

Bargaining for monopoly: The joint operating arrangement between the *Denver Post* and the *Rocky Mountain News*

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Abstract

This paper explores the causes and consequences of the Joint Operating Arrangement (JOA) between two of Denver, Colorado's leading newspapers, implemented in January 2001, following the Attorney General's grant of approval under the Newspaper Preservation Act of 1970. The history of rivalry between the *Rocky Mountain News* and the *Denver Post*, the events leading to their application to operate jointly, and the aftermath of the JOA are discussed. The paper proposes a simple bargaining model that shows how the terms on which the parties to a JOA agree to split the profits of collusive duopoly reveal truthful information about the survival prospect each newspaper assigns to the other. Our analysis casts doubt on the Attorney General's finding that the *News* was in danger of failing.

I. Introduction

In January 2001, the U.S. Attorney General approved the application submitted by the E. W. Scripps Company, publisher of Denver's *Rocky Mountain News (News)*, and MediaNews Group, Inc., publisher of the *Denver Post (Post)*, to unite the two newspapers under a Joint Operating Arrangement (JOA). Scripps is the eighth largest newspaper publisher in the nation and the *News* is one of Scripps' most widely circulated papers. MediaNews Group, owner of the *Post*, is the seventh largest newspaper company in the United States.¹ The JOA allows the *News* and the *Post* jointly to set their prices, including circulation and advertising rates, to combine their newspaper production and distribution operations, and to share the profits of cooperation while at the same time preserving the independence of their respective news reporting and editorial departments.²

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AUTHORS' NOTE: *We benefited from comments on earlier drafts by Bill Anderson, Hilary Shughart, Robert Tollison and, especially, Michael Reksulak. As is customary, however, we accept full responsibility for any remaining errors. Professor Shughart acknowledges summer funding from the Robert M. Hearin Support Foundation.*

¹ See *Report of the Assistant Attorney General in Charge of the Antitrust Division in the Matter of: Application by E. W. Scripps Company and MediaNews Group, Inc. for Approval of a Joint Operating Arrangement Pursuant to the Newspaper Preservation Act, 15 U.S.C. §§ 1801–1804*, Public File No. 44-03-24-15, 4–5 (2000), hereinafter cited as "Report."

² *Id.*, at 1.

The JOA between the *Denver Post* and the *Rocky Mountain News* was consummated under the terms of the Newspaper Preservation Act (NPA) of 1970.³ Such arrangements existed in the newspaper industry prior to that time, but in 1965 the Department of Justice charged the parties to a JOA in Tucson, Arizona, with violating the Sherman and Clayton acts, arguing that the agreement unlawfully conferred collective monopoly power on the participating newspapers.⁴ The 22 JOAs then in effect countered that without shelter from the antitrust laws, at least one of the participating newspapers would fail, leaving those markets with only a single local daily paper and, hence, producing monopoly in any case. Concerned with declining competition both in the ordinary markets served by the daily press and in the contributions of the print media to the marketplace of ideas, Congress responded by passing the NPA to enable weaker papers to survive by combining their business operations with stronger rivals. To that end, the NPA provides a narrow antitrust exemption for newspaper JOAs, provided that the Attorney General determines that no more than one of the parties is other than a “failing newspaper.”⁵

The economics of the newspaper industry are somewhat peculiar. The relevant product market for analyzing the competitive effects of JOAs is a dual one, consisting of circulation and advertising. Although the advent of new sources of information has blurred the boundaries of competition, the relevant geographic market for newspapers is primarily local. No matter

³ “The NPA defines a ‘joint newspaper operating arrangement’ as ‘any contract, agreement, joint venture (whether or not incorporated), or other arrangement entered into by two or more newspaper owners for the publication of two or more newspaper publications, pursuant to which joint or common production facilities are established or operated and joint or unified action is taken or agreed to be taken with respect to any one or more of the following: printing, time, method, and field of application; allocation of production facilities; distribution; advertising solicitation; circulation solicitation; business department; establishment of advertising rates; establishment of circulation rates and revenue distribution: Provided, that there is no merger, combination, or amalgamation of editorial or reportorial staffs, and that editorial policies be independently determined.’ 15 U.S.C. §1802(2).” *Id.*

⁴ *Citizen Publishing v. United States*, 394 U.S. 131 (1969). The Supreme Court ruled in the government’s favor, declaring the Tucson JOA to be illegal per se. See Report, *supra* n. 1, at 7.

⁵ Report, *supra* n. 1, at 1.

how the market is defined, though, the number of competitive local daily newspapers in the United States has been in steep secular decline. The disappearance of viable daily papers is explained by the existence of significant economies of scale in production and distribution as well as by the technological innovations and demographic changes that have fostered the growth of alternative sources of news and editorial opinion, including around-the-clock cable television news channels, nationally circulated daily newspapers, such as *USA Today*, the *Wall Street Journal*, and the *New York Times*, and, not least, the Worldwide Web. Taking account of the special characteristics of the newspaper industry is crucial for analyzing the causes and consequences of competition or cooperation between local daily papers.

Whether or not the NPA has been successful in preserving a second, independent editorial voice is a matter of dispute. One of the criticisms of the law is that newspapers are able artificially to create the accounting losses necessary to secure the Attorney General's blessing by shifting profits to a corporate parent or by taking advantage of other less-than-transparent bookkeeping strategies. Creative accounting helps make one of the newspapers look less profitable than otherwise and provides the applicants with the evidentiary basis for JOA approval. As we shall see, however, the financial terms of a proposed JOA can provide useful information regarding the parties' assessments of the survival prospects of the ostensibly failing paper.

In this paper, we propose a simple bargaining model that, given estimates of the newspapers' values, allows us to solve for the equilibrium division of profits between two newspapers participating in a hypothetical JOA. It formalizes Kenneth Baseman's conjecture that the newspapers' assessments of their respective financial conditions are truthfully revealed

in the proposed profit-sharing plan.⁶

The paper is organized as follows. A brief review of the characteristics of the newspaper industry is presented in Section II. Section III explores the history of the price war between the *Post* and the *News* and summarizes the process that led to the approval of their application to operate jointly. Baseman's conjecture about the importance of expected future profits in any assessment of the competitive effects of the Attorney General's exercise of authority under the NPA is discussed in Section IV, where the simple bargaining model applicable to this case is also laid out. Finally, the economic impact of the Denver JOA on subscribers and advertisers is assessed and conclusions are drawn in Section V.

II. Characteristics of the newspaper industry

The newspaper industry is the second oldest mass-media industry in the United States as well as being one of the most profitable of all manufacturing industries in the country.⁷ A variety of unique economic characteristics distinguish newspapers from other industries.

A. Market definition issues

Most commentators agree that the relevant product market served by the newspaper industry is a dual one.⁸ A newspaper simultaneously produces two products, information and advertising, which are sold respectively to two customer groups, namely readers and advertisers. These two products are not necessarily of equal importance to a newspaper's financial wellbeing, however.

The conventional wisdom is that newspaper circulation is a "loss-leader" in the sense that the

⁶ K. C. Baseman, *Partial Consolidation: The Detroit Newspaper Joint Operating Agreement*, in *THE ANTITRUST REVOLUTION: ECONOMICS, COMPETITION, AND POLICY* 25 (John E. Kwoka, Jr. & Lawrence J. White eds., 3rd ed., 1999).

⁷ R. G. Picard, *The Economics of the Daily Newspaper Industry*, in *MEDIA ECONOMICS: THEORY AND PRACTICE* 111 (A. Alexander, J. Owers & R. Carveth eds. 1998).

⁸ See, e.g., R. G. PICARD, *MEDIA ECONOMICS: CONCEPTS AND ISSUES* 55 (1989).

revenue generated by selling copies to readers typically is less than the cost of printing and distributing them. These circulation losses are more than offset by selling advertising space to individuals and firms who thereby purchase access to the newspaper's readership. The advertising rates charged by newspapers are in turn largely driven by circulation: the more copies the newspaper sells, the larger is the audience advertisers potentially can reach and the higher are the rates papers can charge for advertising space.

At first blush, the relevant geographic market of a local newspaper would seem to be confined to a specific metropolitan area determined by the scope of the paper's distribution network. Accordingly, the relevant geographic market in the case at hand might be defined as the City of Denver and its contiguous suburbs. Such a definition would have been less controversial at the time of the enactment of the Newspaper Preservation Act than it is now, when nationally circulated daily newspapers and cable television news broadcasts vie with local papers for the attention of the consumers of news and information. As a result of these developments, the geographic dimension of the information market in which local newspapers compete is certainly national, and plausibly global. At the same time, however, the geographic market in which newspapers compete for the patronage of advertisers, especially the placers of classified ads, tends to be more limited. Local advertisers want to reach local buyers: the owners of Denver's hardware and grocery stores have no interest in paying for ads that will be seen by consumers in New York City. Hence, the relevant geographic market for newspapers may be bifurcated as well – national (or international) for news and information, but more localized for advertising.

B. Downward spiral

The dual product market characteristic of newspapers confronts their publishers with demand functions for advertising and circulation that are interdependent. That interdependency gives rise to a “circulation spiral,” which is referred to as a “downward spiral” when considering the circumstances facing a newspaper in decline. A reduction in circulation reduces the demand for space on the part of advertisers and so reduces the attractiveness of the paper to readers interested in reducing their pre-purchase costs of searching for information about the locations of sellers, the prices they charge, and so on. Circulation consequently declines, which leads to a further reduction in the demand for advertising space.⁹ Failing papers usually are found in such a downward spiral, which, given competitive responses by rivals, may be difficult to reverse.

C. Economies of scale

Significant economies of scale characterize the newspaper industry. There are two factors contributing to these scale economies. One is so-called first-copy costs, which refer to the costs associated with producing one copy of the newspaper, including, among others, the costs of reporting, editing, and page makeup. These costs do not vary with the number of copies printed, and so the average of these costs decrease significantly as circulation increases. The second factor is distribution costs. Once a distribution network has been established, the cost of processing a larger volume of papers through that network is comparatively small. The overall effect of these two factors is a sharply declining long-run average cost curve.¹⁰

D. Decline of newspaper competition within individual markets

⁹ Baseman, *supra* n. 6, at 27–28.

¹⁰ Barry Litman, *Microeconomic Foundations*, in *PRESS CONCENTRATION AND MONOPOLY: NEW PERSPECTIVES ON NEWSPAPER OWNERSHIP AND OPERATION* 3, 26 (R.G. Picard, J. P. Winter, M. E. McCombs & S. Lacy eds. 1988).

The number of metropolitan areas in the United States with competing local daily newspapers has been falling for quite some time. In 1910, 58% of U.S. cities had two or more local daily newspapers, but by 1971 that figure was down to 2%. Today, only 49 of the 1,419 cities that have a local daily newspaper of general circulation are served by more than one such publication. Joint operating arrangements are in effect in 12 of those 49 cities and the papers are commonly owned in 16 of them.¹¹ Before the *Post-News* JOA was implemented, Denver was one of only six major cities (the others being New York, Chicago, Boston, Washington, D.C. and San Francisco) with competing independent daily newspapers of general circulation.¹² Sixteen of the newspapers in the few remaining competitive cities nevertheless rank among the country's top 100 dailies; these 16 papers collectively account for 13.44% of all daily newspaper circulation nationwide.¹³ Larger cities are more likely to support competing newspaper firms owing to greater diversity of readers' preferences and to the greater likelihood of achieving the critical mass in circulation dictated by first-copy costs. The division of labor is limited by the extent of the market, after all.

The secular decline in the number of competitive local newspaper markets has been propelled by the advantages morning papers have over afternoon papers. First, because afternoon papers are printed in the morning and therefore face deadlines that preclude coverage of events occurring during normal business hours, consumers have tended to shift to other media, such as local and national evening news broadcasts, to catch up on the day's events. Second, the morning papers have lower distribution costs since they are delivered at a time that

¹¹ Editor & Publisher Co., *EDITOR & PUBLISHER INTERNATIONAL YEARBOOK* xix (2001).

¹² Report, *supra* n. 1, at 14.

¹³ Editor & Publisher Co., *supra* n. 11, at xi.

avoids daytime traffic.¹⁴

E. Market structure

Local newspaper markets exhibit a wide range of structural types nationally. There are many monopoly newspaper towns with a single daily newspaper. In some cities, a single company owns two separately titled dailies, resulting in what has been called a joint monopoly.¹⁵ And, as we have seen, there are a few remaining large-city examples of competing independently owned dailies.

As a practical matter, however, the Newspaper Preservation Act proposes a tradeoff between two variants of duopoly. The first variant is one in which two independently owned newspaper companies publish rival dailies, and this was the situation in Denver before the JOA between the *Post* and the *News* was implemented. Depending on how the duopolists view their mutual interdependence and respond to the other's strategic moves, market performance theoretically can vary anywhere along the spectrum from pure monopoly to pure competition. The second variant is one in which the two papers are separately owned but run under a joint operating arrangement. In essence, "the JOA really forms a formal, legally sanctioned price-fixing cartel."¹⁶ No one pattern of rivalrous behavior is permanent under either scenario, however. Whether they operate independently or jointly, the duopolists may alter their strategies in the face of changes in market shares, local business conditions, new technological developments, or pressures from corporate parents. Significant and costly product competition will tend to color all such strategy choices, owing to the strong incentives to increase

¹⁴ Baseman, *supra* n. 6, at 28.

¹⁵ Litman, *supra* n. 10, at 14.

¹⁶ *Id.*, at 15.

newspaper circulation.¹⁷

III. The *Post-News* JOA

A. *The parties*

The E. W. Scripps Company, the owner of the *Rocky Mountain News*, is a diversified firm with interests in newspapers, broadcast television stations, cable television networks and other media-related enterprises. The *News* is a morning tabloid newspaper, published seven days a week. Founded in 1859, and acquired by Scripps in 1926, it has been the fastest-growing newspaper in the United States since September 1998. It led the nation in the total number of classified advertisements published during the three years prior to 2000, printing 6.7 million such advertisements in 1998 alone. Through the second quarter of 1999, the *News* was the number one newspaper in the United States in total advertising column-inches, according to Competitive Media Reporting's *1999 National Newspaper Ranking Report*. In September 1999, the *News* had daily and Sunday circulations of 376,342 and 483,220 papers, respectively.¹⁸

MediaNews was founded in 1983 by William Dean Singleton and Richard B. Scudder to purchase and manage newspapers. Initially distributed in the afternoon, the *Denver Post* is now a morning broadsheet newspaper, published seven days a week. In 1999, the *Post* had a daily circulation of 373,483 papers and a Sunday circulation of 521,038.¹⁹

B. *Newspaper competition in Denver prior to the JOA*

Before Denver's two daily newspapers sought the Attorney General's approval to operate

¹⁷ *Id.*, at 15–16.

¹⁸ Report, *supra* n. 1, at 4–5.

¹⁹ *Id.*

jointly, the rivalry between them exemplified the competitive duopoly scenario mentioned above. When, from time to time, one paper lowered its circulation rates and initiated an advertising campaign to boost readership, the other responded with similar actions to protect its market share, thus triggering a second series of moves and countermoves until all excess profits had been squeezed from the industry.

Competition in Denver's daily newspaper market has for many years been characterized by a vigorous battle between the *News* and the *Post* for circulation, readership, and advertising revenues. This head-to-head competition began in 1926, when the *News* was sold to Scripps. Over the next few decades, the *Post* held on to the lead in circulation and advertising revenue. The *News* switched to a tabloid format in 1942, slowly gaining the daily circulation lead by 1980, and the Sunday lead by 1983. Times-Mirror bought the *Post* in 1980, and switched the paper from the afternoon to the morning in an attempt to regain its former market dominance. By 1987, however, Times-Mirror concluded that it had failed to achieve that goal, and sold the *Post* to MediaNews. MediaNews introduced many changes at the *Post*, including cutting costs, improving the paper, and emphasizing its advantages in geographic coverage and attractiveness to newcomers who were changing the demographic profile of consumers in the high-growth Denver area. From 1987 to 1997, the *Post* steadily gained circulation share, while the *News* steadily lost it.

The competitive inroads made by the *Post* drove Scripps throughout the 1990s to expend significant effort in reducing its costs and expanding its circulation, with the hope that increased advertising revenue would soon follow.²⁰ These strategic countermoves included an

²⁰ *Id.*, at 15–20.

investment of \$150 million to build a new production facility in 1992. Scripps also adopted a “Front Range Plus” strategy aimed at eliminating unprofitable circulation by focusing its marketing and distribution efforts on the areas most important to advertisers. But this strategy did not result in increased advertising revenues as expected, since its competitor, the *Post*, refused to match the *News*’s significantly increased advertising rates.

On the circulation front, the *News* took a number of steps, including introducing a “penny paper” subscription package in late 1997, the point in time when executives at the *News* began asserting that the paper was approaching a downward spiral. The new pricing plan allowed consumers to purchase a six-day-per-week subscription, including Sunday, for \$3.12 per year. The subscriber was then permitted to purchase a one-day-per-week subscription for an additional penny. In effect, readers were offered a seven-day-per-week subscription for about 1¢ per day. Although the penny-paper plan was successful in terms of increasing circulation, circulation profits actually fell, as increased production expenses far exceeded anticipated circulation revenues. Neither did the increase in circulation lead to an increase in advertising revenues for the *News*, again mostly due to the *Post*’s refusal to match the *News*’s attempt to charge higher rates. At the end of the day, then, the penny paper plan produced additional operating losses for the *News*.

By 1999, after years of price wars between the *News* and the *Post*, neither had achieved dominance in circulation, leaving the two newspapers at relative parity in readership. The *Post* did gain a slight advantage in advertising revenues during the 1990s, but, again, neither firm had a commanding lead on that score.²¹ Table 1 compares the revenue performances of

²¹ *Id.*

Denver's two daily newspapers during the second half of the 1990s.

Table 1

Advertising Revenue and Circulation Revenue of Denver's Two Dailies (\$000)

Year	Advertising revenue		Circulation revenue	
	<i>Rocky Mountain News</i>	<i>Denver Post</i>	<i>Rocky Mountain News</i>	<i>Denver Post</i>
1995	150,518	135,693	32,709	29,669
1996	152,762	156,047	28,433	29,695
1997	164,728	178,505	25,909	28,059
1998	170,767	192,671	24,073	26,071
1999	186,286	199,289	18,480	24,183

Source: Report of the Assistant Attorney General in Charge of the Antitrust Division 40–43 (2000).

C. Was the News in danger of failing?

The JOA application submitted by the *News* and the *Post* describes the *News* as being in probable danger of financial failure. Under the Newspaper Preservation Act, the failing paper test has two prongs, namely that (1) the newspaper is suffering losses, which (2) more than likely cannot be reversed. The Antitrust Division evaluated the financial troubles claimed by Scripps using an “incremental analysis,” which posits that “if a subsidiary of a corporate parent returns a net benefit to the overall business of the corporate parent, the corporate parent will choose to keep the subsidiary operating, even if the subsidiary appears to be losing money on a stand-alone basis.” The report concluded that reduced circulation revenues and increased costs resulted in significant financial losses for the *News*. It also concluded that neither different management nor other business strategies likely would reverse the losses.²²

IV. Baseman's theory of profit sharing in a simple bargaining model

According to the Attorney General's report, the terms of the proposed JOA envisioned the

²² *Id.*, at 7–12.

formation of a “Denver Newspaper Agency,” which would produce and distribute both the *News* and the *Post* and would manage all commercial aspects of the businesses of the two newspapers, including circulation, advertising sales, and marketing. The agency was to be owned by Scripps and MediaNews in equal shares and governed by a four-member board, composed of two members each from Scripps and MediaNews. An independent chief executive officer would be appointed by the board to manage the agency.²³

The profits of the JOA were to be split evenly, with Scripps paying to the Denver Post Corporation an additional cash sum of \$60 million for the purpose of equalizing the parties’ initial interests. The parties asserted that that figure represented the difference in the current fair market values of the existing enterprises, taking account of the relative competitive position of each newspaper. They also said that the cash payment was set through negotiation, rather than being the result of precise accounting or financial valuations of the businesses. The term of the proposed JOA is 50 years.²⁴

In his analysis of a joint operating arrangement between two newspapers in Detroit, Michigan, Kenneth Baseman models the terms of the JOA as evolving from negotiations between the more profitable (“senior”) paper and the less profitable (“junior”) one.²⁵ The ultimate bargain logically should satisfy the condition that “each paper fares at least as well under the JOA as it would without the JOA.” Therefore, “the terms of a proposed JOA can ... provide extremely useful information regarding the newspapers’ assessments of the survival prospects of the junior paper.”²⁶

²³ *Id.*, at 3.

²⁴ *Id.*

²⁵ Baseman, *supra* n. 6, at 35.

²⁶ *Id.*

In what follows, we construct a simple model to show how, given two newspapers' relative financial positions, the bargaining outcome (in terms of proposed profit shares) is determined. Conversely, given the outcome, we can determine the parties' respective valuations of their pre-JOA financial conditions.

The decision to participate or not in a JOA is a two-person (or two-firm) bargaining problem and the assumptions we adopt here are basic to this kind of game. In particular, suppose there are two newspapers, paper 1 and paper 2. They negotiate the division of profits within a proposed JOA. Let S be the set of alternative outcomes (alternative shares of profits); the two sides must agree on some element of this set. Once an agreement has been reached, the bargaining is over, and the two papers receive their respective payoffs (shares of profits). In case they cannot agree, the result is the status quo. Let (d_1, d_2) be the payoffs from the disagreement point, i.e., the point at which the negotiations break down, and so the two newspapers will continue to operate independently.

Let d_1 be the payoff for the senior paper if the JOA is not concluded. If so, the senior paper will remain in business and when the junior paper fails at some time t in the future, it will earn a monopoly profit, π_m , in period t and beyond.²⁷ Since d_1 is the present value of the senior paper's expected future profits, $E(\pi_1)$, we need to specify a discount rate, r . We can express d_1 as follows:

$$d_1 = \pi_1^0 + \frac{E(\pi_1^1)}{(1+r)^1} + \frac{E(\pi_1^2)}{(1+r)^2} + \dots + \frac{E(\pi_1^{t-1})}{(1+r)^{t-1}} + \frac{E(\pi_m)}{(1+r)^t} + \frac{E(\pi_m)}{(1+r)^{t+1}} + \dots$$

The junior paper, on the other hand, will, in the absence of a JOA, expect to earn profits (or

²⁷ We assume that, once the junior paper has failed, the senior paper will earn monopoly profits forever. This assumption has no material effect on the analysis if we also assume an infinite time horizon for computing the present value of the JOA.

sustain losses) for $t-1$ periods and then will exit from the market in period t . Its reversion point, d_2 , is thus

$$d_2 = \pi_2^0 + \frac{E(\pi_2^1)}{(1+r)^1} + \frac{E(\pi_2^2)}{(1+r)^2} + \dots + \frac{E(\pi_2^{t-1})}{(1+r)^{t-1}}.$$

If an agreement is reached, the two newspapers will operate under a JOA and share the resulting profits. For simplicity, we assume that the total profit from operating jointly equals $E(\pi_m)$, the expected monopoly profit. The present value of expected future profits under the JOA, d_J , is thus

$$d_J = \frac{E(\pi_m)}{(1+r)} + \frac{E(\pi_m)}{(1+r)^2} + \dots$$

Denote the bargain that produces agreement as s , the share of the senior paper as s_1 and the share of the junior paper as s_2 . The utility functions of the two papers are as follows:

$$u_1(s) = (1 - s_2)d_J \text{ and}$$

$$u_2(s) = s_2 d_J.$$

Clearly, the two sides will not engage in bargaining unless there are outcomes in S that yield higher payoffs for both of them than the payoffs received under the status quo. We can thus state the following two necessary conditions for agreement:

1. $u_1(s) \geq d_1$ and $u_2(s) \geq d_2$ for every $s \in S$.
2. $u_1(s) > d_1$ and $u_2(s) > d_2$ for at least one $s \in S$.²⁸

It is plausible to assume that the parent companies of the two newspapers possess the same information and approximately equal bargaining skills. If so, the benefits from bargaining will be the same, that is,

²⁸ C. D. ALIPRANTIS & S. K. CHAKRABARTI, GAMES AND DECISION MAKING 214 (2000).

$$(1 - s_2)d_J - d_1 = s_2d_J - d_2.$$

Solving this expression yields the equilibrium division of profits:

$$s_1^* = \frac{1}{2} + \frac{d_1 - d_2}{2d_J} \text{ and}$$

$$s_2^* = \frac{1}{2} - \frac{d_1 - d_2}{2d_J}.$$

From these equilibrium solutions, we can see that the profit split is determined by the two newspapers' assessments of their present values, and the expected total profit under JOA. Since d_1 is the senior paper's present value, d_1 is greater than d_2 . The larger is the difference between d_1 and d_2 , the larger is the senior paper's profit share and the smaller is the junior paper's share. The profits flowing from the JOA will be divided equally only if $d_1 = d_2$. In an extreme case where $d_2 = 0$ and $d_1 = d_J$, s_2 is zero and the senior paper will let the junior paper fail rather than enter a JOA with it.

The model is thus consistent with Baseman's argument that if, in the absence of a JOA, the junior paper is expected to remain in business for an extended period, the senior paper will offer a relatively even profit split. If, on the other hand, the junior paper is close to failure, its share of JOA profits will be much smaller. That is to say, whether a senior paper will enter a JOA and how the profit will be split depends on how long the junior paper is expected to remain viable.²⁹

Conversely, if we observe profits split evenly in a JOA, one can conclude that the survival prospects of both papers were thought to be roughly equal. Thus, the Attorney General can determine whether the applicants' claims about their survival prospects are truthful by

²⁹ Baseman, *supra* n. 6, at 38–39.

evaluating their consistency with the JOA's proposed financial terms. Of course, a complete analysis of the consequences of approving any joint operating arrangement would also need to take account of other terms of the deal, such as initial cash payments from one paper to the other, the allocation of control rights, and so on.

V. The aftermath and conclusions

The Denver Newspaper Agency reacted swiftly to the Attorney General's decision to allow the *Post* and the *News* to operate jointly. After the JOA became official on January 22, 2001, prices for subscriptions to the two newspapers were increased significantly. Not surprisingly, circulation fell dramatically, with Monday-through-Saturday figures for the *News* and *Post* off 17.9% and 11.9%, respectively. Tables 2 and 3 compare the two newspapers' subscription prices and circulation numbers before and after the implementation of their JOA.

Table 2

Annual Subscription Prices for Denver's Two Newspapers Before and After the JOA

Year	<i>Rocky Mountain News</i>	<i>Denver Post</i>
2000	Offers the following at \$4.95/year: six days, weekends & holidays or Sunday & holidays	Less than \$5.00 for various year-long plans
2002	Daily & Sunday (48 weeks): \$73.80 Sunday & holidays (52 weeks): \$26.00	

Sources: Report of the Assistant Attorney General in Charge of the Antitrust Division 39 (2000) and www.denverpost.com and www.rockymountainnews.com (2002).

Table 3

Daily Circulations of Denver's Two Newspapers Before and After the JOA

Period	<i>Rocky Mountain News</i>	<i>Denver Post</i>
1999	376,342	373,483
April–September 2001	309,938	305,929
October 2001–March 2002	306,230	304,544

Sources: Denver Post, Rocky Mountain News Circulations Decline, *Denver Post*, 30 October 2001, and Denver Post and Rocky Mountain News Report Decline in Circulation, *Denver Post*, 19 April 2002.

These subscription price increases and reductions in circulation produced welfare losses for Denver's newspaper readers. The post-JOA evidence is thus consistent with previous studies showing that newspapers participating in such arrangements do set prices in the same manner a monopolist would.³⁰ It is possible that the goals of the NPA have been fulfilled in the sense that Denver's consumers and advertisers have access to newspaper products they might not have gotten without the JOA. If so, both groups may have paid a price for preserving independent editorial and news reporting voices that may not have been worth paying. As a matter of fact, because the profits of the Denver JOA were divided equally, the theoretical model presented herein casts substantial doubt on the contention that the *Rocky Mountain News* would have failed in the absence of the Attorney General's permission to collude. That conclusion is reinforced by the initial cash payment of \$60 million made by the owner of the ostensibly failing paper (the *News*) to the stronger one (the *Post*).

The welfare costs of the Denver JOA extend beyond the reading and advertising constituencies of the *News* and the *Post*. *Westword* is an alternative weekly newspaper published in Denver since 1977 and one of the largest alternative weeklies in the country. Prior to the implementation of their JOA, Denver's two daily newspapers bid competitively for the

³⁰ J.C. BUSTERNA & R.G. PICARD, JOINT OPERATING AGREEMENTS: THE NEWSPAPER PRESERVATION ACT AND ITS APPLICATION 109 (1993).

right to print *Westword*. The joint operating arrangement will eliminate such competition in the provision of printing services by the *News* and the *Post*. Higher printing costs will make it difficult for *Westword* and other independent, vertically unintegrated newspapers to survive.³¹

Another potential victim is Jeffco Publishing Company, which publishes four weekly newspapers and distributes another paper free of charge in Jefferson County, Colorado, located immediately west of Denver. In opposing the JOA, Jeffco contended that the arrangement would facilitate predatory pricing by the *News* and the *Post*.³²

It is now too late for Denver, as it is for Detroit and for York, Pennsylvania, two other cities where joint newspaper operating arrangements have been approved despite weak or nonexistent evidence that one of the dailies would have failed without the Attorney General's intervention.³³ Clearly, the definition of what constitutes a "failing newspaper" needs to be refined and strengthened to avoid decisions under the Newspaper Preservation Act that replace competitive duopoly with collusive duopoly. Of equal importance is the advisability of conducting ex post reviews of existing JOAs to ensure that the parties' ex ante claims are consistent with subsequent market outcomes.

The simple bargaining model contained in this paper provides some guidelines for distinguishing applications for JOAs that, under the guise of preserving the participating newspapers' reportorial and editorial independence, are in fact nothing more than self-serving attempts to secure safe harbors for collusion. In particular, when the parties to a joint newspaper operating arrangement propose to divide their profits equally, a straightforward

³¹ Report, *supra* n. 1, at 36.

³² *Id.*, at 35.

³³ Baseman, *supra* n. 6, at 43.

implication of that offer is that the papers themselves think each has the same chance of survival if they continue to operate independently. A reasonable policy response in such cases is to reject the JOA application, or hold it in abeyance until additional evidence becomes available that the failure of one of the parties is imminent. Only if the parties propose an unequal profit split does an evidentiary basis exist for further investigation possibly leading to the approval of their JOA application and, moreover, the more unequal is the proposed profit split, the more likely is it that, in the parties' own judgment, one of the newspapers will fail in the absence of permission to operate jointly.

In light of the enforcement failures under the Newspaper Preservation Act, it is worth asking whether that statute has outlived its usefulness, assuming that, even in 1970, intervention was warranted to preserve independent voices in local markets for news and editorial opinion. Is collusive duopoly the best, or only viable, policy solution to secular changes in the newspaper industry in a world where CNN, C-SPAN, local cable television superstations, nationally distributed editions of major dailies, and regionally distributed editions of smaller city newspapers deliver news and opinion to the masses from London, Atlanta, Chicago, Los Angeles, New York, Washington, D.C., and even Denver? A law written for the era of William Randolph Hearst and Joseph Pulitzer is hard to justify at a time when the *Oxford (Miss.) Eagle*, a five-day-per-week paper with a daily print circulation of about 13,000 copies, is available globally on the Worldwide Web.