EXHIBIT C

Would a Debt-Free WorldCom Wreck the Telecom Industry?

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Proponents of a WorldCom reorganization have argued that the public interest is best served by allowing WorldCom to reconstitute itself free of debt under the protection of the bankruptcy laws. In this report, I explain why such a reorganization could actually harm the public interest. In particular, I demonstrate that the industry would be more stable if excess capacity were rationalized through consolidation and the assets placed in the hands of firms with sustainable business plans. Consumers, investors, and producers each stand to benefit from the added stability in the industry resulting from WorldCom's exit. The collection of assets that WorldCom has amassed (with the assistance of misleading accounting) does not represent a viable enterprise. The elimination of WorldCom's debt will not change its competitive outlook in a sector that is plagued by excess capacity, increasing competition from wireless, imprudent acquisitions, and unsustainable company structures. Hence, a reorganization of WorldCom is likely only to postpone its inevitable demise.

To provide a historical perspective, I review the major cases of restructuring under bankruptcy in the airline and steel industries. These analogues suggest that, as in the case of WorldCom, the elimination of debt did not address the fundamental problems of the failing firm, and that the exit of the failing firms eventually generated large welfare gains for consumers. I conclude that, in light of WorldCom's problems and the historical evidence of related industries, the FCC should encourage deployment of WorldCom's assets to carriers with sustainable business plans and structures.

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I. THE CAUSES OF WORLDCOM'S FAILURE

With over $100 billion of assets, WorldCom became the largest American company ever to file for bankruptcy.[1] The causes of WorldCom's failure are complex; some are firm-specific while others are industry-wide.

The rapid decline in the equity values of telecommunications firms is by now a familiar story. During the late 1990s, investors poured huge sums into the industry, including $470 billion dollars in new debt,[2] creating a vast glut of excess capacity. Telecommunications carriers invested heavily in networks with an expectation of rapidly increasing demand for Internet traffic. But by mid-2001, investors had recognized that the Internet was growing much more slowly than the 1,000-fold annual increase some had originally predicted. In less than two years, the telecommunications industry worldwide lost $2.36 trillion in market capitalization as measured by the Dow Jones Global Telecom Market Index.[3] Using a similar index for U.S. carriers, as of January 2003, the U.S. industry had lost $846 billion in market capitalization from its peak in March 2000.[4]

Against this industry backdrop, WorldCom admitted in June 2002 that it had misclassified $3.8 billion in operating costs for 2001 and part of

1. *The only way is up, maybe—The only way is up*, THE ECONOMIST at *1 (July 27, 2002).
2. *Id*.
3. Dennis K. Berman, *Before Telecom Bubble Burst, Some Insiders Sold Out Stakes*, WALL ST. J. at A1 (Aug. 12, 2002).
4. The Dow Jones Global Index—U.S. Telecoms consisted of 21 U.S. telecommunications stocks as of January 2003.

2002 as capital spending—thereby concealing large losses.[5] Subsequently, it raised this estimate to $7.2 billion[6] and acknowledged that it would write-off all current goodwill and intangible assets, recorded as $50.6 billion, when it filed its restated financial statements for 2000, 2001 and 2002.[7] In his First Interim Report in November 2002, Bankruptcy Court Examiner Dick Thornburgh estimated that the misstatements would prove to be larger than those that WorldCom had already disclosed.[8] One day after the Examiner's report was filed, WorldCom acknowledged a new $9 billion estimate of false profits contained in an amended complaint filed by the Securities and Exchange Commission (SEC).[9] WorldCom originally reported a profit of $1.4 billion in 2001, and $130 million for the first quarter of 2002.[10] Thus, the accounting irregularities and the write-off of goodwill more than eliminated all of WorldCom's profits for 2001 and 2002.

As large as WorldCom's misstatement of profits may have been, it would be a mistake to attribute WorldCom's bankruptcy solely to accounting irregularities. Over the last decade, WorldCom committed a series of fundamental strategic errors that led to its demise, and its accounting irregularities are best understood as an effort to conceal from the public, regulators, and financial markets the extent of its business problems.

A. *Excess Investment by Network Operators Based on Unreasonable Projections*

The simple explanation for the general collapse in telecommunications equities is that too many firms got caught up in the Internet mania and built networks to carry projected traffic that did not materialize. In the United States, more than a dozen national fiber backbones were constructed.[11] As explained in *The Economist*, this construction boom was founded on three incorrect assumptions: (1) Internet traffic would double every 100 days; (2) the usefulness of a telecommunications network is proportional to the

5. Unlike costs, capital expenses are written off against profits over time, so the error boosted reported profits.

6. Jared Sandberg and Susan Pulliam, *WorldCom Finds More Errors; Restatement Will Be $7.2 Billion*, WALL ST. J. at A1 (Aug. 9, 2002).

7. Susan Pulliam and Jared Sandberg, *New WorldCom Report to SEC Will Acknowledge More Flaws*, WALL ST. J. at A3 (Sept. 19, 2002).

8. *In re* WorldCom, Inc., *et al*., No. 02-15533 (AJG) (Bankr. S.D.N.Y. Nov. 4, 2002) (First Interim Report of Dick Thornburgh, Bankruptcy Court Examiner).

9. Deborah Solomon and Jared Sandberg, *WorldCom's False Profits Climb—Telecom Firm's Latest Tally May Exceed $9 Billion; SEC Files More Charges*, WALL ST. J. at A3 (Nov. 6, 2002).

10. Jared Sandberg, Rebecca Blumenstein, and Shawn Young, *WorldCom Admits $3.8 Billion Error In Its Accounting—Firm Ousts Financial Chief And Struggles for Survival; SEC Probe Likely to Widen*, WALL ST. J. at A1 (June 26, 2002).

11. *The telecoms crisis—The telecoms industry is in a mess. What went wrong?* THE ECONOMIST at *1 (July 20, 2002).

square of the number of users; and (3) new product development and consumer acceptance of such developments were now occurring in a fraction of the traditional time.[12] When it became clear that projected increases in demand were not likely to materialize, aggressive price-cutting ensued, and the value of telecommunications equities plummeted.

WorldCom is credited as one of the primary sources of the overly optimistic forecasts for the growth in Internet traffic.[13] According to Professor Andrew Odlyzko of the University of Minnesota, WorldCom's executives are "more responsible for inflating the Internet bubble than anyone."[14] Even the Department of Commerce relied on UUNet, WorldCom's Internet subsidiary, as an authoritative source for its optimistic Internet traffic projections.[15] Since 1996, Internet traffic has grown at around 70 to 150 percent per year, much more slowly than WorldCom's estimates of 700 to 1,500 percent.[16] When the hyperbole of its claims became apparent after the telecommunications boom ended, WorldCom admitted that its Internet traffic growth estimate was actually a measurement of the growth in its own backbone network.[17] The company had misleadingly used its own accelerated *capacity* growth as a proxy for growth in Internet *usage*.

Under pressure to achieve rapid revenue growth in the face of disappointing traffic growth, competitive carriers such as Global Crossing resorted to "hollow swaps."[18] But far more damaging were the earlier decisions by those companies to expand their networks based on the fallacious projections in Internet traffic. Telecommunications equipment firms offered carriers generous loans, which encouraged carriers to build networks even faster. The resulting investment proved destructive.

Eventually, this speculative bubble had to burst. When prices fell to marginal cost, which can be very low in an industry with huge sunk costs, numerous bankruptcies ensued. Indeed, over the last two years, more than fifty telecommunications firms have filed for bankruptcy.[19]

12. *Id*.

13. *The power of WorldCom's puff*, THE ECONOMIST (July 20, 2002) (citing Andrew Odlyzko, a former researcher at AT&T who is now at the University of Minnesota).

14. *Id.*

15. *Id.*

16. *Id.*

17. Yochi J. Dreazen, *Wildly Optimistic Data Drove Telecoms to Build Fiber Glut*, WALL ST. J. at B1 (Sept. 26, 2002).

18. Henry Sender, *SEC Deals Blow to Telecoms By Rejecting Capacity Swaps*, WALL ST. J. at A1 (Aug. 21, 2002). According to the SEC, in early 2001, Global Crossing and Qwest entered into such a swap with each side valued at $100 million.

19. Larry F. Darby, Jeffrey A. Eisenach, and Joseph S. Kraemer, *The CLEC Experiment: Anatomy of a Meltdown* at 1 (Sept. 23, 2002) (*available at* http://www.pff.org).

B. Increasing Competition, Particularly from Wireless

The effects of the speculative bubble in investment spending were exacerbated by a substantial increase in long-distance competition. This increasing competition in both the residential and business sectors of the long-distance industry eliminated most opportunities for profit. Merrill Lynch observed in January 2002 that "the five largest [long-distance] new entrants invested $25.2 billion over the 1998-2000 period, substantially more than the $8.5 billion committed by the five largest CLECs."[20] In July 2001, the investment banking firm, Robertson Stephens, warned of an impending long-distance price war: "In order to gain market share, Qwest could initiate a price war in corporate data and voice services. WorldCom engaged in a similar move in 1999."[21] In October 2001, Morgan Stanley Dean Witter described the intensity of the competition that had arrived:

> WorldCom enjoys a leading position in many of its markets, but the competitive pressures are building. A major concern is the domestic voice business, which should account for about 30% of revenues through 2001, and should face significant competition over the next couple of years. We have also seen pricing pressure in WorldCom's traditional data segments.[22]

The intense pressure to reduce prices would ultimately decrease the value of WorldCom's networks. In April 2002, Lehman Brothers reduced its price target on WorldCom shares "based on an IXC industry outlook that has deteriorated beyond even [its] recently reduced expectations."[23] The downgrade came in response to a WorldCom announcement that revenue from voice traffic declined substantiallly and that enterprise demand for data/IP [was] still highly constrained, particularly for private line and dedicated Internet access.[24]

Another unexpected source of long-distance competition was the emerging wireless sector. In May 1998, AT&T offered the first digital one-rate plan, which provided customers (near) nationwide coverage without incurring roaming or long-distance charges.[25] By 2000, all the major wireless providers were offering a similar pricing plan.[26] According to the FCC's *Seventh Annual Commercial Mobile Radio Services (CMRS)*

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20. Merrill Lynch, WorldCom Group, Investext Report at 4 (Jan. 4, 2002). The five carriers were Broadwing, Global Crossings, Level 3, Qwest, and XO Communications.

21. Robertson Stephens, WorldCom Group, Investext Report at 2 (July 2001).

22. Morgan Stanley Dean Witter, WorldCom Group, Investext Report at 3 (Oct. 15, 2001).

23. Lehman Brothers, WorldCom Inc., Investext Report at 11 (April 22, 2002).

24. *Id*. at 1.

25. Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services at 34 (released July 3, 2002) [hereinafter *Seventh CMRS Report*].

26. *Id*.

Competition report, released in July 2002, "[w]ireless plans are substituting for traditional wireline long distance as well."[27] To support its landline displacement hypothesis, the FCC cited an analyst report showing that 20 percent of AT&T's customers replaced some wireline long distance usage with wireless.[28] The FCC also cited an AT&T press release, which attributed the decline in its long distance calling volumes and revenues in part to wireless substitution.[29] WorldCom itself noted in its 2001 SEC Form 10-K that "wireless competition and the availability of inexpensive long-haul transport has already significantly reduced consumer long distance pricing, and as a result negatively affected the profitability of traditional service providers."[30]

Another source of competition for long-distance services was the entry by the local Bell companies into in-region inter-Lata services beginning in late 1999, as regulators began to certify that the Bell companies had met the conditions prescribed in Section 271 of the Telecommunications Act.[31] As of January 2003, Regional Bell Operating Companies (RBOCs) had received section 271 authorizations in 35 states on the following dates: Alabama (Sept. 18, 2002), Arkansas (Nov. 16, 2001), California (Dec. 19, 2002), Colorado (Dec. 23, 2002), Connecticut (July 20, 2001), Delaware (Sept. 25, 2002), Florida (Dec. 19, 2002), Georgia (May 15, 2002), Idaho (Dec. 23, 2002), Iowa (Dec. 23, 2002), Kansas (Jan. 22, 2001), Kentucky (Sept. 18, 2002), Louisiana (May 15, 2002), Maine (June 19, 2002), Massachusetts (Apr. 16, 2001), Mississippi (Sept. 18, 2002), Missouri (Nov. 16, 2001), Montana (Dec. 23, 2002), Nebraska (Dec. 23, 2002), New Hampshire (Sept. 25, 2002), New Jersey (June 24, 2002), New York (Dec. 22, 1999), North Carolina (Sept. 18, 2002), North Dakota (Dec. 23, 2002), Oklahoma (Jan. 22, 2001), Pennsylvania (Sept. 19, 2001), Rhode Island (February 24, 2002), South Carolina (Sept. 18, 2002), Tennessee (Dec. 19, 2002), Texas (June 30, 2000), Utah (Dec. 23, 2002), Vermont (April 17, 2002), Virginia (Oct. 30, 2002), Washington (Dec. 23, 2002), and Wyoming (Dec. 23, 2002).[32] These states represent 74 percent of incumbent local exchange carrier (ILEC) end-user switched access lines in the United States.[33] By July 2002, SBC and Verizon had obtained one

27. *Id*.

28. *Id*. (citing *Carriers Said to Need New Tactics to Combat LD Substitution*, COMM. DAILY, Mar. 15, 2002).

29. *Id*. (citing *AT&T Announces 1Q 2002 Earnings*, News Release, AT&T Corp., Apr. 24, 2002).

30. WorldCom, Inc. 2001 SEC Form 10-K at 16 (released Mar. 13, 2002). According to the Yankee Group, a technology consultancy, three percent of telephone users had used a wireless telephone as their primary telephone as of August 2002. See Simon Romero, *When the Cellphone is the Home Phone*, N.Y. TIMES at G1 (Aug. 29, 2002).

31. 47 U.S.C. § 271.

32. *RBOC Applications to Provide In-region, InterLATA Services Under § 271* <www.fcc.gov/Bureaus/Common_Carrier/in-region_applications>.

33. FED. COMMUNICATIONS COMM'N, LOCAL TELEPHONE COMPETITION: STATUS AS OF JUNE 30, 2002, Table 6 (2002), *available at* http://www.fcc.gov/wcb/iatd/comp.html.

quarter of all long-distance subscribers in Texas[34] and New York,[35] respectively. In its 2001 SEC 10-K Report, WorldCom acknowledged the competitive threat posed by the ILECs:

> As the traditional local phone companies are allowed to offer in-region long distance services in additional states, they will be in a position to offer single source local and long distance service similar, if not superior, to that being offered by us. We expect that increased competition will result in additional pricing and margin pressures in the domestic telecommunications services business.[36]

Because RBOCs are competitors with recognizable brand names, they are expected to capture ever-larger shares, thereby placing significant downward pressure on long-distance prices.[37]

C. *Imprudent Acquisitions by WorldCom, Partly Fueled by Misleading Accounting*

By mid-2001, WorldCom operated one of the largest global telecommunication networks, including 56,500 route miles of terrestrial fiber (48,000 domestic route miles), 26,000 route miles of wholly owned undersea cable, and 9,850 route miles of metropolitan fiber in over 123 markets in North America, Europe, and Asia.[38] In addition, WorldCom operated the largest global Internet backbone, with 2,500 points of presence (POPs), carrying roughly 40 percent of global Internet traffic.[39] Rather than growing internally, however, WorldCom achieved this position through a series of costly acquisitions:

- In August 1996, MFS Communications (a CAP) bought UUNet, a global provider of Internet access options, applications, and value-added services, for approximately $2.1 billion.[40] In December 1996, WorldCom merged with MFS for approximately $12.0 billion.[41]

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34. Jennifer Davies, *Long-distance bid from Pac Bell wins tentative approval*, SAN DIEGO UNION-TRIBUNE at A-1 (July 24, 2002) ("In Texas, where SBC is based, the company gained 25 percent of the long- distance market in two years.").

35. Tom Johnson, *Verizon wins long distance approval-Feds say local phone carrier can enter New Jersey market*, STAR LEDGER NEWARK, NJ at 41 (June 25, 2002) ("In New York, Verizon has captured around 25 percent market share.").

36. WorldCom, Inc. 2001 SEC Form 10-K at 15-16 (Mar. 13, 2002).

37. Jerry A. Hausman and J. Gregory Sidak, *Do Long-Distance Carriers Price Discriminate Against the Poor and the Less-Educated?*, Social Science Research Network Electronic Library, *at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=296368 (Jan. 2002), at 20-24.

38. Robertson Stephens, WorldCom Group, Investext Report at 2 (July 2001).

39. *Id*.

40. MFS COMMUNICATIONS SEC FORM 10-Q at 7 (filed Nov. 12, 1996).

41. WORLDCOM, INC. SEC FORM 10-K405/A at 4 (filed Apr. 26, 2001).

- In January 1998, WorldCom acquired Brooks Fiber, a facilities-based CLEC, for $2.4 billion.[42]
- In January 1998, WorldCom acquired CompuServe Corporation, an Internet service provider, for $1.3 billion.[43] WorldCom subsequently sold CompuServe's Interactive Services division to AOL.
- In January 1998, WorldCom acquired ANS Communications, an Internet access provider, for $500 million.[44]
- In August 1998, WorldCom acquired 19 percent of Embratel, a Brazilian long distance provider, for $2.3 billion.[45]
- In September 1998, WorldCom acquired MCI, one of the world's largest voice carriers and advanced Internet network operators, for approximately $40 billion.[46]
- In October 1999, WorldCom acquired SkyTel, a provider of nationwide messaging services, for $1.7 billion.[47]
- In July 2001, WorldCom acquired Digex, a provider of managed web and application hosting services, through its acquisition of Intermedia for $5.8 billion.[48]

From December 1996 through July 2001, WorldCom spent over $66 billion in acquisitions. Upon a review of WorldCom's internal documents in August 2002, the *Washington Post* reported that WorldCom became "the aggregation of more than 60 telecommunications companies it had acquired," and described how "poorly WorldCom absorbed the companies, gaining their revenue but doing little to integrate them operationally to eliminate overlapping costs."[49] According to the Adventis Group, a telecommunications consultancy, the massive collection of firms resulted in multiple sales teams and overlapping billing.[50]

WorldCom's aggregation strategy covered losses in its normal line of business. In October 2001, Morgan Stanley Dean Witter noted that "[m]uch of [WorldCom's] above-average industry growth has resulted

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42. *WorldCom/Brooks Fiber: Brooks Holders To Get 1.85 Shares*, DOW JONES NEWS SERVICE (Jan. 30, 1998).

43. WORLDCOM, INC. SEC FORM 10-K405 at 5 (filed Mar. 13, 2002).

44. *Id*.

45. *Id*. The purchase was described as "a 51.79% voting interest and a 19.26% economic interest."

46. *Id*. at 4.

47. Matt Moore, *SkyTel shareholders approve merger with MCI WorldCom*, ASSOCIATED PRESS NEWSWIRES (Sept. 30, 1999).

48. *Id*. at 3. Through its merger with Intermedia, WorldCom acquired a 55 percent equity interest and 94 percent voting interest in Digex. *See WorldCom Gains Control of Digex Through Merger with Intermedia*, WorldCom Press Release (Sept. 5, 2000).

49. Jonathan Krim, *Long Pattern Preceded Scandal At WorldCom*, WASH. POST at A1 (Aug. 29, 2002).

50. *Id*. (citing Jim Andrew, a telecommunications consultant).

from its M&A strategy."[51] Merrill Lynch noted in January 2002 that WorldCom "may have materially overpaid for its controlling stake in Digex."[52] No telecommunications company has ever assembled such a disparate amalgam of assets, and WorldCom has clearly failed to assimilate that amalgam into an integrated whole.

D. Other Strategic Errors Not Related to Accounting

WorldCom also engaged in a series of other errors that were equally costly. In particular, WorldCom's resale strategy for entering the wireless and local markets failed, and WorldCom's portfolio of clients (many of whom were other telecommunications carriers) was not sufficiently diversified.

1. No Wireless Assets

Whereas long-distance competitors AT&T and Sprint owned wireless facilities to absorb the massive defection from wireline long-distance service, WorldCom relied on a wireless resale strategy, which according to Merrill Lynch, experienced a "rapid slowdown" in the fourth quarter of 2001, and "present[ed] a wild card in terms of future impact."[53] WorldCom's failure to make inroads in the wireless industry suggests that wireless customers are not comfortable purchasing service from a company that does not own the underlying wireless network. According to the *FCC's Seventh Wireless Report*, the entire resale sector accounted for only 5 percent of all mobile telephone subscribers in 2001.[54]

Even if it could lure some wireless customers, WorldCom's resale strategy ensured that it would not be profitable to do so. By relying on someone else's wireless network, WorldCom could not differentiate its offering. In January 2002, Merrill Lynch expressed concern over the fact that 25 percent of WorldCom's revenue growth came from WorldCom's "low (most likely zero) margin wireless resale business."[55] In particular, Merrill predicted that WorldCom would lose long-distance revenues to non-affiliated wireless carriers:

> However, we remain skeptical over the longer-term viability of this entity to generate enough cash flow maintain the $2.40/share annual dividend as the migration to wireless continues to take consumer LD minutes off of the wireline network.[56]

Wireline displacement by wireless communications caught WorldCom flatfooted. In June 2002, WorldCom announced that it had decided to exit

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51. Morgan Stanley Dean Witter, WorldCom Group, Investext Report at 3 (October 15, 2001).
52. Merrill Lynch, WorldCom Group, Investext Report at 4 (Jan. 4, 2002).
53. Merrill Lynch, WorldCom Group, Investext Report at 2 (Jan. 4, 2002).
54. *Seventh CMRS Report*, *supra* note 25, at 41.
55. Merrill Lynch, WorldCom Group, Investext Report at 2 (Jan. 4, 2002).
56. *Id*. at 3.

the wireless resale business.[57] Thus, WorldCom has no assets in the only telecommunications sector in which revenues continue to increase rapidly.

2. Reliance on Customers in its Own Industry

Many of the customers on whom WorldCom relied for its revenue suffered from the telecommunications meltdown in the same way as WorldCom itself, and were unable to pay their bills. To borrow an analogy from finance, WorldCom's portfolio of customers was under-diversified. When the telecommunications industry began contracting, WorldCom received a double hit. Merrill Lynch described the problem in its January 2002 review of WorldCom's operations:

> Also another risk factor remains with the 'Emerging Markets' segment of WorldCom Group's customer base—which includes customers such as other IXCs, Genuity, Williams and Qwest. This customer group accounts for approximately 10% of revenues. Revenue from this group will likely be down [quarter-on-quarter] in [the fourth quarter] and management estimates a flatter trend going forward—given the hits already taken from names like Winstar and Teligent and, already shrunken business from Genuity and the transition of business to Cable and Wireless's own network.[58]

Given the state of the industry, WorldCom's heavy reliance on these telecommunications clients is likely to remain a problem even if WorldCom emerges from bankruptcy.

II. RESTRUCTURING UNDER BANKRUPTCY HAS NOT WORKED WELL IN OTHER INDUSTRIES

Recent studies have shown that reorganization through bankruptcy does not always result in viable firms. Lynn LoPucki and Joseph Doherty of the University of California, Los Angeles, analyzed the results for firms that emerged from bankruptcy between 1991 and 1996. They found that 29 percent of those firms had gone out of business within five years.[59] Of these discontinued firms, nearly two-thirds had liquidated or merged in distress.[60] After emerging from bankruptcy, the firms in their sample had average annual losses equivalent of 2 percent of their assets.[61] The performance of firms filing for bankruptcy in the Southern District of New York, where WorldCom has filed, was even worse, with average annual

57. *WorldCom, Inc. Announces Intention to Exit Wireless Resale Business,* News Release, WorldCom, Inc. (June 5, 2002).

58. Merrill Lynch, WorldCom Group, Investext Report at 5 (Jan. 4, 2002).

59. Lynn M. LoPucki & Joseph W. Doherty, *The Failure of Public Company Bankruptcies in Delaware and New York Revisited*, 55 VANDERBILT L. REV. (forthcoming 2002) (manuscript at 8, *at* http://www1.law.ucla.edu/~erg/pubs.html).

60. *Id.* at 11.

61. *Id.* at 13.

losses equal to three percent of assets.[62] Likewise, a recent study by Professor Edith Hotchkiss of Boston College concluded that half of all Chapter 11 restructurings fail.[63]

Professor Douglas Baird of the University of Chicago and Professor Robert Rasmussen of Vanderbilt University argue that reorganization under Chapter 11 is becoming less necessary to successfully employ a firm's assets.[64] They conclude that reorganization is less important because assets can usually be employed as efficiently among different firms as they can within the same firm.[65]

The telecommunications sector is obviously not the first to suffer a wave of bankruptcies. To determine how well the overbuilt telecommunications sector might succeed in restructuring through bankruptcy reorganizations of some of its major firms, it is useful to look at the experiences of other industries that have endured such bankruptcy proceedings. For this purpose, I examine the effects of reorganization in two major U.S. industries that have also experienced a rash of bankruptcies: steel and airlines.

The steel industry has evolved in the last twenty years from an industry dominated by large "integrated" firms to one of smaller-scale "minimill" firms. Integrated firms use enormous blast furnaces, coke ovens, and basic-oxygen steelmaking furnaces to convert iron ore, coal, and limestone into steel. Minimum efficient scale in these firms exceeds 3 million tons per year. Minimills, on the other hand, use electric furnaces to melt scrap, direct-reduced iron ore, or pig iron. Minimill plants range in size from 500,000 tons to 2 million tons per year.

The large, integrated firms have seen their aggregate raw-steel capacity decline from about 140 million tons to about 60 million tons in the last 25 years. The changing environment in the steel industry has forced a large number of integrated firms into bankruptcy. Using Thomson Financial's SDC Platinum Corporate Restructuring database, which compiles details of bankruptcies since 1988, I searched for all companies listed in the Standard Industrial Classification Code (SIC) of 3312 (Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling) that filed for bankruptcy. Table 1 displays the results of this search, excluding "minimill" firms and firms with bankruptcy assets less than $300 million.[66]

62. *Id*.

63. *The Firms That Can't Stop Falling*, THE ECONOMIST at *1 (Sept. 5, 2002).

64. Douglas G. Baird & Robert K. Rasmussen, *The End of Bankruptcy*, 55 STANFORD L. REV. (forthcoming 2002) (manuscript at 1, *at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=355320)

65. *Id.* at 20-29.

66. Although the SDC Platinum Corporate Restructuring database begins coverage in 1988, several bankruptcies that were filed before 1988 appeared in the database.

TABLE 1: INTEGRATED STEEL BANKRUPTCIES

Company	Bankruptcy Filing Date	Bankruptcy Assets (Million $)
LTV Corp.	July 1986	$6,163
LTV Steel Co.	December 2000	$6,101
Bethlehem Steel Corp.	October 2001	$4,255
National Steel Corp.	March 2002	$2,461
Republic Technologies International*	April 2001	$1,415
Wheeling-Pittsburgh Steel	April 1985	$1,286
Wheeling-Pittsburgh Steel	November 2000	$1,272
Acme Metals	September 1998	$829
Sharon Steel	April 1987	$661
Birmingham Steel	June 2002	$647
Geneva Steel Co.	February 1999	$605
Sharon Specialty Steel	November 1992	$425
Gulf States Steel	July 1999	$300

Note: *Republic Technologies uses both electric arc furnaces and blast furnaces to produce steel. Therefore, I include it as an "integrated" steel company.
Source: Thomson Financial, SDC Platinum Corporate Restructuring database.

Likewise, since the U.S. airline industry was deregulated in 1978, dozens of airlines, ranging from new regional startups to decades-old titans, have gone through bankruptcy proceedings. Using the SDC Platinum Corporate Restructuring database, I searched for all airlines (those classified under SIC 4511 or 4512—Air Transportation, Scheduled, and Air Courier) that have declared bankruptcy since 1988, excluding air couriers and airlines with bankruptcy assets less than $400 million. Table 2 displays the results, with the addition of two significant bankruptcies before 1988 that were not in the database.

TABLE 2: PASSENGER AIRLINE BANKRUPTCIES

Company	Bankruptcy Filing Date	Bankruptcy Assets (Million $)
United Airlines	December 2002	$22,800
U.S. Airways	August 2002	$8,025
Continental Airlines Holdings	December 1990	$7,656
Eastern Air Lines	March 1989	$4,037
TWA	January 1992	$2,864
TWA	June 1995	$2,495
Pan American	January 1991	$2,440
TWA	January 2001	$2,137
America West Airlines	June 1991	$1,165
Continental Airlines	September 1983	$1,053
Braniff International	May 1982	$1,008
Midway Airlines	March 1991	$468

Sources: Thomson Financial, SDC Platinum Corporate Restructuring database; The Bankruptcy DataSource, as cited in Bridget O'Brien, *Debt-Burdened Continental Air, Citing Rising Fuel Costs, Files Under Chapter 11—Binge of Borrowing in '80s To Finance Acquisitions Brings 2nd Visit to Court*, WALL ST. J. at A3 (Dec. 4, 1990); Dave Carpenter, *United Airlines files for bankruptcy court protection; largest such filing in aviation history*, ASSOCIATED PRESS NEWSWIRES (Dec. 9, 2002).

Many of these bankruptcies in the steel and airline industry resulted in reorganization. Almost uniformly, the process of reorganization has failed to produce viable firms and has diminished the value of remaining company assets. The history of Chapter 11 reorganization therefore provides little reason to believe that WorldCom's emergence from bankruptcy will actually serve the public interest.

A. An Overview of Chapter 11 History

Of the firms in Tables 1 and 2, nine firms—LTV, Sharon Steel, Wheeling-Pittsburgh, Geneva Steel, Braniff, TWA, Continental, and America West—have been reorganized through Chapter 11. Only one of these companies, America West, has thus far avoided a second trip to bankruptcy court. This fact alone strongly suggests that reorganization does not produce viable firms.

LTV, Sharon, and Gulf States initially reorganized only to be liquidated in subsequent bankruptcies. Wheeling-Pittsburgh and Geneva are once again under Chapter 11 protection after emerging from previous bankruptcies. Notably, the recent success in reviving the LTV steel operations occurred only after LTV was liquidated through Chapter 7 and its assets were sold to a more efficient operator.

Braniff's inevitable liquidation was only postponed by its emergence from its first bankruptcy proceeding. TWA went through bankruptcy three times, and the delays in getting TWA's assets into the hands of a more efficient competitor (American) could have been avoided had the airline been liquidated in the first Chapter 11 filing. Even America West, the sole reorganized firm not to file again for bankruptcy, has underperformed the rest of the industry. Given its large number of customer complaints, ongoing financial distress, and talk of a second bankruptcy filing, it is safe to say that America West's reorganization has been a failure, and that liquidation would have distributed its assets to more efficient carriers with better management.

Like WorldCom, some of these companies failed from a growth-by-acquisition strategy. When companies were reorganized through Chapter 11, poor managers continued to make strategic errors, leading to more bankruptcies and liquidation. Assets were liquidated at fire-sale prices after years of delay. Creditors were hurt through delayed liquidation, as management devalued assets through inefficient operations during bankruptcy and after reorganization. Reorganization of the bankrupt integrated steel firms and airlines has proven to be a failure, and WorldCom's regulators should take note of the hazards inherent in attempting to reorganize a failed firm.

One might argue that reorganizations are beneficial to shareholders, and that those benefits must be weighed against the welfare gains of consumers from liquidation. But those benefits, at least in the airline industry, cannot be substantiated. Professor Todd C. Pulvino of the Kellogg Graduate School of Management at Northwestern University discovered that airline assets were not sold at statistically significantly lower prices under Chapter 7 liquidation[67] than in Chapter 11 reorganization.[68] The author explained that managers operating under Chapter 11 have an incentive to sell assets quickly, even at depressed prices, to keep operations running. Pulvino concludes that "Chapter 11 does not appear to provide significant benefits to a distressed firm's claimholders—it neither increases prices at which assets are sold nor limits the number of aircraft sold at discounted prices."[69]

67. Chapter 7 bankruptcies are designed to close and liquidate a firm while Chapter 11 bankruptcies are designed to rehabilitate a firm. In Chapter 7 bankruptcies, a court-appointed trustee auctions off the assets of the firm and uses the proceeds to pay off creditors. Chapter 11 bankruptcies protect a firm's assets so that it can continue to operate while devising a plan of reorganization. This plan must be approved by one half of the creditors and two thirds of the shareholders and confirmed by the court. These plans generally create a new capital structure for the firm both to satisfy creditors and to remedy the problems that caused bankruptcy. *See* RICHARD A. BREALY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 505-506 (5th ed. 1996) (1981).

68. Todd C. Pulvino, *Effects of bankruptcy court protection on asset sales*, 52 J. FIN. ECON. 151 (1999).

69. *Id*. at 179.

B. *Examples from the Steel Industry Confirm that Chapter 11 Reorganization Does Not Produce Viable Firms*

Of the thirteen bankruptcies listed in Table 1, four resulted in reorganizations.[70] LTV and Sharon Steel were both reorganized during their first bankruptcy filings, but subsequent bankruptcy filings led to liquidation. Wheeling-Pittsburgh and Geneva Steel were also reorganized after their first bankruptcy filings, and the companies are currently operating under Chapter 11 protection once again.

For virtually every one of these companies, the reason for bankruptcy was the inability to compete in a changing marketplace due to high costs and poor management. Reorganization might arguably have made these companies more competitive by reducing labor costs through new agreements with workers, but it never produced a sustainable company. Many of the reorganizations under Chapter 11 simply delayed the liquidation of uncompetitive companies and destroyed asset value in the process.

1. *LTV*

LTV emerged as the product of the famous 1960s conglomerate builder, James Ling.[71] In 1984, the company, which owned a diverse array of businesses in industries from sporting goods to defense, expanded its unprofitable steel operations with the controversial acquisition of Republic Steel. The acquisition, intended to make the company's steel operations profitable by increasing their scale, contributed to a $723.9 million loss in 1985.[72]

LTV filed for Chapter 11 bankruptcy in 1986, citing severe slumps in both the steel business and its oilfield services business.[73] In 1988, the company presented a reorganization plan that did little more than scale back steel operations.[74] The company's bankruptcy proceedings continued until 1993 because of controversy over whether the company should fund nearly $2 billion in pension liabilities.[75] Nearly seven years after its 1986 Chapter 11 filing, LTV emerged from bankruptcy after selling its aerospace and defense business to pay off debts.[76] This unit was LTV's only profitable business prior to bankruptcy.[77]

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70. I do not include Bethlehem Steel or National Steel in this analysis because the outcomes of their bankruptcy proceedings have not been decided.

71. Michael A. Hiltzik, *Debt-Laden LTV Corp. Goes into Bankruptcy: 2nd-Largest U.S. Steel Firm, Hard Hit by Slumps in That Industry and Oil, Seeks Chapter 11 Help*, L.A. TIMES at H1 (Jul. 18, 1986).

72. *Id*.

73. *Id*.

74. Jay Jorden, *LTV's Bankruptcy Reogranization Plan Envisions No More Layoffs or Closings*, WASH. POST at E6 (May 5, 1988).

75. *Id*.

76. *LTV Emerges from Bankruptcy*, ROCKY MTN. NEWS at 39A (Jun. 29, 1993).

77. Hiltzik, *supra* note 71, at H1.

LTV continued operating until it filed for Chapter 11 bankruptcy again in 2000, blaming imports for driving down steel prices.[78] However, the problems that had plagued the company before its prior reorganization had not disappeared. In 2000, losses rose to $719 million—nearly the same level as in 1985.[79] The financial community expressed particular concern with the board and management team, who had managed to lose $900 million in cash since 1995 while racking up $830 million in debt.[80] Because of these problems, the company moved to shutter and sell its integrated steel operations in 2001.[81] The next year, WL Ross, a turnaround firm, bought LTV's steel assets for $127.5 million.[82]

2. *Sharon Steel*

Sharon Steel filed for Chapter 11 bankruptcy protection in April 1987 after losing $62 million in the first three quarters of 1986.[83] The firm, which was part of Victor Posner's vast holdings, had suffered from poor market conditions and mismanagement. During the bankruptcy proceedings, Posner was removed based on allegations that he had siphoned revenue from the company.[84] In November 1990, the court confirmed a reorganization plan that allowed Castle Harlan, a New York investment bank, to purchase Sharon's assets and assume its liabilities for approximately $300 million.[85] Unsecured creditors received a share of the reorganized company's equity.[86]

Within two years of reorganization, Sharon was once again losing $3 million a month due to low steel prices and a recession.[87] These losses and difficulty in securing new financing resulted in a second Chapter 11 filing in November 1992.[88] Sharon's assets remained idle for nearly three years as negotiations with creditors turned sour and the court refused to allow the plant to reopen. In 1995, the company sold its coke plant to Koppers Industries for $5.05 million[89] and its steel plant to Caparo Group for $26

78. Thomas J. Sheeran, *LTV files for bankruptcy, blames unfair imports for losses*, ASSOCIATED PRESS (Dec. 29, 2000).

79. M.R. Kropko, *Judge OKs purchase of LTV Bankruptcy official rules deal is legally sound, in the public interest. New York's WL Ross to pay $127.5 million, assume LTV obligations*, AKRON BEACON J. at 4X, 8 (Mar. 1, 2002).

80. Sheeran, *supra* note 78.

81. *LTV Bankruptcy Sale*, ASSOCIATED PRESS NEWSWIRES (Feb. 28, 2002).

82. Kropko, *supra* note 79, at 4X, 8.

83. Earl Bohn, *Sharon Steel Files Bankruptcy Petition*, WASH. POST at D10 (Apr. 18, 1987).

84. Harold Gwin, *Sharon Steel Bankruptcy Case Comes to An End in Western Pennsylvania*, KNIGHT-RIDDER TRIBUNE BUS. NEWS (Mar. 19, 2002).

85. *Federal Bankruptcy Judge Confirms Plan to Reorganize Sharon Steel*, PR NEWSWIRE (Nov. 21, 1990).

86. *Id*.

87. *Sharon Steel Files for Chapter 11 Bankruptcy Protection*, ASSOCIATED PRESS (Nov. 30, 1992).

88. *Id*.

89. Michael Roknik, *Koppers Industries set to buy Sharon Steel coke plant*, HERALD at 14 (Apr. 4, 1995).

million.[90] The book value of Sharon's assets was $383 million just before bankruptcy in 1992.[91] In 1987, before the first bankruptcy, Sharon had listed assets of $478 million.[92]

3. *Wheeling-Pittsburgh*

Wheeling-Pittsburgh Corp. was created by the merger of Wheeling Steel and Pittsburgh Steel in 1968. By the early 1980s, the company was not a viable competitor in the domestic steel industry. Wheeling-Pittsburgh spent $480 to produce a ton of steel—about 17 percent more than its lowest-cost competitors.[93] As a result, it lost $170 million between 1982 and 1984.[94] At the same time, the company undertook a costly modernization program that saddled it with $514 million in debt.[95]

Mounting losses, negative equity, and union opposition to a debt restructuring plan forced Wheeling-Pittsburgh to file for Chapter 11 bankruptcy in April 1985. After more than five years of litigation, the court approved a reorganization plan in 1991.[96] This plan separated the company into a holding company, which was renamed WHX in 1994, and a subsidiary, Wheeling-Pittsburgh Steel Corp.[97]

But reorganization did not solve the company's problems. After emerging from bankruptcy, Wheeling-Pittsburgh Steel remained a high-cost producer in an extremely competitive market, and its situation was exacerbated by deteriorating market conditions in the late 1990s.[98] As a result, it filed for Chapter 11 again in November 2000, citing a high level of imports as the reason for its filing.[99] In the year after its bankruptcy filing, the company lost another $336.7 million.[100] As of January 2003, Wheeling-Pittsburgh continued to operate under Chapter 11 protection.

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90. Len Boselovic, *Farrell, Pa., Steel Mill Continues Struggle to Turn Profit*, PITTSBURGH POST-GAZETTE (Feb. 19, 2000).

91. *Sharon Steel Files*, *supra* note 87.

92. Bohn, *supra* note 83, at D10.

93. Warren Brown, *Steel Firm to File For Bankruptcy: Wheeling-Pittsburgh Seeks Protection After Debt Plan Rejection*, WASH. POST at F1 (Apr. 17, 1985).

94. *Id*.

95. Alexandra Biesada, *Vultures Dance: Why Wheeling-Pittsburgh Steel has taken so long to emerge from bankruptcy*, FIN. WORLD at 40 (Nov. 13, 1990).

96. *Judge Says He'll Confirm Reorganization Plan*, ASSOCIATED PRESS (Dec. 9, 1990).

97. *Id*.

98. John E. Sacco, *For Wheeling-Pitt, the long wait is finally over*, AM. MET. MARKET at 35 (Nov. 20, 2000).

99. *15 years later, Wheeling-Pittsburgh re-enters bankruptcy*, NEW STEEL at 6 (Jan. 1, 2001).

100. Len Boselovic, *Bankrupt W-P Seeks Bailout*, PITTSBURGH POST-GAZETTE at C-6 (Jan. 12, 2002).

4. *Geneva Steel*

The U.S. government founded Geneva Steel in the 1940s at a remote site in Utah to protect it from attack by enemy warplanes,[101] leaving it impaired in a competitive market by its distance from the country's large manufacturing centers. It was saved in the late 1980s by a group of investors who spent $400 million modernizing the mill.[102] As a result, the company was saddled with heavy debt and interest payments amounting to more than $40 million per year.[103]

Subsequently, Geneva buckled in the face of intense competition during the late 1990s and filed for Chapter 11 bankruptcy in February 1999. The company cited low-priced imports as the main cause of bankruptcy, but many of its problems were self-inflicted.[104] Geneva emerged from bankruptcy in January 2001 under a reorganization plan that included a $110 million loan guarantee from the U.S. Department of Commerce and a $125 million line of revolving credit from Citibank.[105]

Geneva was in dire straits once again by November of the same year. Due to adverse market conditions, the company shut down all of its manufacturing operations and continued to maintain liquidity by selling inventories and collecting receivables.[106] By January 2002, the company filed for Chapter 11 bankruptcy for the second time. After failing to meet a November 2002 deadline to secure financing, Geneva formulated plans to liquidate.[107]

C. *Chapter 11 Reorganization Has Likewise Failed to Create Viable Firms in the Airline Industry*

Of the eight different companies in Table 2 that have completed bankruptcy proceedings,[108] only Continental Airlines and America West Airlines still operate under their original names. Braniff and TWA went through subsequent bankruptcies before either liquidating or merging with a more efficient carrier. The experience of those airline carriers who emerged from Chapter 11 bankruptcy is very telling—namely, most carriers who were allowed to reemerge debt-free failed shortly thereafter. Continental and America West are the only two major airlines still operating that have emerged from bankruptcy. Continental has been largely

101. *Hurt By Cheap Imports, Struggling Geneva Steel Files for Bankruptcy*, DOW JONES BUS. NEWS (Feb. 1, 1999).

102. *Id*.

103. *Id*.

104. *Id*.

105. *Geneva, Laclede exit Chapter 11*, NEW STEEL (Feb. 1, 2001).

106. *Geneva Steel LLC Commences Chapter 11 Bankruptcy Proceeding; Secured Lenders Agree to Permit Access to Cash Collateral Through May 1, 2002*, PR NEWSWIRE (Jan. 25, 2002).

107. *Geneva Steel to Work with Secured Lenders on Plan of Reorganization*, PR NEWSWIRE (Nov. 18, 2002).

108. I do not include US Airways or United in this group because the outcomes of their current bankruptcy proceedings have yet to be determined.

viewed as a success, but only due to a complete change in management and ownership. Since its last bankruptcy, Continental has also partnered with a larger airline, Northwest, lending credence to the claim that its assets could have been better employed in the hands of others. On the other hand, there is little doubt that America West is one of the worst performing and most financially distressed major airlines operating today, in part due to the effects of its reorganization.

1. Braniff

Incorporated in 1930 in Oklahoma, Braniff was the first U.S. airline to declare bankruptcy after the Airline Deregulation Act of 1978. Before declaring bankruptcy, Braniff was known for planes decorated by Alexander Calder, leather seating, and flight attendants in designer uniforms. After deregulation, Braniff faced increasing competition and high fuel costs. When Braniff filed for Chapter 11 bankruptcy in May 1982, it had suffered losses of $336.4 million in the previous three years and carried $732 million in debt.[109] Braniff's reorganization plan was approved in September 1983, and the airline was purchased by Hyatt Corp. and its owners, the Pritzker family of Chicago.[110] The airline resumed operations in May 1984 under the new ownership, which retained the leather seats, full fares, and focus on business customers of pre-bankruptcy Braniff. However, the airline soon began losing money and shifted to more limited operations five months later with a low-fare strategy.[111]

The Pritzkers sold Braniff to an investor group led by Jeffrey Chodorow in 1988.[112] Braniff's new chairman, William G. McGee, publicly set forth ambitious plans to triple the airline's fleet and increase its revenue and flights by 25 to 30 percent by 1991.[113] The airline moved its

109. *Braniff's Bankruptcy May Lead to Grounding of Other Airlines*, WALL ST. J. at *1 (May 14, 1982); Associated Press, *Filing opens way for reorganization Grounded Braniff seeks bankruptcy*, OKLAHOMA CITY TIMES at *1 (May 13, 1982).

110. *Braniff Gets Court Approval for Plan of Reorganization*, WALL ST. J. at *1 (Sept. 2, 1983); *Braniff to Have $100 Million in Capitalization at Takeover*, WALL ST. J. at *1 (Dec. 12, 1983).

111. James E. Ellis, *The Corporation: At Braniff, No Frills and Few Thrills*, BUS. WEEK at 101 (May 4, 1987).

112. Bridget O'Brian, Caleb Solomon, & Patricia Ann McKanic, *Braniff Grounds Planes, Raising Chapter 11 Talk*, WALL ST. J. at *1 (Sept. 28, 1989). It was revealed that Braniff's buyers had been organized by Scot Spencer, a 23-year-old entrepreneur with a police record that included charges of attempted grand larceny and theft by deception. Although he never held an official executive position with Braniff, Spencer supposedly played an important role in its operations and new strategy. *See, e.g.*, Asra Q. Nomani and Bridget O'Brian, *Winging It: A Braniff 'Consultant,' Aged 24, Helped Run Airline Into Ground—Scot Spencer Engineered Deal To Acquire the Company, Became a de Facto Boss—A Record of Misdemeanors*, Wall St. J. at *1 (Nov. 22, 1989).

113. Bridget O'Brian and Caleb Solomon, *Braniff Files For Protection From Creditors—Failing to Secure Financing, Carrier Seeks Chapter 11 Status for Second Time*, WALL ST. J. at *1 (Sept. 29, 1989).

headquarters from Dallas to Orlando and its hub to Kansas City. Unfortunately, Braniff's traffic growth could not keep pace with its increasing capacity as the airline drained its cash to fuel the expansion. Braniff was forced to file for Chapter 11 bankruptcy protection again in September 1989. Braniff could not emerge from its second bankruptcy, and its assets were liquidated in May 1990.[114] Braniff's backers started a new charter airline with the Braniff name in 1991, but the new airline declared bankruptcy only five weeks after flights began. It shut down in 1992 and was liquidated.[115]

2. TWA

TWA filed for bankruptcy three times before merging with American Airlines in 2001. Corporate raider Carl Icahn bought out TWA in 1985 and took the company private in 1988. In doing so, he recouped much of his personal investment but added hundreds of millions of dollars to the airline's debt load. By 1992, TWA suffered from only having a single U.S. hub, a weak European segment, and an aging fleet.[116] TWA had been the U.S. leader in transatlantic traffic, but had fallen to number four among transatlantic carriers after selling its London routes to American Airlines in 1991. TWA declared bankruptcy in January 1992, and Icahn resigned as chairman and relinquished control of the airline in January 1993.[117] When it emerged from bankruptcy in November 1993, TWA was left with $1.8 billion in debt.

TWA suffered from its debt load remaining after the reorganization in addition to management turnover and missteps. TWA filed for Chapter 11 protection again in June 1995 in a "prepackaged" bankruptcy, in which the creditors met beforehand to agree on distributions.[118] The carrier emerged from its second bankruptcy in August 1995.[119] At the time, however, analysts claimed that TWA's cash-requirements projections were too low and that the airline needed a buyer.[120] TWA filed for Chapter 11 a third time in January 2001 when American Airlines entered merger talks with

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114. Janin Friend, *Auction Ends Airline's Fight*, DALLAS TIMES HERALD at 1 (May 23, 1990).

115. *Braniff Files Chapter 11 Bid*, WALL ST. J. at A5 (Aug. 8, 1991); Tom Incantalupo and Alan J. Wax, *Braniff's Collapse: It was Mayday from Day 1*, NEWSDAY at 21 (Aug. 31, 1992).

116. Michael J. McCarthy, *TWA Schedules Its Second Trip to Bankruptcy Court—Airline Hopes to Emerge Within 60 Days, This Time as an 'Aggressive' Carrier*, WALL ST. J. at B4 (June 26, 1995).

117. *Icahn Officially Ends Stint As the Chairman of TWA*, WALL ST. J. at A4 (Jan. 11, 1993).

118. Michael J. McCarthy and Carl Quintanilla, *No Guarantees of Soft Landing in TWA Filing—Chapter 11 Plan Could Fail Due to Scarcity of Cash, Wariness of Travelers*, WALL ST. J. at A4 (July 3, 1995).

119. *TWA Exits Chapter 11; Creditors Get Bigger Stake*, WALL ST. J. at A6 (Aug. 24, 1995).

120. Michael J. McCarthy, *TWA Could Shed Bankruptcy Shield Today, With a Focus on Rebuilding*, WALL ST. J. at A4 (Aug. 23, 1995).

the airline.[121] At this point, TWA had lost money for twelve consecutive years. TWA claimed it would have been forced to liquidate had American not made its purchase offer. The bankruptcy court approved the deal between American and TWA in March 2001.[122]

3. *Continental*

Continental Airlines has filed for bankruptcy twice since the Airline Deregulation Act—in 1983 and again in 1990. Continental first filed for Chapter 11 in September 1983, at which time it was the eighth largest airline in the United States.[123] Continental has been operating since the 1930's and was purchased by Frank Lorenzo's Texas Air in 1982. At the time of the merger, Continental was carrying a heavy debt load and high labor costs. Lorenzo tried to obtain concessions from employees, and after failing to do so, filed for Chapter 11 to get out of its labor contracts. Continental did not face a cash crisis when it declared bankruptcy. Instead, it was using bankruptcy as a strategic maneuver to cancel its expensive labor contracts. Unionized employees went on strike, and Continental replaced them with nonunion workers.

After suffering losses for five years, Continental returned to profitability in the first quarter of 1984.[124] Continental emerged from bankruptcy in June 1986, paying almost 100 cents on the dollar on pre-bankruptcy claims.[125] Management had forced workers to take pay cuts of up to 50 percent, and, according to one analyst, Continental's labor costs fell from 36 percent to 22 percent of operating costs.[126]

By the time Continental filed for Chapter 11 again in December 1990, it had grown to become the fifth largest airline in the United States.[127] However, its acquisitions of People Express, Frontier, and New York Air saddled the airline with heavy debt. When fuel costs increased after Iraq's invasion of Kuwait in the summer of 1990, Continental could not maintain its operations while continuing to service its debt. At the time of its second

121. Nikhil Deogun, Susan Carey and Scott McCartney, *TWA Approves Chapter 11 Filing, Buyout—Gears of Consolidation Start to Move as AMR Board Meets to Clear Purchases*, WALL ST. J. at A3 (Jan. 10, 2001).

122. Susan Carey and Scott McCartney, *AMR Wins Court Approval of TWA Deal*, WALL ST. J. at A3 (Mar. 13, 2001).

123. *Continental Air Files Bankruptcy; Plans Streamlined Operation*, WALL ST. J. at *1 (Sept. 26, 1983).

124. Bryan Burrough, *Continental Air's Lorenzo Has New Image With Aides a Year After Chapter 11 Filing*, WALL ST. J. at *1 (Sept. 24, 1984).

125. *Continental Air's Plan To Reorganize Cleared*, WALL ST. J. at *1 (July 1, 1986); James R. Norman, *Continental Is Soaring Out of Chapter 11*, BUS. WEEK at 32 (July 7, 1986).

126. GALE RESEARCH, INC., NOTABLE CORPORATE CHRONOLOGIES, *cited in* Lawrence A. Weiss and Karen H. Wruck, *Information Problems, Conflicts of Interest, and Asset Stripping: Chapter 11's Failure in the Case of Eastern Airlines*, 48 J. FIN. ECON. 55, 60 (April 1998).

127. Bridget O'Brian, *Debt-Burdened Continental Air, Citing Rising Fuel Costs, Files Under Chapter 11—Binge of Borrowing in '80s To Finance Acquisitions Brings 2nd Visit to Court*, WALL ST. J. at A3 (Dec. 4, 1990).

Chapter 11 filing, Continental carried a similar amount of debt as American Airlines, a carrier with 50 percent more planes and passengers than Continental.

During this second bankruptcy, Continental expanded its markets rather than contracting operations to alleviate consumer fears that it would be liquidated.[128] After winning concessions from lessors,[129] the carrier emerged from bankruptcy protection in April 1993 when Air Canada and the Texas investor group Air Partners led by David Bonderman invested $450 million in the airline in exchange for majority ownership.[130] Creditors were paid pennies on the dollar for their claims.

Air Canada sold its stake in Continental in 1996 and 1997.[131] Continental tried to entice Delta to purchase the airline late in 1996. In January 1998, both Northwest and Delta made bids for Continental. Continental accepted Northwest's bid that month, and Air Partners sold its stake in the airline to Northwest.[132] Northwest placed its shares in a trust and gave up voting rights except in limited circumstances. Northwest and Continental merged their routes, frequent flier programs, and marketing, but kept their employees and planes separate. Continental repurchased most of Northwest's shares in the airline in January 2001.[133] Only through this effective change in ownership did Continental succeed after its second trip through Chapter 11.

4. *America West*

America West filed for Chapter 11 in June 1991[134] and emerged in August 1994.[135] America West began service in 1983 as a low-fare regional carrier in Phoenix. The airline had low wage costs due to nonunion employees. However, America West heavily added to its debt by expanding out of its Phoenix and Las Vegas hubs, purchasing expensive Boeing 747s, and operating a low-demand route between Phoenix and Nagoya, Japan.[136] In an effort to increase traffic and obtain a cash infusion,

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128. Mark Ivey Houston, *The Mess At Continental: 'We Had To Change Course'—A new Chapter 11 restructuring plan may mean layoffs and asset sales*, BUS. WEEK at 24 (Aug. 5, 1991).

129. Continental already had some of the lowest wages in the industry due to its first bankruptcy, so it could not relieve its debt by slashing labor costs.

130. *Partnership Completes Continental Air Buyout*, WALL ST. J. at A7 (Apr. 29, 1993).

131. CONTINENAL AIRLINES, INC. SEC FORM 10-K (filed Feb. 24, 1997).

132. Scott McCartney, Susan Carey, & Martha Brannigan, *Delta Blues: How Northwest Beat The Top Contender To Control Continental—Clash of Egos, Philosophies Ends in Surprise Switch; Pilots' Seniority Was Key—Avoiding a 'Box of Rocks'*, Wall St. J. at A1 (Jan. 27, 1998).

133. CONTINENTAL AIRLINES, INC. SEC FORM 10-K (filed March 1, 2002).

134. Bridget O'Brian, *America West Says It Will Keep Flying – Enters Chapter 11 With Just $18 Million in Cash*, WALL ST. J. at B2 (July 1, 1991).

135. *America West Airlines Reorganization Plan Is Approved by Court*, WALL ST. J. at A2 (Aug. 12, 1994).

136. Bridget O'Brien, *America West's Beauvais Quits Amid Troubles*, WALL ST. J. at C11 (July 20, 1992).

the airline offered 50 percent discounts on fares in early 1991, but this only reduced its future cash flow.

After declaring bankruptcy in June 1991, the airline was granted multiple extensions by the court to file its reorganization plan.[137] America West returned to profitability in 1993,[138] and its bankruptcy plan was approved in August 1994. The airline received financing from the Fort Worth investors, then known as AmWest Partners, who had purchased Continental in 1993.[139] America West remained profitable for a time after emerging from bankruptcy, but soon embarked on more expansion plans and faced increased competition in Las Vegas.[140] The airline suffered operating losses and attempted to cut costs by outsourcing maintenance to a low-cost third party. Complaints drew an FAA investigation in 1998, and America West paid a $2.5 million fine, the largest ever for an airline, for maintenance-related problems.[141] The investigation caused more costs for the airline by requiring employees to triple check every move.[142] In addition, America West had a relatively small share of traffic at its hub airport compared with the shares enjoyed by other major airlines at their hubs.[143] America West was still suffering from operational problems before the attacks of September 11, 2001, and was the first airline to seek federal loan guarantees to prevent bankruptcy after the attacks.[144]

III. RESTRUCTURING OF WORLDCOM AS A STAND-ALONE FIRM THROUGH CHAPTER 11

The history of Chapter 11 reorganizations strongly suggests that WorldCom will not emerge from bankruptcy as a viable long-term competitor. What is more, any proposal for allowing WorldCom to reorganize and re-emerge from bankruptcy fails ignores the harmful effect that reorganization would have on *other* carriers in the industry. Bankruptcies cannot solve the problem of overcapacity, which plagues the

137. Danna K. Henderson, *America West Flies On (Ten-Year Old Airline is Thriving)*, AIR TRANSPORT WORLD at 26 (Sept. 1, 1993).

138. *Id.*

139. *America West Airlines Reorganization Plan Is Approved by Court*, *supra* note 135.

140. *America West Plans Largest Expansion Since Reorganization*, WALL ST. J. at B14 (Sept. 22, 1995); John F. Greer, Jr., *America West now boarding*, FIN. WORLD at 26 (Oct. 21, 1996).

141. Scott McCartney, *America West Air Agrees to Pay FAA $2.5 Million Penalty for Various Lapses*, WALL ST. J. at A8 (July 15, 1998).

142. David Knibb, *Amwest Slow to Fix* THINGS, AIRLINE BUS. at 18 (Dec. 1, 1996); Scott McCartney, *America West Loses Altitude Just After Its Comeback—No. 9 Airline Struggles Anew With Reliability, Labor, Depressed Shares*, WALL ST. J. at B4 (Sept. 18, 1998).

143. Melanie Trottman, *America West Chief to Back Parker as CEO*, WALL ST. J. at B4 (Aug. 16, 2001); Perry Flint, *Seeing is Believing (America West Airlines)*, AIR TRANSPORT WORLD at 64 (June 1, 2001).

144. Caroline E. Mayer, *America West Again Revises Bid for Aid; Airline's Action Is Focus Of Fight Over U.S. Role*, WASH. POST at E01 (Dec. 19, 2001).

telecommunications industry. Much of a telecommunications carrier's network remains in the ground and able to provide services long after the collapse of the firm. Prior experience with bankruptcy suggests that WorldCom will have difficulty in using its assets efficiently. Allowing WorldCom to retain its assets after it emerges from bankruptcy risks the creation of a vicious cycle of destruction in the telecommunications industry. Having emerged from bankruptcy, WorldCom could undercut its debt-laden rivals, causing further collapses in the already beleaguered telecommunications industry.

A. There Is No Obvious Source of Excess Costs, Such As Labor Agreements, That Can Be Targeted

Bankruptcy would presumably allow WorldCom to unwind its unproductive assets and to eliminate its debts. But there is no obvious source of excess costs, such as an expensive labor agreement, that could be targeted in such a bankruptcy. And the unprofitable companies that WorldCom acquired over the past few years could be sold without the protection of bankruptcy. According to the Adventis Group, any attempt to restructure WorldCom is destined to fail: "[WorldCom] has lots of weak businesses as well, including its declining consumer long-distance unit and its failed mobile-telecoms arm. This makes it harder to shrink."[145]

As I demonstrated in Part I, the causes of WorldCom's failure are systemic—they cannot be undone in a bankruptcy proceeding. Because of excess capacity in the industry, and because WorldCom relies too heavily on other telecommunications carriers for its revenue, WorldCom's business model is likely to be unsustainable. If the accounting fraud were the sole reason for WorldCom's failure, perhaps a reorganization coupled with new management could save the enterprise. Unfortunately, the apparently intentional accounting errors were a symptom, not a cause, of WorldCom's ill heath.

B. A Restructured WorldCom Would Try to Rebuild by Cutting Rates Sharply Because It Has No Debt to Service

In an industry with large fixed costs and trivial marginal costs, such as telecommunications, traditional pricing models based on (near-zero) marginal costs do not generate sustainable equilibria. Instead, a carrier must price in a way to recoup its fixed investment and earn some expected rate of return for its investors. According to an analyst from Gartner, a telecommunications consultancy, the bailout of WorldCom would eliminate the massive debt it incurred to construct its network, which would place WorldCom in "a much stronger position to compete on

145. *Another cowboy bites the dust*, THE ECONOMIST at *1 (June 29, 2002) (citing Nancy Kaplan of Adventis).

pricing."[146] According to Jean-Pascal Crametz, a former Stanford University professor who studied pricing in the telecommunications industry, the incentives of a debt-free WorldCom point toward aggressive price-cutting behavior:

> If a carrier erases its debt costs, it can start offering 'bandwidth,' as telecom capacity is called, at a price close to its barest operating expenses. For example, between London and New York, a basic fiber-optic connection cost $22,000 annually at the start of 2001. The glut has forced the price to about $5,000 today. For a carrier without any debt payments, the price may drop to close to $2,000. It becomes a domino effect. I don't know how the Sprints of the world can compete.[147]

Because rival communications networks are strategic substitutes, the best response of one carrier to a price decrease by another carrier is to lower its price. The equilibrium of such a game could be massive industry collapse with the possibility that the remaining carriers would be forced to declare bankruptcy.

C. If It Were Allowed to Reemerge Free of Debt, the Stability of the Entire Industry Would Be Undermined

Bankruptcy courts traditionally arbitrate the claims of different groups of claimants on a bankrupt enterprise and approve a course of action that appears to be best suited to the fair settlement of these competing claims. In some cases, the bankruptcy court may approve a reorganization as the best course of action even if it carries substantial risk of failure. Telecommunications regulators have a different responsibility—namely, they must be concerned for the welfare of the entire sector and for the welfare of those who consume its services.

Any attempt to reconstitute WorldCom, with all of its infirmities, as a stand-alone company places not only the interests of WorldCom's creditors, employees, suppliers, and customers at risk, but it also exposes much of the rest of the telecommunications sector to risk. If WorldCom is reorganized, encounters difficulties, and responds by drastically slashing prices to sustain itself for another week or another month, other carriers who compete with WorldCom or have business relationships with WorldCom also are placed at risk. The competitors obviously suffer from the desperate price cutting. But other telecom businesses who do business with WorldCom also suffer because their assets are also largely sunk, and regulators would require many of them to continue doing business with WorldCom. In short, the reorganization of WorldCom creates an

146. Dennis Berman, H. Asher Bolande and Almar Latour, *Telecom Restructuring Could Reproduce Glut*, WALL ST. J. at A1 (Aug. 14, 2002) (quoting To Chee Eng, a Singapore-based analyst).

147. Dennis Berman, H. Asher Bolande and Almar Latour, *Telecom Restructuring Could Reproduce Glut*, WALL ST. J. at A1 (Aug. 14, 2002) (quoting To Chee Eng, a Singapore-based analyst).

"externality" (the moral hazard of a debt-free carrier) that a bankruptcy judge need not consider, but one that regulators cannot ignore.

The "domino effect" articulated by Professor Crametz above was carried to its logical conclusion in a July 2002 review of the telecommunications industry by *The Economist*:

> When an operator goes bankrupt, its capacity does not go away. Instead, the new owner (or the original owner, operating under bankruptcy protection) can run the network far more cheaply, having been freed from much of the need to service the debts incurred in building it. The result is a domino effect: prices fall, driving other tottering operators into bankruptcy. If WorldCom fails to reach agreement with its creditors over its $32 billion of debt and seeks the protection of Chapter 11, it may well drag other firms with it.[148]

As other carriers attempt to retard the defection of customers to WorldCom's network, prices would fall toward average variable costs. Without a sufficient margin, the remaining carriers would be hard pressed to service their own debts. Eventually, those carriers may seek bankruptcy protection. Customers would be reluctant to switch carriers in a climate where multiple firms were exiting. Under a worst case scenario, the regulators might have to designate certain fail-proof networks to restore some sense of stability. The process would be highly politicized and would not guarantee that the most efficient firm would survive.[149]

Obviously, there is no solution to the WorldCom bankruptcy problem that can avoid a continuation of low prices for basic transmission and switching services given the excess capacity now plaguing the sector. However, regulators should be careful to approve a solution that minimizes a downward "death spiral" in prices caused by the lack of complementary assets or services in WorldCom's portfolio. In the hands of companies that can use WorldCom's assets more effectively, more valuable services can be offered, thereby increasing the demand for telecommunication services and minimizing the risk of such a downward spiral.

The risk of consumer harm in this case may be larger than in previous bankruptcy cases because WorldCom's fraudulent accounting behavior allowed it to borrow money at artificially low rates and thereby purchase additional assets that cannot be used profitably in a reconstituted company. Had WorldCom not engaged in apparently fraudulent behavior, the size of the bankrupt firm may have been much smaller and the risk of damage from its reorganization as a stand-alone company would be correspondingly lower.

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148. *The telecoms crisis—The telecoms industry is in a mess. What went wrong?* THE ECONOMIST (July 20, 2002).

149. Recall the selection of wireless licensees before auctions were implemented in 1994,

IV. DESIGNING A PUBLIC POLICY FOR DEALING WITH THE RESTRUCTURING OF WORLDCOM ASSETS

Although the FCC cannot change the bankruptcy laws, it is charged with protecting the public interest and with minimizing the harmful effect of WorldCom's apparent fraud on the telecommunications industry. In this case, both the failed historical record of restructuring under Chapter 11—as well as the unprecedented circumstances of WorldCom's apparent financial fraud—recommend that the Commission consider requiring the transfer of WorldCom's licenses to a third party. Putting WorldCom's assets into the hands of others would lead to more efficient operations, thereby reducing the impact of continuing low prices. More efficient firms will be able to use the assets more efficiently, which will lead to lower prices and greater consumer welfare. In addition, these carriers should face a much lower probability of enduring similar financial problems of WorldCom, so that the risk of the assets going through another bankruptcy cycle is minimized.

According to Stephanie Teral, research director at the telecommunications consultancy RHK, "If you want to solve the problems with the telecom industry, you better liquidate, period."[150] This is not to say that liquidation would result in higher prices for consumers (although many consumers would probably gladly choose somewhat higher prices of a secure service over lower prices of an erratic service). The resulting consolidation would create a new breed of carriers that were more adept to surviving in a climate of lower prices.

Given its vast experience in conducting auctions, the FCC could readily structure a process that would ensure the transfer of WorldCom's licenses to new and independent owners and managers. Carriers with sustainable business plans will be able to use the assets more efficiently, which will eventually lead to lower prices and greater consumer welfare. In addition, the deployment of WorldCom's assets to more financially healthy carriers will reduce the risk of the assets going through another bankruptcy cycle. A well-designed auction would ensure that the eventual owners of WorldCom's assets would value the assets most highly and would have the correct level of debt, thus avoiding future bankruptcies.

V. CONCLUSION

Telecommunications regulators have different responsibilities from those facing bankruptcy referees in Chapter 11 proceedings. Bankruptcy judges arbitrate disputes among a narrow set of claimants on a firm's assets. Regulators must be sure that the firm or firms that emerge from bankruptcy do not pose a threat to the stability of the telecommunications sector. Whether or not WorldCom emerges from bankruptcy, the FCC should make sure that the restructured firm or firms have a reasonable

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150. Dennis Berman, H. Asher Bolande and Almar Latour, *Telecom Restructuring Could Reproduce Glut*, WALL ST. J. at A1 (Aug. 14, 2002).

probability of survival. Regulators should not risk a downward spiral that engulfs other carriers. The bankruptcy experience of the steel and airline industry should not be repeated in telecommunications.