

**THE BATTLE FOR VALUE:  
FEDERAL EXPRESS CORPORATION  
VS.  
UNITED PARCEL SERVICE OF AMERICA, INC.  
(Abridged)**

*We will produce outstanding financial returns by providing totally reliable, competitively superior global air-ground transportation of high priority goods and documents that require rapid, time-certain delivery.*

—Federal Express Mission Statement

*Federal Express is a leader of the pack in developing information systems aimed at keeping its customers informed and serving them better.*

—Tom Peters, *Liberation Management*

*Clearly, the competencies that are most valuable are those that represent a gateway to a wide variety of potential product markets. To take a financial analogy, investing in core competencies is like investing in options. A core competence leader possesses an option on participation in the range of end-product markets that rely on that core competence. . . . A core competence is a bundle of skills and technologies that enables a company to provide a particular benefit to customers. . . . At Federal Express the benefit is on-time delivery, and the core competence, at a very high level is logistics management.*

—Gary Hamel and C.K. Prahalad, *Competing for the Future*

*[We will] maintain a financially strong, manager-owned company earning a reasonable profit, providing long-term competitive returns to our shareowners.*

—United Parcel Service Mission Statement

*This is probably one of the three or four defining moments for this company.*

—John Alden, UPS Senior Vice President, referring to a major reengineering effort announced May 23, 1995<sup>1</sup>

*Then one day the company looked out upon its business and saw that times had changed. The practices had become “inoperative” because the strategies had become outdated. The strategies had become outdated because smaller upstart rivals and old foes had become more competitive. Profits declined. So UPS examined what its customers wanted, sought ideas from its employees, swallowed hard, and decided it had better start doing business differently—or there might not be any more business to do. So it did. Now UPS is living happily ever after once again. For now.<sup>2</sup>*

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<sup>1</sup>Robert Frank, “Efficient UPS Tries to Increase Efficiency,” *Wall Street Journal*, May 24, 1995, B1.

<sup>2</sup>Charles R. Day, “Shape Up and Ship Out,” *Industry Week*, February 6, 1995.

On July 10, 1995, J.C. Penney announced the award to United Parcel Service (UPS) of a \$1 billion, five-year contract for delivery services. This was the largest distribution contract ever awarded and represented a dramatic concentration of Penney's business with one carrier. "They're stealing business from each other. The question is, who can do it at the lowest cost?"<sup>3</sup> said one analyst. A J.C. Penney spokesperson confirmed that the additional UPS business was coming at the expense of other carriers—Penney's previously-standing agreement with UPS had entailed shipments worth \$160 million over three years. At the announcement, the stock price of Federal Express Corporation (FedEx) fell 2.33 percent; FedEx's total market value of equity declined \$85 million.

The contract announcement surprised many observers. Federal Express had virtually invented customer logistical management, was widely perceived as innovative, entrepreneurial, and an operational leader. Business pundits applauded the company for its outstanding operational practices. In 1990, FedEx received the crowning acknowledgment of excellence by winning the coveted Malcolm Baldrige award for quality. As Chairman Fred Smith explained: "Quality was really part of the culture from the outset. I think it came from the fundamental recognition that in providing time-definite transportation, quality was really all that we were selling."<sup>4</sup> So good was FedEx at this that they were generally credited with redefining the product.

UPS had also garnered awards and recognitions. But historically it had the reputation as big, bureaucratic, and an industry follower. However, UPS was shedding this image as it became an innovator and an increasingly tenacious adversary. UPS's transition had involved some rude awakenings, however, about the customer expectations that had changed. The announcement by J.C. Penney seemed to suggest that UPS was successfully making the transition into the new world of air-express package delivery.

The competition between FedEx and UPS for dominance of the \$19 billion air-express delivery market foreshadowed an unusually challenging future:<sup>5</sup>

- intensifying efforts at product innovation, customer focus, quality management, and reengineering.
- high and rising investment in the business. According to Fred Smith, the CEO of FedEx: "Anyone who's unwilling to spend on quality is really mapping a blueprint for liquidation."<sup>6</sup> For the future, analysts forecasted large investment outlays as each firm attempted to gain the upper hand through efficient, modern technology and infrastructure.
- shifting market shares. FedEx's dominance of the overnight express package market was high; growth in that segment was slowing as the market matured. The new intensive battleground was in the market for two- and three-day delivery.

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<sup>3</sup>"UPS Gets \$1 billion, 5-Year Contract from J.C. Penney," *Bloomberg Business News*, July 11, 1995.

<sup>4</sup>Peter Bradly, "Making Quality Fly; Federal Express's Quality Control," *Purchasing* (January 17, 1991).

<sup>5</sup>Virtually all of Federal Express's business activities were in the air-express segment of the package-delivery industry. But United Parcel had roughly 27 percent of its revenues derived from air express.

<sup>6</sup>"Federal Express," (UVA-OM-0721).

Against the backdrop of the J.C. Penney announcement, industry observers wondered how this titanic struggle would resolve itself, particularly for investors in those two firms. Was the performance of the firms in recent years an indication of the future?

### **Federal Express Corporation**

At the end of 1994, FedEx had nearly \$6 billion in assets and net income of \$204 million, on revenues of about \$8.5 billion. FedEx had survived the lean years of 1991-93, and by 1994, the firm's financial ratios indicated an improvement (see **Exhibit 1**).

FedEx first took form as Fred Smith's term paper in a Yale economics course. Smith's strategy dictated that FedEx would actually acquire the planes for transport, whereas all other competitors used the cargo space on commercial airlines. In addition to using his own planes, Smith's key innovation was to apply a hub-and-spoke distribution pattern, which permitted cheaper and faster service to more locations than his competitors. Smith invested his \$4 million inheritance, and raised \$91 million in venture capital to launch the firm—this was the largest venture capital startup in memory. In the early years FedEx experienced losses, and Smith would have been ousted from his chairmanship were it not for improved results and the support of his president. By 1976, FedEx finally saw a modest profit though, of \$3.6 million on an average daily volume of 19,000 packages. Through the rest of the 1970s, FedEx continued to grow by expanding services, acquiring more trucks and aircraft, and raising capital. The formula was successful; in 1981, FedEx generated more revenue than any other U.S. air-delivery company.

By 1981, competition in the industry had started to rise. Emery Air Freight began to imitate FedEx's hub system and to acquire airplanes. UPS began to move into the overnight air market. The United States Postal Service (USPS) positioned its overnight letter at half the price of FedEx's, but quality problems and FedEx's now immortal "absolutely-positively-overnight" ad campaign quelled any potential threat from that quarter. In 1983, FedEx had reached \$1 billion in revenues and seemed poised to own the market.

In 1990, FedEx received the prestigious Malcolm Baldrige National Quality Award from U. S. President George Bush. FedEx was the first service firm to win the award. FedEx had won 194 other awards for operational excellence since 1973. Part of this success could be attributed to deregulation and to operational strategy, but credit could also be given to FedEx's philosophy of "People-Service-Profit," which reflected an emphasis on customer focus, total quality management, and employee participation. In explaining its philosophy, the company's 1994 Annual Report stated: "We believe that by working as a team, we can produce exemplary service for our customers, which in turn will provide outstanding long-term financial returns for our stockholders." Extensive attitude surveying, a promote-from-within policy, and effective grievance procedures that sometimes resulted in a chat with Fred Smith himself, and a high emphasis on personal responsibility and initiative not only earned FedEx the reputation as a great place to work, but also helped to keep the firm largely union-free.

FedEx's entire history was set against a background of fundamental changes in the business environment. The first was deregulation in transportation. For instance, government deregulation of the airline industry in 1978 permitted larger planes to replace smaller planes, reducing the number of trips between cities—this permitted FedEx to purchase several Boeing 727s, which helped reduce its unit costs. Deregulation of the trucking industry in 1994 permitted FedEx to establish an integrated regional trucking system that would lower its unit costs further on short-haul trips, and to compete more effectively with UPS. And trade deregulation in the Asia-Pacific region permitted FedEx to establish a new base of operations there. The second major change was induced by inflation and rising global competitiveness—these forces compelled manufacturers to manage their inventories closely and to emulate “just-in-time” supply programs of the Japanese. This created a demand for rapid and carefully monitored movement of components. The third major force was technological innovation, which afforded advances in customer ordering, package tracking, and process monitoring.

### **United Parcel Service, Inc.**

Founded in 1907, manager-owned UPS was the largest transportation company in America. Consolidated parcel delivery, both on-ground and through the air, was the primary business of the company. Service was offered to and from every address in the U.S. and Western Europe, and many addresses in other countries—it was the only express delivery company to service all areas of the United States (except Northern Alaska). The company delivered between 10 and 20 million packages a day, twenty times the amount delivered by the United States Post Office. This translated into an estimated 80-90 percent market share of the entire domestic small package delivery market. UPS employed 303,000 people, owned 221 aircraft and 135,000 ground vehicles. UPS stock was owned by UPS managers, or their families, by former employees, or by charitable foundations owned by UPS. The company acted as the market-maker in its own shares, buying or selling shares at a “fair market value”<sup>7</sup> determined by the board of directors each quarter.

The key to UPS's success was efficiency. According to *Business Week* reporter Todd Vogel, “Every route is timed down to the traffic light. Each vehicle was engineered to exacting specifications. And the drivers, all 62,000 of them, endure a daily routing calibrated down to the minute.”<sup>8</sup> But this demand for machine-like precision met with resistance by UPS's unionized labor force. Of those demands, UPS driver Mark Dray said:

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<sup>7</sup>In setting its share price, the board considered a variety of factors including past and current earnings, earnings estimates, the ratio of UPS common stock to debt of UPS, the business and outlook of UPS and the general economic climate. The opinions of outside advisers were sometimes considered. The stock price had never decreased in value. The employee stock purchases were often financed with Stock Hypothecation Loans from commercial banks. As the shares provided collateral for these loans, the assessment by the outside lenders provided some external validation for the share price.

<sup>8</sup>Todd Vogel and Chuck Hawkins, “Can UPS Deliver the Goods in a New World?” *Business Week* (June 4, 1990).

... drivers are expected to keep precise schedules (hours broken down into hundredths) that do not allow for variables such as weather, traffic conditions, and package volume. If they're behind, they're reprimanded, and if they're ahead of schedule, their routes are lengthened. Drivers make 100 to 120 deliveries a day. . . .<sup>9</sup>

In its quest for efficiency, UPS experienced several strikes resulting from changes in labor practices and driver requirements.

More aggressive and more vocal than ever before, the new UPS of 1995 was the product of extensive reengineering efforts and a revitalized business focus. UPS was girding itself for battle. UPS, although much larger than FedEx, had not chosen to compete directly in the overnight delivery market until 1982. According to observers, such a late entry typified the slow, plodding nature of the heavily unionized UPS.

In 1994, *Fortune* magazine ranked UPS as the tenth most-admired company in the United States—the magazine had ranked UPS as the most-admired transportation company for each of the preceding 10 years. The survey particularly cited UPS for its successful record as a long-term investment, and for its innovations in package-tracking capabilities with cellular technology.<sup>10</sup> Traditionally, the company had been the industry's low-cost provider. In recent years, the company had been investing heavily in information technology, aircraft, and facilities to support service innovations, maintain quality, and reduce costs.

At year-end 1994, UPS reported assets, revenues, and profits of \$11.1 billion, \$19.6 billion, and \$943 million, respectively (see **Exhibit 2** for various financial ratios about the firm). The company's financial conservatism was reflected in its AAA bond rating.

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<sup>9</sup>Jill Hodges, "Driving Negotiations; Teamsters Survey Says UPS Drivers among Nation's Most Stressed Workers," *Star Tribune* (June 9, 1993).

<sup>10</sup>In 1994, UPS introduced electronic clipboards that communicated with cellular technology to a communications center in New Jersey. From there, delivery information could be forwarded to customers. As more manufacturers used express delivery companies to move inventory on a just-in-time basis, package-tracking capabilities became important.

### Competition in the Express Delivery Market, 1982-95

**Exhibit 3** gives a detailed summary of the major events marking the competitive rivalry between FedEx and UPS. Significant dimensions of this rivalry included increased customer focus, price competition, and business process reengineering with an emphasis on quality of service (see **Exhibit 4**). However, three dimensions of competition drew particular attention.

- *Globalization.* In 1984, FedEx entered the international delivery market with its first acquisition, Gelco Express, which delivered to 84 countries—this was followed quickly with acquisitions in Britain, the Netherlands, and United Arab Emirates. In 1985, it established an airport hub in Brussels, aiming to build an intra-Europe delivery system, much as it had built in Memphis in the United States. In 1989, FedEx bought Tiger International for \$883 million—the acquisition proved to be one of FedEx’s costliest investments, augmenting the company’s debt by 250 percent to \$2.1 billion. FedEx bought Tiger only three weeks after learning it was for sale, claiming that it hurried the transaction to prevent UPS’ purchase. UPS insisted that it had contemplated, but rejected, the purchase after deciding that it would not be profitable. An international delivery service, Tiger represented FedEx’s hope to acquire an immediate (and profitable) presence in Europe—FedEx wanted Tiger’s existing delivery routes and landing privileges for access to Europe, East Asia, and South America. The acquisition had given FedEx a 7 percent international market share. However, Tiger’s fleet consumed enormous sums for extensive modifications to meet FAA standards and by 1991, international losses at FedEx amounted to \$194 million. Then in 1992, with European demand remaining only a tiny fraction of the U.S. overnight demand, FedEx relinquished its hub in Europe, by selling the Brussels operation to DHL. Analysts estimated that FedEx had lost \$1 billion in Europe since its entry there. FedEx would continue to deliver to Europe, but rely on local partners. In total, between 1982 and 1994, FedEx had invested about \$2.5 billion in its overseas operations.

UPS did not break into the European market in earnest until 1988, with the acquisition of ten European courier services. To enhance its international delivery systems, UPS created a system that coded and tracked packages, and automatically billed customers for customs duties and taxes. Throughout the 1988-1992 period, UPS seemed to announce the acquisition of local and regional distributors as rapidly as FedEx. Also, UPS expanded to Asia, using its own planes and canceling a contract previously held with Tiger International. Unfortunately, the company had not earned a profit on its international services; Kent Nelson speculated that UPS would not turn its first international profit until 1998, but said,

We could have had great difficulties sustaining the losses we had in international operations if we were a public company. It would have taken a lot of dancing and a lot of explaining, and somebody could have replaced me and dramatically cut our losses overnight by bailing out. If I were going after

short-term profits, I might have chosen another course. But international is going to be one of our winners.<sup>11</sup>

UPS hoped that its international service would account for one-third of total revenue by the year 2000. Donald Layden, UPS's international operations manager, commented, "The overall strategy is for us to be the leading provider of package distribution services worldwide."<sup>12</sup> In May 1995, UPS announced that it would spend more than \$1 billion to expand its European operations during the next five years. UPS noted that its first-quarter pretax international losses narrowed to \$47 million from \$77 million a year earlier.

**Exhibit 5** presents segment data decomposing revenues, operating profit, and assets for both firms by domestic and foreign orientation. However, analysts noted that allocations between these segments were often a matter of judgment—for instance, how was a sorting facility to be allocated if it served both domestic and foreign routes?

- *Information technology.* Every package handled by FedEx was logged by a central computer system, COSMOS (Customer, Operations, Service, Master On-line System). This global computer network transmitted data from package movements, customer pick-ups, invoices, and deliveries to a central database at the Memphis headquarters. At every transition in the delivery cycle, the bar-coded data on each package was scanned and processed, allowing package movements to be tracked precisely. In 1992, COSMOS performed 250,000 of these transactions—each day. In 1993, FedEx introduced Powership 3, a desktop shipping system given to customers who shipped three or more packages a day. This system stored frequently used addresses, printed labels, requested a courier without a telephone, traced packages, and was connected directly to FedEx. Also in 1993, FedEx announced the introduction of three other technology systems aimed at more efficient handling or better control.

UPS had much catching up to do, according to Francis Erbrick, vice president of Information Systems: "If you went into our information services facility in 1985, you went into 1975 in terms of technology."<sup>13</sup> To catch up, UPS invested in an \$80-million central data facility in New Jersey to link all of UPS's computers worldwide. From there, investment in information technology grew exponentially—by 1992, the cumulative total investment was \$1.4 billion. "Nineteen ninety-two was the first year we spent more on computers than on vehicles," said UPS CEO Kent Nelson. "Initially that scared me, but information is just as important as packages." UPS planned on spending an additional \$3.2 billion on information technology by 1996, including a worldwide computer network known as PRISM to handle customer requests, billing, and package tracing internationally. Later UPS introduced the Delivery Information Acquisition Device (DIAD), which scanned

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<sup>11</sup>"The Wizard Is Oz," *Chief Executive* (March 1994): 42.

<sup>12</sup>"UPS Optimistic about Shipping Its Strategy Worldwide," *Los Angeles Times*, July 4, 1992, D2.

<sup>13</sup>Resa W. King, "UPS Gets a Big Package—of Computers," *Business Week* (July 25, 1988).

package bar codes and recorded customer signatures. These hand-held units were carried by the drivers and once back in the truck, would connect with the central computer system by a Motorola cellular modem. Other technological improvements at UPS included the creation of optical character recognition equipment that could translate address labels or other documents to be saved directly on the computer without hand typing.

- *Service expansion and new service introduction.* FedEx launched Zapmail in 1984 at a cost of \$100 million. Designed to capture the growing fax market before the machines were priced low enough to be universal, technical problems and the meteoric plunge in facsimile machine prices caused the service to fail and then close just two years later. The cumulative write-off on Zapmail was about \$400 million.<sup>14</sup> FedEx responded to UPS's price competition by guaranteeing delivery by 10:30 a.m. instead of noon, as it had previously. The new competition from UPS spurred FedEx to further expand its geographic service to 95 percent of the United States from 74 percent. Throughout the 1980s, FedEx, armed with volume discounts and superb quality, went after big clients that had previously used UPS without thought. At the same time, FedEx continued to find new markets such as contract warehousing services for mission-critical inventory that could be delivered anywhere at a moment's notice.

This competition forced UPS to revise its strategy. The company began to copy FedEx's customer interfaces, such as installing 11,500 drop-off boxes to compete with FedEx's 12,000 boxes, 165 drive-through stations, and 371 express-delivery stores. Further, UPS began to pick up packages on the same day that the order was received, a service that FedEx had always offered—wherever and whenever a customer called. As UPS tried to enter FedEx's business, so too did FedEx enter UPS's. In 1990 FedEx entered UPS's core business: the two-day ground-delivery market. At the same time, UPS began to offer modest discounts to volume shippers. In 1993, UPS added a new and cheaper three-day delivery service to undercut FedEx's more expensive two-day service. Up until the summer of 1995, the race seemed to be one of how quickly each competitor could transform itself into the other. UPS had begun Saturday pickups and deliveries to match FedEx. FedEx bought \$200 million in ground vehicles to match UPS. In January 1995, UPS bought SonicAir, a *same-day* delivery company, for \$60 million.

The largest recent innovations entailed offering integrated logistics services to large corporate clients. These services were aimed at providing total inventory control, and included purchase orders, receipt of goods, order entry and warehousing, inventory accounting, shipping, and accounts receivable. For instance, the London design company, Laura Ashley, retained FedEx to store, track and ship products quickly to individual stores worldwide. Similarly, Dell Computer retained UPS to manage its total inbound and outbound shipping.

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<sup>14</sup>When FedEx announced the establishment of Zapmail in 1984, its stock price fell nearly \$10.00 from the mid-\$40s to the mid-\$30s. Later, when Zapmail was terminated, FedEx's stock price rose \$8.00 per share.



One measurable impact of this competition between FedEx and UPS, investment spending, is given in **Exhibit 6**. Through 1989, net cash used for investment rose at an annualized rate of 27 percent at Federal Express and 17 percent at UPS. By 1994, UPS had outspent FedEx by a factor of nearly two to one. After the U.S. Congress deregulated intrastate trucking in October 1994, FedEx announced that it would augment its ground service with the purchase of 4,000 new trucks and an investment of \$200 million in ground vehicles. Greg Smith, an analyst with the research consulting firm Colography Group, commented, “The more you can do with trucks, the more FedEx will buy and the more they’ll become like UPS.”<sup>15</sup>

Fred Smith, CEO of FedEx, argued that his company had compelled UPS to deliver packages faster. “UPS has had to adapt to all the innovations we have offered,” he said. “The middle ground (two- and three-day delivery) is the battleground. In the next century, people will find it absurd not to move things by express. How many people go by bus today?”<sup>16</sup>

### Shares of Market

Reflecting this competitive turbulence, the market shares of FedEx and UPS had changed over the preceding seven years as illustrated in Table 1.

Table 1  
Express Delivery Market Shares<sup>17</sup>

	1987		1991		1994		
	Air Overnight Package & Letter	Air Overnight Letter	Air Overnight Package	Air Deferred Packages & Letters	Air Overnight Letter	Air Overnight Package	Air Deferred Packages & Letters*
Federal Express	52.80%	56.80%	28.40%	35.10%	58.30%	29.40%	36.60%
Airborne	6.60	15.90	18.70	10.00	15.10	19.80	19.40
UPS	13.20	10.20	35.40	63.20	12.70	41.50	42.60
U.S. Postal Service	8.00	13.00	4.90	---	9.60	3.40	---
DHL	2.50	NA	8.50	---	2.90	2.70	---
Others	<u>16.90</u>	<u>4.10</u>	<u>4.10</u>	<u>1.70</u>	<u>1.40</u>	<u>3.20</u>	<u>1.40</u>
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

\* 1994 market share for deferred packages and letters reflects the research of the Colography Group, which indicated that some delivery services sold by UPS as “air delivery” actually traveled by truck and rail. In 1994 (but not 1991) that volume has been removed. This adjustment should be taken into consideration when comparing UPS’s market share in the “Deferred Packages and Letters” category.

<sup>15</sup>Quoted in Joan Feldman, “The Price of Success; FedEx Is Solidly No. 1 in Express Shipping and Is Relying on Technology to Stay There Despite the Pressures of Rising Costs,” *Air Transport World* (September 1994): 46.

<sup>16</sup>Richard Weintraub, “Delivering a Revolution: The Fierce Rivalry between FedEx and UPS Remakes Global Commerce,” *Washington Post*, August 28, 1994.

<sup>17</sup>Source: Greg Smith of the Colography Group and *Business Week*, March 30, 1987.

## Performance Assessment

Virtually all interested observers—customers, suppliers, investors, and employees—watched the competitive struggle of these two firms for hints about the next steps in the drama. The conventional wisdom was that if a firm were operationally excellent, strong financial performance would follow. Indeed, FedEx had set a goal of “producing outstanding financial returns,” while UPS targeted “competitive returns to shareholders.” Had the two firms achieved their goals? Moreover, did the trends in financial performance suggest whether strong performance could be achieved in the future? In pursuit of these questions, the exhibits afford several possible avenues of analysis.

- *E.P.S., market values and returns.* **Exhibit 7** presents the share prices, E.P.S., and price-earnings ratios for the two firms. Also included is the annual total return from holding each share (percent gain in share price, plus dividend yield). Some analysts questioned the appropriateness of using UPS’s “fair market value” share price because it was set by the board of directors, rather than in an open market.
- *Ratio analysis.* **Exhibits 1 and 2** present a variety of analytical ratios computed from the financial statements of each firm.
- *Economic Profit Analysis.* Also known as “Economic Value Added” (EVA) computed the value created or destroyed each year by deducting a charge for capital from the firm’s net operating profit after taxes (NOPAT).

$$\begin{aligned} \text{EVA} &= \text{Operating Profits} - \text{a Capital Charge} \\ &= \text{NOPAT} - (\text{K} \times \text{Capital}) \end{aligned}$$

The capital charge was determined by multiplying the weighted average cost of capital, K, times the capital employed in the business or operation.

***Estimating capital.*** Included in capital are near-capital items that represent economic value employed on behalf of the firm such as the present value of operating leases, amortized goodwill, and losses. The rationale for including losses and write-offs in continuing capital is that such losses represent unproductive assets, or failed investment. Were they excluded from the capital equation, the sum would only count successful efforts, and not accurately reflect the performance of the firm.

***Estimating NOPAT.*** Net operating profit after taxes (NOPAT) is calculated with a similar regard for losses and write-offs. Here the aim is to arrive at the actual cash generated by the concern. To do so, the estimates add increases in deferred taxes back into income because it is not a cash expense, and calculate the interest expense of the leased operating assets as if they were leased capital assets.

**Estimating cost of capital.** The capital charge applied against NOPAT should be based on a blend of the costs of all the types of capital the firm employs, or the weighted average cost of capital. The cost of debt (used for both debt and leases) is the annual rate consistent with each firm’s bond rating (BBB for FedEx, and AAA for UPS). The cost of equity may be estimated in a variety of ways—in the analysis here, the capital asset pricing model was employed.<sup>18</sup> FedEx’s beta and cost of equity are used in estimating FedEx’s cost of capital. Since UPS’s beta was unobservable, the analysis that follows uses the average beta each year of FedEx, Roadway Package Services, and Airborne Express, UPS’s publicly held peer firms.

**Estimating EVA and MVA.** In Exhibits 8 and 9 the stock of capital and the flow of NOPAT are used to calculate the actual return and, with the introduction of the WACC, the EVA. These exhibits present the EVA calculated each year, and cumulatively through time. The panel at the bottom of each exhibit estimates the market value created or destroyed (or “Market Value Added” [MVA]) over the observation period. MVA is calculated as the difference between the current market value of the company and its investment base. The market value created could be compared with cumulative economic value added. In theory, the following relationships would hold:

$$\begin{aligned} \text{MVA} &= \text{Present value of all future EVA} \\ \text{MVA} &= \text{Market value of debt and equity minus capital} \end{aligned}$$

Thus,

$$\text{Market Value} = \text{Capital plus present value of all future EVA}$$

In other words, maximizing the present value of EVA amounted to maximizing the market value of the firm.

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<sup>18</sup>The capital asset pricing model describes the cost of equity as the sum of the risk-free rate of return and a risk premium. The risk premium is the average risk premium for a large portfolio of stocks times the risk factor (or “beta”) for the company. A beta equal to 1.0 suggests that the company is just as risky as the market portfolio; less than 1.0 suggests lower risk; greater than 1.0 implies greater risk. In July 1995, FedEx’s beta was 1.13.

### Outlook for Federal Express in Mid-1995

About 75 percent of FedEx’s common shares were held by institutional investors, who, it could be assumed, were instrumental in setting the prices for the company’s shares.<sup>19</sup> Typically, these investors absorbed the thinking of the several securities analysts and analytical services that followed Federal Express in 1995. The following excerpts indicate the outlook held by these analysts:

Analyst	Comments
<b>Donaldson, Lufkin &amp; Jenrette Securities</b> P.R. Schlesinger May 26, 1995	As noted, the recent weakness in FDX stock appears, to us, more an indication of general concerns about the health of the economy and the implications for the air express market, and relatedly, renewed worries that Federal might not be able to reverse its domestic earnings declines by boosting prices. The added recent concern about its being vulnerable to US-Japan trade tensions might have added one too many worries for some holders. The stock has . . . underperformed the market. We continue our market performance rating on the stock.
<b>Value Line</b> M.M. Royce, June 23, 1995	The domestic operations have been suffering margin erosion. Federal is working to trim costs and get rid of less profitable business, and we expect fiscal 1996 will bring some relief. . . . Meanwhile, the international segment is running strong. Brisk traffic continues to lift revenues and margins, and the air courier is now tapping into the huge market in Asia to keep the momentum going. . . . This neutrally ranked stock is interesting for its 3- to 5-year appreciation potential, based on the increasing globalization of Federal’s network. Indeed, foreign operations should provide the lion’s share of profits by early next century.
<b>Alex. Brown &amp; Sons</b> H.P. Boyle, Jr. March 14, 1995	The domestic business was a disappointment. Although volume growth remained robust (up 20.1%), cost per domestic package fell only 2.6% versus a revenue per package yield decline of 5.9%. Thus, the domestic operating margin was squeezed to 4.2% from last year’s 6.7% level. The business mix shift toward lower-yielding deferred delivery products requires a more rapid reduction in the cost base than the company was able to achieve during the quarter. . . . we are raising our estimates for the remainder of the fiscal year and beyond. The international performance was spectacular, and we expect it to continue to offset the deterioration in domestic operating income. Given the outlook, we continue to rate the common shares “buy.”

Federal Express paid no common stock dividend, which meant that returns to investors would derive entirely from capital gains.

### Conclusion

Observers of the air-express package delivery industry pondered the recent performance of the two leading firms and their prospects. What had been the impact of the intense competition between the two firms? Which firm was doing better? The announcement about the J.C. Penney contract might contain clues about the prospects for competition in the future.

<sup>19</sup>Officers, directors, and employees of FedEx owned 10 percent of the shares. The remainder, about 15 percent, were owned by individual investors not affiliated with the company.

## Exhibit 1

**THE BATTLE FOR VALUE**

## Analytical Financial Ratios, Federal Express Corporation

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
<b>Activity Analysis</b>											
Average days outstanding	47.43	47.83	44.92	43.43	46.41	47.73	47.28	45.79	44.08	43.23	365/receivables turnover
Working capital turnover	22.59	17.89	34.34	125.84	149.90	162.81	(233.91)	(47.22)	(82.89)	78.62	Sales/average net working capital
Fixed assets turnover	1.64	1.78	1.86	1.90	1.82	2.00	2.14	2.15	2.27	2.45	Sales/average net fixed assets
Total asset turnover	1.18	1.23	1.33	1.41	1.24	1.28	1.36	1.36	1.39	1.44	Sales/average total assets
<b>Liquidity Analysis</b>											
Current ratio	1.34	1.42	1.01	1.10	1.01	1.06	0.90	0.87	0.99	1.15	Current assets/current liabilities
Cash ratio	0.04	0.43	0.04	0.10	0.14	0.08	0.08	0.06	0.11	0.26	(Cash + Mkt securities)/current liabilities
Cash from operations ratio			0.92	1.08	1.17	0.47	0.63	0.37	0.52	0.53	Cash from operations/current liabilities
Defensive interval			1.11	1.51	3.28	1.96	2.38	3.20	2.54	3.18	(Cash + AR + Cash Taxes)/(Rents + Gross CAPEX)
<b>Long-term Debt and Solvency Analysis</b>											
Debt equity ratio	0.75	0.51	0.69	0.63	1.43	1.30	1.09	1.14	1.13	0.85	Total debt/total equity
Times interest earned	5.58	8.87	7.81	5.65	3.68	2.06	1.39	0.14	2.34	3.73	EBIT/interest expense
Fixed charge coverage ratio	4.78	3.71	1.73	1.55	1.47	0.46	(0.36)	(0.93)	0.27	0.49	Earnings before fixed charges and taxes/fixed charges
Capital expenditure ratio			0.60	0.93	0.55	0.87	1.02	1.04	0.91	1.95	Cash from operations/CAPEX
Cash from operations-debt ratio			0.53	0.65	0.31	0.24	0.43	0.29	0.39	0.47	Cash from operations/total debt
<b>Profitability Analysis</b>											
Margin before interest and tax	12.83%	13.37%	11.48%	9.77%	8.21%	5.52%	3.28%	0.30%	4.83%	6.26%	EBIT/Sales
Net profit margin	3.77%	5.12%	(2.06)%	4.83%	3.57%	1.65%	0.08%	(1.51)%	0.69%	2.41%	Net income/sales
Return on assets	5.98%	6.74%	(1.27)%	7.29%	5.73%	4.08%	2.04%	(0.08)%	2.40%	4.17%	(Net income + after-tax interest costs)/average total assets
Return on total equity	9.90%	13.82%	(6.04)%	15.58%	13.07%	7.37%	0.36%	(7.01)%	3.31%	11.37%	Net income/average total equity
Financial leverage effect	29.42%	38.32%	(17.98)%	49.47%	43.48%	29.89%	2.34%	(495.42)%	14.28%	38.51%	Net income/operating income
<b>Growth</b>											
	<b>84-85</b>	<b>85-86</b>	<b>86-87</b>	<b>87-88</b>	<b>88-89</b>	<b>89-90</b>	<b>90-91</b>	<b>91-92</b>	<b>92-93</b>	<b>93-94</b>	
								Compound Annual Growth Rate			
Sales		27.65%	23.51%	22.17%	33.07%	35.77%	9.60%	(1.80)%	3.42%	8.60%	17.31% (85-94)
Total adjusted capital	41.19%	38.80%	13.69%	19.47%	62.66%	8.47%	1.71%	2.15%	7.57%	8.46%	18.11% (84-94)
Book assets	20.98%	15.29%	19.95%	19.90%	53.76%	3.92%	1.62%	(5.87)%	1.90%	(0.78)%	11.98% (84-94)
Net income before unusual (gain) loss		38.87%	N.M.F.	N.M.F.	(11.33)%	(30.45)%	(94.91)%	N.M.F.	N.M.F.	86.11%	4.40% (85-94)
Adjusted NOPAT		14.94%	4.37%	5.21%	22.28%	16.10%	(36.43)%	(8.76)%	21.42%	35.74%	11.61% (85-94)
Net income		73.30%	N.M.F.	N.M.F.	(1.69)%	(37.27)%	(94.91)%	N.M.F.	N.M.F.	279.40%	11.61% (85-94)
Operating income		33.02%	6.02%	4.03%	11.85%	(8.74)%	(34.91)%	(90.89)%	154.24%	40.69%	8.31% (85-94)

Source: Federal Express annual report.

## Exhibit 2

**THE BATTLE FOR VALUE**  
Financial Ratios, United Parcel Service

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
<b>Activity Analysis</b>											
Average days outstanding	16.31	14.80	10.63	9.40	16.42	21.23	22.23	23.13	23.11	25.66	365/receivables turnover
Working capital turnover	175.90	382.90	77.65	(109.36)	(112.44)	101.75	124.67	140.99	543.54	313.87	Sales/average net working capital
Fixed asset turnover	3.28	3.26	2.84	2.53	2.42	2.44	2.54	2.64	2.71	2.69	Sales/ average net fixed assets
Total asset turnover	1.83	1.70	1.59	1.52	1.51	1.54	1.60	1.68	1.78	1.71	Sales/average total assets
<b>Liquidity Analysis</b>											
Current ratio	1.01	1.03	1.16	0.78	1.11	1.04	1.08	1.03	1.00	1.04	Current assets/current liabilities
Cash ratio	0.31	0.30	0.40	0.22	0.26	0.08	0.14	0.06	0.12	0.09	(Cash + Mkt. securities)/current liabilities
Cash from operations ratio		1.00	1.12	1.36	0.60	0.60	0.85	0.69	0.83	0.68	Cash from operations/current liabilities
Defensive interval		1.40	0.81	0.62	1.31	1.13	1.58	1.71	1.83	1.50	(Cash + AR + Cash Taxes)/(Rents + Gross CAPEX)
<b>Long-term Debt and Solvency Analysis</b>											
Debt equity ratio	0.07	0.05	0.10	0.04	0.24	0.24	0.21	0.23	0.22	0.24	Total debt/total equity
Times interest earned	288.82	134.44	259.96	197.54	81.93	14.61	24.61	30.48	42.87	53.27	EBIT/interest expense
Fixed charge coverage ratio	10.38	22.66	13.57	16.76	(0.04)	(7.49)	2.18	3.23	14.90	13.16	Earnings before fixed changes and taxes/fixed changes
Capital expenditure ratio		1.62	1.14	1.34	0.98	0.94	1.53	1.56	1.60	0.96	Cash form operations/CAPEX
Cash from operations to debt ratio		10.38	4.80	13.54	1.33	1.28	1.92	1.68	2.06	1.43	Cash from operations/total debt
<b>Profitability Analysis</b>											
Margin before interest and tax	10.66%	13.44%	10.03%	9.75%	9.83%	7.73%	8.33%	7.74%	8.20%	7.95%	EBIT/sales
Net profit margin	6.97%	7.76%	8.10%	6.88%	5.61%	4.39%	4.66%	3.12%	4.55%	4.82%	Net income/sales
Return on Assets	16.13%	19.83%	19.10%	16.17%	12.43%	9.06%	9.91%	6.77%	10.24%	11.03%	(Net income + after-tax interest cost)/average total assets
Return on total equity	25.99%	29.76%	28.53%	24.44%	20.49%	16.59%	18.72%	13.59%	21.13%	21.96%	Net income/average total equity
Financial leverage effect	65.40%	57.75%	80.78%	70.56%	57.06%	56.72%	55.96%	40.40%	55.54%	60.63%	Net income/operating income
	<b>84-85</b>	<b>85-86</b>	<b>86-87</b>	<b>87-88</b>	<b>88-89</b>	<b>89-90</b>	<b>90-91</b>	<b>91-92</b>	<b>92-93</b>	<b>93-94</b>	
<b>Growth</b>											<b>Compound Annual Growth Rate</b>
Sales	12.50%	12.14%	12.33%	13.94%	12.02%	10.10%	10.39%	9.98%	7.65%	10.08%	11.10% (84-94)
Total adjusted capital	27.58%	21.19%	23.19%	5.02%	33.74%	5.71%	8.55%	6.69%	3.62%	13.90%	14.48% (84-94)
Book assets	39.12%	18.22%	37.60%	21.52%	13.30%	5.03%	7.51%	3.92%	6.15%	14.84%	16.12% (84-94)
Net income before unusual (gain) loss	19.12%	17.85%	(6.61)%	21.45%	(8.61)%	(13.94)%	17.33%	9.27%	5.82%	16.51%	7.07% (84-94)
Adjusted NOPAT	-	1.93%	(3.33)%	10.94%	0.89%	(9.41)%	(2.16)%	12.26%	3.03%	9.89%	2.44% (85-94)
Net Income	-	40.39%	17.22%	(3.24)%	(8.61)%	(13.94)%	17.33%	(26.28)%	56.86%	16.51%	7.88% (85-94)
Operating income	-	58.98%	(16.20)%	10.77%	13.02%	(13.42)%	18.92%	2.12%	14.08%	6.74%	8.01% (85-94)

Source: United Parcel Services annual report.

## Exhibit 3

**THE BATTLE FOR VALUE**

## Timeline of Competitive Developments

**FedEx**

Offers 10:30 a.m. delivery

**1982**

Increases service area 74% to 94%

Later cutoff times

**1983**

Introduces technology to link services

Acquires GELCO: access to 83 countries

**1984**

Sets up Brussels hub

**1985**

Warehouse for IBM, National Semiconductor, Laura Ashley

**1987****1988**

Announces standard overnight service

Announces reduced corporate rate

Buys Tiger International

International acquisitions

**1989****1990****1991**

Exits from Europe

Offers 2-day delivery

**1992**

Introduces PowerShip software

Introduces business logistics services

Allies with IBM, Kinko's, Claris, Radio

Shack, Sam's, Connect Soft

**1993**

Persuades UPS catalog customers to defect from UPS

Buys 4,000 trucks

Offers service through Internet

**1994****1995****UPS**

Enters Overnight Package Delivery

Begins making significant IT investment

TV advertising; lower rates

Offers automated customs service

Offers same-day pickup

Invests \$80 million in computer and

telecommunications center

International acquisitions

Offers delivery by 10:30 a.m.

Raises rates - 32% for commercial, 16% for residential

Launches DIAD system

Offers Saturday delivery

Offers HAZMAT shipping

Offers logistics service

Offers prepaid letter

Offers Saturday pickup

Offers 3-day service

New ad campaign

DIAD fully functional

Raises rates 3.9%

Offers heavy package delivery

Offers early a.m. service

Offers service on internet

Acquires SonicAir

Offers same-day delivery

Exclusive contract with J.C.Penney,

\$1 billion over five years

Exhibit 4

**THE BATTLE FOR VALUE**

Pricing and Delivery of Comparable Packages

Comparative Pricing of Major Overnight Carriers: 1993, 1995  
(two-pound package, Baltimore to Los Angeles)

<u>Company</u>	<u>Same-Day</u>	<u>Next AM</u>		<u>Two-Day</u>	
	1995	1993	1995	1993	1995
<b>Federal Express</b>					
Price	\$159.00	\$24.25	\$24.25	\$14.00	\$14.00
Commitment		10:30 AM	10:30 AM	4:30 PM	4:30 PM
<b>Airborne</b>					
Price	\$155.00	N/A	\$25.00	\$9.00	\$9.00
Commitment			12:00 noon	3:00 PM	3:00 PM
<b>United Parcel Service</b>					
Price	\$159.00	\$18.50	\$16.75	\$10.50	\$5.25
Commitment		10:30 AM	10:30 AM	4:00 PM	4:00 PM
<b>U. S. Postal Service</b>					
Price	N/A	\$13.95	\$15.00	N/A	N/A
Commitment		3:00 PM	3:00 PM		
<b>DHL</b>					
Price	\$159.00	\$24.25	\$24.25	N/A	N/A
Commitment		12:00 noon	12:00 noon		
<b>Price Premium of FedEx over UPS</b>		<b>31.08%</b>	<b>44.78%</b>	<b>33.33%</b>	<b>93.10%</b>

Source: Alex Brown & Sons, Inc., 1993; telephone survey, 1995.



Exhibit 5  
**THE BATTLE FOR VALUE**  
 Segment Information  
 (in thousands of dollars)

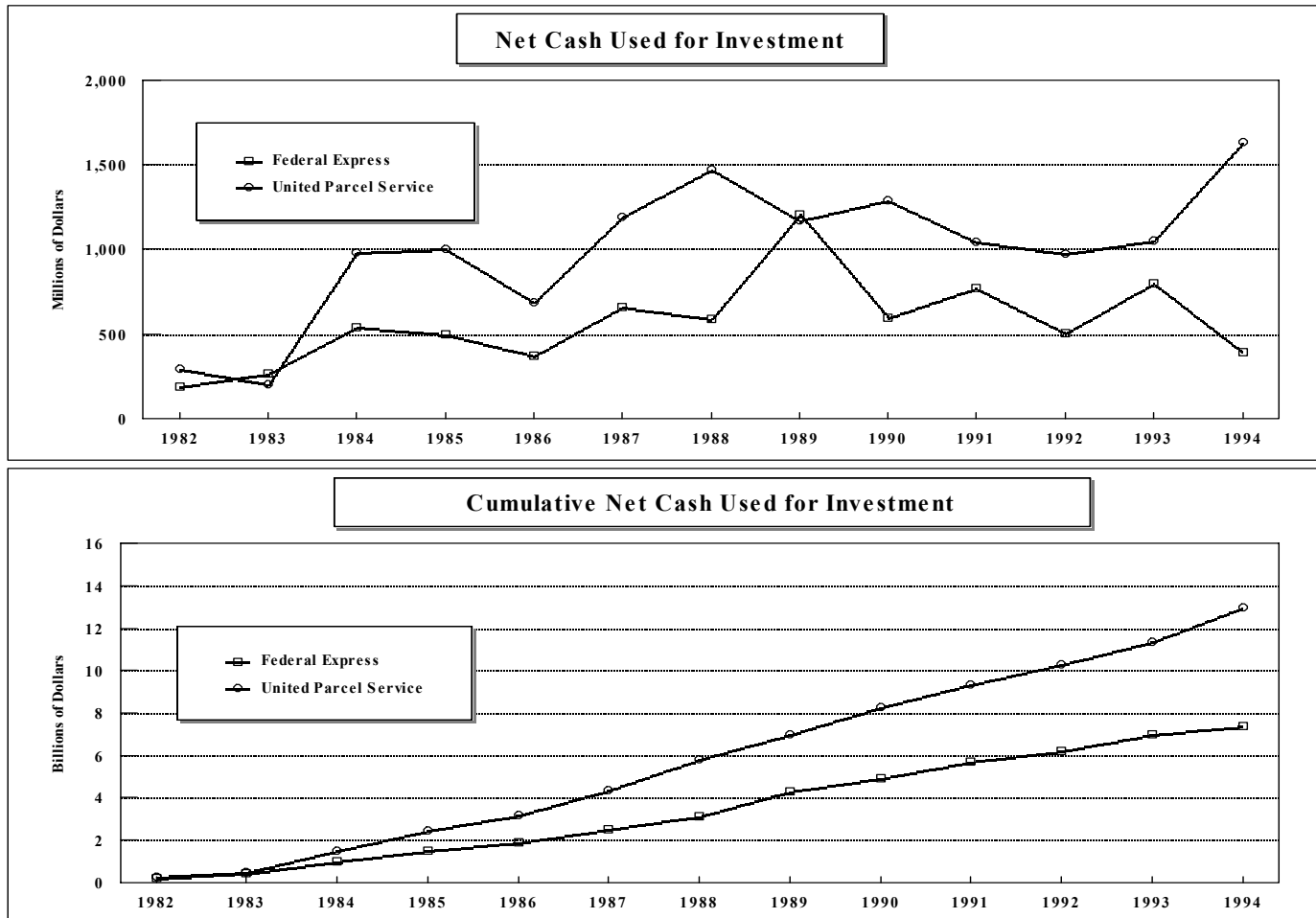
	1986	1987	1988	1989	1990	1991	1992	1993	1994
<b>United Parcel Service</b>									
Domestic:									
Revenue						\$13,694,728	\$14,721,686	\$15,822,558	\$17,297,843
Income before income taxes						1,470,645	1,545,484	1,698,299	1,902,140
Identifiable assets						7,982,237	7,873,398	8,359,395	9,886,634
Foreign:									
Revenue						1,325,102	1,796,935	1,959,795	2,277,847
Loss before income taxes						(253,580)	(276,189)	(266,602)	(326,764)
Identifiable assets						876,174	1,164,419	1,214,436	1,295,770
Consolidated:									
Revenue						15,019,830	16,518,621	17,782,353	19,575,690
Income before income taxes						1,217,065	1,269,295	1,431,697	1,575,376
Identifiable assets						8,858,561	9,037,817	9,573,831	11,182,404
<b>Federal Express</b>									
Domestic:									
Revenues	\$2,456,832	\$2,924,742	\$3,459,427	\$4,144,827	4,784,887	5,057,831	5,194,684	5,667,964	6,199,940
Operating income (loss)	358,267	393,876	409,977	467,143	608,069	671,186	635,872	559,140	559,629
Identifiable assets				3,007,348	3,798,364	4,032,361	3,941,022	4,432,578	4,883,644
Foreign:									
Revenues	116,397	253,566	423,390	1,022,140	2,230,182	2,630,465	2,355,376	2,140,179	2,279,516
Operating income (loss)	\$ (14,246)	\$ (29,144)	\$ (30,525)	(42,708)	(194,490)	(391,393)	(612,905)	(181,967)	(28,997)
Identified assets				\$2,286,074	\$1,876,709	\$1,640,100	\$1,522,164	\$1,360,486	\$1,108,854
Consolidated:									
Revenues	2,573,229	3,178,308	3,882,817	5,166,967	7,015,069	7,688,296	7,550,060	7,808,043	8,479,456
Operating income (loss)	\$ 344,021	\$ 364,743	\$ 379,452	424,435	413,579	279,793	22,967	377,173	530,632
Identifiable assets				\$5,293,422	\$5,675,073	\$5,672,461	\$5,463,186	5,793,064	5,992,498

Source: United Parcel Service reports to shareholders and Federal Express annual reports, S.E.C., 10-K reports.

Exhibit 6

**THE BATTLE FOR VALUE**

Comparative Capital Investment Information



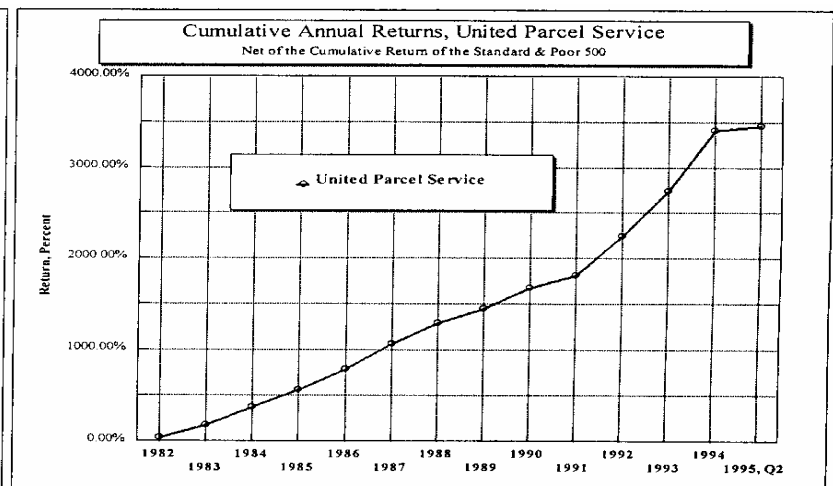
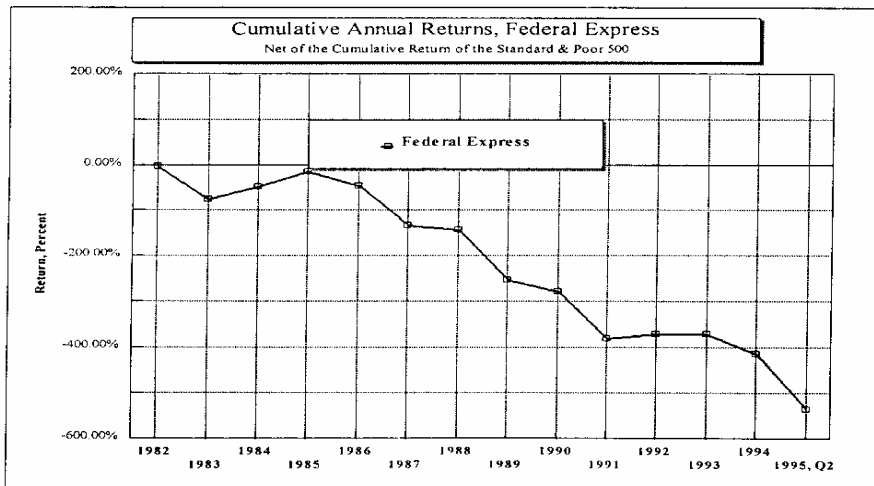
Source: Casewriter analysis of annual reports.

Exhibit 7

THE BATTLE FOR VALUE

Equity Returns and Prices

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995, Q2
<b>Federal Express</b>															
Stock Price, December 31st	31.25	\$37.13	\$23.13	\$34.50	\$60.63	\$63.13	\$39.88	\$50.63	\$45.75	\$33.88	\$38.75	\$54.50	\$70.88	\$60.25	60.75
EPS	1.85	\$2.03	\$2.52	\$1.61	\$2.64	\$2.65	(\$1.26)	\$3.56	\$3.53	\$2.18	\$0.11	(\$2.11)	\$0.98	\$3.65	\$5.27
P/E multiple	16.89	18.29	9.18	21.43	22.96	23.86	n.m.f	14.20	12.96	15.56	350.51	n.m.f	72.00	16.51	11.53
Total Capital Appreciation Return		18.80%	(37.71)%	49.19%	75.72%	4.12%	(36.83)%	26.96%	(9.63)%	(25.96)%	14.39%	40.65%	30.05%	(14.99)%	0.83%
Cumulative Compound Annual Return		18.80%	(26.00)%	10.40%	94.00%	102.00%	27.60%	62.00%	46.40%	8.40%	24.00%	74.40%	126.80%	92.80%	94.40%
<b>United Parcel Service</b>															
Fair Market Value, December 31st	\$1.69	\$2.31	\$4.13	\$6.25	\$8.25	\$10.25	\$12.00	\$13.38	\$14.50	\$15.25	\$16.00	\$18.50	\$20.75	\$23.50	\$24.50
EPS	0.49	\$0.49	\$0.73	\$0.71	\$0.84	\$0.99	\$1.16	\$1.12	\$1.07	\$0.95	\$1.14	\$0.87	\$1.40	\$1.63	-
Implied P/E multiple	3.48	4.70	5.69	8.87	9.82	10.34	10.33	11.90	13.54	15.98	14.08	21.33	14.86	14.45	-
Dividends per Share	0.10	\$0.16	\$0.35	\$0.34	\$0.38	\$0.39	\$0.41	\$0.43	\$0.46	\$0.47	\$0.47	\$0.49	\$0.49	\$0.54	-
Capital Appreciation Return		37.04%	78.38%	51.52%	32.00%	24.24%	17.07%	11.46%	8.41%	5.17%	4.92%	15.63%	12.16%	13.25%	4.26%
Income Return		24.63%	22.52%	13.59%	11.59%	10.71%	10.44%	8.86%	7.68%	6.41%	7.27%	5.03%	7.11%	7.35%	-
Total Annual Return		61.66%	100.90%	65.11%	43.59%	34.96%	27.52%	20.32%	16.10%	11.59%	12.19%	20.65%	19.28%	20.60%	4.26%
Cumulative Compound Annual Return		61.66%	224.78%	436.24%	669.96%	939.11%	1225.03%	1494.24%	1750.84%	1965.29%	2217.10%	2695.67%	3234.54%	3921.60%	4092.73%
<b>Standard &amp; Poor 500 Index Return, with Reinvestment</b>															
Annual	(4.91)%	21.41%	22.51%	6.27%	32.16%	18.47%	5.23%	16.81%	31.49%	(3.17)%	30.55%	7.67%	9.99%	1.31%	20.22%
Cumulative		21.41%	48.74%	58.07%	108.90%	147.48%	160.43%	204.20%	300.00%	287.32%	405.64%	444.43%	498.81%	506.63%	629.28%
<b>Cumulative Compound Annual Returns, Net of the Standard &amp; Poor 500</b>															
Federal Express		(2.61)%	(74.74)%	(47.67)%	(14.90)%	(45.48)%	(132.83)%	(142.20)%	(253.60)%	(278.92)%	(381.64)%	(370.03)%	(372.01)%	(413.83)%	(534.88)%
United Parcel Service		40.25%	176.04%	378.17%	561.06%	791.63%	1064.60%	1290.04%	1450.84%	1677.97%	1811.46%	2251.25%	2735.73%	3414.96%	3463.45%



Source: Casewriter analysis of annual reports

Exhibit 8

**THE BATTLE FOR VALUE**

EVA Estimation, FedEx

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
NOPAT	\$ 235,029	\$270,140	\$281,950	\$296,642	\$362,744	\$421,152	\$267,728	\$244,280	\$296,612	\$402,621
Beginning Capital	\$1,403,280	\$1,981,285	\$2,551,826	\$2,901,126	\$3,465,870	\$5,637,746	\$6,115,501	\$6,220,035	\$6,353,969	\$6,834,676
RATE OF RETURN	16.75%	13.63%	11.05%	10.23%	10.47%	7.47%	4.38%	3.93%	4.67%	5.89%
<b>WACC</b>										
Long-Term Debt	\$ 607,508	\$ 561,716	\$ 744,914	\$838,730	\$2,138,940	\$2,148,142	\$1,826,781	\$1,797,844	\$1,882,279	\$1,632,202
PV Non-Capitalized Operating Leases	\$ 111,384	\$ 291,264	\$ 510,900	\$ 488,929	\$ 604,217	\$ 996,153	\$1,214,342	\$1,246,275	\$1,334,481	\$1,567,249
PV of Capital Leases	<u>\$ 295,075</u>	<u>\$ 299,228</u>	<u>\$ 321,310</u>	<u>\$ 319,165</u>	<u>\$ 512,079</u>	<u>\$ 467,755</u>	<u>\$ 239,254</u>	<u>\$ 225,800</u>	<u>\$ 221,740</u>	<u>\$199,004</u>
Total	\$1,013,967	\$1,152,208	\$1,577,124	\$1,646,824	\$3,255,236	\$3,612,050	\$3,280,377	\$3,269,919	\$3,438,500	\$3,398,455
Average Shares Outstanding	46,970	49,840	51,905	52,670	52,272	53,161	53,350	53,961	54,719	56,012
Share Price	<u>\$ 58.00</u>	<u>\$ 66.00</u>	<u>\$ 44.00</u>	<u>\$ 49.00</u>	<u>\$ 45.00</u>	<u>\$ 34.00</u>	<u>\$ 33.00</u>	<u>\$ 55.00</u>	<u>\$ 70.00</u>	<u>\$ 57.00</u>
Market Value of Equity	\$2,724,260	\$3,289,440	\$2,283,820	\$2,580,830	\$2,352,240	\$1,807,474	\$1,760,550	\$2,967,855	\$3,830,330	\$3,192,684
Tax Rate	46.00%	46.00%	34.00%	34.00%	34.00%	34.00%	34.00%	34.00%	35.00%	35.00%
Long-Term USG Bonds	10.74%	8.14%	8.76%	9.11%	8.62%	8.81%	8.24%	7.61%	6.46%	7.43%
Yield of Senior BBB-rated Debt	12.19%	10.37%	10.55%	10.75%	10.35%	10.86%	10.12%	9.18%	8.55%	8.91%
Beta	1.35	1.30	1.15	1.10	1.10	1.05	1.05	1.15	1.20	1.25
Cost of Equity	18.03%	15.16%	14.97%	15.05%	14.56%	14.48%	13.91%	13.82%	12.94%	14.18%
Cost of Capital	14.93%	12.68%	11.70%	11.95%	10.07%	9.61%	9.20%	9.75%	9.45%	9.86%
<b>EVA</b>										
NOPAT/Beginning Capital	16.75%	13.63%	11.05%	10.23%	10.47%	7.47%	4.38%	3.93%	4.67%	5.89%
WACC	14.93%	12.68%	11.70%	11.95%	10.07%	9.61%	9.20%	9.75%	9.45%	9.86%
Spread	1.82%	0.95%	-0.65%	-1.73%	0.39%	-2.14%	-4.83%	-5.82%	-4.78%	-3.96%
x Beginning Capital	<u>\$1,403,280</u>	<u>\$1,981,285</u>	<u>\$2,551,826</u>	<u>\$2,901,126</u>	<u>\$3,465,870</u>	<u>\$5,637,746</u>	<u>\$6,115,501</u>	<u>\$6,220,035</u>	<u>\$6,353,969</u>	<u>\$6,834,676</u>
Annual Economic Value Added	\$ 25,583	\$ 18,914	(\$16,596)	(\$50,079)	\$13,620	(\$120,431)	(\$295,178)	(\$362,265)	(\$303,694)	(\$270,959)
Cumulative Annual EVA	\$ 25,583	\$ 44,497	\$27,901	(\$22,178)	(\$8,557)	(\$128,988)	(\$424,166)	(\$786,431)	(\$1,090,125)	(\$1,361,084)
<b>FEDEX: MEASURES OF VALUE CREATION (billions)</b>										
	<u>1985</u>	<u>1994</u>	<u>Change</u>							
<b>Cumulative EVA</b>	0.026	(1.361)	(1.387)							
<b>Analysis of Market Value Added</b>										
Book Value of Equity	0.815	1.925	1.109							
<u>Interest-Bearing Debt and Equivalents</u>	<u>1.014</u>	<u>3.398</u>	<u>2.384</u>							
CAPITAL (Book Value)	1.829	5.323	3.494							
Market Value of Equity	2.724	3.193	0.468							
<u>Interest-Bearing Debt and Equivalents</u>	<u>1.014</u>	<u>3.398</u>	<u>2.384</u>							
CAPITAL (Market Value)	<u>3.738</u>	<u>6.591</u>	<u>2.853</u>							
<b>MARKET VALUE ADDED</b>	<b>1.909</b>	<b>1.268</b>	<b>(0.641)</b>							

Source: Casewriter analysis of annual reports.

Exhibit 9

**THE BATTLE FOR VALUE**

Economic Profit Estimation, UPS

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
NOPAT	\$831,562	\$847,624	\$819,396	\$909,046	\$917,178	\$830,912	\$812,968	\$912,629	\$940,269	\$1,033,291
Beginning Capital	\$2,333,765	\$2,977,489	\$3,608,550	\$4,445,420	\$4,668,509	\$6,243,546	\$6,599,950	\$7,164,016	\$7,642,932	\$7,919,479
RATE OF RETURN	35.63%	28.47%	22.71%	20.45%	19.65%	13.31%	12.32%	12.74%	12.30%	13.05%
<b>WACC</b>										
Long Term Debt	\$150,950	\$113,882	\$293,825	\$140,009	\$848,036	\$854,687	\$830,634	\$862,378	\$852,266	\$1,127,405
PV Non-Capitalized Operating Leases	-	-	-	-	-	\$334,593	\$451,534	\$562,073	\$621,874	\$635,233
PV of Capital Leases	385,935	\$341,656	\$344,608	\$345,383	\$345,265	\$342,122	\$333,074	\$320,616	\$289,838	\$233,639
Total	536,885	\$455,538	\$638,433	\$485,392	\$1,193,301	\$1,531,402	\$1,615,242	\$1,745,067	\$1,763,978	\$1,996,277
Average Shares Outstanding	675,746	675,000	675,000	675,000	647,481	625,481	616,000	595,000	580,000	580,000
Share Price	\$8.25	\$10.25	\$12.00	\$13.38	\$14.50	\$15.25	\$16.00	\$18.50	\$20.75	\$23.50
Market Value of Equity	5,574,908	\$6,918,750	\$8,100,000	\$9,028,125	\$9,388,477	\$9,538,588	\$9,856,000	\$11,007,500	\$12,035,000	\$13,630,000
Tax Rate	46.00%	46.00%	34.00%	34.00%	34.00%	34.00%	34.00%	34.00%	35.00%	35.00%
U.S. Treasury Bond Yields (30-yr.)	10.74%	8.14%	8.76%	9.11%	8.62%	8.81%	8.24%	7.61%	6.46%	7.43%
Cost of Debt (AAA-rated)	10.93%	9.02%	9.32%	9.55%	9.16%	9.34%	8.69%	8.27%	7.16%	7.80%
Beta	1.10	1.01	0.97	0.97	0.96	1.02	1.02	0.94	1.07	1.05
Cost of Equity	16.66%	13.59%	14.00%	14.34%	13.82%	14.34%	13.75%	12.68%	12.21%	13.11%
<b>Cost of Capital</b>	<b>15.72%</b>	<b>13.05%</b>	<b>13.42%</b>	<b>13.93%</b>	<b>12.94%</b>	<b>13.20%</b>	<b>12.62%</b>	<b>11.69%</b>	<b>11.25%</b>	<b>12.08%</b>
<b>EVA</b>										
NOPAT/Beginning Capital	35.63%	28.47%	22.71%	20.45%	19.65%	13.31%	12.32%	12.74%	12.30%	13.05%
WACC	15.72%	13.05%	13.42%	13.93%	12.94%	13.20%	12.62%	11.69%	11.25%	12.08%
Spread	19.92%	15.41%	9.28%	6.52%	6.70%	0.10%	-0.30%	1.05%	1.06%	0.97%
x Beginning Capital	2,333,765	2,977,489	3,608,550	4,445,420	4,668,509	6,243,546	6,599,950	7,164,016	7,642,932	7,919,479
<b>Annual Economic Value Added</b>	<b>464,804</b>	<b>458,971</b>	<b>334,978</b>	<b>289,955</b>	<b>313,001</b>	<b>6,469</b>	<b>(19,902)</b>	<b>75,258</b>	<b>80,720</b>	<b>76,463</b>
<b>Cumulative Annual EVA</b>	<b>464,804</b>	<b>923,775</b>	<b>1,258,753</b>	<b>1,548,708</b>	<b>1,861,710</b>	<b>1,868,179</b>	<b>1,848,277</b>	<b>1,923,534</b>	<b>2,004,255</b>	<b>2,080,718</b>
<b>UPS: MEASURES OF VALUE CREATION (billions)</b>										
	<u>1985</u>	<u>1994</u>	<u>Change</u>							
<b>CUMULATIVE EVA</b>	0.465	2.081	1.616							
<b>Analysis of Market Value Added</b>										
Book Value of Equity	2.026	4.647	2.621							
<u>Interest-Bearing Debt and Equivalents</u>	<u>0.537</u>	<u>1.996</u>	<u>1.459</u>							
CAPITAL (Book Value)	2.563	6.644	4.080							
Market Value of Equity	5.575	13.630	8.055							
<u>Interest-Bearing Debt and Equivalents</u>	<u>0.537</u>	<u>1.996</u>	<u>1.459</u>							
CAPITAL (Market Value)	6.112	15.626	9.514							
<b>MARKET VALUE ADDED</b>	<b>3.548</b>	<b>8.983</b>	<b>5.434</b>							

Source: Casewriter analysis of annual reports.