Staples-Office Depot and *UP-SP*: An Antitrust Tale of Two Proposed Mergers

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Forthcoming in
Daniel Slottje, ed.
Measuring Market Power
North Holland

Draft: 3/12/02

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Abstract

This paper examines two proposed mergers of the 1990s: the Staples proposal to merge with Office Depot, and the Union Pacific railroad's proposal to merge with the Southern Pacific. Though the two mergers appeared to be quite different on the surface, closer analysis indicates that they were surprisingly similar: both involved a merger of two of the three firms in their respective markets; and both involved significant issues of market delineation. However, the two proposals received quite disparate treatment by different antitrust regimes: The former was blocked by the FTC, while the latter was approved by the STB. The former was a sensible decision; the latter had disastrous consequences for freight shipments in the American southwest in the late 1990s.

Key words: mergers; antitrust; office super stores; railroads

JEL classification numbers: K21, L40, L81, L92

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I. Introduction

On September 4, 1996, Staples, Inc., announced its intention to acquire Office Depot, Inc. A year earlier, on August 3, 1995, the Union Pacific Corp. announced its intention to purchase the Southern Pacific Rail Corp.

At first glance these were two disparate merger proposals, involving two very different industries. Staples and Office Depot were office super store retailers; the UP and SP were railroads. And, from an antitrust perspective, the disputes surrounding the two mergers appeared to be very different.

But, as this paper will argue, the two mergers were surprisingly similar: At its core, each involved a merger of two of the three firms in their relevant markets. Also, market delineation was important for the analysis of both mergers. Their outcomes, however, were quite different: The Federal Trade Commission (FTC), with jurisdiction over the Staples-Office Depot merger, challenged the merger and ultimately prevailed in U.S. District Court. By contrast, the Surface Transportation Board (STB), the agency with jurisdiction over railroad mergers,[1] approved the UP-SP merger.

If this were all that was notable about the two mergers, a comparison of the two mergers might warrant a paragraph or two in an antitrust legal textbook, which would remark on the

[1] The STB came into existence on January 1, 1996, and was the successor to the Interstate Commerce Commission (ICC) as the economic regulator of the railroad industry.

different legal treatment of similar "three-to-two" mergers by different government agencies. The UP-SP merger wasn't just another three-to-two merger, however. Despite the UP's grand promises of efficiencies that would follow from the merger, its implementation initially created such havoc within the merged company that, for over two years, rail freight movements in the American southwest were stalled badly, at a very large cost to shippers and recipients of rail freight in the region.

Accordingly, an examination of the two proposed mergers and how they were treated legally can yield useful insights into public policy in the U.S. and the ways in which its inconsistent treatment of otherwise similar arrangements can lead to unfortunate consequences.

This paper will proceed as follows. In Section II we will summarize the narrative of the Staples-Office Depot proposed merger and its legal outcome.[2] In Section III we will describe the UP-SP merger and its outcome.[3] And Section IV will offer a brief conclusion.

[2] This narrative will draw heavily on Dalkir and Warren-Boulton (1999).

[3] This narrative will draw heavily on Kwoka and White (1999b).

II. The Staples-Office Depot Merger

A. The business context.

The "office super store" (OSS) retail concept was pioneered by Staples in 1986, as a large-volume retail outlet for office supplies and other business-related products that focused on small- and medium-sized businesses, home office customers, and individuals. The strategy involved a wide selection of items (5,000-6,000 in a store) and sharply discounted prices (typically 30%-70% below manufacturers' suggested list prices), based on direct-from-the-manufacturer purchases at substantial discounts. Prices at OSSs were often substantially below the prices for the same items that were being sold in local stationery stores and other outlets. Office Depot quickly followed Staples into the OSS category.

This retail concept proved to be a great success. Both chains expanded rapidly. When the merger of the two firms was proposed, Office Depot and Staples were the first and second largest chains of OSSs in the U.S. As of 1997 (when the case went to trial) Office Depot operated over 500 stores in 38 states; it had worldwide revenues in 1996 of $7.3 billion and a 1996 year-end stock market value of $2.2 billion. Staples operated 550 stores in 28 states; it had worldwide revenues in 1996 of $4.5 billion, and a stock-market valuation of approximately $3 billion at year-end 1996.

In the decade following Staples' innovation, 23 other OSS chains attempted to replicate these two chains' success. By the time of the proposed merger, however, only OfficeMax, Inc., was a close rival to the two chains. OfficeMax had been spun off from Kmart in 1994. As of 1997 it had 575 stores in 48 states, with 1996 sales of $3.2 billion.

When the Staples-Office Depot merger was first proposed, most observers believed that it would face few problems in avoiding a legal challenge. After all, both chains primarily sold office supplies and related materials and equipment, and there were tens of thousands of other sellers of such items, from mom-and-pop stationery stores to drug store chains to Wal-Mart and Kmart. The merger's proponents claimed that the two chains accounted for less than 10% of the nation's sales of such items.

Subsequent events showed that this optimism was unfounded. After considering the arguments (presented below), the FTC in April 1997 decided to challenge the merger,[4] which required requesting a preliminary injunction (PI) in federal district court. The FTC filed its request on April 9, 1997, which (as is usually the case) precipitated an expedited "mini-trial" on the antitrust merits of blocking the merger. The trial began on May 19, 1997.

B. The legal context.

The relevant antitrust law with respect to mergers is the Clayton Act, passed in 1914. Enforced by the Department of Justice's (DOJ) Antitrust Division and by the FTC, Section 7 of the Act instructs the agencies to block any merger "where in any line of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition or to tend to create a monopoly." In essence, as the Act is currently interpreted, mergers that would likely create or enhance market power are to be blocked.

There are three basic elements to modern antitrust analysis of mergers:[5] (1) the delineation of the relevant market; (2) the determination of the likelihood of post-merger exercise (or enhancement) of market power; and (3) the extent to which any promised efficiencies from a proposed merger should be considered as an offset to any feared market power. The DOJ-FTC Horizontal Merger Guidelines have structured these agencies' approach to merger analysis for the

[4] The FTC initially voted to oppose the merger in March; a subsequent effort to address the FTC's competitive concerns, through a proposed divestiture of 63 stores to OfficeMax, was rejected in April.

[5] An extended discussion can be found in Kwoka and White (1999a).

past two decades.[6]

1. The relevant market. Since the prevention or inhibition of an increase in market power is the goal of antitrust merger enforcement, the Merger Guidelines define a market as a product (or cluster of products) sold by a group of sellers who, if they acted in concert, could succeed in profitably raising their prices by a significant amount for a significant period of time. In essence, this defines a relevant market as one that can be monopolized. The Guidelines define a significant price increase generally as 5% and a significant period generally as one year. The smallest group of sellers that could exercise market power is generally selected as the relevant market for analysis.

These principles encompass both geographic space and product space. Also, even if a group of sellers could not sustain a significant price increase toward all of their customers, if they could practice price discrimination toward a significant group of customers, then that customer group constitutes a relevant market.

2. The likely exercise of market power. The Merger Guidelines use a number of market factors to indicate the likely post-merger creation or enhancement of market power: (a) the post-merger level of seller concentration (measured by the Herfindahl-Hirschman Index (HHI)[7] and the change in the HHI brought about by the merger; (b) the conditions of entry into the market; (c) the nature of the buyers' side of the market; (d) the characteristics of the product and its market context; and (e) the history of seller behavior in the market.

A merger is more likely to be challenged when the post-merger seller concentration is higher;[8] when the increase in seller concentration brought about by this merger is greater; when

[6] The "modern" incarnation of these guidelines was first adopted by the DOJ in 1982, with a modification in 1984 and additional modification and formal joint adoption by both agencies in 1992, and a further modification in 1997.

[7] This is defined as the sum of the squared market shares of all of the sellers in the market.

[8] The Guidelines specify that a post-merger seller HHI level of 1,000 is a level below which mergers will rarely be challenged; a post-merger level of 1,800 is a level above which (if the merger

conditions of entry are more difficult; when buyers are more numerous and diverse (and thus less able to thwart coordinated behavior through noticeable shopping around and volume purchases); when the characteristics of the product or the market make it easier for sellers to monitor each others' behavior; and when the history of seller behavior indicates that coordinated behavior is more likely.

If the initial structure presented by the merger is likely to raise anti-competitive concerns, divestitures of sufficient assets to third parties, so as to restore a competitive structure, are a common remedy that then permits the (modified) merger to proceed.

3. Efficiencies. The Merger Guidelines recognize that mergers can bring significant efficiencies and cost-savings but also that such efficiencies are often easy to promise but may fail subsequently to materialize or they may be achievable without the merger. The Guidelines indicate that a merger will not be challenged where the promised efficiencies are "cognizable" (i.e., merger-specific and verifiable) and of a sufficient magnitude that the merger would (net) not have anti-competitive consequences.

The continuing challenge of the enforcement agencies and of the courts has been to convert these somewhat general principles of merger analysis into specific approval/denial decisions with respect to specific mergers.

C. The FTC's arguments.

The FTC's arguments in opposing the Staples-Office Depot merger tracked the analytical points of the Merger Guidelines: (1) The relevant market was OSSs in individual metropolitan

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itself causes a change in the HHI of 100 or more) there is a presumption that the merger should be challenged; and intermediate HHI levels warrant further examination. In actual enforcement practice, few mergers with post-merger levels below 2,000 have been challenged, and some mergers with substantially higher levels have been approved, because of other market characteristics.

markets (metropolitan statistical areas, or MSAs); (2) Within those markets, the merger would reduce the number of competitors from three to two (i.e., the combined firm and OfficeMax), or from two to one (in MSAs where only Staples and Office Depot were present), creating a less competitive duopoly in the former and converting duopolies into monopolies in the latter; and (3) The true efficiencies from the merger would be small.

1. An OSS market. Though the products sold by OSSs were sold by other retail outlets, the pricing data presented by the FTC indicated that OSSs by themselves, in individual MSAs, constituted a relevant market. The data showed that prices of the items sold by Staples or by Office Depot were highest when only one of them was present in a metropolitan area, lower when there were two OSSs in the MSA, and lower still when all three were present. Sophisticated econometric modeling, which controlled for other factors, showed results that were quite similar to the straightforward price comparisons. Further, in the econometric results, the presence of other major sellers, such Wal-Mart or warehouse price clubs, were not constraints on OSSs' prices when two or three OSSs were in an MSA.

In addition to the price evidence, there were internal documents of Staples and of Office Depot that indicated that each was concerned primarily or exclusively with the rivalry (or its absence) from other OSSs and described MSAs as "competitive" or "uncompetitive" in terms of whether one or more OSS rivals were present or absent.

In sum, since Staples or Office Depot could *and did* charge significantly higher prices in MSAs where it was the sole OSS than it did when two or three OSSs were present, OSSs in MSAs were markets that could be monopolized and thus constituted a relevant market.

2. Anti-competitive effects from the merger. The same evidence that delineated the markets also showed what the effects of the merger would be. When Staples and Office Depot were together in a MSA, prices were 11.6% lower than when only Staples was present in the MSA and 8.6% lower than when only Office Depot was present. When all three OSSs were present in an

MSA, prices were 4.9% lower than when only Staples and OfficeMax were present and 2.5% lower than when only Office Depot and OfficeMax were present. The FTC's econometric analysis indicated that the merger would have the effect of raising prices above what they would otherwise have been, on average, by 7.3%.

The FTC argued further that, because of high sunk costs of entry and the apparent "saturation" of most MSAs (according to the defendants' documents), entry by a new OSS was not likely.

3. Efficiencies. While acknowledging that the OSSs had, in the past, been the pioneers in creating the low-cost OSS segment, the FTC argued that the merger was unlikely to create significant economies that could not be achieved by the two OSSs separately. Also, the magnitude of the claimed efficiencies had increased dramatically (almost 500%) between the time that the merger was approved by the Staples board of directors and the time that the parties presented their efficiencies analysis to the FTC, casting some doubt on the accuracy of the latter estimates. The FTC estimated that the merger would bring true efficiencies of only 1.4% of sales and that only a small part (a seventh, or 0.2%, based on an econometric analysis of Staples' costs and prices) of these efficiencies would be passed through to consumers, so that the net effect of the merger would be a 7.1% (= 7.3% - 0.2%) price increase.

D. The Staples/Office Depot arguments.

The merging parties, not surprisingly, argued that the FTC's analysis was incorrect and that the merger's effect would be a *decrease* in prices, not an increase.

1. The market. The parties argued that the FTC's econometric analysis was flawed and offered an alternative analysis that indicated that the presence or absence of another OSS had only a small effect on the price charged by Staples or Office Depot. These results would indicate that OSSs were not a separate market and that their pricing was constrained by a wider set of

competitors, especially Wal-Mart, Best Buy, Comp USA, and other large sellers of items that overlapped with those sold by the OSSs.[9] Thus the relevant market was an appreciably wider one (in product space) than just OSSs. The parties agreed, however, that the relevant geographic market was individual MSAs.

2. Competitive effects of the merger. Since Staples and Office Depot were embedded in a relatively wide market, their merger was unlikely to have any significant anti-competitive effects. Their actions were too constrained by other sellers of office supplies. Further, the parties argued, entry was relatively easy; the sunk costs were not large. OfficeMax had increased its planned store openings, and rivals could arise through consolidations of local stationery stores.

3. Efficiencies. The parties contended that the merger-specific efficiencies were considerably larger than was claimed by the FTC -- around 4.5% of sales -- and that two-thirds of the gains would be passed through to consumers. Since the parties' econometrics estimates showed that the immediate price effects of the merger would be to raise prices by only 0.8%, while the passed-through efficiencies would reduce prices by 3% (= 4.5% x 0.67), the net effect of the merger would be a *reduction* in prices of 2.2% (= 0.8% - 3.0%).

E. The decision.

After a seven-day trial, Federal District Court Judge Thomas F. Hogan, on June 30, 1997, issued his opinion, which found in favor of the FTC's request to block the merger.[10] His opinion was one of regret: "In light of the undeniable benefits that Staples and Office Depot have brought to consumers, it is with regret that the Court reaches the decision that it must in this case."[11] But he

[9] The point-counterpoint as to the merits of the two sets of analyses can be found in Baker (1999) and Hausman and Leonard (no date).

[10] Federal Trade Commission v. Staples, Inc. 970 F. Supp. 1066.

[11] FTC v. Staples, 970 F. Supp. 1066, 1093.

found that the relevant market was OSSs in MSAs;[12] that the very high post-merger levels of seller concentration[13] and the likely absence of entry would likely mean anti-competitive effects; and that efficiencies were likely to be modest and modestly passed through to consumers. In sum, he was (albeit, reluctantly) convinced by the FTC's arguments and halted the merger.

F. Aftermath.

In the years following Judge Hogan's decision both Staples and Office Depot continued to expand. Office Depot remains the leading OSS, with Staples second. As of March 2001, Office Depot had expanded to 787 stores in the U.S., with worldwide sales of $11.6 billion in 2000. As of February 2001 Staples had expanded to 973 stores (including smaller "Staples Express" stores) in the U.S., with worldwide sales of $10.7 billion in 2000. OfficeMax continued as the third OSS, with 953 stores in the U.S. (as of March 2001) and worldwide sales of $5.2 billion in 2000. There has been no noticeable reduction in the competitive vigor of the OSS market.[14]

[12] He appeared to rely primarily on the simple price differentials among markets that the FTC presented and the documents but did not rely on either side's econometrics.

[13] In 15 MSA markets the post-merger market share of the merged entity would be 100%, and in 27 other MSA markets the market share would be above 45%. The HHI would rise on average by 2,715 points in the relevant MSA markets as a consequence of the merger.

[14] For a more extensive discussion of the post-1997 developments in the sale of office products, as well as a critical view of the case and its outcome, see Grengs (2001).

III. The UP-SP Merger

A. The business context.

Mergers have been a way of life in the railroad industry. From 186 major ("class I") railroads in 1920, mergers reduced their numbers to 39 in 1980. The mergers increased the surviving railroads' regional coverage and scope, but no railroad had (or even today has) achieved comprehensive national coverage or even a coast-to-coast route.

Another important feature has been the railroads' century-long losing struggle against other surface freight transportation modes: trucks, pipelines, and ships and barges.[15] As of 1995, rail accounted for 41% of intercity freight tonnage, which was substantially below the railroads' share in the early decades of the century. This decline was partly due to the technological developments of the other modes; but the stultifying regulation of surface transportation, and especially of railroads, by the Interstate Commerce Commission (ICC) also played a major role.[16]

As part of the general deregulation of the 1970s and 1980s, the Congress passed the Staggers Act in 1980, which substantially deregulated the railroad industry, providing it with considerably more flexibility in its operations and in its pricing, up as well as down. And mergers continued apace. Between 1980 and early 1995, mergers had reduced the number of Class I railroads to only eleven, of which only large major railroads operated in the western United States: the Burlington Northern (BN), the Union Pacific (UP), the Southern Pacific (SP), and the Santa Fe (SF). Table 1 provides the major characteristics of these four railroads.

In August 1994, the BN proposed to purchase the SF, which would create the largest

[15] The struggle for passengers was lost to cars, buses, and airlines and finally abandoned with the Congressional creation of Amtrak in 1971.

[16] For critiques of that regulation, see Meyer et al. (1959), Friedlaender (1969), Friedlaender and Spady (1981), Keeler (1983), and White (1999a, 1999b).

railroad in the west. The ICC approved the BN-SF merger in August 1995.

Two weeks before the BN-SF merger was approved, the UP announced its intention to acquire the SP, which would create an even larger railroad and vault the UP-SP into first place. The UP and SP had an intertwined history. The UP and an SP predecessor (the Central Pacific) had been the two railroads commissioned by President Lincoln in 1862 to build the transcontinental railroad (which was completed in 1869). They had sought to combine in the early twentieth century but were rebuffed by the courts on antitrust grounds.

In early August 1995 they again attempted to combine. Their merger proposal immediately sparked considerable controversy. Dozens of interested and affected parties presented formal comments (pro and con) to the ICC/STB (which had jurisdiction with respect to the merger). The commentators included eleven other railroads; 38 individual shippers and 19 trade associations (the largest of which represented 1,400 individual shippers); five federal agencies; 12 state governments, as well as many individual communities within those states); and five labor unions.

B. The legal context.

Despite the considerable deregulation provided by the Staggers Act, the ICC remained as the regulatory agency for the railroads and, most importantly, retained the powers of merger approval or rejection for railroad mergers (rather than these powers' devolving to the FTC or DOJ). When the ICC was dismantled at the end of 1995 and the Surface Transportation Board (STB) created to replace, the STB retained the ICC's merger review powers.

The ICC/STB's legislative mandate in assessing mergers is broader than that of Section 7 of the Clayton Act. Rather than focusing just on the competition and efficiency issues and the tradeoffs (if any) between them, the ICC/STB is instructed by legislation also to consider a railroad merger's effects on "the adequacy of transportation to the public" and "the interest of carrier employees," among other things.

Further, even though a major focus of the agency has been on the basic antitrust issues -- market power versus efficiencies -- the ICC/STB's approach has been much more accommodating toward railroad mergers. An important underlying ethos of the agency has been that the railroads had experienced hard financial times during the late 1960s and the 1970s and that they need all the help that they can get to return to adequate profitably. Consequently, (a) the agency has generally been more accepting of claims of efficiencies than have the FTC or DOJ; (b) it has been less concerned about decreases in the vigor of competition; and (c) where monopoly outcomes would have arisen as a consequence of a merger, the ICC/STB has usually sought to remedy them with modest requirements, such as trackage rights for other railroads,[17] rather than divestitures of track to other railroads. The result has been a strong tendency for the agency to approve railroad mergers.[18]

The UP and SP filed their formal proposal for the merger before the ICC in November 1995. The ICC was succeeded by the STB on January 1, 1996, and the STB assumed jurisdiction and considered the arguments offered by the merging railroads and by other interested parties. Though the ICC/STB did not have the same policy attachment to the "Merger Guidelines" as did the DOJ and FTC, the arguments offered by the parties tended to follow the structure developed by the Guidelines, albeit in somewhat different orderings.

C. The UP-SP's case for the merger.

1. Efficiencies. The prospective efficiencies of the UP-SP merger were the centerpiece of merger applicants' arguments. The UP-SP expected efficiencies to arise in a large number of ways. First, by taking advantage of the consolidated track systems, the UP-SP could offer significantly

[17] Trackage rights allow a second railroad to gain access to otherwise captive shippers over the first railroad's tracks.

[18] The last major rail merger that the ICC had rejected had been the proposed merger of the Southern Pacific and the Santa Fe in 1986.

shorter routes between a number of important city pairs, thereby reducing the direct costs of transport and also reducing shipment times. Second, UP-SP could offer single-line service to shippers for far more destinations, thereby reducing the delays that plague joint-line service.[19] Third, the use of parallel routes of the two carriers would relieve congestion and permit different-speed trains to use different sets of parallel tracks, thereby creating greater flexibility in service; a similar argument was advanced for rail yards and other facilities. Fourth, rolling stock could be used more efficiently on the combined lines. Last, computer systems could be combined, joint purchasing would achieve economies, and corporate overhead generally could be reduced.

The applicants quantified the cost savings from the merger (for themselves and for shippers) at about $750 million a year, which was slightly less than 10% of the pre-merger UP-SP revenues.

Also, the applicants argued that the SP was an ailing firm with diminishing competitive vigor. It needed a general overhaul, but lacked the resources to accomplish it and would fall further behind in a competitive struggle with the consolidated BNSF and even with an independent UP. The merger was necessary to invigorate the SP.

Finally, the shadow of the merged BNSF loomed large. The applicants repeatedly argued that the UP-SP merger was necessary to allow the merged entity to compete on even terms with the BNSF.

2. Competitive effects of the merger. For many shippers that currently had rail service only through dual access to the UP and the SP, the merger would reduce their access to a single carrier. These were described as the "two-to-one" shippers. Other shippers currently had access to the UP, the SP, and a third rail carrier -- typically the BNSF -- and they would find their choices reduced to two. These were the "three-to-two" shippers.

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[19] In essence, the replacement of joint-line with single-line service is a form of vertical integration, since the freight hand-off in a joint line movement (the equivalent of a supplier-customer transaction) is being replaced with a single ownership transaction.

For the two-to-one shippers, the merger applicants made extraordinary efforts to assure a continued "two" level of competition through a trackage rights agreement with the BNSF. The latter railroad would have the right to run its trains over the merged UPSP tracks in order to serve these customers. The annual traffic covered by these trackage rights totaled $900 million (over 10% of the pre-merger revenues of the two merging lines) and about 4,000 miles of track (about 11% of the merged UPSP system). This level of trackage rights in a railroad merger was unprecedented. Further, it would replace an ailing SP with a vigorous BNSF.

As for the three-to-two shippers, the applicants argued that they would be better served by the vigorous competition that would ensue between a more efficient UPSP and the BNSF than they would be by a powerful BNSF, a smaller UP, and a weak SP that would become even weaker. Further, the applicants argued that (a) there was no reliable evidence that showed that a three-to-two merger of rail carriers would cause freight rate increases; (b) existing studies that did predict such an effect suffered from deficiencies that made them unreliable and irrelevant; (c) coordinated behavior among the two sellers in the rail market would be unlikely, since monitoring and policing of each other's actions was difficult, especially since railroads' service dimensions could be extensively differentiated; and (d) many shippers were large and capable entities that could shop around and play off the two rail carriers against each other, in essence holding "auctions" for the rights to carry their freight.[20]

In sum, a model of "Bertrand"[21] unfettered price competition, yielding a competitive outcome, would be a reasonable approximation to rail markets with even as few as two carriers.

3. Market delineation. Market delineation did not attain the same prominence in the UP-SP merger as it did for the Staples-Office Depot proposal; but it was importantly present. In the UP-

[20] See Willig (1995).

[21] I.e., where each competitor chooses its price as its strategic variable and myopically assumes that the other(s) will keep their prices unchanged.

SP's designation of which shippers were in the "two-to-one" category, the merger applicants were implicitly making delineations. In some instances they excluded shippers because the UP-SP believed that competition from other modes offered sufficient alternatives (i.e., a wide market); in other instances they excluded shippers because the UP-SP believed that they were served currently by only the UP *or* the SP -- i.e., they currently faced a monopoly anyway -- and this single-carrier service would not change after the merger (i.e., a narrow market).

D. The arguments against the UP-SP merger.

The opponents of the merger included many (but not all) shippers, other railroads[22] (but not the BNSF), and the U.S. Departments of Justice, Transportation, and Agriculture.

1. Market delineation. The merger opponents argued that the applicants had seriously understated the extent of the two-to-one problem, by delineating markets too narrowly so as to portray current monopoly (UP or SP service) situations where there was really actual or potential competition. First, the applicants ignored instances where the shipper (or recipient) might be directly served by only the UP or the SP, but the other carrier was close enough that the threat or actuality of using trucks or barges for short trans-shipments, or the threat of short rail extensions by the other, effectively kept the two lines in competition with each other.

Second, the applicants ignored instances in which only the UP or the SP might serve one end of a shipment but the other was one of the two carriers competing at the other end, and thus inter-line service was currently necessary; recent research showed that the monopoly carrier in such instances did not capture all of the potential rents, but the merger would yield a single-line service monopoly (which would capture all of the rents).

Third, they ignored instances of "source competition" (where two shippers at different

[22] The author filed comments in this case on behalf of the Kansas City Southern Railway Co.

locations, served by different railroads, compete to serve a recipient) and "destination competition" (where a shipper has a choice of destinations -- e.g., seaports for a shipment destined for overseas -- that are served by different railroads) where the UP was the sole carrier on the one route and the SP was the sole carrier on the other route.

In sum, the applicants had defined these markets too narrowly. The aggregate consequences were serious. These unremedied two-to-one situations involved an additional $1 billion or so of shipments, above the $900 billion that the applicants had identified, and a 20% increase in freight rates was predicted.[23]

2. The exercise of market power. In the unremedied two-to-one markets, the exercise of market power would be immediate. In the "remedied" two-to-one markets, the trackage rights remedy was wholly inadequate as a device for creating effective competition. A trackage rights arrangement is equivalent to a tenant (the BNSF) competing for the same customers with its landlord (the merged UPSP). By structuring the terms of the tenancy arrangement, the landlord can distort and mute the competitive threat from the tenant. For the trackage rights agreement that had been negotiated with the BNSF, the UP-SP had established fees and other arrangements that put the BNSF at a substantial disadvantage in competing for these customers. In addition, since the BNSF was the "tenant" in nearly all the trackage rights arrangements, the multi-market contacts between the BNSF and the merged UPSP, with their risks of encouraging oligopolistic coordination, would be increased even further than in just the (unremedied) three-to-two markets.

The three-to-two markets involved about $5 billion in rail freight revenues.[24] Most strands

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[23] This prediction was based on cross-section regressions that compared freight rates on routes with one, two, three, etc., rail carriers, holding constant other important characteristics; see Majure (1996) and Grimm (1996).

[24] Neither the merger applicants nor its opponents devoted much analytical efforts to the four-to-three markets, since they knew from past decisions that the ICC/STB was convinced that the reduction in the number of carriers in such markets was irrelevant; even the opponents' efforts with respect to three-to-two mergers was considered an uphill effort, since past ICC rulings had found

of oligopoly theory predict that a reduction in the number of sellers from three to two will reduce the vigor of competition and cause the prices to be higher. Only the Bertrand model of competition, for an *undifferentiated* product, would predict no change in price. But the applicants were simultaneously endorsing a Bertrand outcome while emphasizing the differentiations in the service offerings of the two railroads as the impediment to collusive behavior. However, product differentiation "softens" Bertrand competition, leading to a non-competitive outcome. Further, though the applicants likened rail competition for the shipments of a large customer to an auction, standard auction theory predicts that fewer bidders will mean less favorable prices. And the extensive, repeated contacts of the BNSF and the merged UPSP across all of the two-carrier markets (which would be exacerbated by the trackage rights agreement) would also tend to encourage a less competitive climate.

In addition to theoretical predictions that three-to-two would mean less vigorous competition, there was a large body of empirical literature (including literature on auctions) that indicated that this reduction would mean higher prices.[25] Though most of this literature involved industries other than rail, included were a number of studies of rail freight markets that showed that the number of carriers on a route influenced freight rates in the expected way.[26] A reduction in the number of carriers from three to two was expected to increase freight rates by about 10%. Also, a study of the bids that the Department of Defense (DOD) received for rail freight movements of

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that such reductions increased competition, so long as merger entailed superior "character of competition," "more competitive routes," "more diverse geographic competition," and stabilizing a weak competitor.

[25] See Bresnahan (1989), Schmalensee (1989), and Weiss (1989); Kwoka (1979) specifically showed that the presence of a sizable third seller in a market caused price-cost margins to decline. And Evans and Kessides (1994) had shown the price-raising consequences of repeated multi-market contacts in another transportation context, airlines.

[26] See Grimm (1985, 1996), MacDonald (1987, 1989a, 1989b), Winston et al. (1990), Grimm et al. (1992), Burton (1993), Wilson (1994), and Majure (1996).

military equipment showed that the number of bidders mattered in the expected way.[27]

As for the financial health of the SP, though the SP was financially weak, it was not failing. It had successfully raised capital in recent years, and its operations were improving. More important, detailed econometric analysis indicated that its presence made a significant difference in reducing rail rates.

3. Efficiencies. The merger's critics argued that the promised efficiencies could prove chimerical. First, the merger would yield a larger organization, which unavoidably would be more difficult to manage. Second, the UP had had difficulties in absorbing the operations of the Chicago & North Western Railway, which it had acquired earlier in 1995. Third, some of the applicants' predictions of cost savings were simply a projection of industry trends and would likely occur anyway, even in the absence of the mergers. Fourth, some of the cost savings involved transfers from other parties, which meant no social gains. Finally, some of the single-line integration efficiencies could be achieved through better coordination between the independent UP and SP.

4. A summing up. The merger's opponents argued that the risks of new or enhanced market power were quite high, that the trackage rights arrangement with the BNSF was inadequate as a remedy, and that the promised efficiencies were speculative at best. The opponents urged outright rejection of the merger or, alternatively, a conditioning of its approval on the divestiture of duplicative track into the hands of rival railroads, which would lessen the problems of oligopolistic behavior.

E. The STB's decision.

The ICC and then the STB reviewed a voluminous record in late 1995 and the first half of 1996, including public hearings. On July 3, 1996, the STB issued its decision.

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[27] See Ploth (1996).

In a lengthy opinion the STB approved the merger, supporting the UP-SP on virtually all of the major issues and making only modest changes in the trackage rights agreement.[28] The Board concluded that the merger would result in superior service, substantial cost savings, enhanced competition, and (because of the trackage rights agreement) adequate protection to "captive" shippers. "[T]he merger as conditioned [by the trackage rights agreement] clearly will be pro-competitive in the sense that it will stimulate price and service competition in the markets served by the merged carriers. The merger will create a more efficient UP/SP system competing head-to-head throughout the West with BNSF. UP/SP customers will benefit from tremendous service improvements brought about by reductions in route mileage, extended single-line service, enhanced equipment supply, better service reliability, and new operating efficiencies."[29]

E. Aftermath.

1. The merged entity. In September 1996 the UP began to implement the merger. By the summer of 1997 it was clear that the company's integration efforts were unraveling. One harbinger was a deterioration of safety, with an extraordinary number of train crashes and crew deaths. Simultaneously, the UP began experiencing congestion problems, as trains and shipments began slowing down and backing up and shippers and recipients began to complain about lost shipments and long delays. "Near gridlock" began to be a common description of the UP system. The company experienced substantial managerial and logistics problems. For example, the UP and the SP had different computer systems and dispatching systems, and workers from one system were unable to adapt readily to the other's computers and operations. Cutbacks in management, crews, and equipment -- which had been part of the projected cost savings from the merger -- worsened the

[28] 1 S.T.B. 233 (1996).

[29] 1 S.T.B. 233, 375 (1996).

problems.

Despite the UP's repeated assurances of service improvements, extensive problems continued to plague the UP through 1998 and into 1999, especially in the Gulf Coast area.[30] The UP began sending freight on competing truck and rail carriers, including the BNSF. Only in 2000 did the UP's problems appear to be behind it, although even then critics remained.[31]

As of early 2002 it is too early to tell whether the long-run effects of the merger will meet the rosy predictions of the merger applicants and the STB -- substantial efficiencies and no increase in market power -- or will be closer to the dire warnings of the merger's critics -- heightened market power and few net efficiencies. But the short-run consequences of the merger are all too clear: The costs to rail freight shippers and recipients in the southwestern U.S. have been substantial.

2. The industry. Three months after the STB approved the UP-SP merger, the managements of the CSX railroad (one of the two major railroads in the southeast) and of Conrail (the sole major railroad in the northeast) announced an agreement to merge Conrail into CSX. A week later the other major southeastern railroad, the Norfolk Southern (NS), made a higher offer for Conrail. After a few months of further offers and counter-offers and legal wrangling, the three parties agreed that CSX and the NS would jointly buy Conrail and split its route structure and equipment between themselves. This transaction was approved by the STB in June 1998. Despite extensive planning, so as to avoid the problems experienced by the UP, both acquirers experienced significant service disruption problems in absorbing their respective Conrail pieces that lasted for over a year.

Further consolidation of the U.S. rail system seemed inevitable. The first shoe to drop was the decision of the Canadian National Railway Co. (CN) to purchase the Illinois Central (IC), a major U.S. carrier with north-south routes from New Orleans to Chicago and surrounding

[30] Weinstein and Clower (1998) estimate that the losses to Texas shippers in the last half of 1997 alone were over $1 billion.

[31] See Schmeltzer (2000).

communities in the Mississippi Valley. Since these two carriers had few overlapping routes -- it was a true "end-to-end" merger -- it raised little controversy, and the CN-IC merger was approved by the STB in June 1999.

The next merger proposal, however, proved to be the straw that broke the (STB) camel's back. In late December 1999 the BNSF and the CN proposed a merger that would make the BNSF the first transcontinental U.S. railroad (although its Atlantic terminus would be solely in Canada). The STB, concerned about the service disruptions that had followed the UP-SP merger and the CSX-NS-Conrail transaction and also concerned about what other merger proposals might soon follow, never seriously considered the merger. Instead, the agency proposed and then approved (in March 2000) an unprecedented fifteen-month moratorium on all Class I railroad mergers.

During that moratorium, the STB reconsidered its policy approach to mergers and issued a new policy statement in June 2001.[32] That new statement retained the public interest balancing approach that had traditionally guided the agency but added explicit requirements on merger applicants to provide assurances as to the pro-competitive nature of their proposed transactions, to provide back-up plans in the event of service disruptions following a merger, and to guide the agency as to the likely future course of rail industry mergers.

The new policy statement did not indicate, however, a change in philosophy of the STB with respect to crucial competitive issues, such as market delineation and oligopoly behavior (such as three-to-two concerns), although future mergers might not present such issues in the profusion that was presented in the UP-SP merger. Also, whether the burden on applicants will actually be greater remains to be seen, since applicants -- as was the case by the UP-SP -- already provide extensive documentation and assurances as to why their merger will be pro-competitive and not create service problems.

[32] STB Ex Parte No. 582 (Sub-No. 1), "Major Rail Consolidation Procedures," June 11, 2001.

In sum, rather than adopting something akin to the stance of the DOJ and the FTC -- a positive attitude toward competition, a concern about oligopoly behavior, and a skepticism toward claimed efficiencies -- the STB seems (despite its rhetoric to the contrary in its new policy statement) to be continuing along its traditional path. The test of this proposition will occur when, as will inevitably be the case, one of the two remaining eastern rail lines proposes to merge with one of the two remaining western lines.

IV. Conclusion

The proposed mergers of Staples and Office Depot and of the Union Pacific and Southern Pacific railroads appeared, at first glance, to involve quite different issues. On closer examination, however, they involved similar issues: three-to-two mergers, and some crucial questions concerning market delineation.

They received, however, disparate legal treatment. The Staples-Office Depot proposal was rejected by the FTC and the courts; the UP-SP proposal was waived through by the STB. In this author's opinion, the FTC's approach was the correct one, and the STB's approach was flawed; thousands of freight shippers in the southwestern U.S. would surely agree with the latter assessment.

American antitrust policy has historically had a number of industrial exemptions, carve-outs, and special regulatory regimes -- e.g., for agriculture, for fisheries, for newspapers, for ocean shipping, for airlines, and for railroads. These alternatives to mainstream antitrust enforcement, in the name of some other social goal, have almost always yielded unsatisfactory results. Unfortunately, the STB's handling of the UP-SP merger was solidly in that tradition.

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Table 1: The Four Major Western Railroads and Their Characteristics

Railroad	Track miles	Revenues ($ billion)	Employees
Burlington Northern	22,189	$5.0	30,711
Union Pacific	18,759	5.2	29,946
Southern Pacific	17,499	2.9	18,251
Santa Fe	8,352	2.7	15,020

Source: Kwoka and White (1999b, p. 67)