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# Relationships, Layoffs, and Organizational Resilience: Airline Industry Responses to September 11<sup>th</sup>

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ABSTRACT

The terrorist attacks of September 11<sup>th</sup>, 2001 affected the U.S. airline industry more than almost any other industry. In addition to the devastating loss of employee life, passenger ridership plummeted and financial losses were horrendous. Certain of these companies emerged successful, however, and demonstrated remarkable resilience while others languished. This investigation identifies the reasons why some airline companies recovered successfully after the attacks while others struggled. Evidence is provided that two key factors can account for organizational resilience, namely, the existence of relational reserves (the maintenance of positive employee relationships) and financial reserves. Fostering relational reserves is crucial in order to recover from crisis; however, the most common organizational response to crisis is layoffs and a depletion of positive employee relationships. The presence of adequate financial reserves reduces the need to rely on layoffs, thus preserving relational reserves among employees, which boost an organization's ability to bounce back after a crisis has passed.

**LEADING IN THOUGHT AND ACTION**

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AIRLINE INDUSTRY RESPONSES TO SEPTEMBER 11<sup>TH</sup>**

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## **RELATIONSHIPS, LAYOFFS AND ORGANIZATIONAL RESILIENCE: AIRLINE INDUSTRY RESPONSES TO SEPTEMBER 11<sup>TH</sup>**

The terrorist attacks of September 11<sup>th</sup>, 2001 affected the U.S. airline industry more than almost any other industry. In addition to the devastating loss of employee life, passenger ridership plummeted and financial losses were horrendous. Certain of these companies emerged successful, however, and demonstrated remarkable resilience while others languished. This investigation identifies the reasons why some airline companies recovered successfully after the attacks while others struggled. Evidence is provided that two key factors can account for organizational resilience, namely, the existence of relational reserves (the maintenance of positive employee relationships) and financial reserves. Fostering relational reserves is crucial in order to recover from crisis; however, the most common organizational response to crisis is layoffs and a depletion of positive employee relationships. The presence of adequate financial reserves reduces the need to rely on layoffs, thus preserving relational reserves among employees, which boost an organization's ability to bounce back after a crisis has passed.

The U.S. airline industry faced devastating losses in the wake of the September 11<sup>th</sup>, 2001 terrorist attacks. According to Kevin Murphy, airline industry analyst for Morgan Stanley, “If there was ever a stress test for a good business, this is it.”<sup>1</sup> The day after the attacks, the major airlines appeared in front of Congress seeking relief in the form of federal assistance. Fifteen billion dollars were allocated to the industry, some in the form of outright grants to cover the loss of operating revenue in the days after the attacks when the industry was shut down by federal order. The rest of the \$15 billion allocation was made available in the form of loan guarantees to be allocated according to rules established by the Air Transport Stabilization Board. Even with this federal assistance, however, the industry continued to lose millions of dollars on a daily basis due to the slow rate of passenger return. In response to these losses, the major airlines cut their flights by an average of 20 percent and laid off an average of 16 percent of their workforces in the weeks following the attacks. Even though all of the major airlines were devastated about equally in terms of the initial decline in passenger traffic, however, they did not respond in the same way. Some airlines emerged from this crisis resilient and strong, whereas others languished and even confronted bankruptcy.

This is a story of organizational resilience. It is an investigation of the factors explaining the success of some airline companies after the 9-11 attacks and the struggles of others. It focuses on the roles played by relational reserves and financial reserves in ten major airline companies. Specifically, the study explains why managers must maintain and enhance strong employee relationships (relational reserves) during crisis in order to ensure commitment and productivity, but it also highlights the crucial role played by financial reserves (cash flow and low debt levels) in enabling human relationships to flourish. Companies are better able to cope with a crisis when they maintain strong relational reserves and have adequate financial reserves needed to avoid layoffs. These two building blocks in combination are the key predictors of organizational resilience.

## **THE ROLE OF POSITIVE RELATIONSHIPS FOR INDIVIDUALS, COMMUNITIES, AND ORGANIZATIONS**

Abundant research has shown that positive human relationships improve outcomes for individuals, communities, and organizations. For individuals, positive social relationships are associated with higher levels of physical and psychological well being<sup>1</sup> and lower risk of death<sup>2</sup>, at least partly due to the revitalizing, stress-reducing effects of positive relationships. Positive relationships affect the hormonal, cardiovascular, and immune systems of the body, thus enhancing health and wellbeing, and enhancing the relationships themselves<sup>3</sup>. In communities, the density and patterns of social connections are predictors of economic vitality<sup>4</sup>. Social capital and the existence of positive social networks account for community-level outcomes such as educational attainment, financial well-being, and the reduction of crime<sup>5</sup>.

In organizations, social capital facilitates the transfer of knowledge<sup>6</sup> and the achievement of coordinated action<sup>7</sup> among organizational members. For example, relationships of shared knowledge, shared goals and mutual respect support high levels of coordination among frontline employees, with positive effects on both quality and efficiency performance.<sup>8</sup> Moreover, friendships among co-workers and the presence of caring and compassionate relationships are significant predictors of performance outcomes<sup>9</sup>. Collectively, this research contributes to a relational theory of how people develop<sup>10</sup> and how they work effectively together<sup>11</sup>.

### **POSITIVE RELATIONSHIPS AND RESILIENCE DURING CRISIS**

The role of relationships is especially important when considering how individuals and organizations respond to crises. Most organizational theory has focused on the negative consequences of crisis such as threat-rigidity, downward spirals, vicious cycles, and tipping

points<sup>12</sup>, yet some organizations demonstrate a remarkable tendency to flourish and thrive in the midst of crisis. These organizations demonstrate *resiliency*.

Resiliency in everyday parlance refers to the capability to “absorb strain and maintain coherence” (Oxford English Dictionary). In organizational science it refers to (a) the maintenance of positive adjustment under challenging conditions<sup>13</sup>, (b) the ability to bounce back from untoward events<sup>14</sup>, and (c) the capacity to maintain desirable functions and outcomes in the midst of strain<sup>15</sup>. Resilience is a dynamic capacity of organizational adaptability that grows and develops over time<sup>16</sup>. It is not a static attribute that organizations do or do not possess. Rather, it results from processes that help organizations retain resources in a form sufficiently flexible, storable, convertible, and malleable to avert maladaptive tendencies and cope positively with the unexpected<sup>17</sup>.

These processes center on the nature of the relationships that develop among organization members. The levels of social, emotional, and moral support provided to one another, for example, are key components of organizational resilience<sup>18</sup>. In a laboratory study where subjects were exposed to equivalent levels of stressors, Aiello and Kolb<sup>19</sup> found that members of cohesive groups reported the least stress. Similar evidence found that social support among employees reduced the negative effects of work stressors on work outcomes<sup>20</sup>. Positive relationships served as the key coping resources that enabled individuals and organizations to develop resilience in the face of work stress. Individually, children who had close relationships with caregivers, other competent adults, or peers, and those living in a closely knitted community, were more likely to cope effectively during times of adversity<sup>21</sup>.

The predominant theme in the resilience literature is that resiliency results from the presence of both (1) positive relationships and (2) the access to adequate resources. For example,

Wildavsky<sup>22</sup> argued that, in addition to social support, retaining financial reserves in a form that is sufficiently flexible to cope with unanticipated events was a key mechanism for developing resiliency. Similarly, in a study of hospital responses to an unexpected doctors' strike, Meyer<sup>23</sup> found that slack resources worked as "organizational shock absorbers" that buffered the impact of environmental jolts. The accumulation of substantial financial reserves during tranquil periods enabled one of the most resilient hospitals in the study to adapt to the crisis without the need to lay off employees. In another hospital, a strong organizational ideology emphasizing employee well-being greatly affected the organization's ability to respond to environmental jolts. This hospital had to suffer a short-term decline in profits by not laying off employees, but the strategy allowed it to preserve its commitment to its employees and contributed to its ability to readjust quickly after the crisis<sup>24</sup>.

### **LAYOFFS AND ORGANIZATIONAL PERFORMANCE**

Paradoxically, a common organizational response to crisis—i.e., layoffs—tends to undermine the very relationships that help organizations cope during periods of crisis. Many studies have reported the negative effects of downsizing on organizational relationships<sup>25</sup> including: (1) the destruction of interpersonal relationships, shared values, trust and loyalty, and commonality and strength of culture; (2) reduced information sharing and increased secrecy, deception, and duplicity; (3) increased formalization, rigidity, resistance to change, and conservatism; (4) increased conflict, anger, vindictiveness, and feelings of victimization; and (5) increased selfishness and voluntary turnover, as well as deterioration in teamwork and cooperation<sup>26</sup>.

As a result of the negative impact on relationships, layoffs also have negative implications for organizational performance. Most organizations, for example, experience

deteriorating profitability, product and service quality, innovation, and organizational climate after downsizing (Cameron, 1998). Three years after downsizing, the market share prices of downsized companies were an average of 26 percent below the share prices of their competitors at the beginning of the 21<sup>st</sup> century. Among companies with similar growth rates, those that did not downsize consistently outperformed those that did in the 2001 recession. Moreover, almost all organizations that downsized—in the public sector or the private sector—experienced an emergence of the “dirty dozen” as a result of downsizing<sup>27</sup>. (The dirty dozen are twelve common deleterious outcomes associated with downsizing, such as declines in trust, networks, communication, commitment, and innovation along with increases in threat-rigidity, selfishness, conflict, and goal displacement<sup>28</sup>).

These negative performance effects of layoffs are consistent with relational theory, which suggests that relationships are an important predictor of organizational outcomes<sup>29</sup>. When layoffs are used as a primary coping response in a crisis, such as a sharp decline in demand for the organization’s products or services, the resulting weakened relationships mitigate the very resilience and recovery being sought.

## **INVESTIGATING RESILIENCE IN THE AIRLINE INDUSTRY**

This study investigates the extent to which the dramatic differences in resiliency and recovery in U.S. airline companies after the tragedy of September 11<sup>th</sup> can be explained by these same factors—the preservation of relational and financial reserves. Our sample includes the ten major U.S. airlines at the time of the 9/11 crisis, as defined by the U.S. Department of Transportation: Alaska, American, American Trans Air, America West, Continental, Delta, Northwest, Southwest, United, and US Airways. Given the unexpected nature of the 9/11 crisis, we relied on publicly available data to

assess the pre-crisis status of these airlines, to compare their immediate responses to the crisis, and to compare performance recovery over time.

### **Key Indicators**

Financial reserves were indicated in this study in two ways: low levels of debt and high amounts of cash on hand. Accordingly, financial reserves were measured using publicly available measures of debt/equity ratios and days of cash on hand as of September 10<sup>th</sup>, the day prior to the attacks. Debt is a constraint when a crisis or downturn occurs because interest payments are a fixed cost that must be paid regardless of revenues. Low debt levels thus give companies flexibility in a downturn due to lower fixed costs. Furthermore, low debt levels give a company greater flexibility to take on new debt to get through the downturn<sup>30</sup>. Lower debt/equity ratios were, therefore, expected to reduce the extent of layoffs among airlines faced with the crisis of 9/11.

Cash on hand also provides flexibility in the face of a crisis, enabling organizations to pay expenses caused by a crisis. Readily available cash at least partially compensates for the shortfall in current revenues. Cash on hand was, therefore, also expected to reduce the extent of layoffs. The source of data on debt/equity ratios was Yahoo Financials and Thomson Financial. The source of data for days of cash on hand was Yahoo Financials and Merrill Lynch.

Layoffs were measured using publicly available data from press announcements. As airlines announced layoffs, we recorded these data and continued to update the data as airlines adjusted their initial layoff plans in the face of further information. The numbers used in our analyses are the final decisions regarding percentage of employees laid off in each of the major U.S. airlines.

Performance recovery was measured by comparing stock prices for individual airlines to their September 10, 2001 levels, quarterly after September 11 from December 10, 2001 through September 10, 2004. Recovery was measured as current stock price divided by stock price on September 10<sup>th</sup>. One hundred percent would signify that an airline's stock price had recovered to exactly the pre-crisis level of September 10<sup>th</sup>.

One key variable in our model, which is not measured quantitatively, is the strength of employee relationships following the crisis of 9/11 and the layoffs precipitated by that crisis. No measure of employee relationships is publicly available to our knowledge, and although previous studies have produced these measures, they were gathered more than 8 years ago and for only a subset of the U.S. airlines<sup>31</sup>. They provide no indication of the state of employee relations post-9/11. On the other hand, we do provide descriptions of four airlines' responses to the crisis, based on news reports, to show contrasting approaches to layoffs. We also include some anecdotal evidence regarding the impact of layoffs on relationships. Based on the extensive literature on layoffs, cited above, we expected that layoffs would cause damage to employee relationships.

Because only ten airline firms are being examined, we empirically tested the relationships between performance and reserves using the Spearman's rank correlation coefficient—a conservative test of associations—along with their significance levels or p-values.

### **RESILIENCE IN THE FACE OF SEPTEMBER 11<sup>TH</sup>**

Significant differences occurred in the strategies implemented by these ten major airlines after the attacks of 9/11 (see Figure 1), as suggested by the percent of employees laid off.

[Insert Figure 1 about here.]

#### **US Airways**

US Airways' leaders conducted the highest level of layoffs in the industry, a 24 percent reduction compared to the industry average of 16 percent. In addition, US Airways leaders appeared to take advantage of the September 11<sup>th</sup> tragedy to accomplish some goals they had not previously been able to accomplish<sup>32</sup>:

“Despite US Airway’s huge losses, President Rakesh Gangwal said he is optimistic about the airline’s future. Specifically, he said the September 11 attacks have allowed the airline to restructure and downsize in ways that would have been impossible otherwise. Specifically, the attacks allow the airline to invoke *force majeure* clauses in union contracts and eliminate unprofitable routes. *Force majeure* is the legal term for an uncontrollable event that releases a party from its contractual obligations.”

“Gangwal said he expects the changes to be permanent. ‘I don’t want to take advantage of the situation, but we have to do what is right for the company,’ Gangwal said in a conference call with analysts. ‘And the events of September 11<sup>th</sup> have opened certain doors for the company that were pretty much closed before.’”

Employees responded negatively to this apparent opportunism and disregard for human relationships on the part of US Airways’ leadership, and their representatives filed a series of grievances against the airline related to its use of the *force majeure* clause. The head of the pilots’ union noted, “We’ve been saying all along that management has been using *force majeure* not as an opportunity to get through a crisis, but to take advantage of a crisis” (ibid). Whether the actions taken by US Airways were legal or not, they are expected, based on our model, to do lasting damage to relational reserves as well as to undermine the credibility of its leadership.

Indeed, US Airway's leadership was replaced in early 2002 due in part to its loss of credibility with employees as a result of its response to the crisis of September 11<sup>th</sup>.

### **American Airlines**

Though less obviously opportunistic, other U.S. airlines attempted to use clauses in their labor contracts about national emergencies or extraordinary circumstances to avoid making severance payments, including American, Northwest, and United Airlines<sup>33</sup>. According to a spokesperson at American Airlines<sup>34</sup>:

“In the past when we've gone through periods where we're eliminating jobs, we've tried to do it so it'll have as minimal an impact as possible. In this instance, the financial situation is such that we're just not able to do that” [i.e., pay severance to workers who were laid off].

Union leaders were quick to criticize this approach, saying<sup>35</sup>:

“It's outrageous that American would ask the workers to support them on getting this massive federal bailout and then turn around to slap the workers in the face by failing to honor its commitments.”

American responded to this criticism by pointing out that:

“The reason for using these provisions is because of the dire financial condition of the industry. We're furloughing 20,000 employees because of the 20 percent reduction in our flight schedule, which, of course, occurred suddenly. Right now the issue is the survival of the company”.<sup>36</sup>

According to American's then-CEO Don Carty<sup>37</sup>:

“The losses we face are truly staggering. They exceed anything we ever imagined at American. Right now, it's survival, not profitability that is our core challenge.”

Carty sought to soften the blow of no severance payments for American's laid-off employees, however, by saying he would personally take no pay for the three remaining months of 2001. In addition, actual layoffs were reduced to 11,000 from the 20,000 that were initially announced<sup>38</sup> (*USA Today*, February 18, 2002). Again, however, damage to relational reserves is expected to negatively affect resilience.

### **Continental Airlines**

Continental Airlines took a different approach in the wake of September 11<sup>th</sup>. Like nearly every other U.S. major airline, Continental announced substantial layoffs—20 percent of its workforce—and it was one of the first airlines to do so. Like American, Continental's actual layoffs were substantially less than originally announced, numbering 8,000 rather than 12,000. In addition, however, Continental conducted its layoffs in a way that showed a regard for maintaining critical human relationships. Continental's CEO Gordon Bethune announced two weeks after the attacks that the organization would stand behind all severance and furlough pay provisions in its labor contracts<sup>39</sup>. Continental carried a high debt load due to leveraging decisions made by its previous leaders, so this decision to honor all employee contracts was, financially speaking, a painful one. Some of Continental's payments to holders of aircraft-backed certificates were late in the immediate post-September 11<sup>th</sup> period, indicating that the airline was, indeed, experiencing financial hardship and was committing scarce resources to the maintenance of relational reserves. Bethune continued to argue that it was not proper to break commitments to Continental's employees. "We believe that employees should always be treated with dignity and respect, especially when we are forced to make these tough decisions," said Bethune in September 2001<sup>40</sup>.

The station manager of Continental's Newark hub explained how layoffs were conducted:

“Layoffs are something we try to avoid in this company. But after 9/11, we had to lay off 20% to avoid losing 100%. When we have to do it, the philosophy is ‘get out in front of people, don’t stay in your office. Sit in the hot seat.’ Gordon [Bethune] is very comfortable doing that. He’s very direct, very up front. I have personally spent a lot of time in pocket sessions. With 30 people at a time, being very open and honest. It’s easy to talk about it when you’re in a company that has that kind of trust. But not when you’re in a company that does not.”

This more compassionate approach to layoffs helps ameliorate the damage to relationships and the resulting ability to cope with the underlying causes of the crisis. It is also consistent with effective downsizing strategies advocated in studies by Cameron<sup>41</sup>, Cameron, Freeman, and Mishra<sup>42</sup>, and Mishra and Mishra<sup>43</sup> who reported that the most effective downsizing organizations emphasized trust, integrity, compassion, and caring over immediate cost savings and efficiencies in their downsizing implementation.

### **Southwest Airlines**

The case of Southwest illustrates yet another strategy for responding to the crisis. Southwest was determined to avoid layoffs altogether and couched its decision in terms of “taking care of our people.” Traditional wisdom suggests that avoiding layoffs in the face of a dramatic decline in demand would jeopardize Southwest’s short-term well being. That is, investing in relationships by avoiding layoffs would put short-term survival at risk, as was articulated by the senior executives of US Airways and American. Indeed, the company was reportedly losing “millions of dollars per day<sup>44</sup>” in the weeks following the terrorist attacks.

“Clearly we can’t continue to do this indefinitely,” said Southwest’s CEO Jim Parker. Still, he said, “we are willing to suffer some damage, even to our stock price, to protect the jobs of our people”<sup>45</sup>. Southwest indicated a willingness to suffer these immediate losses in order to achieve longer-term performance based on relational reserves.

The result was that while other airlines shed both employees and unprofitable routes, Southwest maintained a steady presence in the wake of the attacks, refusing to lay off any of its employees. Instead, Southwest treated the crisis as an opportunity to increase its presence and expand the availability of its service to the flying public. According to an aviation consultant: “They’re doing what they do best, which is to shine in the hours of trouble”<sup>46</sup>.

Southwest also used the crisis as an opportunity to strengthen employee relationships. As one of the most highly unionized airlines in the industry, Southwest is typically viewed as a model of good labor relations<sup>47</sup>. Still, as it has grown, the organization has experienced its share of labor conflict<sup>48</sup>.

Southwest’s no-layoff response to September 11<sup>th</sup> had the effect of reminding its employees of Southwest’s tradition of caring. According to the president of the Transport Worker’s Union local representing Southwest’s ramp and operations employees<sup>49</sup>:

“What may have seemed like really big issues a month ago maybe aren’t quite the big issues now... When it gets bad everywhere else, it’s good here.”

Asked about Southwest’s efforts to avoid layoffs in the wake of the September 11<sup>th</sup> attacks, a Southwest employee in the Office of Financial Analysis explained, “It’s part of our culture. We’ve always said we’ll do whatever we can to take care of our people. So that’s what we’ve tried to do.”

Former Southwest's CEO Herb Kelleher explained his philosophy regarding layoffs in early 2001, before the crisis of September 11<sup>th</sup> hit<sup>50</sup>:

“Nothing kills your company's culture like layoffs. Nobody has ever been furloughed [at Southwest], and that is unprecedented in the airline industry. It's been a huge strength of ours... “We could have furloughed at various times and been more profitable, but I always thought that was short-sighted. You want to show your people that you value them and you're not going to hurt them just to get a little more money in the short term.”

“Not furloughing people breeds loyalty. It breeds a sense of security. It breeds a sense of trust. So in bad times you take care of them, and in good times they're thinking, perhaps, ‘We've never lost our jobs. That's a pretty good reason to stick around.’”

### **Rationale for Layoffs**

Whereas the views expressed by Southwest's leaders are consistent with the critical role of relational reserves in fostering organizational resilience, they contradict the prevailing prescriptions for competitive corporate strategy. Referring to Southwest CEO Jim Parker's comment about his willingness to take a hit on Southwest's stock price, if necessary, to protect the jobs of its people, *Business Week* noted<sup>51</sup>:

“Such words would likely make famous job-slashers like Jack Welch and Al Dunlap cringe. But Southwest is a member of a tiny fraternity of contrarian companies that refuse, at least for now, to lay off . . . In the aftermath of a national tragedy that economists say makes a recession and thousands of

additional job cuts inevitable, their stances seem almost noble, an old-fashioned antidote to the make-the-numbers-or-else ethos pervading Corporate America.”

The prevailing prescriptions for competitive corporate strategy advocate layoffs to protect the interests of the shareholders<sup>52</sup>. This view is consistent with a longstanding stream of thought by U.S. economists regarding the dominance of shareholder rights over those of other stakeholders<sup>53</sup>. Consistent with this view, the relationship between organizations and their employees is often treated as a contingent one. Cappelli<sup>54</sup> observed that employers who moved toward a more contingent approach to employment “were shocked by the collapse of employee morale” and often ended up backpedaling to regain the employee commitment without which it was difficult to operate. However, as *Business Week* pointed out, there are practical benefits of a no-layoff approach, namely “fierce loyalty, higher productivity, and the innovation needed to enable them to snap back once the economy recovers”<sup>55</sup>. These arguments are consistent with the negative association between layoffs and performance discussed earlier.

### **Stock Price Recovery**

Stock price recovery since September 11<sup>th</sup> has been slow in all the major airline companies, even since the immediate crisis has passed. This is, in part, due to on-going security concerns and the increased “hassle factor,” both of which have contributed to the decline in demand for air travel<sup>56</sup>. However, the recovery in stock prices has varied substantially across the industry and has been highest for Southwest and lowest for US Airways (see Figure 2).

[Insert Figure 2 about here.]

This outcome is of interest because Southwest and US Airways are both the most vulnerable to the hassle factor due to their focus on short-haul flights, which are most easily replaced by alternative forms of travel such as trains, buses, and automobiles. Data from the

Federal Aviation Administration show that between December 2000 and December 2003, the number of short-haul flights dropped—i.e., the number of flights shorter than 249 miles decreased by 20 percent, and flights between 250 and 499 miles dropped by 11 percent. Meanwhile, the number of long-haul flights increased—i.e., the number of flights between 500 and 999 miles increased by 8 percent, and flights of 1000 miles or more increased by 1 percent<sup>57</sup>. In addition, international routes proved to be more profitable than domestic routes during the post-September 11<sup>th</sup> period, due to less intense price competition. It might be expected, therefore, that airlines such as Southwest and US Airways that focus on short haul, primarily domestic markets would experience the largest deterioration in demand and revenue in the period following the terrorist attacks, and would, therefore, have the hardest time recovering from the crisis of September 11<sup>th</sup>. The fact that Southwest recovered more quickly than any other major airline, while US Airways recovered more slowly than any other major airline, suggests a need to look at other factors driving recovery.

Using Spearman's rank order correlations, it is clear that the subsequent recovery in airline stock prices relative to their pre-crisis levels was significantly and negatively related to the extent of layoffs at the time of the crisis, averaging  $-.688$  across the three year period (see Figure 3). Resilience, as indicated by the speed of stock price recovery, is negatively correlated with the extent of layoffs, for three years following the crisis. For part of the second year, the correlation became statistically insignificant due to stock market corrections, but by the end of the third year the correlation again returns to significance. This association occurs, we argue, because layoffs deplete the relational reserves, and relational reserves allow firms to bounce back from crises, maintain desirable functions, and adjust positively to unexpected aberrations. With

layoffs, the firm must focus its energy not only on recovering from the crisis but also on rebuilding relational reserves.

[Insert Figure 3 about here.]

### **THE ROLE OF FINANCIAL RESERVES**

An analysis of Southwest and Alaska airlines' strategy to avoid employee layoffs contrasted with that of Continental airlines, which wanted to avoid layoffs but could not, indicates that there are other factors that constrain the ability to prevent layoffs in the face of crisis. To make the decision to forgo layoffs, it is not enough to *want* to do so. Avoiding personnel reductions requires that an organization be financially *able* to sustain short-term losses. In particular, two factors—cash on hand and debt load—are important contributors to resilience, or the extent to which a firm can withstand financial crisis. Cash on hand is crucial for coping with the immediate term resource demands that arise in a crisis, and a low debt/equity ratio is necessary for coping with the medium and long term exigencies of a crisis. Avoiding employee layoffs altogether, or maintaining a contractual commitment to severance pay for those who are laid off, is highly related to the extent to which the organization has the financial reserves with which to operate. Retaining cash to cover immediate financial pressures, and maintaining low debt levels, thereby allowing the firm to finance longer-term expenses, are key elements in preserving relational reserves in a firm. Organizations without sufficient financial reserves may be forced to break their commitments with employees and customers when faced with crisis simply because they cannot meet payroll. On the other hand, relational reserves can be significantly enhanced in the presence of financial slack.

Maintaining excess financial reserves has not been common business practice in the airline industry. For years Southwest has been the only single-A-rated airline company. Kelleher

explained Southwest's financial policy and how it has enabled Southwest to thrive during past downturns<sup>58</sup>:

“Most people think of us as this flamboyant airline, but we're really very conservative from the fiscal standpoint. We have the best balance sheet in the industry. We've always made sure that we never overreached ourselves. We never got dangerously in debt, and never let costs get out of hand. And that gave us a real edge during [the Gulf War crisis of 1990 to 1994].”

Southwest's ability to resist layoffs can be attributable to its long-standing policy of maintaining low debt levels and an abundant supply of cash on hand. As people throughout the company have repeatedly pointed out over the years: “At Southwest, we manage in good times as though we were in bad times”.

Over time, Southwest Airlines made a conscious, strategic choice to maintain substantially greater reserves than is the norm in its industry. Southwest protects these reserves by sticking to its policy of gradual steady growth, despite the fact that there is sufficient demand for Southwest's service to permit a far-faster rate of growth. According to John Denison, Southwest's Executive Vice President of Corporate Services:

“We promise the marketplace 10 percent growth, but we are only going to grow as fast as we can manage. Sometimes we have grown faster strategically. We acquired Morris Air in 1994 at the right time to compete. But we try to maintain the balance sheet. It is no accident that we are the only single-A-rated company in the industry”<sup>59</sup>.

Alaska Airlines, the only other carrier not to layoff employees, adopted a strategy similar to Southwest's. The conservation of financial reserves prior to the crisis made it possible for the company to invest in relational reserves after the crisis hit:

“With a strong balance sheet and \$661 million in cash . . . we were able to make another critical decision, which was to not furlough any Alaska employees . . . Our employees are the very reason for our success.”<sup>60</sup>

From his statements to the press it also appears that Gordon Bethune, CEO of Continental Airlines, would have preferred to absorb the short-term losses after September 11<sup>th</sup> without resorting to employee layoffs. However, Bethune pointed out in 1998, four years into his tenure at Continental, that despite its improvement, Continental was not out of the woods financially speaking<sup>61</sup>. In addition to the bitter labor relations legacy of Frank Lorenzo, Bethune had to overcome the legacy of Continental's multiple bankruptcies which drained the airline financially and left it with high levels of debt. Indeed, Bethune has told employees since September 11<sup>th</sup> that the level of financial reserves going forward would need to be greater than he had believed previously.

In other words, the differences in the long-term financial performance of Southwest and Alaska compared to Continental can be at least partially explained by their ability to invest in relational reserves in the face of crisis. The presence of financial reserves was integral to the ability of Southwest's and Alaska's leaders to maintain and even strengthen their employee relationships in the face of crisis, while Continental's relatively weak financial reserves constrained its ability to do the same. Figures 4 and 5 report cash on hand and debt-equity ratios of the major U.S. airlines prior to September 11<sup>th</sup>. The figures show substantial variation in cash and debt levels among the major airlines prior to September 11<sup>th</sup>.

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[Insert Figures 4 and 5 about here.]

A Spearman's rank correlation analysis of these data shows that prior cash levels of the airlines did not predict the extent of layoffs in the ten firms in the airline industry ( $p = -.457$ , significance = .184), but their debt/equity ratios were strongly predictive ( $p = .801$ , significance = .005). As noted above, debt acts as a constraint in a downturn since interest payments are a fixed cost that must be paid regardless of revenues<sup>62</sup>. Low debt levels were thus expected to give companies flexibility in a downturn due to lower fixed costs. Furthermore, low debt levels provide companies with greater flexibility to take on new debt to survive the downturn. Cash on hand also provides flexibility in the face of a downturn in revenues, enabling organizations to pay expenses from past revenues to at least partially compensate for the shortfall in current revenues. However, cash on hand does not last long with extremely high debt levels. The observed correlation between cash on hand and layoffs is relatively weak because for those companies with extremely high debt levels, like US Airways and Northwest, high levels of cash on hand could not reduce the need for layoffs.

These results suggest that it is not merely the desire to invest in relational reserves by avoiding layoffs that accounts for resilience in the face of crisis. Being *willing* to avoid layoffs and to preserve relationships is different than being *able* to do it. It is both the desire and ability to avoid damaging relational reserves that accounts for long-term resilience. Financial reserves, particularly in the form of low debt levels, serve as a supplementary coping resource for organizations by giving them room to maneuver in the face of crisis. Organizations can avoid relying on layoffs as the primary response to crisis if they have the necessary financial reserves.

These results are expected to be relevant beyond the airline industry as well. Indeed, financial theory indicates that interest payments create a form of financial risk that becomes

greater when interest payments are higher and when there is variability of operating earnings<sup>63</sup>.

By implication, financial reserves play a more important role in fostering organizational resilience when the variability of operating earnings in the industry is greater.

### **A Caveat Regarding Financial Reserves**

If the lack of financial reserves makes an organization vulnerable to crisis and more dependent on using layoffs as a coping strategy—and, therefore, less resilient—why then are high levels of debt a common feature of so many companies? One answer is illustrated by the fact that Southwest has been criticized by Wall Street analysts for its policy of maintaining high levels of financial reserves. The business press reported that Southwest’s “conservative approach has been criticized by Wall Street analysts, who have argued that the airline should use its extra cash to make acquisitions or buy back stock. Goldman Sachs airline analyst, Glenn Engel, called the balance sheet ‘too strong’ [although] Engel allowed, ‘this has meant that when times are tough, they have a lot more flexibility’”<sup>64</sup>.

Airline analyst reports identify several arguments in favor of high debt levels: 1) debt markets do not severely penalize leverage, 2) cash constraints restrict investments, 3) high interest exposure lowers reported profits, and 4) high interest exposure impedes labor’s bargaining position. It is argued that a weak balance sheet is advantageous because:

“When an airline with a strong balance sheet suffers, the shareholder absorbs the risk, but when an airline with a weak balance sheet suffers, other stakeholders (creditors, employees, local government and suppliers) share the risk”<sup>65</sup>.

In other words, high debt levels are argued to be beneficial not *in spite of* the fact that they force organizations to break their commitments in times of crisis, but rather *because* they force organizations to break their commitments in times of crisis.

## **A MODEL OF ORGANIZATIONAL RESILIENCE**

Building on relational and coping theories, financial theory, and our findings regarding differences in airline company resilience after 9/11, we propose a summary model depicted in Figure 6. In the normal pattern of organizational behavior, a crisis occurs and the organization's leadership responds with layoffs and cutbacks. The organization's performance subsequently suffers because of the resulting deterioration in relationships. The relationships that could serve as a collective coping mechanism in the face of adversity are, instead, weakened by layoffs. This scenario represents a dilemma for organizations, in which measures taken for short-term survival appear to undermine the conditions for longer-term success.

[Insert Figure 6 about here.]

However, some organizations respond differently to crisis, accepting the short-term costs of excess staffing levels in order to maintain positive human relationships in the face of adversity. By avoiding layoffs, these organizations maintain or even strengthen human relationships, creating coping resources that enable organizational members to respond cohesively to the crisis in innovative ways. As a result, the deterioration of organizational performance caused by the crisis is ameliorated. Furthermore, once the immediate crisis has passed, organizational performance can return more quickly to pre-crisis performance levels due to the maintenance of relationships during the period of the crisis. To avoid layoffs, however, organizations must be financially able to do so. Financial reserves thus play a significant role in minimizing layoffs and in sustaining the relationships that enable organizations to return more quickly to pre-crisis performance levels.

The results of this investigation of U.S. airline companies provide support for this model. US Airways and American were sued by employees, senior leadership was replaced, and

bankruptcies occurred. The *destruction* of relational reserves was obviously damaging to these companies. On the other hand, the *preservation* of relational reserves led to a different outcome. Southwest's financial recovery has been dramatic, having been profitable every quarter since the September 11<sup>th</sup> tragedy. Alaska Airlines announced in its 2002 Annual Report, a year after the 9/11 crisis, that "Alaska Airlines has the second best balance sheet and the best traffic, revenue, and yield performance of any of the major airlines." Continental's financial recovery has been moderate, but employee morale and company leadership have remained intact primarily due to preservation of relational reserves. Moreover, given Continental's difficult financial condition in September 2001 (e.g., high debt and low cash reserves), it is surprising that the company has fared as well as it has.

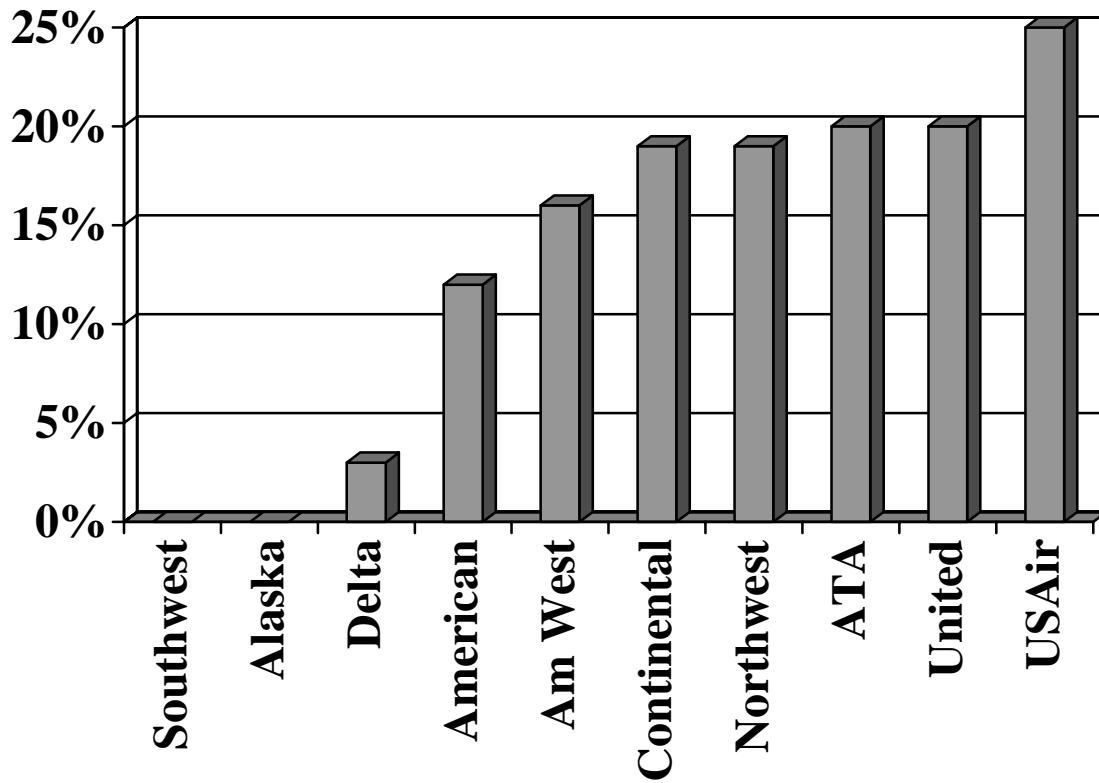
## CONCLUSION

Our findings are consistent with Meyer's<sup>66</sup> conclusion that financial reserves, coupled with a strong commitment to employees, are pivotal to an organization's ability to cope with environmental jolts. Our resilience model explains the role that relational reserves play in coping with crisis, and the role that financial reserves play in enabling organizations to maintain relational reserves. *Wanting* to maintain commitments in the face of crisis is only half the story. The other half is being *able* to do so, which requires having financial reserves in place for that purpose. The relationship-based performance of Southwest Airlines contradicts the leveraged buy-out movement of the 1980s and 90s in which corporate leaders were encouraged to rid their organizations of financial reserves, with the promise that this would make them efficient, lean, and more accountable to shareholders. The fact that there would be few reserves in place to preserve relationships and commitments in the face of crises, and that a decline in organizational resilience was the risk, is the often-neglected aspect of that phenomenon.

One limitation of our analysis, of course, is the absence of empirical measures of employee relationships in the airlines companies before and after 9/11. We were forced to rely, therefore, on implied evidence. For example, the filing of grievances and threatened strikes at US Airways and American were interpreted as a deterioration in relational reserves. Public statements by the CEOs of Southwest and Alaska Airlines reinforcing the priority of employee relationships in the company, on the other hand, were interpreted as a proxy for relational reserves. Relational reserves are clearly damaged by layoffs, and numerous studies have provided evidence that layoffs lead to deterioration in employee relationships<sup>67</sup>. The violation of the psychological contract resulting from downsizing<sup>68</sup> causes trust and cooperation to be replaced by distrust and antagonism, so layoffs almost always cause a deterioration in relational reserves. Thus, the qualitative evidence presented here is consistent with earlier findings. Airline companies that avoided layoffs and invested in preserving relationships—by maintaining commitments to employees and their relationships to the company—showed more resiliency than those that violated contractual commitments, instituted layoffs, and cancelled severance benefits.

**FIGURE 1**

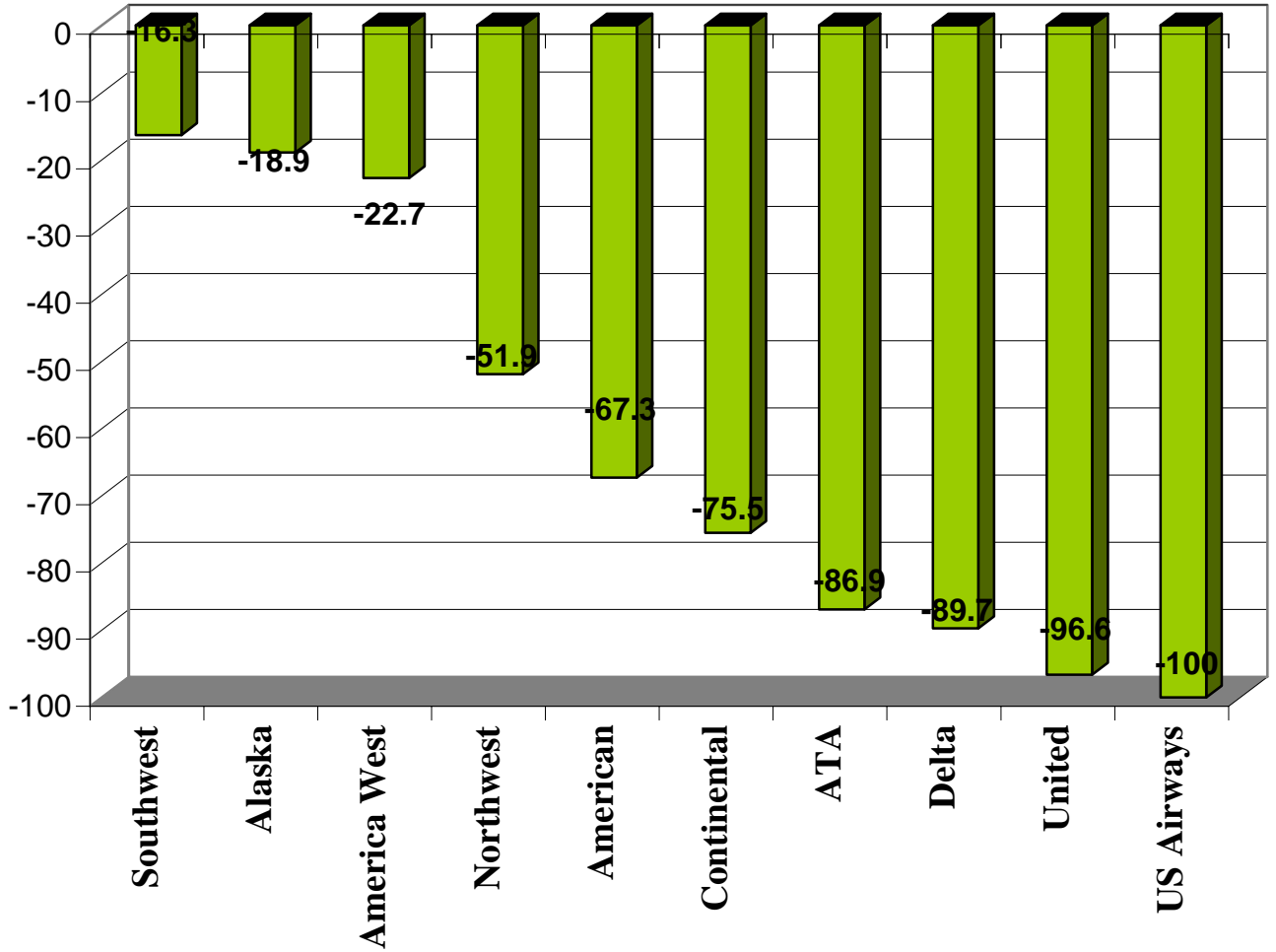
**Employee Layoffs After September 11<sup>th</sup>**



<sup>1</sup> Source: Layoffs reported in press after September 11, divided by year-end employment for 2000 as reported by Bureau of Transportation Statistics.

**FIGURE 2**

**Stock Price Recovery from Sept. 10, 2001 to Sept. 10, 2004<sup>2</sup>**



<sup>2</sup> Percent change in stock price. Source: Yahoo Financials.

**FIGURE 3**

**Percent Layoffs and Stock Price Recovery<sup>3</sup>**

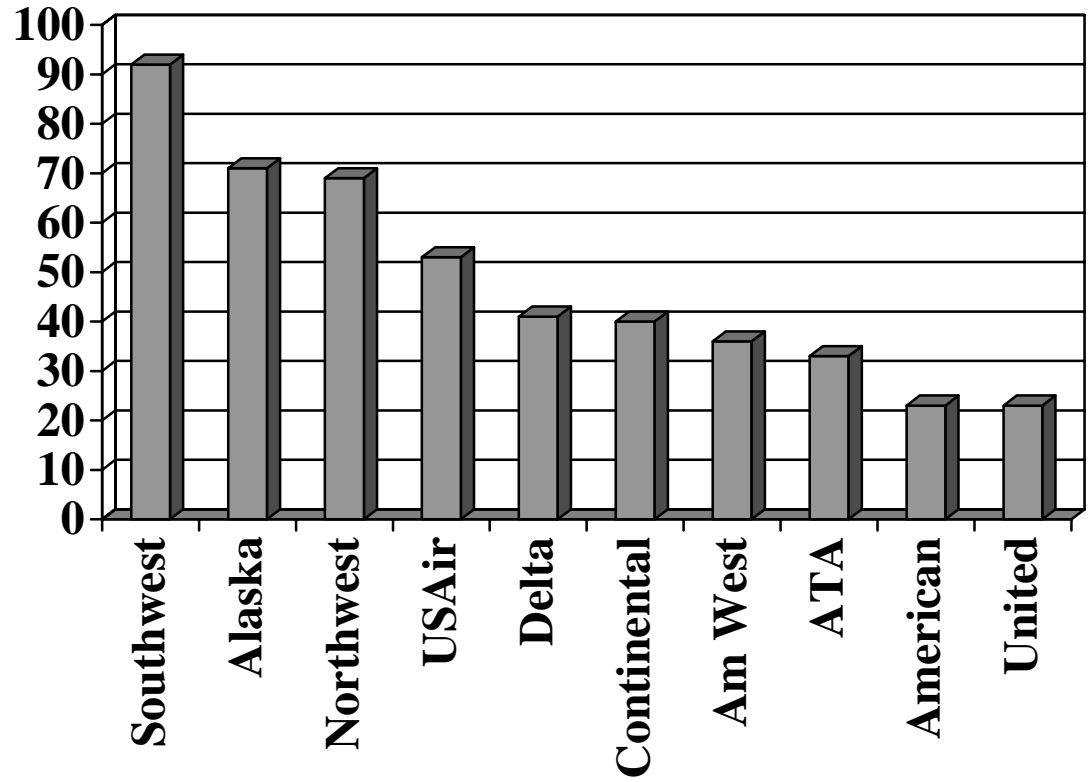
	Dec 10 2001	March 10 2002	June 10 2002	Sept 10 2002	Dec 10 2002	March 10 2003	June 10 2003	Sept 10 2003	Dec 10 2003	March 10 2004	June 10 2004	Sept 10 2004
<b>Layoffs</b>	-.697 (.025)	-.758 (.011)	-.783 (.007)	-.899 (.000)	-.832 (.003)	-.777 (.008)	-.850 (.002)	-.428 (.217)	-.341 (.336)	-.483 (.157)	-.648 (.043)	-.758 (.011)

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<sup>3</sup> Spearman's rank correlation of layoffs conducted post-Sept. 11<sup>th</sup> (news reports) as a percent of employment against stock price recovery relative to September 10<sup>th</sup> levels (source: Yahoo Financials). P-values in parentheses. Sample: Ten major U.S. airlines.

**FIGURE 4**

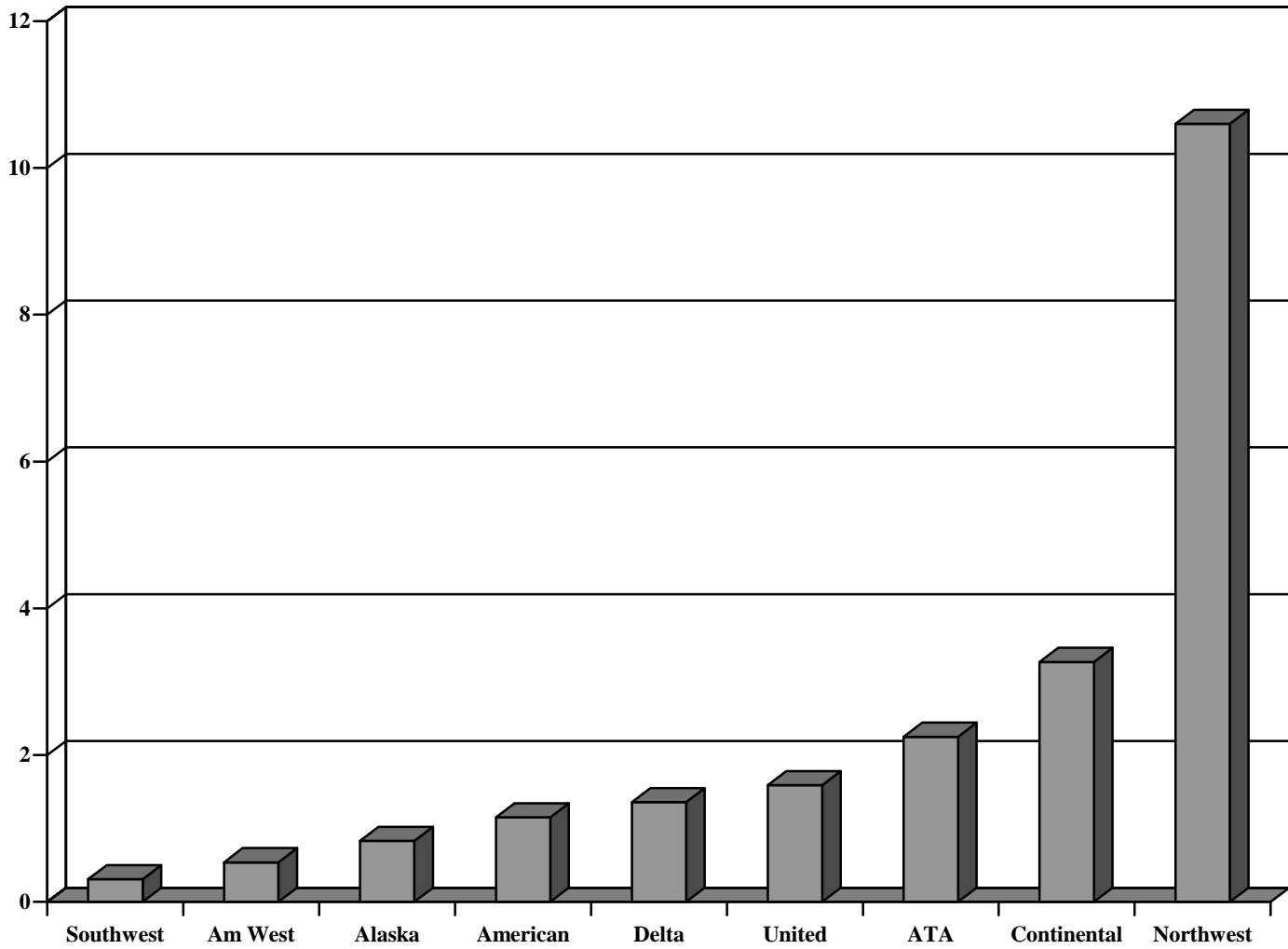
**Days of Cash on Hand Preceding September 11<sup>th</sup>**<sup>4</sup>



<sup>4</sup> Sources: Aviation Week and Space Technology and Merrill Lynch.

**FIGURE 5**

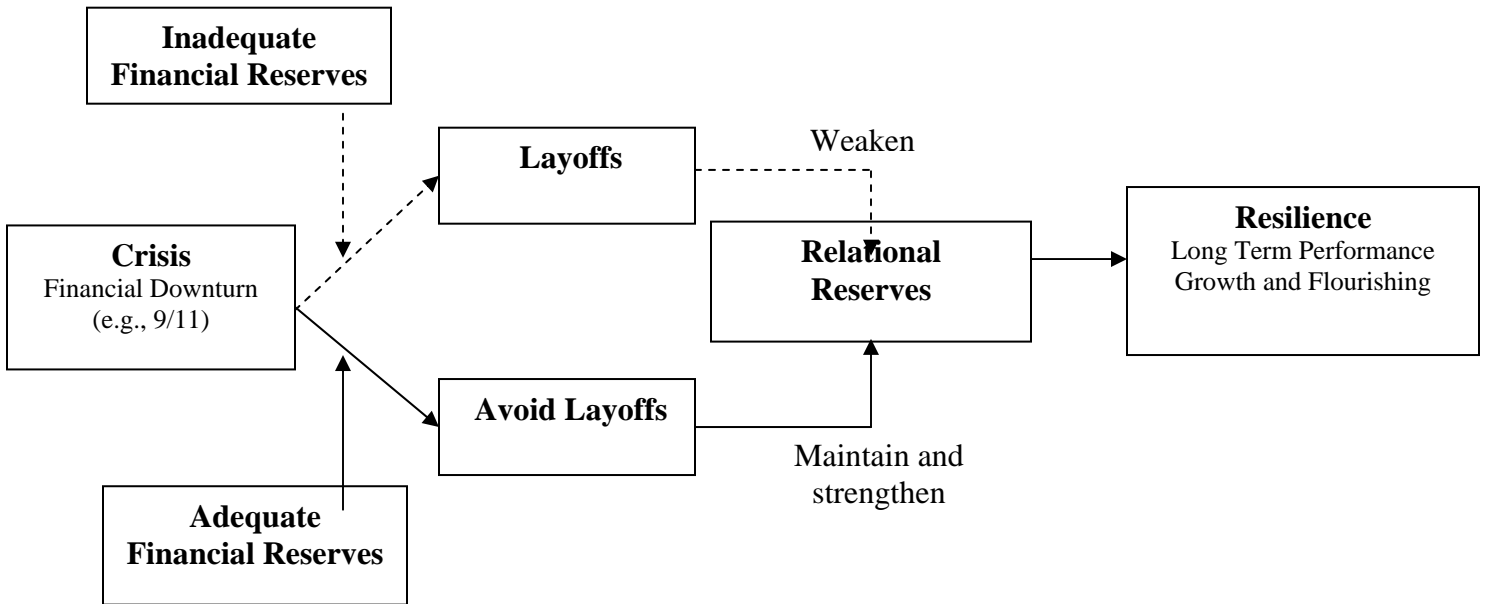
**Debt to Equity Ratios Preceding September 11<sup>th</sup><sup>5</sup>**



<sup>5</sup> Sources: Yahoo Finance and Thomson Financial. Note: US Airways was off the chart with a debt/equity ratio of 300.

**FIGURE 6**

**Organizational Resilience in the Face of Crisis: The Role of Employee Relationships**



## End Notes

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- <sup>1</sup> Ryff, C.D., & Singer, B.H. 2001. *Emotion, Social Relationships and Health*. New York: Oxford University Press.
- <sup>2</sup> Seeman, T.F. 1996. Social ties and health: The benefits of social integration. *Annals of Epidemiology*, 6: 442-451.
- <sup>3</sup> Heaphy, E.D. and Dutton, J.E. 2004. Embodied connections: Understanding the physiological effects of positive connections at work. Working paper, University of Michigan School of Business.
- <sup>4</sup> Gittell, R.J., & Vidal, A. 1999. *Community Organizing: Building Social Capital as a Development Strategy*. Thousand Oaks, CA: Sage Publications; Putnam, R.D. 2001. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.
- <sup>5</sup> Baker, W. 2000. *Achieving Success Through Social Capital*. San Francisco: Jossey Bass; Putnam, 2001.
- <sup>6</sup> Nahapiet, J., & Ghoshal, S. 1998. Social capital, intellectual capital and the organizational advantage. *Academy of Management Review*, 23(2): 242-266; Levin, D.Z., & Cross, R. Forthcoming. The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management Science*.
- <sup>7</sup> Leana, C., & Van Buren, H.J., III. 1999. Organizational social capital and employment practices. *Academy of Management Review*, 24: 538-555; . Crowston, K. & Cammerer, E.E. 1998. Coordination and collective mind in software requirements development. *IBM Systems Journal*, 37(2): 227-245. Faraj, S. & Sproull, L. 2000. Coordinating expertise in software development teams. *Management Science*, 46(12): 1554-1568..

- 
- <sup>8</sup> Gittell, J.H. 2003. *The Southwest Airlines Way: Using the Power of Relationships to Achieve High Performance*. New York: McGraw-Hill. Gittell, J.H. 2002. Coordinating mechanisms in care provider groups: Relational coordination as a mediator and input uncertainty as a moderator of performance effects. *Management Science*, 48(11): 1408-1426. Gittell, J.H. 2001. Supervisory span, relational coordination and flight departure performance: A reassessment of post-bureaucracy theory. *Organization Science*, 12(4): 467-482. Gittell, J.H., Fairfield, K., et al. 2000. Impact of relational coordination on quality of care, post-operative pain and functioning, and the length of stay: A nine-hospital study of surgical patients. *Medical Care*, 38(8): 807-819.
- <sup>9</sup> Cameron, K.S. and Caza, A. 2004. Contributions of positive organizational scholarship. *American Behavioral Scientist*, 47: 731-740; Dutton, J.E. 2003. *Energizing your workplace: Building and sustaining high quality relationships at work*. San Francisco: Jossey-Bass.
- <sup>10</sup> Miller, J.B. 1976. *Toward a New Psychology of Women*. Boston: Beacon Press; Miller, J.B., & Stiver, I.P. 1997. *The Healing Connection: How Women Form Relationships in Therapy and in Life*. Boston: Beacon Press.
- <sup>11</sup> Fletcher, J. 1999. *Disappearing Acts: Gender, Power and Relational Practice at Work*. Cambridge, MA: MIT Press; Gersick, C.J.G., Bartunek, J.M., & Dutton, J.E. 2000. Learning from academia: The importance of relationships in professional life. *Academy of Management Journal*, 43(6): 1026-1044; Barley, S.R., & Kunda, G. 2001. Bringing work back in. *Organization Science*, 12(1):76-95.
- <sup>12</sup> Staw, B., Sandelands, L., & Dutton, J. 1981. Threat-rigidity effects in organizational behavior: A multi-level analysis. *Administrative Science Quarterly*, 26:501-524; Sitkin, S.B. 1992.

- 
- Learning through failure: The strategy of small losses. In Staw, B.M. and Cummings, L.L. (Eds.), *Research in Organizational Behavior*, 14: 231-266. Greenwich, CT: JAI Press; Gladwell, M. 2002. *The Tipping Point: How Little Things Can Make a Big Difference*. Boston: Back Bay; Weick, K.E. 2003. Positive organizing and organizational tragedy. In K.S. Cameron, J.E. Dutton, & R.E. Quinn (Eds.), *Positive Organizational Scholarship: Foundations of a New Discipline*. San Francisco: Berrett-Koehler.
- <sup>13</sup> Worline, M.C., Dutton, J.E., Frost, P.J., Janov, J., Lilius, J., & Maitlis, S. 2004. *Creating fertile soil: The organizing dynamics of resilience*. Working paper, University of Michigan School of Business; Weick, K.E., Sutcliffe, K.M., & Obstfeld, D. 1999. Organizing for high reliability: Processes of collective mindfulness. In Sutton, R. and Staw, B.M. (Eds.), *Research in Organizational Behavior*, 21: 81-124. Greenwich, CT: JAI Press.
- <sup>14</sup> Sutcliffe, K.M., & Vogus, T. 2003. Organizing for resilience. In K.S. Cameron, J.E. Dutton, & R.E. Quinn (Eds.), *Positive Organizational Scholarship: Foundations of a New Discipline*: 94-110. San Francisco: Berrett-Koehler.
- <sup>15</sup> Edmondson, A.C. 1999. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44: 350-383; Bunderson, J.S., & Sutcliffe, K.M. 2002. Comparing alternative conceptualizations of functional diversity in management teams: Process and performance effects. *Academy of Management Journal*, 45: 875-893.
- <sup>16</sup> Wildavsky, A. 1988. *Searching for Safety*. New Brunswick: Transaction Books.
- <sup>17</sup> Sutcliffe, K.M., & Vogus, T. 2003; Worline, M.C., Dutton, J.E., Frost, P.J., Janov, J., Lilius, J., & Maitlis, S. 2004.

- 
- <sup>18</sup> Carver, C.S., Scheier, M.F., & Weintraub, J.K. 1989. Assessing coping strategies: A theoretical based approach. *Journal of Personality and Social Psychology*, 56: 267-283.
- <sup>19</sup> Aiello, J.R., & Kolb, K.J. 1995. Electronic performance monitoring and social context: Impact on productivity and stress. *Journal of Applied Psychology*, 80(3): 339-353.
- <sup>20</sup> Moyle, P., & Parkes, K. 1999. The effects of transition stress: A relocation study. *Journal of Organizational Behavior*, 20(5): 625-646; Schaubroeck, J., & Fink, L.S. 1998. Facilitating and inhibiting effects of job control and social support on stress outcomes and role behavior: A contingency model. *Journal of Organizational Behavior*, 19(2): 167-195.
- <sup>21</sup> Masten, A.S., & Reed, M. 2002. Resilience in development. In C.R. Synder & Shane J. Lopez (Eds.), *Handbook of Positive Psychology*. Oxford: University Press.
- <sup>22</sup> Wildavsky, 1988.
- <sup>23</sup> Meyer, A.D. 1982. Adapting to environmental jolts. *Administrative Science Quarterly*, 27: 515-537.
- <sup>24</sup> Gittell, 2003.
- <sup>25</sup> Cameron, K.S. 1994. Strategies for successful organizational downsizing. *Human Resource Management Journal*, 33: 189-212; Cameron, K.S. 1998. Strategic organizational downsizing: An extreme case. *Research in Organizational Behavior*, 20: 185-229; Cameron, K.S., Freeman, S.J., & Mishra, A.K. 1991. Best practices in white collar downsizing: Managing contradictions. *Academy of Management Executive*, 5: 57-73.
- <sup>26</sup> Also see Cole, R.E. 1993. Learning from learning theory: Implications for quality improvement in turnover, use of contingent workers, and job rotation policies. *Quality Management Journal*, 1: 9-25; McKinley, W., Sanchez, C.A., & Schick, A.G. 1995.

---

*Organizational downsizing: Constraining, cloning, learning.* Working paper, Southern Illinois University Department of Management.; Cascio, W.F., Young, C.E., & Morris, J. 1997. Financial consequences of employment change decisions in major U.S. corporations. *Academy of Management Journal*, 40: 1175-1189; DeWitt, R.L. 1993. The structural consequences of downsizing. *Organization Science*, 4: 30-40

<sup>27</sup> See Bennett, A. 1991. Downsizing doesn't necessarily bring an upswing in corporate profitability. *Wall Street Journal*, June 6; Cameron, K.S., Kim, M.U., & Whetten, D.A. 1987. Organizational effects of decline and turbulence. *Administrative Science Quarterly*, 32: 222-240; Cameron, K.S. 1998. Strategic organizational downsizing: An extreme case. *Research in Organizational Behavior*, 20: 185-229; Cascio, W.F., Young, C.E., & Morris, J. 1997. Financial consequences of employment change decisions in major U.S. corporations. *Academy of Management Journal*, 40: 1175-1189; Henkoff, R. 1990. Cost cutting: How to do it right. *Fortune*, April 9: 17-19; Mishra, A. K., & Mishra, K. E. 1994. The role of mutual trust in effective downsizing strategies. *Human Resource Management*, 33(2): 261-279; Cole, 1993; McKinley, Sanchez, & Schick, 1995.

<sup>28</sup> Cameron, Kim, & Whetten, 1987.

<sup>29</sup> Gittell, 2003.

<sup>30</sup> Freear, J. 1980. *The Management of Business Finance*. London: Pittman Publishing Limited.

<sup>31</sup> Gittell, 2001.

<sup>32</sup> Barakat, M. 2001. US Airways loses \$766 million in third quarter, worse than analysts expected. *Arlington Journal*, October 31.

<sup>33</sup> Greenhouse, S. 2001. Unions at airlines assail management for denying benefits. *New York Times*, September 26.

- 
- <sup>34</sup> *CNNfn.* 2001. Airlines weigh severance. September 26.
- <sup>35</sup> Greenhouse, 2001.
- <sup>36</sup> *ibid.*
- <sup>37</sup> Trottman, M. 2001. Up in the air: Amid crippled rivals, Southwest again tries to spread its wings. *Wall Street Journal*, October 11.
- <sup>38</sup> *USA Today.* 2002. Southwest to add 4,000 jobs this year. February 18.
- <sup>39</sup> *CNNfn.*, 2001.
- <sup>40</sup> *ibid.*
- <sup>41</sup> Cameron, 1998.
- <sup>42</sup> Cameron, Freeman, and Mishra, 1991.
- <sup>43</sup> Mishra and Mishra, 1994.
- <sup>44</sup> *Wall Street Journal.* 2001. Southwest mulls cuts, halts Boeing deliveries. September 21.
- <sup>45</sup> Conlin, 2001.
- <sup>46</sup> Trottman, 2001.
- <sup>47</sup> Gittell, J.H., von Nordenflycht, A., & Kochan, T.A. 2004. Mutual gains or zero sum? Labor relations and firm performance in the airline industry. *Industrial and Labor Relations Review*, 57(2): 163-179.
- <sup>48</sup> Trottman, 2001.
- <sup>49</sup> *ibid.*
- <sup>50</sup> Brooker, K. 2001. The chairman of the board looks back. *Fortune*, May 28.
- <sup>51</sup> Conlin, 2001.
- <sup>52</sup> Tichy, N.M. 1993. *Control Your Destiny or Someone Else Will.* New York: Doubleday.

- 
- <sup>53</sup> Friedman, M. 1970. The social responsibility of business is to increase its profits. *The New York Times Magazine*, September 13; Jensen, M. 1989. The eclipse of the public corporation. *Harvard Business Review*, 67(5): 61-75.
- <sup>54</sup> Cappelli, P. 1999. *The New Deal at Work: Managing the Market-driven Workforce*. Boston, MA: Harvard Business School Press.
- <sup>55</sup> Conlin, 2001.
- <sup>56</sup> Sharkey, J. 2004. Fewer are flying on short routes. *New York Times*, February 17.
- <sup>57</sup> *ibid.*
- <sup>58</sup> Brooker, 2001.
- <sup>59</sup> Gittell, 2003: 245.
- <sup>60</sup> Alaska Airlines Annual Report to Shareholders, 2001:4.
- <sup>61</sup> *The News Hour with Jim Lehrer*. 1998. Continental Airlines' turnaround. March 19.
- <sup>62</sup> Freear, 1980, p. 151.
- <sup>63</sup> Freear, 1980.
- <sup>64</sup> Mount, 2002.
- <sup>65</sup> *Goldman Sachs Investment Summary for Airline Industry*, 1997.
- <sup>66</sup> Meyer, 1982.
- <sup>67</sup> Cameron, 1994, 1998; Cameron, Freeman, & Mishra, 1993.
- <sup>68</sup> Rousseau, 1995.