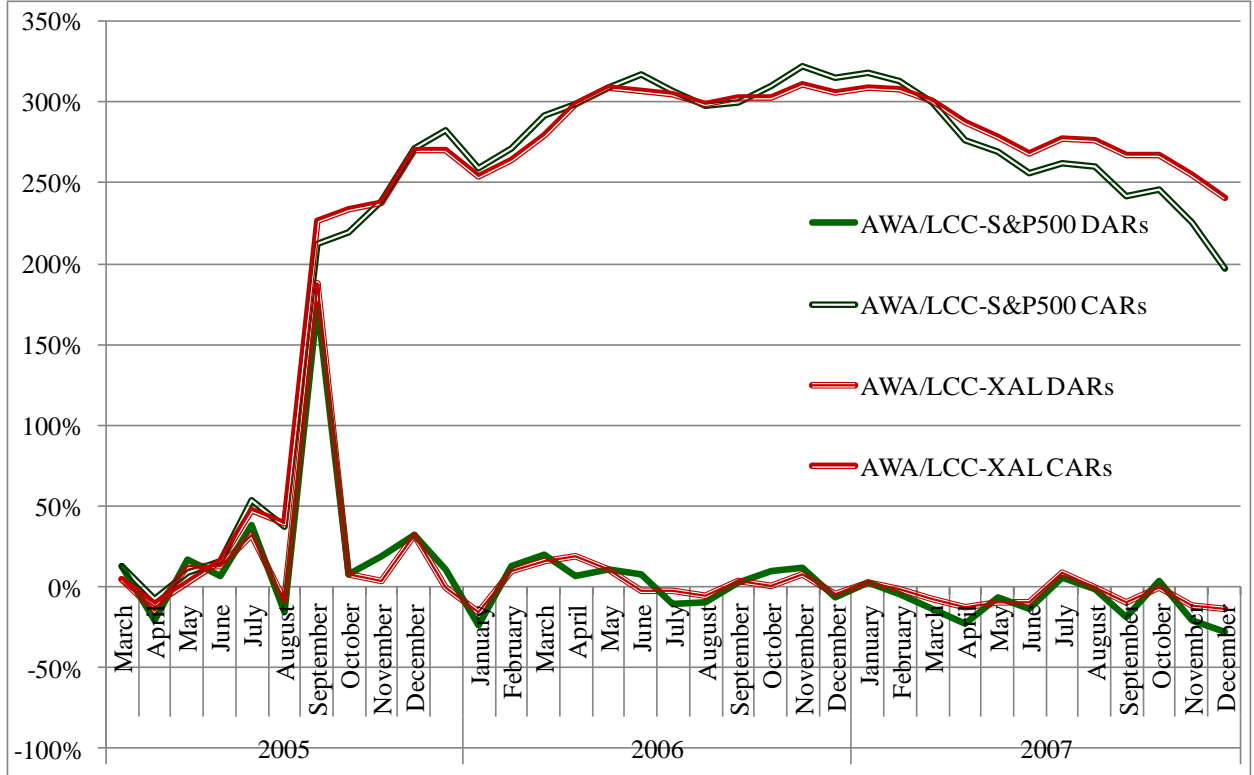
The airline’s improving profitability ratios indicate that the merger appears to be a success and that the US Airways Group’s improving operating and financial performance will benefit not only its investors but also its customers, who should eventually experience an improved service quality from a better managed airline, which is on its way to financial sustainability.

Figure 25 US Airways Group (LCC) Profitability Ratios, Q4 2005–Q4 2013



Data source: masFlight and Diio Mi

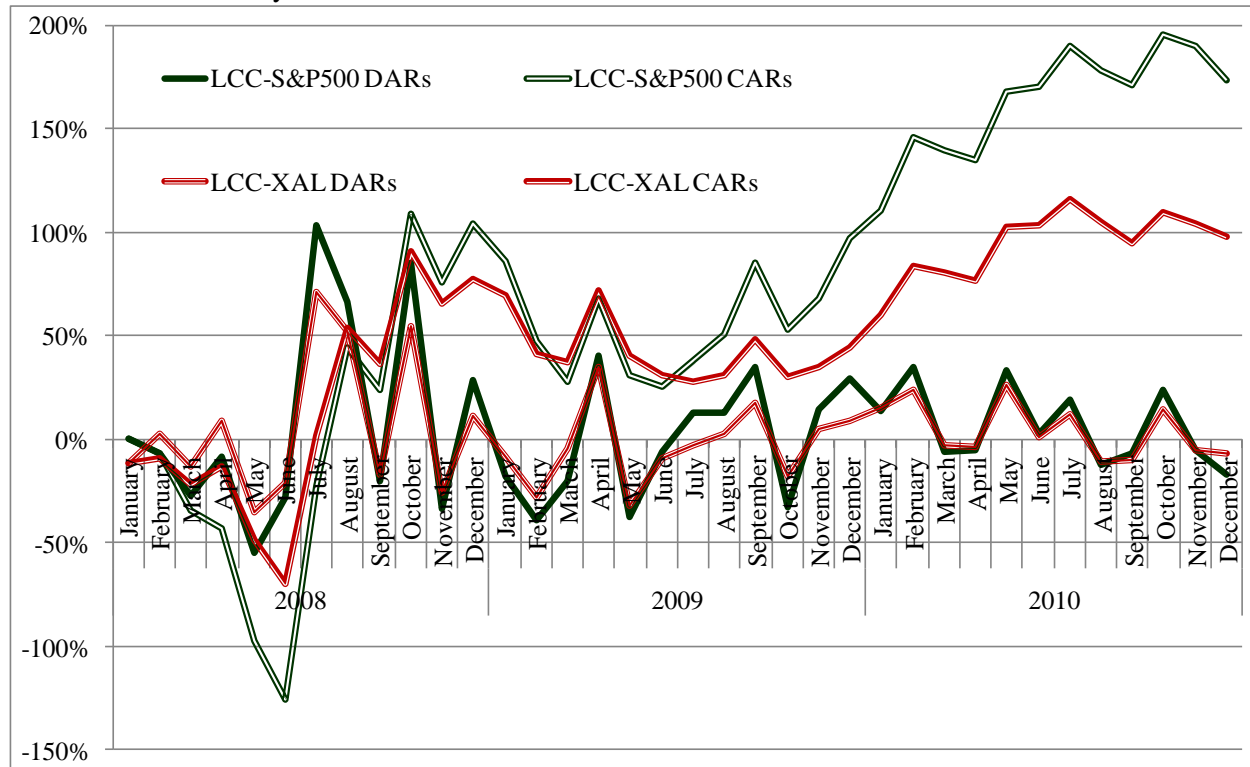
Figure 26 AWA/US Airways Group (LCC) End-of-Month Abnormal Returns March 2005–December 2007



Data source: Yahoo Finance Charts

With regard to the US Airways Group’s share price performance against the S&P 500 and its industry, the airline has consistently outperformed the S&P 500 and XAL from the time of the merger announcement up to the last trading day in 2007 (see Figure 26).

Figure 27 AWA/US Airways Group (LCC) End-of-Month Abnormal Returns January 2008–December 2010

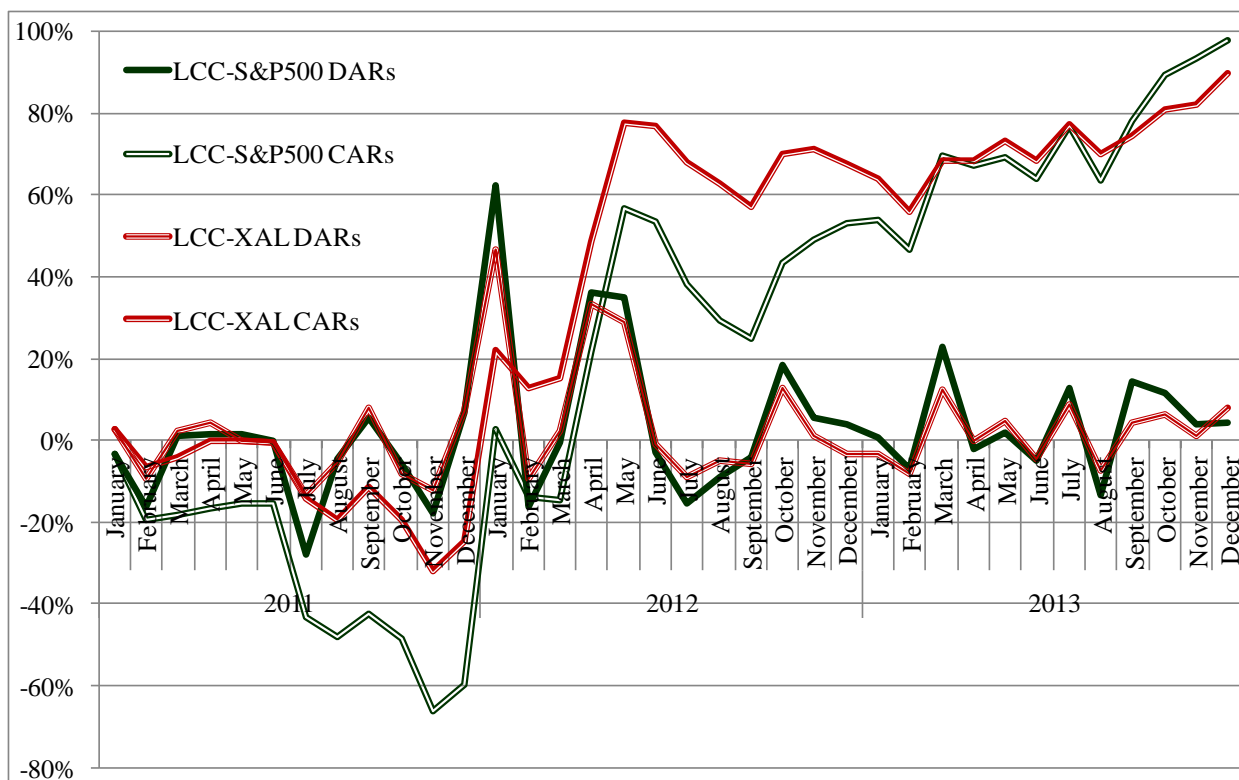


Data source: Yahoo Finance Charts

The weakening US economy from Q4 2007 to Q2 2009 (see Figure 23) has complicated the impact of the merger on the US Airways Group’s stock price from 2008 to 2010, although its stock returns still managed to outperform the S&P500 and XAL since early 2009 (see Figure 27), indicating investor confidence on the merger five years later. This suggests that the airline’s improving operating and financial performance in the same period has been well-received by investors, resulting in positive end-of-the-month abnormal returns.

Although the US economy started to improve between 2011 and 2013, personal consumption expenditures (PCE) on transportation services have been erratic and decreasing (see Figure 23), driving the US Airways Group’s share price lower, underperforming the S&P500 and XAL in the same period. The airline’s share price started to recover by mid-2012, however, and have since outperformed the S&P500 and XAL. This indicates an unwavering investor confidence on the airline’s ability to compete favorably against its rivals, perhaps due to its improving operating and financial performance since 2010.

Figure 28 US Airways Group (LCC) End-of-Month Abnormal Returns January 2011–December 2013



Data source: Yahoo Finance Charts. The time series ends on December 9, 2013 when the US Airways Group merged with American Airlines.

The US Airways Group completed the consolidation of its operations and financial systems in Q3 2007, two years after America West and USAir officially merged as the US Airways Group. Table 2 shows the airline's operating revenues, operating expenses, and net income from 2008–2013.

Table 2 Operating Revenues and Net Income of the US Airways Group, 2008–2013

Year	Operating Revenues		Operating Expenses		Net Income	
	USD '000	Annual Change	USD '000	Annual Change	USD '000	Annual Change
2008	12,459,197	3.35%	14,232,649	-0.39%	-2,148,445	-714.19%
2009	10,780,838	-13.47%	10,659,854	-25.10%	-140,459	93.46%
2010	12,195,807	13.12%	11,415,098	7.08%	598,641	526.20%
2011	13,340,511	9.39%	12,906,813	13.07%	180,376	-69.87%
2012	14,121,027	5.85%	13,299,050	3.04%	702,493	289.46%
2013	14,935,551	5.77%	13,933,010	4.77%	654,168	-6.88%

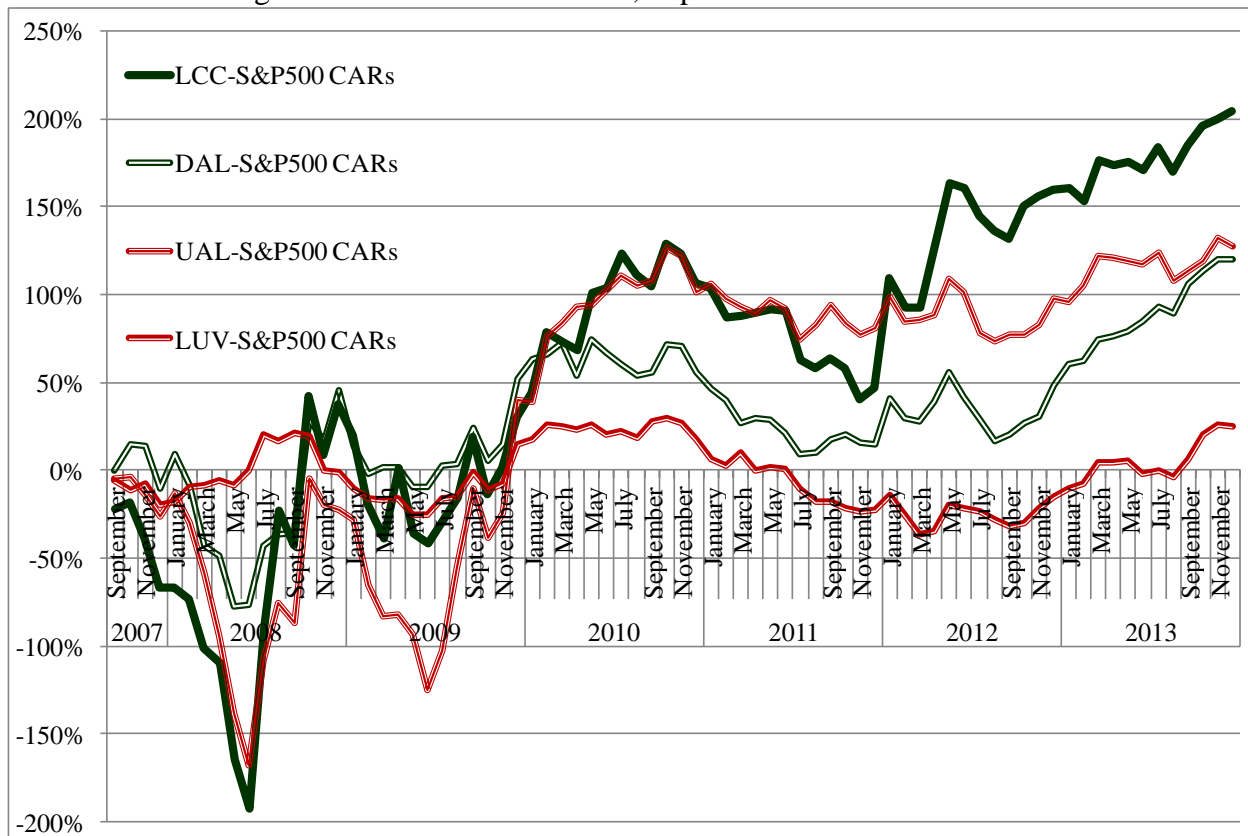
Data source: masFlight and Diio Mi. The annual change between 2007 and 2008 is based on the combined operating revenues and net income of AWA and USAir in 2007 since the US Airways Group's financial results for a full year starts in 2008.

The US Airways Group returned to profitability in 2010, mostly due to its increasing operating revenues (see Figure 17 and Table 2), posting a net income of USD 654.17 million in 2013, with operating revenues of USD 14.94 billion, representing a decrease of 6.88% in net income and a 5.77% increase in operating revenues from 2012. The decrease in net income is due its USD 335.38 million income taxes in 2013 while the airline has a small tax credit in 2012. Operating

expenses have increased less than operating revenues since 2012 and in five of the last six years, indicating that the US Airways Group’s ability to control costs has improved.

The US Airways Group’s CARs have substantially outperformed the CARs of Delta Air Lines and Southwest Airlines from 2010 to 2013 and United Airlines’ from 2012 to 2013 using the S&P 500 as benchmark (see Figure 29). American Airlines was delisted from the New York Stock Exchange on December 29, 2011, a month after filing for Chapter 11 (Mehta, 2011), so its share price performance is not included in Figures 29 and 30. The stock performance of the US Airways Group against the three major airlines using the XAL as index is similar—outperforming the CARs of Delta and Southwest from 2010 to 2013 as well as United’s from 2012 to 2013. The share price performance of the US Airways Group from 2012 to 2013 is largely due to its announcement to acquire the bankrupt American Airlines in January 2012 (Joyce, 2012) while the stock performance of United is attributed to its return to profitability in 2013, its first annual net income since its merger with Continental Airlines in October 2010.

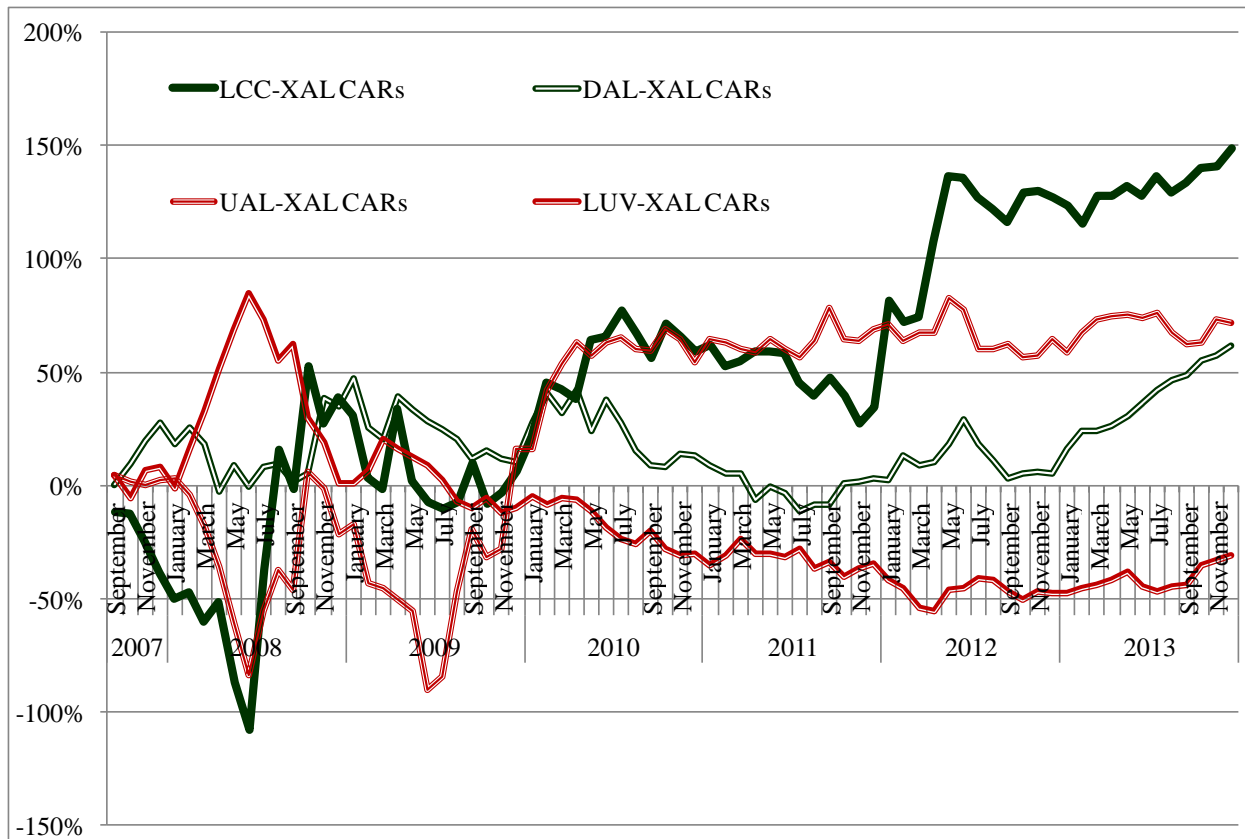
Figure 29 Stock Performance of the US Airways Group (LCC), DAL, UAL, and LUV Using the S&P 500 as Benchmark, September 2007–December 2013



Data source: Yahoo Finance Charts. The time series ends on December 9, 2013 when the US Airways Group merged with American Airlines.

Figure 30 Stock Performance of US Airways Group (LCC), DAL, UAL, and LUV Using the XAL as Benchmark, September 2007–December 2013





Data source: Yahoo Finance Charts. The time series ends on December 9, 2013 when the US Airways Group merged with American Airlines.

Overall the acquisition of USAir by America West, which formed the US Airways Group, appears to have benefited the shareholders of both airlines since the US Airways Group’s operating and financial performance has improved since Q4 2005. The US Airways Group’s improving operating and financial performance may have emboldened its board, management, and various employee groups to approve its merger with American Airlines on December 9, 2013 (American Airlines, 2013).

## 6. Conclusion

This article has analyzed the post-merger performance, using airline operations metrics and financial ratios from Q1 2000–Q4 2013, of US Airways, America West Airlines, and the US Airways Group. While the weakening US economy from Q4 2007 to Q2 2009 has complicated the impact of the merger on the US Airways Group’s operating and financial performance, overall the airline has managed to turnaround the faltering performance of its predecessors.

In view of the improving operating and financial performance of the US Airways Group since America West acquired the bankrupt USAir in September 2005, the merger is largely considered a success, even if the airline still needs to reduce its reliance on debt and utilize its assets more efficiently to improve its profitability and financial sustainability. Even investors agree that the merger is a success, rewarding the US Airways Group with share prices that have outperformed the S&P 500 and XAL since the merger, except when the US economy faltered. Moreover, the

US Airways Group's share prices have outperformed its major competitors for at least two years between 2010 and 2013.

Perhaps the improving operating and financial performance of the US Airways Group emboldened its management and board of directors to merge with American Airlines, which has just emerged from Chapter 11 bankruptcy protection and reorganization. On December 9, 2013, the US Airways Group, some eight years following the merger of America West and USAir, merged with AMR Corporation and started operations under the American Airlines Group, forming the largest airline in the world with its base in Fort Worth, Texas (American Airlines, 2013).

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### **Appendix**

Source: Brealey, R.A., Myers, S.C., and Allen, F. (2011). *Principles of Corporate Finance*. New York: McGraw-Hill, pp. 789–797.

Leverage ratios measure the airlines' reliance on debt to finance their operations (Brealey et al., 2011). We used the following leverage ratios.

$$\text{Eq. 1 Debt ratio} = (\text{Long-term debt} + \text{Leases}) \div (\text{Long-term debt} + \text{Leases} + \text{Equity})$$

$$\text{Eq. 2 Debt ratio with short-term debt} = (\text{Long-term debt} + \text{Short-term debt} + \text{Leases}) \div (\text{Long-term debt} + \text{Short-term debt} + \text{Leases} + \text{Equity})$$

$$\text{Eq. 3 Debt-equity ratio} = (\text{Long-term debt} + \text{Leases}) \div (\text{Equity})$$

$$\text{Eq. 4 Times-interest earned} = (\text{Earnings before interests and taxes or EBIT} + \text{Depreciation}) \div (\text{Interest})$$

Liquidity ratios measure the airlines' ability to meet their financial obligations in the short term or within one year (Brealey et al., 2011). We used the following liquidity ratios.

$$\text{Eq. 5 Net working capital to Total assets ratio} = (\text{Current assets} - \text{Current liabilities}) \div (\text{Total assets})$$

$$\text{Eq. 6 Current ratio} = (\text{Current assets}) \div (\text{Current liabilities})$$

$$\text{Eq. 7 Cash ratio} = (\text{Cash} + \text{Short-term securities}) \div (\text{Current liabilities})$$

$$\text{Eq. 8 Interval measure (years)} = (\text{Cash} + \text{Short-term securities} + \text{Receivables}) \div (\text{Costs from operations})$$

Efficiency ratios measure the airlines' ability to use their assets (e.g., current assets, fixed assets, or total assets) and liabilities (e.g., current liabilities, long-term debt, or equity) to generate sales (Brealey et al., 2011). We used the following efficiency ratios.

$$\text{Eq. 9 Total asset turnover} = (\text{Net sales}) \div (\text{Average total assets})$$

$$\text{Eq. 10 Fixed asset turnover} = (\text{Net sales}) \div (\text{Average fixed assets})$$

Eq. 11 Accounts receivable turnover =  $(\text{Net sales}) \div (\text{Average accounts receivables})$

Eq. 12 Average collection period (years) =  $((\text{Average receivables}) \div (\text{Sales} \div 365)) \div 365$

Profitability ratios measure the airlines' ability to generate profits (Brealey et al., 2011). We used the following profitability ratios.

Eq. 13 Gross margin =  $(\text{Revenues} - \text{Cost of goods sold}) \div (\text{Revenues})$

Eq. 14 Net profit margin =  $(\text{EBIT} - \text{tax}) \div (\text{Sales})$

Eq. 15 Return on assets (ROA) =  $(\text{EBIT} - \text{tax}) \div (\text{Average total assets})$

Eq. 16 Return on equity (ROE) =  $(\text{Earnings available for common shareholders}) \div (\text{Average equity})$

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<sup>i</sup> [http://www.encyclopedia.com/topic/US\\_Airways\\_Group\\_Inc.aspx](http://www.encyclopedia.com/topic/US_Airways_Group_Inc.aspx), accessed October 17, 2015.