

**Presentation to Ohio House of Representatives
May 23, 2007**

**Statement of Howard Feller, McGuireWoods LLP,
On Behalf Of Anthem Blue Cross and Blue Shield,
In Opposition to House Bill 125, The Health Care Simplification Act,
Before the Civil and Commercial Law Committee of the Ohio House of Representatives
May 23, 2007**

On behalf of Anthem Blue Cross and Blue Shield, we have prepared this statement to assist the Ohio House of Representatives in its evaluation of the proposed legislation on most favored nation ("MFN") clauses in physician contracts. In the way of background, I am a partner in the firm of McGuireWoods LLP, where I have practiced for 29 years. I specialize in the area of antitrust law and have devoted a major portion of my antitrust practice to the health care industry. In particular, I have done a substantial amount of work for Anthem Blue Cross and Blue Shield, now WellPoint, and have conducted extensive analyses of the health care markets in Ohio, Indiana and Kentucky. I am currently serving as a member of the governing Council of the American Bar Association's Antitrust Section. I also previously served as the Chair of the Health Care Committee, the Chair of the Program Committee, and the Co-Chair of the Sherman Act Section 1 Committee of the ABA Antitrust Section. In addition, I am a past Editor of both the *Antitrust Healthcare Chronicle* and the *Section 1 Newsletter* published by the ABA Antitrust Section, as well as a past-chair of the Antitrust Section of the Virginia State Bar. Lastly, I have made many speeches and written a number of articles on various antitrust issues, including several articles on most favored nation clauses in health plan contracts.

As a threshold matter, there have been several common misunderstandings as to the meaning and effect of Anthem's Comparable Provider Rate (CPR) clause, that I would like to address upfront. First, it does not mean that Anthem gets a better rate. Under the Comparable Provider Rate ("CPR") clause, other health plans may receive the same rate as Anthem receives,

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so the term “most favored nation” clause is a misnomer and does not apply to Anthem’s clause. The purpose of the CPR clause is to ensure that Anthem is not discriminated against and does not subsidize the costs of other plans when it brings a substantial amount of business to a particular physician. It is an “equal” rate clause, not a “better” rate clause. While not referred to as such in the bill, we believe our CPR clause falls under the definition as contained in H.B. 125.

We submit that Anthem’s use of the CPR clause in physician contracts is valid, beneficial and pro-consumer from both an antitrust and health policy perspective. Our principal points are that: (1) the comparable provider rate clause is based on legitimate business reasons and is applied in a beneficial manner for Ohio consumers, (2) Anthem does not have antitrust market power, which means that its CPR clause cannot create antitrust concerns as a matter of law, and (3) the clause has not produced any anticompetitive effects.

The CPR clause does not prevent physicians from accepting either higher payments or lower payments from other health plans, it does not negatively impact consumers, and it is not applied by Anthem to small plans or new entrants. The focus of Anthem’s clause is on the payment rates of other plans that have comparable volume, so it has not been applied at all to many plans in Ohio.

A. Legitimate Business Reasons and Pro-Consumer Benefits

The CPR clause is a prudent buying practice and produces real cost benefits and efficiencies for Anthem and its members. On behalf of its over 3 million members in Ohio, Anthem negotiates with physicians to obtain their services at the lowest possible cost. The CPR provision is a legitimate cost-control device that is used to keep Anthem’s cost competitive. It

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essentially is a “cost protection” clause because it prevents Anthem from paying unnecessarily high costs, over the market rate, and subsidizing the activities of other competing plans.

The CPR clause produces a real cost savings for Anthem’s members by preventing Anthem from having to pay higher rates than other plans, which benefits many consumers since these cost savings are passed on by Anthem. Specifically, when rate adjustments are made under the CPR clause, Anthem passes on the cost savings realized directly to its self-funded members, which are about 50% of its members (over 1.5 million people), in the form of lower payments for physician services for which they are directly responsible. Anthem passes on the cost savings to its fully-insured members in the form of competitive premium rates.

The CPR provision also enables Anthem to enter into long-term contracts with physicians since they ensure that Anthem will not be disadvantaged competitively with regard to costs and is not discriminated against. If Anthem did not receive this protection, it would negatively impact our ability to agree to give physicians rate increases over a long-term, such as 3 years. Anthem’s long-term contracts are beneficial to consumers because they enable Anthem to control future costs, maintain stable physician networks for its members, and avoid potential shortages of available physicians. These long-term contracts also are beneficial to physicians because they are able to obtain payment rate increases to cover their increased costs and are assured a stable income stream.

It is important to recognize that Anthem is a purchaser of physician services. Virtually every court that has considered the effects of a most favored nation clause has found that it is a legitimate buying practice and makes economic sense. In fact, many courts have upheld the valid business reasons for having an MFN clause, explaining that MFN clauses are exactly the

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types of practices by buyers that the antitrust laws are intended to encourage since they are designed to get the lowest possible cost. Here, Anthem's clause ensures that over 3 million people in Ohio are able to minimize their health care costs and do not pay more for physician services than members of other competing plans.

MFNs are used by purchasers in many industries involving the sale of goods to ensure that they receive the lowest possible cost. In fact, in the health care industry, hospitals commonly use MFN clauses when they purchase equipment, drugs and supplies. MFNs are never challenged in industries involving the sale of goods because sellers have a legal obligation under the Robinson-Patman Act to sell at the same price to all competing customers. The MFN clause is simply a negotiated commitment by the seller to comply with its legal obligation to sell at the same price and not discriminate against an individual buyer. As a result, it is a prudent and legitimate practice for a buyer, such as a hospital, to ask a seller in a goods industry to agree that it will not charge that buyer more than other buyers.

Anthem's use of the CPR provision is consistent with the use of MFN clauses by others in the health care industry, such as hospitals, as well as by purchasers in other industries. To illustrate this, if a large national retailer, which purchases large quantities from suppliers, required suppliers to agree to an MFN clause to assure the retailer that no one else would get a lower price, particularly competitors who have equal or lower volume, no one would question that. The MFN clause is merely a contractual assurance by suppliers, consistent with their Robinson-Patman Act obligations, that they will not discriminate against the retailer by giving competing retailers a lower price. This would be perfectly legal.

Anthem is just like retail chains in that it is a large purchaser of physician services. It tries to negotiate the lowest possible cost based on its volume. However, Anthem never knows whether a physician, in fact, has given a lower price to another competing health plan. Anthem is justified in not wanting to be unfairly discriminated against by physicians giving lower prices to its competitors who have similar volume.

I. Application of Antitrust Principles to Anthem's CPR Clause

A. Antitrust Market Power

The law in the 6th Circuit is that proof of market power is required for a vertical arrangement like an MFN clause to produce anticompetitive effects. To prove market power, there must be (1) substantial market share, (2) the existence of barriers to entry, and (3) most importantly, the ability to raise price above competitive levels without losing business. With regard to market share, the U.S. Supreme Court and 6th Circuit have said that 30% is not enough and even where a company's market share is relatively high, it does not have market power if there is ease of entry into the market.

Anthem's position in the State of Ohio does not meet the levels required by the U.S. Supreme Court and 6th Circuit to prove market power. Since Anthem does not meet this test, its contracting practices, as a matter of law, do not raise antitrust law concerns and cannot cause anticompetitive harm.

As you would expect then, when you look at the health care financing market in Ohio, you see that it is a vibrant market with robust competition among many insurers and that the CPR clause has not produced any actual anticompetitive effects. Appendix B is a summary of an article published by an economist, Dr. William Lynk, in 2000, which is the only published

economic research to date on the effects of MFN clauses in health insurance contracts. The article itself is contained in Appendix C. The analysis and conclusions of this economic research study are extremely important for several reasons.

First, the article indicated that no empirical research had ever been done previously on the effects of MFN clauses in health care markets. This is critical because empirical economic evidence, not theory or assumptions, should be the basis for antitrust law and state law analysis of MFN clauses. As Dr. Lynk stated, “only factual investigation can determine whether in any actual market the balance of consumer benefits from MFNs is positive or negative.” Dr. Lynk also explained that the relevant consideration is the effect on the average price paid by all consumers, not the effect on competitors.

Second, Dr. Lynk for the first time conducted an empirical study of MFN clauses in two markets and found that there were no anticompetitive effects. Rather, he found that the enrollment of the other plans increased and there were pro-competitive benefits because the MFN clauses caused a decrease in hospital prices.

In sum, the Lynk research study demonstrates that there is no empirical economic evidence to date that MFN clauses in health insurance contracts produce anticompetitive effects, and that the only existing empirical evidence shows that they are pro-competitive and beneficial, and are based on valid economic and business reasons. As a result, this economic research study concluded that “If there is one lesson that is warranted from this analysis, it is that across-the-board presumptions opposing MFNs are groundless.” To our knowledge, no empirical economic analysis of MFN clauses in health insurance contracts has been conducted since 2000 and it certainly has not been done in any Ohio markets.

B. Analysis of the Competitive Conditions in the Market

There is vigorous competition among the health care insurance companies operating in Ohio for groups (i.e., employers) and individuals. It is a very competitive market in that many companies sell health insurance products in Ohio and there is aggressive rate competition between insurers for group and individual business. There also is vigorous competition over benefit plans, quality and service. This competition is evidenced by the fact that groups and individuals frequently switch between insurers.

Significantly, many insurers offer premium rates that are lower than Anthem's rates in all areas of the state. In some cases, particularly for PPO and HDHP products, these competitors offer premium rates that are 10-20% lower than Anthem's premium rates. For example, individual consumers can obtain premium rates that are lower than Anthem's rates by going on the ehealthinsurance.com website. (See Appendix E.) If you were to go on this website today and put in your own information, you will find some rates from a number of insurers that are lower than Anthem's rates. These facts clearly show that the CPR clause has not adversely affected the ability of other health care plans to offer lower rates to Ohio consumers, which is the key test. The CPR clause obviously has not prevented other plans in Ohio from offering very competitive premium rates. To the contrary, they continue to aggressively underbid Anthem on premium rates, to the benefit of all consumers. Thus, Anthem does not have the power to raise premium rates above competitive levels without losing substantial business, which is the legal test for market power.

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There also is aggressive competition among insurers to develop networks of physicians by signing contracts with them. Physicians typically enter into contracts with many insurers and other insurers have successfully formed large networks.

In addition, new companies can easily enter the health insurance market in Ohio and, in fact, have done so in the last 10-15 years. There is no actual evidence of any prevention of new entry in Ohio because of the CPR clause. There also is no actual evidence of any prevention of expansion by existing firms in Ohio. To the contrary, existing health insurance companies have expanded their business operations and increased their enrollment in Ohio, and they continue to expand. In fact, many insurers have substantial financial resources that they can use to compete and expand. Competitors also continue to offer innovative new products. Concrete proof that there are no barriers to entry is found in an article in yesterday's Columbus Dispatch. A group of local physicians have formed a company to sell health insurance to small central Ohio businesses. The physicians have developed a business plan, have hired a former insurance executive to run the company, and want to sign contracts with all central Ohio physicians. Within several years it plans to insure at least 10,000 people and it says its prices will be competitive. In fact, the President of the company said that if the hospitals "give me the same rates they give other companies, I think that's fair." This is very important because, as a matter of law, a contract arrangement cannot produce anticompetitive effects in a market where there is ease of entry. Furthermore, nothing in Anthem's CPR clause would prohibit this new company from negotiating for the same rate that Anthem receives.

The CPR clause has not made other plans less effective competitors. Rather, the other plans have been operating successfully in Ohio, have priced their products effectively, and have

taken business from Anthem. To our knowledge, no physicians have refused to contract with other plans because of the CPR clause.

Most importantly, premium rates have not been negatively impacted because of the CPR clause. Based on the evidence of substantial competitive bidding in the market, there cannot possibly have been an adverse affect on insurance premium rates for consumers, which is the relevant consideration. Moreover, the contention that the payment rates of some insurers for physician services are slightly higher than they allege they should have been is not evidence of anticompetitive effects on consumers. The relevant test is whether the CPR clause has caused an aggregate net increase in premium rates to consumers, which necessarily includes Anthem's consumers in the analysis. There is absolutely no indication that this has occurred. To the contrary, the other plans in Ohio frequently offer lower premium rates than Anthem.

There are several basic flaws and inaccuracies in the statements made by proponents of House Bill 125. First, as a threshold matter, the proponent's arguments are based on theories and assumptions, not on actual empirical evidence of market activities in Ohio. For example, proponents claim that MFN clauses force small insurers out of business and prevent new insurers from entering the market in Ohio. However, neither of these things has happened in Ohio. To demonstrate this, Appendix D is a list published by the Ohio Department of Insurance which shows that over 80 insurers are actively competing in Ohio. Many of these companies either entered the market or expanded their business in the last 10 years.

Proponents also contend that MFN clauses have resulted in higher insurance rates. However, there is absolutely no evidence of that. In fact, the only economic study of MFN clauses conducted to date, by Dr. Lynk, found that MFN clauses produced lower prices from

providers which would result in lower premium rates. Also, the actual facts in Ohio are that there is vigorous competition over premium rates.

In sum, the opposition to the use of MFN clauses is fundamentally based on theories and assumptions, which Dr. Lynk's economic research study pointed out cannot be relied upon. The only way to determine what the effect of an MFN clause has been in an actual market is to conduct an empirical economic study that focuses on the impact on consumers. That has never been done in Ohio so there is no valid economic evidence on which to justify a prohibition against the use of MFN clauses, especially when their purpose is to reduce costs for consumers. In addition, the proponents essentially are asking the Legislature to create an entitlement for some plans to pay less for physician services than other plans, like Anthem, have to pay. There is no legal or economic justification for creating this special treatment for some health plans and not others. Rather, this is a contract negotiation issue that should be left to the market to determine. State law also should not be used to require Anthem's members to subsidize the competitive activities of other plans.

Finally, in a period of rising healthcare costs, a policy that negatively impacts a healthcare plan's ability to negotiate in the market and reduce its costs should not be encouraged from a public policy standpoint. This ability to negotiate benefits consumers because the savings obtained by Anthem are passed on to its fully-insured members in the form of lower premium rates and to its self-funded members in the form of lower physician payments.

II. Conclusion

We submit that the use of the CPR clause by Anthem in physician contracts is pro-consumer. It is a prudent and legitimate buying practice that is engaged in by Anthem for the

benefit of over 3 million consumers in Ohio. Also, since there is no empirical economic evidence of any adverse effects from the use of MFNs in Ohio, there is no valid legal or economic basis for the Legislature to interfere in the contract negotiations of buyers and sellers in the health care market. As a result, the provision in HB125 to prohibit the use of MFN clauses would create bad law and bad health care policy in Ohio, and we urge the committee to remove it from the bill.

APPENDIX A

Antitrust Analysis of MFN Clauses

I. SIXTH CIRCUIT LEGAL STANDARDS

This section sets forth the legal standards established by the Sixth Circuit for analyzing the antitrust issues that relate to Anthem's use of the CPR provision in its physician contracts in Ohio. The Sixth Circuit has stated that a most favored nation ("MFN") clause in a healthcare provider agreement must be analyzed under the Rule of Reason:

To determine whether the MFN clauses unreasonably restrain trade, the fact finder must weigh all the circumstances of a case and decide whether the MFN clauses "should be prohibited as imposing an unreasonable restraint on competition." *Continental Television, Inc. v. Sylvania, Inc.*, 433 U.S. 36, 49, 53 L. Ed. 2d 568, 97 S. Ct. 2549 (1977). This inquiry is highly fact specific and is often referred to as the "rule of reason" analysis. To resolve this issue

the court must ordinarily consider facts peculiar to the business to which the restraint is applied; its condition before and after the restraint was imposed; the nature of the restraint and its effect, actual or probable. The history of the restraint, the evil believed to exist, the reason for adopting the particular remedy, the purpose or end sought to be attained, are all relevant facts.

Chicago Board of Trade v. United States, 246 U.S. 231, 238, 62 L. Ed. 683, 38 S. Ct. 242 (1918).

Blue Cross & Blue Shield v. Klein, 1997 U.S. App. LEXIS 17753, 8-9 (6th Cir. July 11, 1997)

(internal footnote omitted).¹

A. Definition Of Relevant Service And Geographic Markets

"The starting point in a rule of reason case is to identify the relevant product and geographic markets." *Stratmore v. Goodbody*, 866 F.2d 189, 194 (6th Cir. 1989).

¹ This decision related to the validity of the federal government's CID issued to Blue Cross & Blue Shield but did not address the legality of MFN clauses on the merits.

The Sixth Circuit follows the well-established principles for defining the relevant service and geographic markets. First, “[t]he relevant market includes those products or services that are reasonably interchangeable with, as well as identical to, defendant’s product.” *Am. Council of Certified Podiatric Physicians & Surgeons v. Am. Bd. of Podiatric Surgery, Inc.*, 185 F.3d 606, 622 (6th Cir. 1999); *Found. for Interior Design*, 244 F.3d at 531. While no Sixth Circuit decision has defined the relevant service market at issue in this case, the U.S. Department of Justice in a prior MFN case identified the relevant market as the “health care insurance market.” *Blue Cross & Blue Shield v. Klein*, 1997 U.S. App. LEXIS 17753, at *2. In addition, a district court within the Sixth Circuit has identified the relevant market as the health care finance market and found that HMOs had to compete with other sources of health care financing. *Hassan v. Indep. Practice Assocs., P.C.*, 698 F. Supp. 679, 691, 695 & n.47 (E.D. Mich. 1988).

Second, to define the relevant geographic market, “the area of effective competition in the known line of commerce must be charted by careful selection of the market area in which the seller operates, and to which the purchaser can practicably turn for supplies.” *White & White, Inc. v. Am. Hosp. Supply Corp.*, 723 F.2d 495, 501 (6th Cir. 1983) (quoting *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 327 (1961)). The relevant geographic market is an “area of effective competition.” *Re/Max Int’l, Inc. v. Realty One, Inc.*, 173 F.3d 995, 1016 (6th Cir. 1999) (quoting *Moore v. Matthews & Co.*, 550 F.2d 1207, 1218 (9th Cir. 1977)).

B. Market Power Requirement

“The relevant market is used to gauge market power, which in turn indicates the potential anticompetitive effect of a challenged restraint.” *Stratmore v. Goodbody*, 866 F.2d at 194.

“[W]ithout market power, a firm cannot have an adverse effect on competition.” *Ezzo’s Invs., Inc. v. Royal Beauty Supply, Inc.*, 243 F.3d 980, 988 (6th Cir. 2001) (quoting *Davis-Watkins Co.*

v. Service Merch., 686 F.2d 1190, 1202 (6th Cir. 1982)); *see also Found. for Interior Design Educ. Research v. Savannah College of Art & Design*, 244 F.3d 521, 531 (6th Cir. 2001) (“Generally, a plaintiff must show that his defendant has market power in the relevant market to prove an antitrust injury.”); *Hand v. Central Transport, Inc.*, 779 F.2d 8, 11 (6th Cir. 1985) (“A defendant must have market power before its conduct can be shown to have an adverse effect on competition.”).

The U.S. Supreme Court has declared that “[m]arket power is the ability to raise prices above those that would be charged in a competitive market.” *Nat’l Collegiate Athletic Ass’n v. Bd. of Regents*, 468 U.S. 85, 109 n.38 (1984) (quoting *Jefferson Parish Hospital Dist. No. 2 v. Hyde*, 466 U.S. 2, 27 n.46 (1984)). Consistently, the Sixth Circuit has held that “market power” is

“the power ‘to force a purchaser to do something that he would not do in a competitive market.’ It has been defined as ‘the ability of a single seller to raise price and restrict output.’ The existence of such power ordinarily is inferred from the seller’s possession of a predominant share of the market.”

PSI Repair Servs. v. Honeywell, Inc., 104 F.3d 811, 818 (6th Cir. 1997) (tying case) (quoting *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 464 (1992) (citations omitted).

Significantly, the fact that the defendant is the largest company in the industry is not sufficient to establish market power. *Ezzo’s Invs.*, 243 F.3d at 988.

C. Market Share And Entry Analysis

Market share and ease of entry are two of the principal factors considered in the analysis of market power. The U.S. Supreme Court has held that a 30% market share is not sufficient to prove market power in a Section 1 case. *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 26-29 & 45-47 (1984) (tying arrangement and exclusive dealing case). Likewise, the Sixth Circuit has held that “[a] thirty-percent share of the market, standing alone, provides an

insufficient basis from which to infer market power.” *PSI Repair Services v. Honeywell, Inc.*, 104 F.3d 811, 818 (6th Cir. 1997) (citing *Hyde*, 466 U.S. at 26-29); *see also* P. Areeda & H. Hovenkamp, *Antitrust Law* ¶ 518.3c (Supp. 1986) (“there is substantial merit in a presumption that market shares below 50 or 60 percent do not constitute [market] power”).

Additionally, the Sixth Circuit has specifically stated that “[i]f rivals may design and offer a similar package for a similar cost, there is no barrier, and without a barrier there is no market power.” *Virtual Maint. v. Prime Computer*, 957 F.2d 1318, 1329 (6th Cir. 1992) (quoting *Will v. Comprehensive Accounting Corp.*, 776 F.2d 665, 672 (7th Cir. 1985)), *vacated and remanded on other grounds*, 506 U.S. 910 (1992); *see also Hassan*, 698 F. Supp. at 695 & n.47 (“there are no significant barriers to entry into this market – that is, the market for health care finance”) (citing *Ball Mem’l Hosp., Inc. v. Mutual Hosp. Ins.*, 784 F.2d 1325, 1335 (7th Cir. 1986)). The existence of ease of entry is highly relevant to the analysis “because if entry is easy, even a firm holding a commanding percentage of the market cannot charge a price above the competitive price, for once it does, competitors will enter the market and undercut the firm’s price.” *Am. Council of Certified Podiatric Physicians & Surgeons v. Am. Bd. of Podiatric Surgery, Inc.*, 185 F.3d 606, 623 (6th Cir. 1999) (analyzing market power in Section 2 case). Thus, in the Sixth Circuit, like most Circuits, a plaintiff cannot prove market power where there are no barriers to entry and there is ease of entry into the relevant market.

D. Proof Of Anticompetitive Effect

Not only must a plaintiff show that the defendant has market power, but also “[r]ule of reason analysis requires a showing of anti-competitive market effect by the plaintiff.” *Davis-Watkins Co. v. Service Merch.*, 686 F.2d 1190, 1202 (6th Cir. 1982) (citing *Lektro-Vend Corp. v. Vendo Co.*, 660 F.2d 255, 268 (7th Cir. 1981)). Thus, “to establish a claim under section 1, the

plaintiff must establish that [a] . . . combination or conspiracy produced adverse, anti-competitive effects within relevant product and geographic markets” *Found. for Interior Design Educ. Research v. Savannah College of Art & Design*, 244 F.3d 521, 531 (6th Cir. 2001) (quoting *Davis-Watkins*, 686 F.2d at 1195-96).

E. Section 2 Standard

With regard to claims under Section 2 of the Sherman Act, the Sixth Circuit “adhere[s] to the views of Areeda & Hovenkamp, *Antitrust Law*, § 519.3 (1989 Supp.) that it would be rare indeed to find that a firm with only 25 percent or 50 percent of the market could control price over any significant period.” *Arthur S. Langenderfer, Inc. v. S.E. Johnson Co.*, 917 F.2d 1413, 1432 (6th Cir. 1990) (citing several cases where market shares ranged from 34 percent to 54.5 percent were held to be insufficient); *White & White, Inc. v. American Hosp. Supply Corp.*, 723 F.2d 495, 508 (6th Cir. 1983) (reversing as “untenable” the district court’s holding that a 25 percent market share coupled with a finding of “leverage” and “link” practices satisfied the “dangerous probability of success” requirement). In addition, the Sixth Circuit has noted that “Section 2 . . . require[s] a greater market share for a finding of market power than does § 1.” *PSI Repair Servs. v. Honeywell, Inc.*, 104 F.3d 811, 821 (6th Cir. 1997) (citations omitted).

II. OTHER RELEVANT LEGAL AUTHORITIES

The following is a summary of decisions in other circuits that relate to the applicable legal standards and the use of most favored nations clauses.

A. *Ball Memorial Hospital, Inc. v. Mutual Hospital Insurance, Inc.*, 784 F.2d 1325 (7th Cir. 1986)

In *Ball Memorial Hospital*, the plaintiff hospitals challenged the introduction of a PPO plan by Blue Cross and Blue Shield of Indiana² under which hospitals participating in the PPO would receive lower rates for their services as a violation of Section 1 of the Sherman Act. In a very detailed opinion, the Seventh Circuit analyzed the elements of a Section 1 claim in the context of the health care financing market.

In defining the relevant service market, the court held that it is “health care financing.” 784 F.2d at 1329-32. This health care financing market consisted of PPOs, HMOs, traditional indemnity insurers, hospitals that have vertically integrated into health care financing, and administered self-insurance plans. *See also Blue Cross & Blue Shield United of Wisconsin v. Marshfield Clinic*, 65 F.3d 1406 (7th Cir. 1995).

With regard to the relevant geographic market, the court held that the geographic market for health care financing is not limited to the State of Indiana, but rather “is regional, if not national.” 784 F.2d at 1336. This broad geographic market definition was based on the fact that the calculation of Blue Cross and Blue Shield of Indiana’s market share needed to account for the possibility of new entry and expanded sales by rivals.

This larger market may not seem useful from the perspective of consumers in Indiana, who must obtain their insurance from firms offering it there. It is highly pertinent, however, from the perspective of the Blues’ rivals and potential rivals, and therefore from the perspective of constraints on the Blues’ ability to raise price. The Blues’ rivals, whose mobility is not restricted, protect consumers, whose mobility is restricted.

Id. at 1336-37.

² A number of cases described in Section IV pertain to Blue Cross and Blue Shield plans in other states. Anthem is not related to or affiliated with any of these other independent plans, except for Blue Cross and Blue Shield of Indiana which is another subsidiary of Anthem, Inc.

The Seventh Circuit defined “market power” as “the ability to raise price significantly higher than the competitive level by restricting output.” *Id.* at 1331. The Seventh Circuit further explained that

[m]arket power comes from the ability to cut back the market’s total output and so raise price; consumers bid more in competing against one another to obtain the smaller quantity available. When a firm (or group of firms) controls a significant percentage of the productive assets in the market, the remaining firms may not have the capacity to increase their sales quickly to make up for any reduction by the dominant firm or group of firms.

Id. at 1335. As a result,

[t]he inquiry in each case is the ability to control output and prices, an ability that depends largely on the ability of other firms to increase their own output in response to a contraction by the defendants. Indeed, it is usually best to derive market share from ability to exclude other sources of supply.

Id. at 1336.

The facts were that during the period of 1980 to 1984 Blue Cross and Blue Shield of Indiana insured between 27% and 36% of the total Indiana population, at some hospitals more than 80% of all patients were covered by Blue Cross, and throughout Indiana about 50% of all hospitals’ revenues came from payments made by Blue Cross. In addition, the next-largest private supplier of health insurance in Indiana accounted for only 3% of all private health insurance in the state. *Id.* at 1330-31. After conducting the appropriate Rule of Reason analysis of market power, the Seventh Circuit concluded that “the Blues lack market power.” *Id.* at 1337. The Seventh Circuit’s conclusion that Blue Cross and Blue Shield of Indiana did not possess market power (i.e., the power to raise price above competitive levels and restrict output) was based primarily upon the following two findings: (1) there is ease of entry into the health care financing market, and (2) the health care financing market is very competitive.

With regard to the first finding, the Court stated that market share only reflects “current sales, but today’s sales do not always indicate power over sales and price tomorrow.” *Id.* at

1336. The Seventh Circuit explained that

a firm’s share of current sales does not reflect an ability to reduce the total output in the market, and therefore it does not convey power over price. Other firms may be able, for example, to divert production into the market from outside. They may be able to convert other productive capacity to the product in question or import the product from out of the area. If firms are able to enter, expand, or import sufficiently and quickly, that may counteract a reduction in output by existing firms. And if current sales are not based on the ownership of productive assets – so that entrants do not need to build new plants or otherwise take a long time to supply customers’ wants – the existing firms may have no power at all to cut back on the market’s output. To put these points a little differently, the lower the barriers to entry, and the shorter the lags of new entry, the less power existing firms have. When the supply is highly elastic, existing market share does not signify power.

Id. at 1335.

Based on this analysis, the Seventh Circuit affirmed the district court’s finding

that each of the factors suggesting that market share does not imply market power is present in the market for medical insurance. New firms may enter easily. Existing firms may expand their sales quickly; the district court pointed out that insurers need only a license and capital, and that firms such as Aetna and Prudential have both. There are no barriers to entry – other firms may duplicate the Blues’ product at the same cost the Blues incur in furnishing their coverage. . . . The Blues do not own any assets that block or delay entry. The insurance industry is not like the steel industry, in which a firm must take years to build a costly plant before having anything to sell. The “productive asset” of the insurance business is money, which may be supplied on a moment’s notice, plus the ability to spread risk, which many firms possess and which has no geographic boundary. . . . The district court emphasized that every firm can expand its sales quickly if the price is right, that no firm has captive customers, and that many firms want to serve this market.

Id. at 1335-36.

With regard to the second finding, the Seventh Circuit also affirmed the district court’s conclusion that “the Blues do not have the power to restrict output in the market or to raise price because they furnish a fungible product that other people can and do supply easily.”

Id. at 1331. As the Court explained,

[t]he market in health care financing is competitive, the court concluded, not only because customers can switch readily but also because new suppliers can enter quickly and existing ones can expand their sales quickly. More than 1,000 firms are licensed to sell health insurance in Indiana, and more than 500 sell this insurance currently. According to the district court, all can expand on a moment's notice. Entry barriers into the market for health care financing are extremely low. All that is needed to compete in Indiana, for example, is sufficient capital to underwrite the policies and a license from the Indiana Insurance Commissioner. . . . Of the 500 firms now selling insurance, many operate nationwide and have (or can attract) plenty of capital against which to write policies – if the price is right. The court listed 'Prudential, Aetna, Metropolitan and Equitable, each of which [has] premium income and assets in the tens of billions and operates nationally. . . . The court also observed that firms may elect self-insurance, and HMOs may expand in response to an increase in the price of insurance.

Id. at 1332. Thus, the Court concluded that

[b]uyers' willingness to switch and sellers' ability to enter and expand rapidly . . . means that "a firm's share of the premium revenues reflect no more than its ability to compete successfully in meeting consumer demands." . . . The Blues cannot exclude competitors, cannot raise prices without losing business quickly; the Blues' size therefore indicates only their success in offering the package of price and service that customers prefer, not any market power.

Id.

B. Kartell v. Blue Shield of Massachusetts, Inc., 749 F.2d 922 (1st Cir. 1984)

The plaintiffs challenged a number of Blue Shield of Massachusetts' policies, including its insistence that its subscribers be given the benefit of any lower prices charged to other health care insurers. In an opinion by then Circuit Judge Breyer, the First Circuit observed that Blue Shield was acting as a buyer and essentially buys medical services for the account of others. *Id.* at 925-26. The First Circuit also assumed that Blue Shield possessed "significant market power" but found that it did not make "a significant legal difference." *Id.* at 927.

The First Circuit stated that "[a] legitimate buyer is entitled to use its market power to keep prices down. . . . Here, Blue Shield and the doctors 'sit on opposite sides of the bargaining

table,’ . . . And, Blue Shield seemed simply to be acting ‘as every rational enterprise does, i.e., [to] get the best deal possible.’” *Id.* at 929-30.

The First Circuit also observed that it needed “to apply mainstream antitrust doctrine, which allows a buyer or seller freedom to bargain for price” and should not “blaze new trails” by “departing from present law or extending it to authorize increased judicial supervision of the buyer/seller price bargain.” *Id.* at 930-31. The Court stated that it “should be cautious – reluctant to condemn too speedily – an arrangement that, on its face, appears to bring low price benefits to the consumer.” *Id.* at 931.

C. *Ocean State Physicians Health Plan, Inc. v. Blue Cross & Blue Shield of Rhode Island*, 883 F.2d 1101 (1st Cir. 1989)

Plaintiff Ocean State Physicians Health Plan and a class of its participating physicians sued Blue Cross and Blue Shield of Rhode Island alleging that it had acted unlawfully to exclude Ocean State from the healthcare insurance market. Blue Cross had long been the largest health insurer in Rhode Island. Ocean State was a new HMO that began operations in 1984. Ocean State grew rapidly and because it provided more coverage and charged lower premiums, many subscribers switched from Blue Cross to Ocean State. Within two years, Blue Cross had lost approximately 30,000 of its 543,000 enrollees. *Id.* at 1102-03.

To meet the challenge presented by Ocean State, Blue Cross instituted a three-pronged attack in 1986. Specifically, Blue Cross launched its own HMO, instituted an “adverse selection” policy of pricing and initiated a Prudent Buyer policy of not paying a physician more for any service than that physician was accepting from any other healthcare insurer such as Ocean State. Blue Cross established the Prudent Buyer policy after it became apparent that Ocean State’s contracting physicians were accepting about 20 percent less for their services from Ocean State than they were receiving from Blue Cross. In order to ensure that it was getting the

physicians' best prices, Blue Cross required each of its participating physicians to certify that he or she was not accepting any lower fees from other insurers than he or she was receiving from Blue Cross for the same service. As a result of the Prudent Buyer policy, Blue Cross achieved significant cost savings. Also, after the implementation of this policy, about 350 of Ocean State's 1,200 physicians resigned, in many cases to avoid a reduction in their Blue Cross fees. *Id.* at 1103-04.

Ocean State sued Blue Cross under Section 2 of the Sherman Act and, after a jury trial, the District Court awarded a judgment notwithstanding the verdict to Blue Cross. The First Circuit affirmed this decision. On appeal, Blue Cross did not dispute that it had monopoly power in the market for healthcare insurance in Rhode Island. The First Circuit nevertheless held that the Prudent Buyer policy as a matter of law did not violate Section 2 of the Sherman Act. *Id.* at 1110.

The Court first explained that "Section 2 does not prohibit vigorous competition on the part of a monopoly," but rather prohibits "exclusionary" conduct by a monopoly. The true test was whether the Prudent Buyer policy "unnecessarily excluded competition" from the healthcare insurance market. *Id.*

The First Circuit then stated that "the record amply supports Blue Cross' view that Prudent Buyer was a bona fide policy to ensure that Blue Cross would not pay more than any competitor paid for the same services." *Id.* The Court further stated that "[w]e agree with the district court that such a policy of insisting on a supplier's lowest price – assuming that the price is not 'predatory' or below the supplier's incremental costs – tends to further competition on the merits, and as a matter of law, is not exclusionary. It is hard to disagree with the district court's view:

As a naked proposition, it would seem silly to argue that a policy to pay the same amount for the same service is anti-competitive, even on the part of one who has market power. This, it would seem, is what competition should be all about.

Citing its earlier decision in the *Kartell* case, the First Circuit held that “the insurer – like any buyer of goods or services – is lawfully entitled to bargain with its providers for the best price it can get ‘[E]ven if the buyer has monopoly power, an antitrust court ... will not interfere with a buyer’s (non-predatory) determination of price.’” *Id.* at 1111. The Court also reiterated that Blue Cross “seems simply to be acting ‘as every rational enterprise does, i.e., [to] get the best deal possible.’” *Id.* In addition, the Court again commented that “courts should be...reluctant to condemn too speedily... an arrangement that, on its face, appears to bring low price benefits to the consumer.” *Id.* With regard to this last point, Ocean State had alleged that Blue Cross never actually passed along its savings to its subscribers. However, the First Circuit stated that “nothing turns on whether Blue Cross in fact lowered its rates. The fact remains that achieving lower costs is a legitimate business justification under the antitrust laws.” *Id.* at 1111, n. 11.

Lastly, the First Circuit stated that “Even a monopoly can engage in a competitive course of conduct, so long as it does so for valid business reasons (such as the desire to get the lowest possible price), rather than in order to smother competition.” *Id.* at 1112. The Court also explained that there was no evidence that Blue Cross refused to deal with the competing HMO’s physicians or that it pressured the HMO’s physicians to alter their dealings with the HMO. *Id.* at 1113, n.12.

D. *E.I. DuPont de Nemours & Co. v. Federal Trade Commission*, 729 F.2d 128 (2nd Cir. 1984)

This case involved a challenge to the use of a “most favored nation” clause by the two largest manufacturers of lead anti-knock gasoline additives, DuPont and Ethyl. DuPont had a

market share of 38.4% and Ethyl had a market share of 33.5%. Under each company's most favored nations clause, no customer would be charged a higher price than other customers.

The Second Circuit explained that the most favored nations clauses "comport with the requirements of the Robinson-Patman Act . . . which prohibits price discrimination between customers." *Id.* at 134. The Court concluded that the most favored nations clauses did not significantly lessen competition and that the elimination of these clauses would not improve competition. *Id.* at 141-2.

E. *National Benefit Administrators, Inc. v. Blue Cross & Blue Shield of Alabama, Inc.*, 1989-2 Trade Cas. (CCH) ¶ 68,831, 1989 WL 146413, (M.D. Ala. 1989)

The plaintiffs in this case challenged a number of provisions in Blue Cross & Blue Shield of Alabama's agreements with its participating providers, including the "prudent purchaser clause" contained in hospital contracts. The prudent purchaser clause provided that if a hospital entered into an agreement with any other third-party payor to provide services at payment rates which were less than Blue Cross' payment rates, the hospital had to immediately notify Blue Cross of this contract and provide Blue Cross with the right to renegotiate its contract with the hospital. The plaintiffs challenged Blue Cross' provider agreements under Sections 1 and 2 of the Sherman Act. *See* 1989 WL 146413, at *1.

The Court granted summary judgment as to the Section 2 attempt to monopolize claim on the grounds that there was no dangerous probability that Blue Cross could succeed in monopolizing the market because of "the competitive market, Blue Cross' current position in that market, the absence of barriers to entry into the market and the cross-elasticity of the product." *Id.* at *3. This holding was based upon the following facts: (1) Blue Cross covered only 37% of the Alabama population; (2) Blue Cross had a large number of existing competitors, including 50-100 TPAs in Alabama as well as over 3,000 competitor TPAs nationwide; (3) there

were 4,600 insurance agents selling health insurance in Alabama; (4) 20 of Blue Cross' competitors had higher accident and health premium revenues than Blue Cross; and (5) "unlike many other industries, there are virtually no barriers to entry into this market." The Court also relied upon evidence which demonstrated that "if the cost of one program becomes too high, customers will change companies in order to obtain less expensive coverage." *Id.* at *3.

With regard to the Section 1 claim, the Court stated that "The antitrust laws do not prohibit a buyer from bargaining for the best deal possible." *Id.* at *5. The Court explained that "[a]s was clearly stated in *Travelers Insurance Co. v. Blue Cross of Western Pennsylvania*, 481 F.2d 80, 84 (3rd Cir. 1973), [i]n its negotiating with hospitals, Blue Cross has done no more than conduct its business as every rational enterprise does, i.e., get the best deal possible. This pressure encourages hospitals to keep their costs down; and, for its own competitive advantage, Blue Cross passes along this saving thus realized to consumers." *Id.* at *5 - *6. Accordingly, the Court concluded that the prudent purchaser clause did not constitute an unreasonable restraint of trade. *Id.*

F. *Kitsap Physicians Service v. Washington Dental Service*, 671 F. Supp. 1267 (W.D. Wash. 1987)

This case involved a challenge under Section 2 of the Sherman Act to an anti-discrimination policy in a dental insurance company contract with its member dentists. The Court rejected the plaintiff's antitrust claims on the grounds that "the non-discrimination clause makes good business sense" and "has a valid business purpose." *Id.* at 1269-1270. The Court explained that "[d]efendant's anti-discrimination policy ensures that defendant will not be charged more than another user of the same services. The courts have explicitly endorsed the non-discrimination policy, stating that 'a provision in the participating agreement that the clinic may not charge [insurer] more than it charges the public ... is only good business sense.'" *Id.* at

1269 (quoting *Mich. Ass'n of Psychotherapy Clinics v. Blue Cross & Blue Shield*, 1982-83 Trade Cas. (CCH) [¶ 65,035] at 70,775 (Mich. Ct. App. 1982)). Furthermore, the Court stated that “[t]he non-discrimination clause, far from being a price control measure, provides insurance companies with protection from (1) being over-charged by dentists, and (2) in the long term, being priced out of the highly competitive dental insurance market.” *Id.*

G. *Travelers Insurance Co. v. Blue Cross of Western Pennsylvania*, 481 F.2d 80 (3rd Cir. 1973)

In this case, the plaintiff insurance company charged Blue Cross with violations of Sections 1 and 2 of the Sherman Act. The Court found that the relevant market consisted of twenty-nine (29) counties in Western Pennsylvania. Blue Cross provided hospitalization insurance for 51% of the population in this area and accounted for 62% of all of the patient days that were covered by commercial insurance. The plaintiff objected to Blue Cross’ standard contract with hospitals under which Blue Cross paid rates for hospital services that were 14-15% less than the amounts paid by other insurers. Consequently, Blue Cross quoted rates for hospitalization insurance that were lower than the rates of private insurance companies such as the plaintiff. Blue Cross was able to pay these lower amounts to hospitals because of the limitations that it negotiated in its contracts with hospitals. *Id.* at 82.

The Court held that even if Blue Cross possessed enough market power to have monopoly power, its arrangements with hospitals did not violate either Section 1 or Section 2. “In its negotiating with hospitals, Blue Cross has done no more than conduct its business as every rational enterprise does, i.e., get the best deal possible. This pressure encourages hospitals to keep their costs down; and, for its own competitive advantage, Blue Cross passes along the saving thus realized to consumers. To be sure, Blue Cross’ initiative makes life harder for

commercial competitors such as Travelers. The antitrust laws, however, protect competition, not competitors; and stiff competition is encouraged, not condemned.” *Id.* at 84.

H. *Westchester Radiological Associates P.C. v. Empire Blue Cross & Blue Shield, Inc.*, 707 F. Supp. 708 (S.D.N.Y. 1989)

In this case, the plaintiff radiologist claimed that the arrangements between Blue Cross and its participating hospitals violated Sections 1 and 2 of the Sherman Act. The Court granted summary judgment to Blue Cross on both of the antitrust claims. In reaching this conclusion, the Court noted that “[f]or antitrust purposes, Blue Cross is treated as a buyer where it pays the bill and seeks to set the amount to be charged.” *Id.* at 712, n. 6. The Court also stated that “Blue Cross is simply acting as a rational buyer attempting to get the best possible terms for its subscribers” and that “[t]he antitrust laws do not prohibit a buyer from bargaining for the best deal possible.” *Id.* at 713 & n. 13.

Furthermore, the Court stated that “The law does not prevent a buyer with market power from negotiating a good price, or from specifying what it will buy. ‘Antitrust law rarely stops the buyer of a service from trying to determine the price or characteristics of the product that will be sold,’ *Kartell*, 749 F.2d at 925. ‘Even if the buyer has monopoly power, an antitrust court ... will not interfere with a buyer’s (non-predatory) determination of price A legitimate buyer is entitled to use its market power to keep prices down.’” *Id.* at 715.

I. *Blue Cross and Blue Shield of Michigan. v. Michigan Association of Psychotherapy Clinics*, 1980-2 Trade Cas. (CCH) ¶ 63,351, 1980 WL 1848, (E.D. Mich. 1980)

This case involved a challenge to Blue Cross and Blue Shield of Michigan’s price non-discrimination clause on antitrust grounds that are not related to this matter. In analyzing this clause, the Court dismissed the argument that the price non-discrimination clause in the provider agreements established minimum prices for services rendered to non-Blue Cross members equal

to Blue Cross' rates. The Court stated that "it is clear from the language of the contract itself that it does not dictate, in any manner, what OPC's are to charge non-Blue Cross members. The price non-discrimination clause provides only that the provider could not charge Blue Cross more for services rendered to its members than the provider charges non-members for similar services. Thus, rather than requiring that non-members be charged at least the Blue Cross ceiling rate, this clause anticipates that providers will charge non-members less than the ceiling rates, and simply requires that Blue Cross be given the benefit of the lower rate." *Id.* at *2.

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APPENDIX B

McGUIREWOODS

MEMORANDUM

TO: Lisa C. Bateson
Staff Vice President, State Affairs
Anthem Blue Cross and Blue Shield

FROM: Howard Feller

DATE: May 15, 2007

RE: Economic Analysis of Most Favored Nation Clauses

This memorandum summarizes the pertinent points made by William Lynk, an economist with Lexecon, Inc., in his Summer, 2000 article entitled "Some Basics About Most Favored Nation Contracts in Healthcare Markets."

1. The recent antipathy of the federal antitrust agencies toward the practice of MFN provisions in healthcare contracts is puzzling. The economic theory on MFNs is remarkably ambiguous in terms of its economic welfare implications; even analyses that fall generally into the anti-MFN camp usually note that there exist circumstances under which MFNs can be efficient and pro-competitive. Also, there is virtually no published empirical economic research on the actual, rather than theoretical, effects of MFNs on the healthcare markets in which they are used. This is important because empirical evidence ordinarily is our guide to antitrust policy in circumstances in which theoretical predictions cut both ways. (p. 494).

2. The principal pro-competitive or efficiency-related theme is that an MFN is one of many available features in supply contracts that, depending upon market characteristics, will permit some buyers and some sellers to achieve their competitive objectives more effectively. (p. 495). Chief among those market characteristics is uncertainty over the distribution of prevailing or future market prices. (p. 495 n. 9).

a. Comment: The use of an MFN clause by health plans in Ohio is justified because of the uncertainty of future physician prices.

3. The article provides some statistics on the remarkable degree of price dispersion in healthcare markets, a fact that may help explain why MFNs can be economically efficient and attractive to cost-conscious healthcare purchasers. (p. 495).

a. Comment: Because of the price dispersion among physicians, a health plan cannot compare rates between physicians, and the MFN clause is needed to ensure that the health plan gets the lowest price.

4. The net overall effect of MFNs on average market price is fundamentally ambiguous. Economic theory provides no universally applicable proof that MFNs always raise price on balance, or always lower price on balance. Benign verdicts on MFNs are typically grounded in hypotheses that they increase the efficiency of transacting through contract, by creating a means of structuring an enforceable agreement to guarantee low prices. As a result, establishing even the direction – pro or con – of the competitive effects of an MFN in any actual market is an empirical question. (p. 495-6).

5. Although with MFNs the hospitals' optimal profitability from discounting is lower, it is nevertheless positive; even with the MFN provision, discount offers to health plans are still profitable, and will still be made. (p. 501).

6. The terms of the MFN tradeoff are these: We can have deeper discounts to a smaller number of patients without an MFN, or we can have shallower discounts to a greater number of patients with the MFN. If we adopt the aggregate dollar amount of discounting as an operational criterion of the market-wide effect on pricing conduct, then by that criterion MFNs are as capable of increasing aggregate discounting as reducing it. (p. 502). Aggregate dollar amount of discounting means the average per-patient discount multiplied by the number of patients receiving a discount. It is the effect of a practice on the average price paid in the market that is ordinarily the central antitrust criterion of consumer welfare effects, not the details of discounting by which that average price is arrived at. (p. 502 n. 19).

7. The question of MFN effects on aggregate discounting in the market is fundamentally empirical rather than wholly theoretical. Only factual investigation can determine whether in any actual market the balance of consumer benefits from MFNs is positive or negative. (p. 502).

8. There is very little published empirical research on the actual effects of MFN provisions, and virtually none that concerns healthcare markets. (p. 503).

9. The effect of the MFN on hospital pricing, specifically on the average level of net price (that is, after all discounts) is the primary consideration. It is this effect on consumers generally, and not the effect on the HMO competitors particularly, that is the pertinent test of antitrust injury from interference. (p. 503-4).

10. One factor the article looked at was enrollment in HMOs both before and after the MFN provision was initiated. There was no indication that the Blue Cross MFN provision halted the HMO's long-run growth within the MFN-affected areas.

a. Comment: The enrollment of competing plans has increased since Anthem's CPR clause was introduced.

11. In the *Ocean State* case, the existence of Ocean State allowed Blue Cross to pinpoint those physicians who were willing to accept lower fees. By reducing reimbursement to these physicians, Blue Cross was able to lower its physician input costs. A policy that can reduce input costs should be encouraged from a public policy viewpoint. As support for this point, Lynk quoted from and cited the Goldberg and Greenberg article. (p. 507 n.25).

12. Since the data showed that the HMOs added more enrollment in the years after the inception of the Blue Cross MFN than they had in the corresponding number of years before it, it is hard to see what the competitive concern was. (p. 508).

a. Comment: The enrollment of competing plans has increased after the CPR clause was used in physician contracts and competing payors also have announced plans to further increase their enrollment.

13. An adverse MFN effect on the relative competitive position of HMOs is not sufficient by itself, to imply competitive injury, in the usual sense of injury to consumer welfare. We expect the MFN to reduce the price paid by the purchaser employing the MFN, and to increase at least some prices paid by other purchasers; it is the net effect on average price, aggregated over all of the affected purchasers, that is the ultimate economic test of consumer injury or benefit. (p. 509).

a. Comment: The average price aggregated over all of the affected purchasers should be lower as a result of Anthem's CPR provision. That is because Anthem's members will be paying lower rates than they would be without the CPR.

14. If you assume as a hypothesis that the Blue Cross MFN had an adverse effect on consumer welfare (that on balance the predominant effect of the MFN was to cause hospitals to raise their prices to Blue Cross's competitors, more so on balance than to lower their prices to Blue Cross), you would expect to see that the average net price for hospital services should rise. (p. 510).

15. As a result, you need to analyze net hospital prices before and after the MFN. If the effect of the MFN were to elevate average net hospital prices, after all discounts, then you would expect average net revenue per patient admission to rise after the MFN went into effect. (p. 510). In the data analyzed, however, the average price declined after the MFN was initiated, rather than increased, which is contrary to the competitive injury hypothesis. (p. 512).

a. Comment: The average physician price per patient should have decreased because of Anthem's low rates. This is the relevant test, not alleged harm to a few competitors.

16. The data analyzed in the article provide no support for the MFN competitive injury conjecture, and are if anything more consistent with a pro-competitive assessment. (p. 518).

a. Comment: The only empirical analysis of MFNs used by health plans found no anticompetitive effects.

17. The article asked why a healthcare purchaser might have initiated an MFN policy in the first place. Prior research has identified many purposes that might be served by MFNs, but one of the simplest of the benign explanations is that MFNs are a tool with which to deal with uncertainty and reduce risks. With this reduction in risk, the buyer is more willing to enter into a mutually beneficial long-term contract with the seller. This example relates to the buyer's uncertainty about getting the best prices from a given seller over multiple years. (p. 518-9).

a. Comment: The purpose of Anthem's CPR clause is to reduce Anthem's uncertainty about getting the lowest rates from physicians and to enable it to enter into long-term contracts with the physicians.

18. Another benign explanation arises from situations where the buyer, Blue Cross, wants to buy a product from many sellers, physicians, but the physicians have substantially different costs and therefore may sell profitably at substantially different prices. The buyer has contemporaneous uncertainty about getting the best prices over multiple sellers in a given year. The buyer has a concern about locking in a disadvantageous price. That concern may lead him to contract with fewer sellers than would be the case without this uncertainty. Here too, MFNs can help overcome a barrier to contract. By pledging to grant to the contracting buyer the lowest prices at which they have in fact sold to other buyers, each of the sellers can provide the strongest evidence practically available that their promise to the buyer of a low price is genuine. With this assurance, the buyer may enter into contracts that, without this credible "best price" guarantee, uncertainty might have prevented. Thus, MFNs are useful in situations where buyers don't know just how low the lowest available price actually is. (p. 519).

a. Comment: This is one of the reasons for Anthem's CPR clause.

19. In examining the hospital data, William Lynk found that there is tremendous price variability in both hospital list and net prices. In this environment, it is a problem for a purchaser of hospital services to figure out how low a price it can realistically negotiate with each of the individual hospitals in the area. A single, flat price won't work, because the metro area hospitals vary greatly in their list and net prices. (p. 521).

a. Comment: This also is a problem faced by Anthem.

20. We see from this high degree of observed pricing heterogeneity in the hospital market that a "one size fits all" approach to price negotiation won't work well. The variation in these figures among the hospitals is highly suggestive of why an MFN provision would seem to a health care purchaser like a prudent approach to bargaining for the best price that it could realistically obtain. We see an immense spread within the metro area of hospitals' average list prices, net prices, mark-ups of list price to net price, and mark-ups of list price to operating costs. One available alternative in the effort to pay no more than must be paid is the focused price inquiry that is the defining element of an MFN provision. (p. 522-3).

a. Comment: This demonstrates the legitimate economic and business justifications for the CPR clause.

21. All of the relevant research has confirmed that price heterogeneity is strikingly high in markets for health care services generally. (p. 523 n.38).

22. A health care purchaser's objectives in this effort are no different than those of any buyer who wants the best available prices from multiple sellers in a market where actual prices are confidential. Under these circumstances, the best and most relevant guide that the price-conscious consumer could seek would be information on the lowest actual prices that these heterogeneous dealers have in fact accepted for their products. These are the lowest prices that are demonstrably not too low for a deal to be struck. This information is, of course, precisely analogous to the pricing information that health care purchasers seek through the mechanism of an MFN. (p. 523-4).

a. Comment: This is another legitimate economic justification for the CPR clause.

23. If there is one lesson that is warranted from this analysis, it is that across-the-board presumptions opposing MFNs are groundless. Any generalizations that eventually do emerge about the consumer welfare effects of MFNs will emerge only through a succession of empirical studies of their circumstances and consequences. (p. 524).

APPENDIX C

Some basics about most favored nation contracts in health care markets

BY WILLIAM J. LYNK*

I. Introduction

A most favored nation (MFN) provision is a condition in a contract between a buyer and a seller, specifying that the buyer gets the benefit of the lowest price that the seller charges to other buyers. So if Smith, a seller, and Jones, a buyer, enter into a contract with an MFN provision under which Jones initially gets a price of \$10, and Smith later sells the same product to another buyer at a price of \$9, then Jones also gets the same lower \$9 price. Or, to rearrange the emphasis, Smith had better not offer the \$9 price to the other buyer unless he is prepared to cut his price to Jones as well.

MFN provisions affect prices, and so it is not surprising that their use has attracted the attention of the federal antitrust agencies. Their earliest litigated assault on this practice was 20 years

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ago, when in 1979 the Federal Trade Commission brought the *Ethyl* case against the sellers of gasoline additives.¹ The Commission found MFNs to be anticompetitive and enjoined their further use, but it was reversed soundly by the Second Circuit Court of Appeals.² Since then, virtually all MFN cases brought by the federal agencies have involved contracts in the health care industry, generally between providers of medical services (e.g., physicians, dentists, hospitals) and purchasers of those services (e.g., health insurers, including health maintenance organizations [HMOs]).³ In addition to the federal antitrust agencies' challenges to health care MFN contracts, the practice has been attacked frequently by private health care antitrust litigants, in which typically a health care purchaser with an MFN provision is sued by either a provider or a competing purchaser (usually a managed care payor such as an

¹ *In re Ethyl Corp.*, 101 FTC 425 (1983). A prior Justice Department investigation of MFNs in the electrical equipment industry ended in settlement with a consent decree; *U.S. v. General Electric Co.*, 1977-2 Trade Cas. (CCH) ¶61,660 (E.D. Pa. 1977) (consent decree).

² *E.I. du Pont de Nemours & Co. v. FTC*, 729 F.2d 128 (2d Cir. 1984).

³ "With the exception of *Ethyl*, the major antitrust challenges to MFN clauses have been in the context of the health care industry." Arnold Celnicker, *A Competitive Analysis of Most Favored Nations Clauses in Contracts Between Health Care Providers and Insurers*, 69 N.C. L. REV. 864, 868 (1991). *See, e.g.*, *United States v. Oregon Dental Service*, 1995-2 Trade Cas. (CCH) ¶71,062 (D. Or. 1995) (consent decree); *United States v. Delta Dental Plan of Arizona*, 1995-1 Trade Cas. (CCH) ¶71,048 (D. Ariz. 1995) (consent decree); *United States v. Vision Service Plan*, 1996-1 Trade Cas. (CCH) ¶71,404 (D.D.C. 1996) (consent decree); *RxCare of Tennessee*, Dkt. C-3664 (FTC June 10, 1996) (consent order); and *United States v. Delta Dental Plan of Rhode Island*, 943 F. Supp. 172 (D.R.I. 1996), 1997-2 Trade Cas. (CCH) ¶71,860 (D.R.I. 1997) (consent decree). *See also* *United States v. Medical Mutual of Ohio*, N.D. Ohio No. 1:98-CV-2172 (September 23, 1998), a proposed consent decree eliminating the use of MFNs by Medical Mutual, the largest commercial health care insurer in the Cleveland metropolitan area and until recently a Blue Cross plan, described in 75 *Antitrust & Trade Reg. Rep.* 374 (BNA) (October 1, 1998), and Erik F. Dyhrkopp & Andrew H. Kim, *Antitrust Enforcers Step Up Scrutiny of MFN Clauses*, NATIONAL L. J., July 5, 1999, at B7.

HMO).⁴ When the providers sue, they typically complain that the prices that they must accept from the defendant purchaser are too low; when the competing purchasers sue, they typically complain that the prices that they must pay to providers are too high.

The recent antipathy of the federal antitrust agencies toward the practice of MFN provisions in health care contracts is unmistakable. As the Department of Justice recently explained in urging the Pennsylvania insurance commission to disallow the use of an MFN provision:

[W]here sellers (hospitals) and buyers (health plans) negotiate price and a large buyer asks sellers for a guarantee of the best rate given to any other purchaser, anticompetitive results can occur. . . . [T]he cost to a hospital of granting a price concession . . . increases dramatically because this same price must be given to the larger buyer. . . . This reduces the incentive of a hospital to grant price concessions to [managed care plans] and thus helps the hospital negotiate a higher price with [managed care plans].⁵

The timing of this emerging enforcement posture in the 1990s is puzzling for at least three reasons. One is that this contractual feature is not a recent development; MFNs have been around for a long time. Second, the economic theory on MFNs is remarkably ambiguous in terms of its economic welfare implications; even analyses that fall generally into the anti-MFN camp usually note

⁴ For example, *Blue Cross & Blue Shield v. Michigan Association of Psychotherapy Clinics*, 1980-2 Trade Cas. (CCH) ¶63,351 (E.D. Mich. 1980); *Kitsap Physicians Service v. Washington Dental Service*, 671 F. Supp. 1267 (W.D. Wash. 1987); *Reazin v. Blue Cross & Blue Shield*, 663 F. Supp. 1360 (D. Kan. 1987), 899 F.2d 951 (10th Cir.); *Ocean State Physicians Health Plan v. Blue Cross & Blue Shield*, 692 F. Supp. 52 (D.R.I. 1988), 883 F.2d 1101 (1st Cir. 1989); *National Benefits Administrators v. Blue Cross & Blue Shield*, 1989-2 Trade Cas. (CCH) ¶68,831 (M.D. Ala. 1989), 907 F.2d 1143 (11th Cir. 1990); *Willamette Dental Group, P.C. v. Oregon Dental Service*, 882 P.2d 637 (Or. App. 1994); and *Blue Cross & Blue Shield v. Marshfield Clinic*, 65 F.3d 1406 (7th Cir. 1995).

⁵ Letter from Anne K. Bingaman, Assistant Attorney General, Antitrust Division, to Hon. Cynthia M. Maleski, Pennsylvania Insurance Commissioner (Sept. 7, 1993), concerning an MFN provision adopted by Blue Cross of Western Pennsylvania in its contracts with hospitals.

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that there exist circumstances under which MFNs can be efficient and procompetitive, and vice versa for analyses that fall generally into the pro-MFN camp.⁶ And third, there is virtually no published empirical economic research on the actual, rather than theoretical, effects of MFNs on the health care markets in which they are used, empirical evidence that is ordinarily our guide to antitrust policy in circumstances in which theoretical predictions cut both ways.⁷

To recap quite lightly some of the insights from previous literature on the MFN issue, two themes seem to predominate. The principal anticompetitive theme is that MFNs are initiated by otherwise competitive sellers in a market because MFNs make it easier to detect secret deviations from explicit or implicit agreements on price.⁸ A related anticompetitive subtheme is that MFNs are initiated by dominant purchasers, because MFNs disadvantage any rivals who might otherwise dicker for a lower price than the

⁶ See, e.g., Steven C. Salop, *Practices That (Credibly) Facilitate Oligopoly Coordination*, in *New Developments in the Analysis of Market Structure* 265 (Joseph E. Stiglitz & G. Frank Mathewson eds., 1986); Celnikier, *supra* note 3; Joseph Kattan, *Beyond Facilitating Practices: Price Signaling and Price Protection Clauses in the New Antitrust Environment*, 63 ANTITRUST L.J. 133, 146-50 (1994); Anthony J. Dennis, *Most Favored Nations Clauses Under the Antitrust Laws*, 20 U. DAYTON L. REV. 1 (1995); Joseph Kattan & Scott A. Stempel, *Antitrust Enforcement and Most Favored Nations Clauses*, ANTITRUST, Summer 1996, at 20; and Jonathan B. Baker, *Vertical Restraints with Horizontal Consequences: Competitive Effects of "Most-Favored-Customer Clauses"*, 64 ANTITRUST L.J. 517 (1996).

⁷ Most of the empirical literature on MFNs concerns natural gas contracts; see Keith J. Crocker & Thomas P. Lyon, *What Do "Facilitating Practices" Facilitate? An Empirical Investigation of Most-Favored-Nation Clauses in Natural Gas Contracts*, 37 J. L. & ECON. 297 (1994); and David A. Butz, *Most-Favored Treatment Provisions as Nondiscrimination Guarantees*, 2 INT'L J. ECON. BUS. 65 (1995), and references cited therein.

⁸ Ironically, they do so by enlisting the unwitting assistance of the customer, who in a typical MFN arrangement has the right to audit the seller's records to guarantee that no other customer is getting a lower price.

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dominant purchaser's price (in which circumstance the MFN will also be applauded by sellers who hope to escape the competitive pressures associated with an environment of rampant discounting). The principal procompetitive or efficiency-related theme is that an MFN is one of many available features in supply contracts that, depending upon market characteristics, will permit some buyers and some sellers to achieve their competitive objectives more effectively.⁹ In this event MFNs will ordinarily receive mixed reviews from market participants: favorable from those who find them competitively useful, and unfavorable from their competitors who don't.

In this article I have several contributions to offer to the evolving antitrust attitude toward the use of MFN provisions in health care provider contracts. The first is to outline a simple economic model of the effects of MFNs on provider incentives to reduce price, a model that demonstrates why the apparent general intuition—that MFNs can be neither condemned nor commended by theory alone—is correct. The second is to examine empirically the actual effects of the adoption of MFN provisions that were incorporated into the provider contracts of two health care purchasers—Blue Cross plans in Rhode Island and in Philadelphia—an examination that may contribute to the empirical basis for antitrust judgment that has, so far, been scarce in this area of inquiry. And finally, I provide some statistics on the remarkable degree of price dispersion in health care markets, a fact that may help explain why MFNs can be economically efficient and attractive to cost-conscious health care purchasers.

II. Price discounting with and without MFNs

To telegraph one of the conclusions of this section, the net overall effect of MFNs on average market price is fundamentally ambiguous; economic theory provides no universally applicable proof that MFNs always raise price on balance, or always lower

⁹ Chief among those market characteristics is uncertainty over the distribution of prevailing or future market prices, a characteristic that I discuss at greater length in section III below.

price on balance.¹⁰ As a very broad generalization, hostile anti-trust verdicts on MFNs are generally grounded in hypotheses that sellers use them to help enforce explicit or tacit collusion by making price cuts more detectable and more expensive, or that purchasers use them to help prevent their competitors from buying inputs more cheaply. Conversely, benign verdicts on MFNs are typically grounded in hypotheses that they increase the efficiency of transacting through contract, by creating a means of structuring an enforceable agreement to guarantee low prices. It is for that reason that establishing even the direction—pro or con—of the competitive effects of an MFN in any actual market is an empirical question. In this section, I sketch out some of the basic mechanics of price discounting with MFNs to demonstrate intuitively why we need more than a theory to either denounce or endorse MFNs.

A. *When is a discount proposal profitable?*

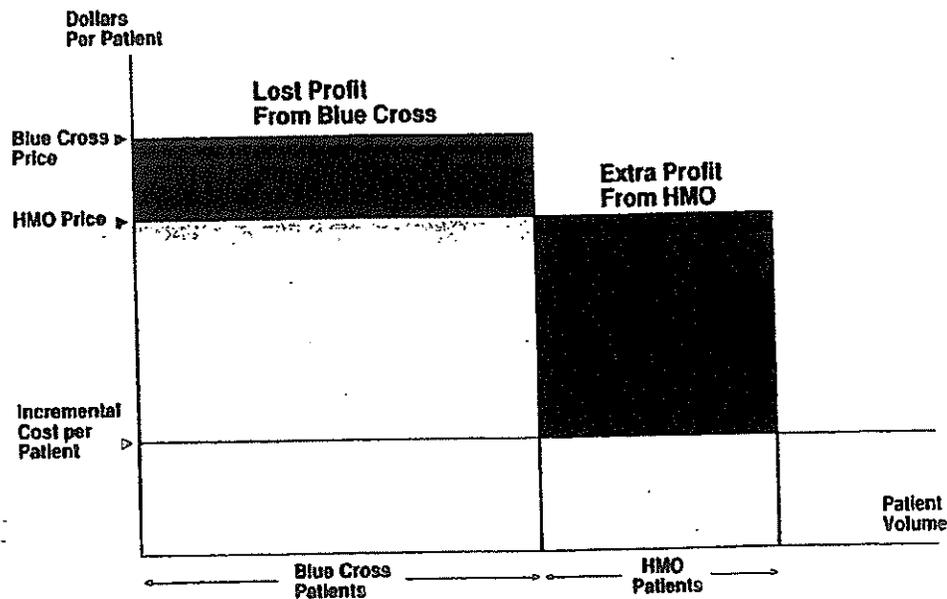
Assume that a hypothetical insurer—call it Blue Cross—contracts with all of the hospitals in its service area to purchase inpatient hospital services for its members. The contracts have MFN provisions of the sort described above; if any one hospital gives a lower price to another purchaser than it is currently giving to Blue Cross, then when this happens Blue Cross will get the same low (“discounted”) price.¹¹

¹⁰ This should not be surprising. It is well known in the economics literature that the welfare implications of price discrimination are ambiguous; depending on the elasticities of consumer demand and the structure of the price schedule, there can be circumstances under which price discrimination either increases or decreases consumer welfare. *See generally* LOUIS PHILIPS, *THE ECONOMICS OF PRICE DISCRIMINATION* (1983). Since MFNs affect the degree of price discrimination within a market, it is unremarkable that their welfare implications also are ambiguous.

¹¹ To keep this description manageably simple, I assume throughout that, in the absence of an MFN provision, hospitals would charge only two classes of prices to their private-pay patients. One is the hospital’s “standard” or undiscounted price, which all indemnity payors, including Blue Cross, pay. The other is an array of discounted prices that the hospi-

Figure 1 shows us how this arrangement looks to a hospital when it contemplates a discount proposal to an HMO. The hospital has a substantial volume of Blue Cross patients, as shown on the horizontal axis of the figure.¹² Blue Cross's contract provides for a price substantially in excess of the hospital's incremental cost per patient, so each Blue Cross patient provides a significant incremental profit. An HMO offers the hospital the usual pitch, under which the HMO, which currently does not deal with the hospital, will begin sending it a specified number of patients ("HMO patients" on the horizontal axis), but only if the hospital gives it a discounted "HMO price," which is below the price that the hospital charges Blue Cross. Although the proposed HMO price is discounted, it is still comfortably above the hospital's

Figure 1
The Arithmetic of Discounting With an MFN Contract



tal offers to HMOs, generally in return for the HMOs' promises of incremental patient volume.

¹² The hospital also has many patients covered by other payors, all of whom I omit from the graph for simplicity.

incremental cost, and so landing the deal would add to the hospital's bottom line.

But with an MFN, the hospital must balance the incremental gain from the HMO's business against the corresponding incremental loss of some of its Blue Cross revenues when it gives Blue Cross the same low price that it gives to the HMO. If the "extra HMO profit" rectangle is larger than the "lost Blue Cross profit" rectangle (as it is in figure 1) then the hospital offers the discounted price to the HMO and grants it to Blue Cross as well. Under other circumstances—a lower HMO price necessary to do the deal, lower HMO patient volume, or higher Blue Cross patient volume—the lost Blue Cross profit rectangle would swamp the extra HMO profit rectangle, and the hospital would decline to deal with the HMO.

B. What determines the size of the discount offer?

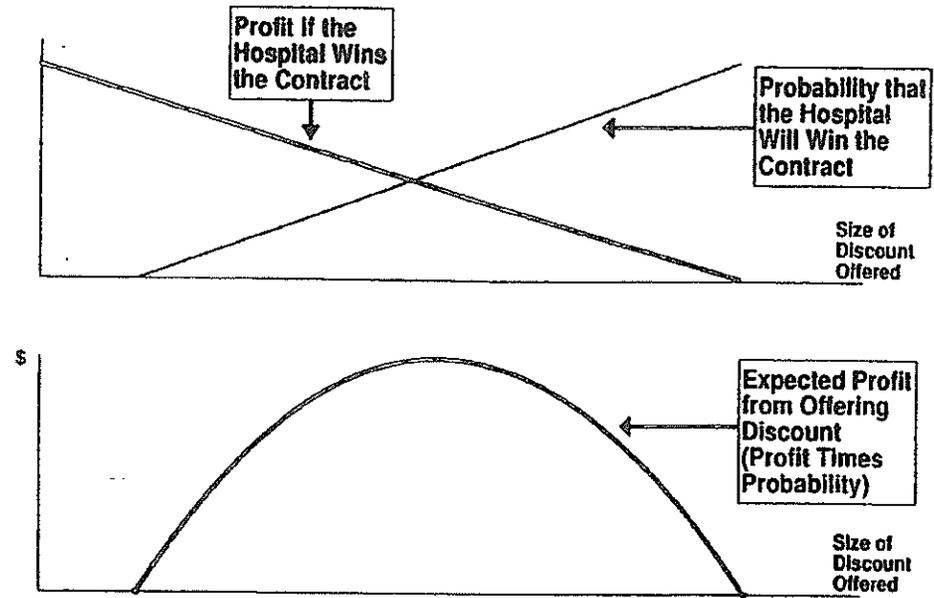
The size of the discount that is necessary to clinch the HMO's business is a key determinant of whether a deal is struck or not; the smaller the necessary discount (that is, the higher the HMO price), the likelier that the figure 1 "balance of rectangles" will favor granting a discount to the HMO. Figure 2 puts a little structure on the concept of determining the size of the discount that the hospital will offer in the absence of an MFN provision with Blue Cross.

Start with the upper panel of the figure. The horizontal axis reflects the percentage discount that a hospital might offer to an interested HMO; moving from left to right represents a greater discount (that is, a lower price) offer.¹³ As the proffered discount gets deeper, two things happen. The first is that the profitability of the HMO contract—if the hospital wins it—declines.¹⁴ The second

¹³ At a discount of zero, the hospital offers the HMO the same price that Blue Cross pays.

¹⁴ At a zero discount, the HMO contract would be exactly as profitable, per patient, as the Blue Cross business. As the discount offer becomes deeper, profitability falls, eventually to zero.

Figure 2
The Profitability of Obtaining an HMO Contract by Offering Discounts:
No MFN



is that the probability that the hospital's offer will be attractive enough to actually win the HMO contract rises.

The profit from the contract *if* it is won, times the probability that the contract *will* be won, equals the expected profitability of the contract. Both of these factors vary with the level of the offered discount. That multiplicative function is shown in the lower panel of figure 2. Intuitively, expected profit is low at low discount levels because, although such a contract would be lucrative if won, the odds of actually winning it are slim. Conversely, the expected profit is also low at high discount levels because, although the odds of winning the contract are high, the profits from performing such a contract are low. The hospital finds its highest expected profit by offering the HMO an intermediate-level discount, one with an appreciable chance that the offer will be spurned but with appreciable profits realized if it is accepted.

C. How does an MFN affect the size of the discount offer?

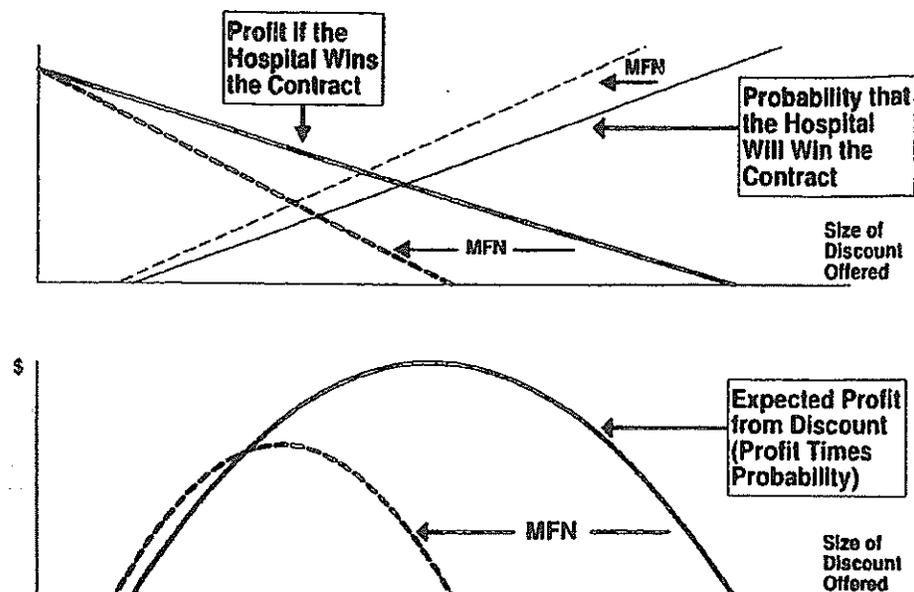
We now change the market environment of figure 2 by assuming that this hospital, and all or most of its competitors, has a contract with Blue Cross that contains an MFN provision. Figure 3 is structured like figure 2, and shows us how the MFN changes the expected profitability of offering discounts to HMOs. There are two MFN effects, shown in the upper panel. The first is that the MFN reduces the profitability of any HMO contract that the hospital wins, because the hospital's profit from the HMO contract is now offset by the "hit" that it takes from granting the same discount on its existing Blue Cross business.¹⁵ The second effect is that the MFN increases the hospital's probability of actually winning the contract at any given level of discount. The reason for this is that if the marketwide MFN feature reduces the profitability of a discounted HMO contract for *this* hospital, it also necessarily reduces the profitability of discounting to win the HMO's business for all of the hospital's *competitors*. This means that the distribution of competing hospitals' bids for the HMO's business will reflect lower levels of discounts (that is, higher prices), which in turn means that any particular level of discount that this hospital offers now has a higher chance of being good enough to win the HMO contract.

The bottom line (in the bottom panel) is that the expected-profitability-of-discount relationship shifts as a result of the MFN provision. There are three qualitative points about the effects of the MFN on the hospital's discount strategy that emerge from this simple theoretical model. First, the model implies that MFNs reduce the hospital's optimal discount offer to the HMO, which is to say that they reduce the spread between the HMO price and the Blue Cross price.¹⁶ Second, it implies that MFNs reduce the over-

¹⁵ Note that this effect is zero for an HMO discount of zero, because in that case no adjustment to the Blue Cross price is required. The MFN effect on foregone profits from Blue Cross business becomes greater as the HMO discount becomes greater, because the "foregone profit" rectangle in figure 1 becomes greater as the HMO price becomes lower.

¹⁶ Which we see because the expected profitability curve peaks at a lower level of discount with MFNs in place.

Figure 3
The Effect of an MFN Contract on the Expected Profitability of Discounting



all profitability to the hospital of engaging in HMO discounting at all.¹⁷ And third, although with MFNs the hospital's optimal profitability from discounting is lower, it is nevertheless positive; even with the MFN provision, discount offers to HMOs are still profitable, and will still be made.

D. Are MFNs procompetitive or anticompetitive?

In health care antitrust assessment we are ordinarily concerned with overall, marketwide effects, not with effects on HMOs considered in isolation from the rest of the market.¹⁸ On the one hand,

¹⁷ Which we see because the peak of the expected profitability curve is lower with MFNs.

¹⁸ "Viewing the managed care discounts in light of their impact on the welfare of consumers as a whole exposes them as illusory. Such selective price advantages are hardly the sort of benefit the antitrust laws

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we might expect smaller HMO discount offers with an MFN; but on the other hand, those discounts, although smaller, are now extended to a larger number of patients, because they are now extended to the Blue Cross patients as well as the HMO patients. The terms of the MFN tradeoff are these: we can have deeper discounts to a smaller number of patients without an MFN, or we can have shallower discounts to a greater number of patients with the MFN. If we adopt the aggregate dollar amount of discounting as an operational criterion of the marketwide effect on pricing conduct, then by that criterion MFNs are as capable of increasing aggregate discounting as reducing it.¹⁹

The simple analytic point of this derivation is that the question of MFN effects on aggregate discounting in the market is fundamentally empirical rather than wholly theoretical. Theory can tell us what effects to expect and to look for—for example, with MFNs we will see shallow discounts for the many, rather than deep discounts for the few—but only factual investigation can determine whether in any actual market the balance of consumer benefits from MFNs is positive or negative.

are designed to protect.” *Federal Trade Commission v. Butterworth Health Corp.*, 946 F.Supp. 1285, 1299 (W.D. Mich. 1996), *aff’d*, 121 F.3d 708 (6th Cir. 1997).

¹⁹ By aggregate dollar amount of discounting I mean the average per-patient discount (for those patients receiving a discount) multiplied by the number of patients receiving a discount. It is the effect of a practice on the average price paid in the market that is ordinarily the central antitrust criterion of consumer welfare effects, not the details of discounting by which that average price is arrived at. Therefore, acceptance of “aggregate discounting” as a practical welfare criterion implies acceptance of the untested assumption that high levels of discounting activity are associated empirically with low levels of average—discounted and undiscounted—price. Whether we accept that assumption or not, empirical examination of the aggregate extent of discounting has independent relevance in its own right, because discounting is the intermediating mechanism through which the MFN may potentially affect average market price.

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III. Some evidence to go with the theory

Compared to other topics in antitrust and industrial organization—the relationship between market structure and price, for example—there is very little published empirical research on the actual effects of MFN provisions, and virtually none that concerns health care markets, the one industry in which recent government and private attacks on this practice have so predominantly focused. I summarize here the available basic economic evidence on market effects in two recent challenges to Blue Cross MFN provisions, one in Rhode Island involving physicians and the other in Philadelphia involving hospitals.²⁰ The available evidence is limited to two instances of the introduction of MFNs in health care provider contracts, but the fact that each of them had enough “bite” to provoke litigation by competing health insurance plans suggests that they may be particularly instructive examples of the MFN phenomenon more generally.

I examine below three observable market characteristics that are relevant to the introduction of these MFN provisions. One is the growth rate of the discount-seeking HMOs. The adoption of the MFN should have improved Blue Cross’s competitive position, and worsened the HMOs’ position, each relative to the other. This is not exactly shocking; competitors (like Blue Cross) generally don’t take competitive initiatives of any sort in which they hope to worsen their position. Thus it is plausible to suspect that even in instances where MFNs do not injure competition itself—that is, do not increase average market price or reduce total market output—they may still have the potential to injure one category of competitors (the discount-seeking HMOs). The second inquiry that I make with data available for the *QualMed* case (though not available for *Ocean State*) is the effect of the MFN on

²⁰ *Ocean State Physicians Health Plan, Inc. v. Blue Cross & Blue Shield of R.I.*, 692 F. Supp. 52 (D.R.I. 1988), 883 F.2d 1101 (1st Cir. 1989) (physicians); and *Petition and Complaint of Health Systems International and QualMed Plans for Health of Pennsylvania regarding: Independence Blue Cross Filing No. 1-P-92 and Subsequent Blue Cross Hospital Contracts*, Dkt. No. M95-06-024 (Insurance Commissioner of the Commonwealth of Pennsylvania) (June 13, 1995) (hospitals).

hospital pricing, specifically on the average level of net price (that is, after all discounts). It is this effect on consumers generally, and not the effect on the HMO competitors particularly, that is the pertinent test of antitrust injury from MFNs. I also examine in that inquiry both the degree to which net price is discounted from list price (an indirect indicator of hospital pricing conduct) and also the level of hospital profitability (an indirect indicator of the effects of hospital pricing). And finally, I examine (again for the *QualMed* market) some characteristics of hospital pricing that may help explain the reasons for Blue Cross's adoption of the MFN provision.

A. *The MFN effect on HMO enrollment*

The contention that Blue Cross MFNs injured the entire class of HMO health care purchasers was central both in *Ocean State* (which appears to be the most cited litigated case on MFN issues) and in *QualMed*. I will not rehash here the fact finding in *Ocean State*, since there is no shortage of law review articles that handle that task ably.²¹ The essential, simplified fact relevant to my purposes is that Blue Cross-Blue Shield of Rhode Island (BCRI), despite the possession of monopoly power in Rhode Island health care financing (which BCRI conceded at trial), was concerned with rising competition from the Ocean State HMO. Upon investigation, BCRI discovered that it was effectively paying more for the services of Rhode Island physicians than the upstart Ocean State HMO was. In response, BCRI in 1986 initiated (among other things, including starting its own HMO) an MFN provision in its physician service contracts. Ocean State sued, claiming antitrust injury, but BCRI prevailed. The Blue Cross MFN provision survived intact.

The relevant stylized facts are roughly similar in *QualMed*. Independence Blue Cross (IBC), which services the greater Philadelphia metropolitan area, added an MFN provision to its

²¹ For a starting point, see Anthony J. Dennis, *Potential Anticompetitive Effects of Most Favored Nation Contract Clauses in Managed Care and Health Insurance Contracts*, 4 ANNALS HEALTH L. 401 (1995), and the references cited therein.

hospital contracts effective as of mid-1992, which required each contracting hospital to offer IBC a price as low as the lowest price that the hospital gave to any other nongovernment payor. In response, the Justice Department in 1993 opened "a civil investigation . . . to assess the competitive effects of IBC's [MFN provision] and to determine whether it violates the federal antitrust laws."²² The Justice Department eventually dropped its investigation, but only because the issue would likely be exempt from federal antitrust scrutiny under the state-action doctrine, and suggested on its way out that the state insurance commission should be the agency to investigate "whether [IBC's MFN] has, in fact, reduced health-care costs" based upon "information now available . . . about the policy's actual effects."²³ Also in response, QualMed, one of the potentially adversely affected HMOs, brought an action against IBC through the Pennsylvania Insurance Commission, which had the legal authority to enjoin the MFN provision. That case was eventually resolved through a 1998 settlement agreement between IBC and the Insurance Commission.

Although the simple economic model sketched in the previous section is ambiguous with respect to consumer injury, it does imply that the MFN should have injured the competitive position of HMOs. Based upon theory alone, we might well predict that both of these Blue Cross MFNs would have stopped the HMO movement cold. After all, if HMOs offer subscribers only a limited panel of health care providers, yet have no provider discounts

²² Letter from Steven Kramer, Attorney, Antitrust Division, to Hon. Cynthia M. Maleski, Pennsylvania Insurance Commissioner (May 5, 1994). This investigation of Blue Cross contracting practices in eastern Pennsylvania was conducted in parallel with the overlapping similar investigation in western Pennsylvania, *supra* note 5. Both of these Blue Cross plans were reported in the general press to have had high enough shares of their respective service areas' health insurance business to raise competitive concerns with the Antitrust Division: A share of 70% for Blue Cross of Western Pennsylvania, and over 50% for IBC. Marc Metzger, *Blue Cross Practice Eyed*, PHILADELPHIA DAILY NEWS (P.M. ed.), Sept. 15, 1993, at B21.

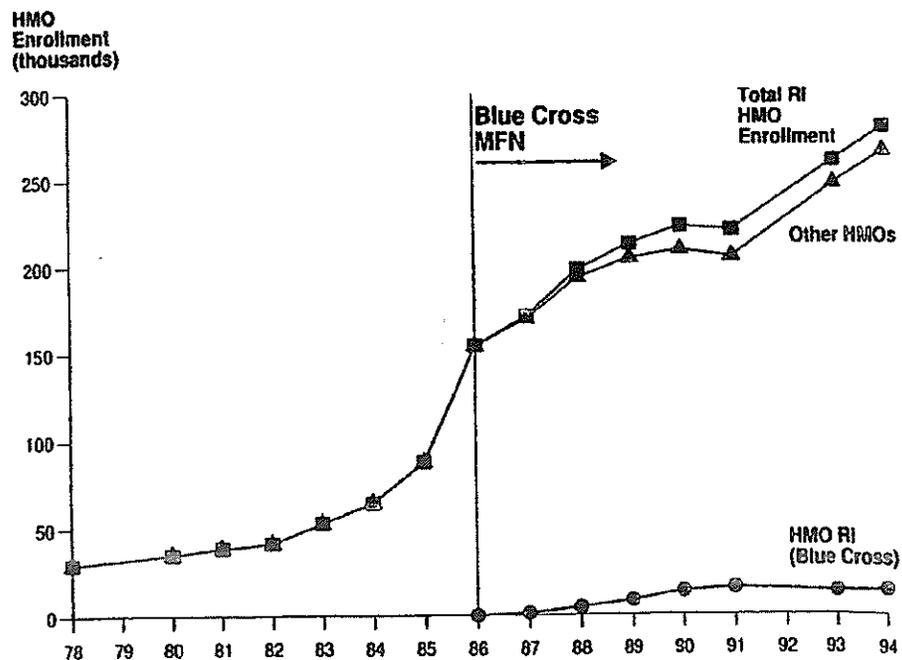
²³ Kramer, *supra* note 22.

to be passed along in the form of offsetting lower health insurance premiums, how could HMOs possibly offer a product that consumers would choose over conventional (Blue Cross) health insurance? As one antitrust expert put the facts in *Ocean State*:

The impact of Blue Cross's MFN clause was immediate. . . . When the dust settled . . . , competing health and dental plans were left bleeding and wounded on the floor.²⁴

With a description like that, it's hard to resist an autopsy of the casualties. Figure 4 provides a look at the HMO enrollment statistics that are relevant to *Ocean State*, and figure 5 does the same for *QualMed*; the underlying data are summarized in table 1.

Figure 4
The Growth of HMO Enrollment in Rhode Island Before and After the Blue Cross MFN

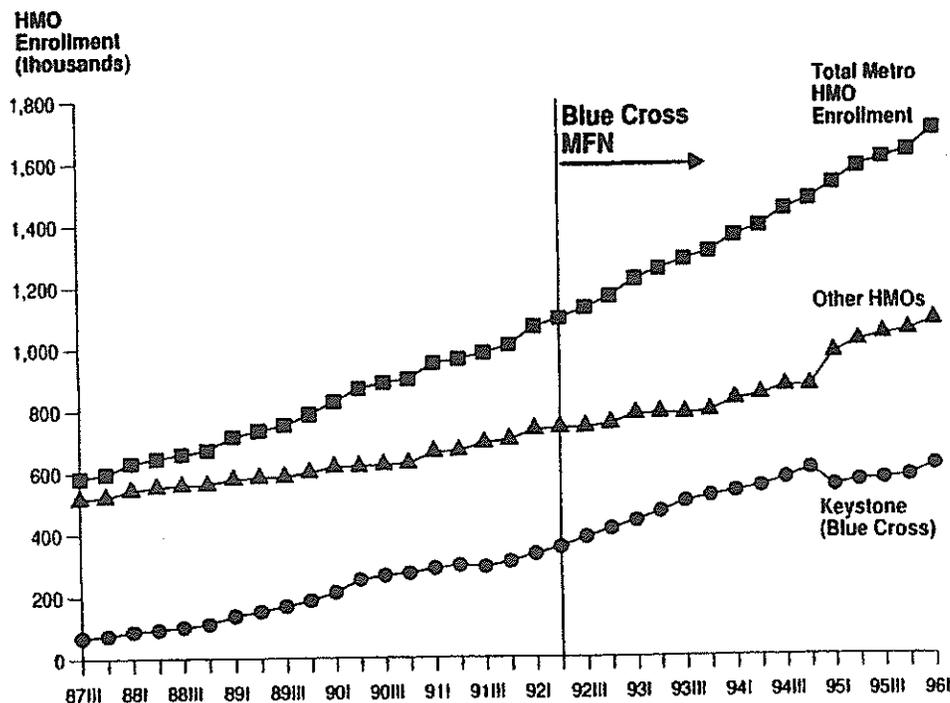


NOTE: HMO RI offered by Blue Cross-Blue Shield. Harvard Community RI members not broken out prior to 1/1/91. Some periods interpolated.

SOURCE: See table 1.

²⁴ Dennis, *supra* note 21, at 409 (footnote omitted).

Figure 5
 The Growth of HMO Enrollment in the Philadelphia Metro Area Before and After the Blue Cross MFN



SOURCE: See table 1.

The figures and table reflect the published statistics on Rhode Island (*Ocean State*) and Philadelphia metropolitan area (*Qual-Med*) enrollment in HMOs both before and after Blue Cross initiated its physician MFN provision. These data speak fairly plainly, and what they say is that there is no indication that the Blue Cross MFN provision halted the HMOs' long-run growth within the MFN-affected areas.²⁵ In a period of fairly stable areawide popu-

²⁵ A study of similar but less-recent Rhode Island HMO data observed that "[t]hese data make it difficult to conclude that the actions undertaken by [BCRI] seriously injured Ocean State," inferring that "[t]he existence of Ocean State allowed [BCRI] to pinpoint those physicians who were willing to accept lower fees. By reducing reimbursement to these physicians, [BCRI] was able to lower physician input costs. . . . [A] policy that can reduce input costs should be encouraged from a public policy viewpoint." Lawrence G. Goldberg & Warren Greenberg, *The*

lation, in each case HMOs added more enrollment in the years following the inception of the Blue Cross MFN than they had in the corresponding number of years prior to it.²⁶ Based on these data, it's hard to see (with the benefit of hindsight) what the competitive concern was.

Table 1

Total HMO Enrollment Before and After the Blue Cross MFN: State of Rhode Island (*Ocean State*), 1978–1994 and Philadelphia Metropolitan Area (*QualMed*); 1987 III–1996 I

HMO enrollment prior to MFN	HMO enrollment at adoption of MFN	HMO enrollment after MFN	Average annual enrollment growth	
			Prior period	Subsequent period
RHODE ISLAND				
29,419 (1978)	154,184 (1986)	279,466 (1994)	15,596	15,660
PHILADELPHIA METRO AREA				
582,785 (1987 III)	1,093,686 (1992 II)	1,694,391 (1996 I)	107,558	160,188

NOTES: Rhode Island: Enrollment figures are for mid-year. Harvard Community RI members not broken out prior to 1991.

Philadelphia Metro: Metro Area enrollment calculated as the sum of Keystone (KHPE, DVHMO, and Vista), Aetna (Aetna C&E and Freedom), U.S. Healthcare (USHC Philadelphia), CIGNA, Greater Atlantic/QualMed, Health Partners, Oaktree/Oxford, and Prucare of Philadelphia (plus several others with negligible enrollment). Includes Medicare and Medicaid. Excludes PPOs, and POS plans (except CIGNA).

SOURCES: Rhode Island: Interstudy publications (1978–1990); GHAA directories (1991–1994); and RI DBR Enrollment Reports (HCHP 6/30/94).

Philadelphia Metro: Pa. Dept. Health, HMO Quarterly Reports (1987 III through 1996 I).

Response of the Dominant Firm to Competition: The Ocean State Case, 20 HEALTH CARE MGMT. REV. 65, 73 (1995).

²⁶ The first-quarter 1995 shift of enrollment away from Keystone (IBC's HMO) that we see in figure 5 was the result of Keystone's sale of its Medicare HMO business to a competing HMO.

The demonstration in figures 4 and 5 does not, of course, translate automatically to the facts of MFNs in operation elsewhere. Different cases will have different facts, and those facts may lead to different competitive conclusions. Nevertheless, the lesson that *Ocean State* and *QualMed* teaches is that theoretical predictions about the actual magnitude of any competitor injury—much less of any competitive injury—are not worth much unless they are informed by empirical evidence.

B. The MFN effect on hospital prices, discounts, and profitability

As I noted earlier, an adverse MFN effect on the relative competitive position of HMOs is not sufficient, by itself, to imply competitive injury, in the usual sense of injury to consumer welfare. We expect the MFN to reduce the price paid by the purchaser employing the MFN, and to increase at least some prices paid by other purchasers; it is the net effect on average price, aggregated over all of the affected purchasers, that is the ultimate economic test of consumer injury or benefit. Although data are lacking on the Rhode Island physicians' fees that would be relevant to an examination of *Ocean State*, I have assembled and analyzed a large body of data on hospital financial and operating characteristics in the Philadelphia metropolitan area for the 7 years (1989–1995) straddling the 1992 introduction of the MFN provision in IBC's hospital contracts.²⁷ These data allow us to test for consumer welfare effects in *QualMed*.

IBC negotiated new MFN-inclusive contracts with its participating hospitals, made effective as of approximately mid-1992. Thus the pre-1992 period reflects the market environment that motivated IBC to adopt the MFN, and the post-1992 period reflects any effects of the MFN on hospital pricing and discounting. In this section I spell out what we would expect to see if, as

²⁷ These data were obtained from HCIA, a major health care data vendor, and are derived from the Medicare Cost Reports that virtually all hospitals submit annually to the U.S. Health Care Financing Administration. My initial investigation of these data was undertaken at the invitation of counsel for IBC, who had requested an independent economic analysis and assessment of the IBC MFN provision.

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claimed by QualMed and suspected by the Justice Department, IBC's MFN had a competitively adverse effect on the market at large, and then report my analysis of the data that are relevant to each of these hypothesized effects.

Assume as a hypothesis that the IBC MFN had an adverse effect on consumer welfare: specifically, that on balance the predominant effect of the MFN was to cause hospitals to raise their prices to IBC's competitors, more so on balance than to lower their prices to IBC. If this were so, what would we expect to see in consequence as evidence of this competitively adverse effect? The chief empirical implications of the hypothesized competitive injury conjecture are that, after the MFN is initiated:

1. The average net price for hospital services should rise;
2. The average discount (of net prices relative to list prices) should shrink; and
3. The average profitability of hospital operations should grow, thanks to less intense price discounting.

I present below descriptive summaries of the data that are relevant to each of these implications, followed by a more extensive statistical analysis of the same data. My empirical analysis is based upon 7 years of annual data (1989–1995) for essentially all acute-care inpatient hospitals in the Philadelphia metropolitan area.²⁸ The relevant underlying data are summarized in table 2.

1. NET HOSPITAL PRICES BEFORE AND AFTER THE MFN If the effect of the MFN were to elevate average net hospital prices, after all discounts, and if all other relevant factors were stable (in either their levels or trends), then we would expect average net revenue per inpatient admission to rise, relative to any existing trend, after 1992.²⁹ But as we see in figure 6, the affected hospitals' average

²⁸ The principal exclusions from this definition are a number of long-term psychiatric and rehabilitation hospitals, and hospitals not reporting for some or all of the 1989–1995 period. This results in 50 hospitals for which I have data for all 7 years. The Philadelphia metro area consists of five counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia.

²⁹ Net inpatient price must be approximated. I calculate net inpatient revenue as net patient revenue (from both outpatients and inpatients),

Table 2
Philadelphia Area Hospital Data Summary
1989-1995

Variable	Mean (standard deviation)		
	1989	1992	1995
Net inpatient price per admission	\$7,606 (2,589)	\$7,929 (2,966)	\$7,062 (2,868)
Percentage discount, net from gross	44.14% (8.54)	52.79% (6.11)	58.21% (7.83)
Operating revenue, percent of operating cost	97.32% (9.52)	101.94% (6.00)	102.05% (5.72)
Inpatient admissions	10,184 (6,008)	10,680 (6,028)	10,710 (6,429)
Inpatient days	67,270 (43,024)	69,302 (43,448)	55,386 (36,895)
Casemix severity index	1.30 (.20)	1.35 (.23)	1.39 (.25)
FTEs per patient	6.42 (1.83)	6.75 (1.80)	8.18 (2.62)
Percent nursing home beds	1.35% (3.47)	1.16% (3.51)	5.69% (11.58)
Percent Medicare days	49.55% (13.04)	52.47% (12.46)	52.52% (12.33)
Percent Medicaid days	12.45% (12.91)	13.34% (12.66)	13.40% (11.23)
Percent private-pay days	38.00% (10.27)	34.19% (9.95)	34.08% (11.02)

NOTE: N = 350 (50 hospitals, 7 years).
Prices deflated to 1995 dollars (Medical Care Component of Consumer Price Index).

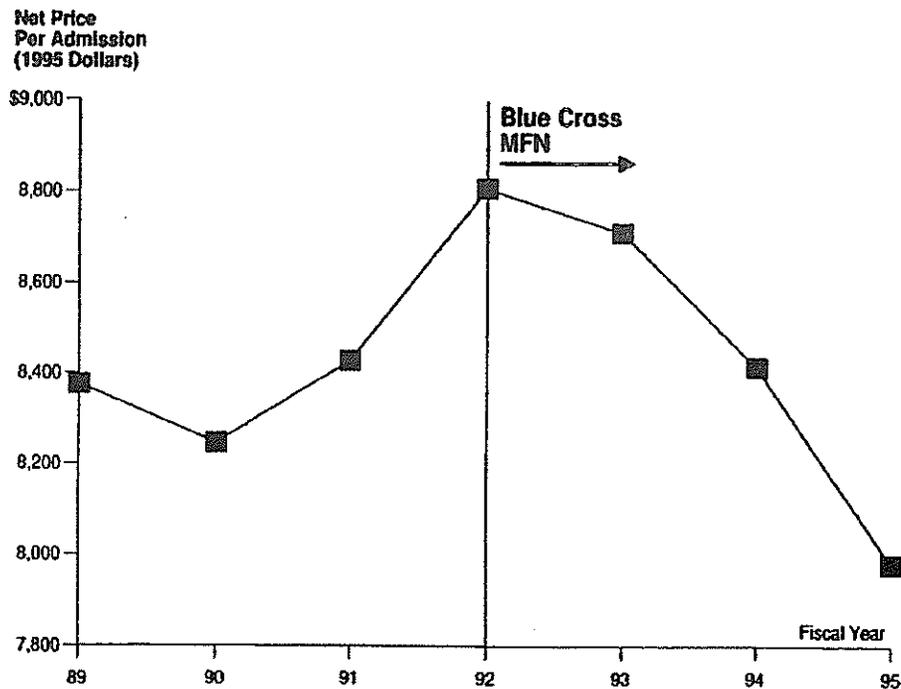
SOURCE: HCIA; AMERICAN HOSPITAL ASSOCIATION, AHA GUIDE (1990-1996); ECONOMIC REPORT OF THE PRESIDENT (1996).

times the ratio of gross inpatient charges divided by the sum of gross inpatient and outpatient charges. Dividing through by patient admissions gives us average net price per inpatient admission. For purposes of analysis, I then deflate these revenues by converting all of them to 1995 dollars using the medical care component of the Consumer Price Index; ECONOMIC REPORT OF THE PRESIDENT (1996), at table B 56.

net inpatient price had been rising slightly in the years leading up to the adoption of the MFN in 1992. After the MFN was initiated, the average price declined, not increased, contrary to the competitive injury conjecture.

Figure 6

Net Price per Inpatient Admission for Philadelphia Area Hospitals Before and After the Blue Cross MFN



SOURCE: See table 2.

If any adverse market price effects of IBC's MFN exist and are important, we would expect them to leave some visible tracks in the pertinent data on net price. No such tracks are apparent, and so the competitive injury conjecture gets no support in this area of investigation.

2. DISCOUNTS FROM LIST PRICE BEFORE AND AFTER THE MFN A subsidiary implication of the Justice Department's and QualMed's antitrust concerns is that the introduction of IBC's MFN should have brought with it a shrinkage of the overall discount. This we

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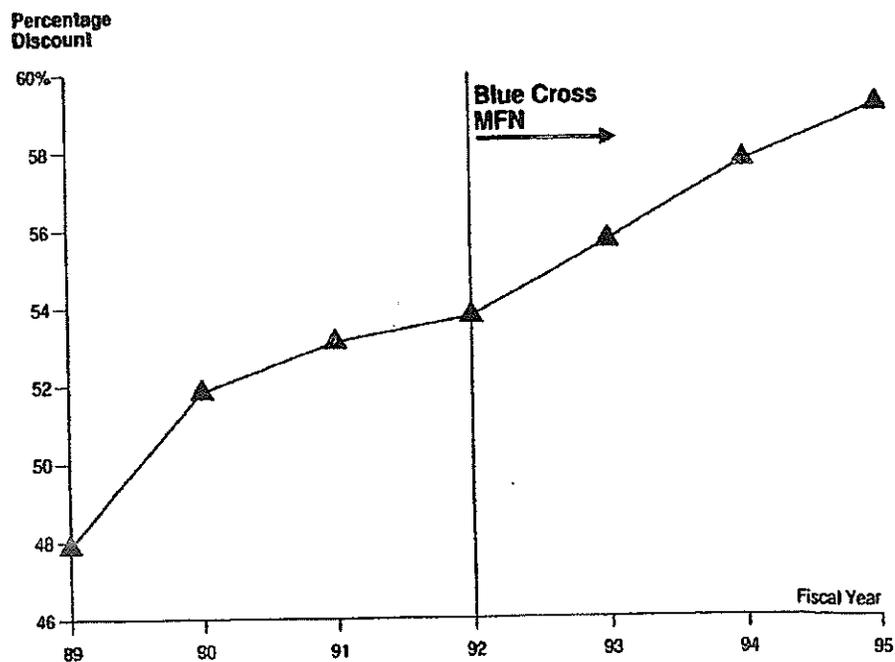
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can observe by measuring the overall average percentage discount, which is calculated as the percentage by which net patient revenue (based on net prices received after all discounts) is less than gross patient revenue (based on list prices charged before any discounts). The chronology of the average percentage discount is recorded in figure 7.

The data show no sign whatsoever of any post-MFN shrinkage in the overall discount level; there is *more* discounting, not less, after IBC introduces its MFN. More to the point; there is no post-MFN break in the continuous trend toward more discounting over time. Here too, the competitive injury conjecture receives no support from the data on overall discounting activity.

3. HOSPITAL PROFITABILITY BEFORE AND AFTER THE MFN The final empirical implication that I draw from the antitrust theory behind

Figure 7
Discounts as a Percentage of Gross Charges for Philadelphia Area Hospitals Before and After the Blue Cross MFN



SOURCE: See table 2.

Fiscal Year
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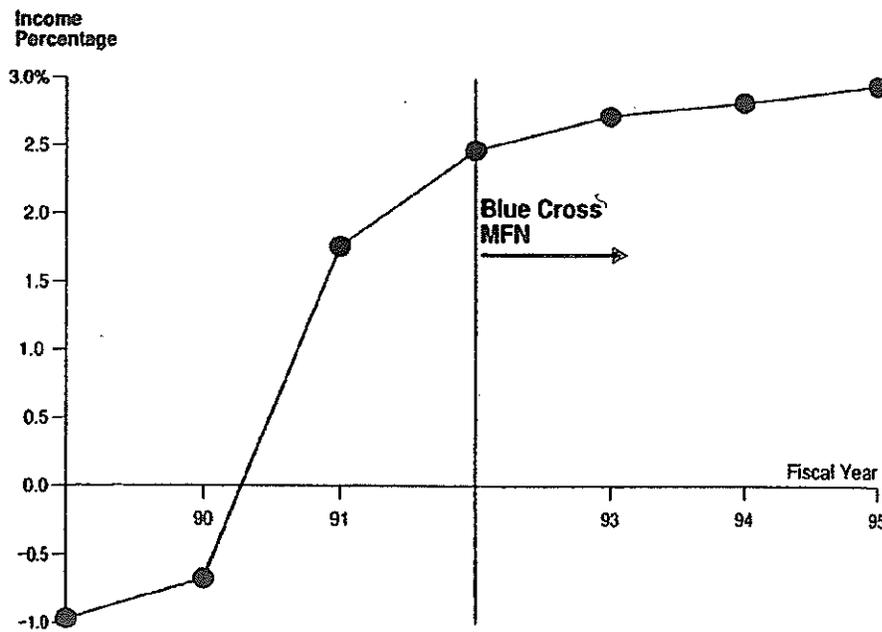
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QualMed is that, if IBC's MFN discouraged aggressive "dog-eat-dog" hospital price discounting, and as a result the MFN cooled the intensity of competition in the hospital services market, then hospital profitability should have been buoyed as a consequential result.³⁰ We can study that proposition by examining hospital profitability, measured by operating income expressed as a percentage of operating revenue.

Figure 8 tells the story, and it is not favorable to the competitive injury conjecture. There is no sign of a significant upturn, rel-

Figure 8
Operating Income as a Percentage of Operating Revenue for Philadelphia Area Hospitals Before and After the Blue Cross MFN



SOURCE: See table 2.

³⁰ As noted earlier, much of the theory under which MFNs can have anticompetitive effects characterizes MFNs as contractual features that are fostered by the sellers (here, the hospitals), rather than the buyers, as a way to prop up explicit or implicit price collusion by making secret price discounts easier to detect.

ative to the pre-MFN upward trend, in hospital profitability after the introduction of the MFN. Profitability grew sharply (from an obviously abnormally low base) before the MFN, but after the adoption of the MFN the growth of profitability flattens out at a level of less than three percent of revenues. This finding is not consistent with a substantial post-1992 reduction in competitive price pressure. Here as before, the facts on hospital profitability fail to provide support for the competitive injury conjecture about adverse market effects of MFNs.

4. STATISTICAL ANALYSIS OF HOSPITAL PRICES, DISCOUNTS, AND PROFITABILITY I recognize that more is going on in this hospital market than just the MFN. Suppose that the effect of the MFN under study here was actually to elevate average net hospital prices, but that coincidentally at the same time there were other independent market factors that changed after 1992 in a way that would tend to reduce prices. If so, then such a confounding price-reducing event might offset and thus mask a hypothetical price-increasing effect of the MFN. The same possibility is true for a hypothetical MFN-induced reduction in the overall level of price discounting, or a hypothetical MFN-induced elevation of hospital profitability.

The usual approach to ruling out other potential causes is to identify at least the most important of those causes, and control for their effects on the variable of interest through multivariate regression analysis. This is my approach here. We have three variables of interest: (1) net price per inpatient admission, (2) discount of net price relative to list price, and (3) hospital profitability. I estimate an economic model under which each of these dependent variables is potentially influenced by several important explanatory variables. Those explanatory variables include:

The overall scale of the hospital's operations (measured on two dimensions: the number of admissions, and the number of patient days);

The severity of medical treatment for the mix of patients that the hospital admits;

The amount of labor that the hospital applies to patient care, measured by full-time-equivalent employees per patient;

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The fraction of the hospital's total beds that is devoted to long-term nursing care rather than short-term acute care; and

The fractions of the hospital's inpatient census that are reimbursed under Medicare and under Medicaid.

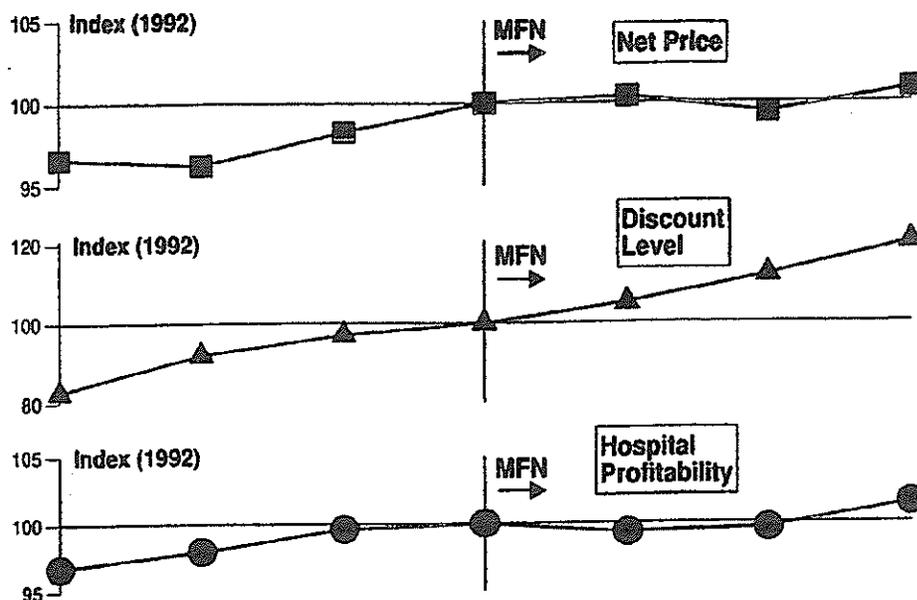
Those are the observable explanatory factors that, having controlled for their effects, we may then rule out as potential alternative causes of any remaining rise or fall in our variables of interest after the MFN begins to affect them.³¹

Finally, to estimate the MFN effect, the model also includes six "year variables" that measure any remaining differences in the dependent variables in each of the three pre-MFN years (1989–1991) and the three post-MFN years (1993–1995), each year relative to the transition year 1992. The interpretive sense of these year variables is that, if there are no important omitted or unobserved explanatory variables that change materially over time in ways that are strongly correlated with any MFN effect, then the pattern of the post-MFN year differences, relative to the pattern of the pre-MFN year differences, captures the effects of the adoption of the MFN.

The details of this statistical analysis are described in the appendix, and the results are summarized in appendix tables A.1 and A.2. The pertinent time patterns of the year variable effects on hospital net price, overall discount level, and hospital profitability are summarized in figure 9. Each variable in the figure—

³¹ Each of these seven explanatory variables is observable, and varies from hospital to hospital within each year and from year to year within each hospital. In addition to these variables, my empirical model also includes binary "hospital fixed-effect" variables, one variable for each hospital. This empirical approach—called a "fixed-effects model"—accounts for differences across hospitals that are common to the entire time period but are not accounted for by the explanatory variables that my model includes explicitly. Illustrative examples of such unobserved influences on (say) net price might include a hospital's teaching (or nonteaching) status; its outstanding (or abysmal) reputation; its location in a safe (or crime-infested) neighborhood; and the excellence (or mediocrity) of the doctors on its staff. The fixed-effect formulation implicitly accounts for across-hospital variation in all of this, and leaves the explicitly measured variables to explain variation over time for each hospital.

Figure 9
 Price, Discount Level, and Profitability, Net of Effects of Explanatory Variables (Percentage of 1992 Level)



NOTE: Deviations from 1992 index calculated from table A.1 coefficients of year variables.

SOURCE: See figures 6–8 and table A.1.

price, discount, and profitability—is indexed; that is, each year effect is shown as the percentage by which the variable of interest deviates from its 1992 level.³² To the extent that the inferences that we might draw from figures 6–8 are qualified by concerns that those movements in price, discounting, and profitability might be influenced by extraneous, non-MFN causal factors, figure 9 addresses, and for the most part obviates, those concerns. The central results survive the statistical analysis: controlling for other causal factors (1) net price, which had been rising prior to

³² Mechanically, the differences from the base year 1992 in each year of figure 9's plots equal the estimated coefficients of the year variables in table A.1's regression estimates, exponentiated to percentage differences. I also estimated the same model with the hospital fixed-effect variables omitted; the results of those estimates are slightly less favorable to the hypothesis of competitive injury than are the results reported here.

the MFN, is held in check after the MFN; (2) discount levels, which had been rising prior to the MFN, continue to rise after the MFN; and (3) hospital profitability, which had been rising prior to the MFN, is roughly stable after the MFN. In other words, the data analyzed here provide no support for the MFN competitive injury conjecture, and are if anything more consistent with a pro-competitive assessment.

IV. Price negotiations and MFNs in heterogenous markets

The preceding sections of my empirical analysis of MFN contracts have concentrated on *what* these contracts have done, either to health insurance market competitors or to hospital market competition. I now turn to a different question and ask *why* a health care purchaser might have initiated an MFN policy in the first place, if in the cases that I have examined it evidently was not to successfully injure competition. At the highest level of generality, the answer is simply that a purchaser of health care proposes an MFN in order to improve its profitability or its competitive position, relative to its rivals. But that level of generality, as noted earlier, does not tell us much about why an MFN is important to that objective.

Prior research has identified many purposes that might be served by MFNs, but one of the simplest of the benign explanations is that MFNs are a tool with which to deal with uncertainty and reduce risk. To illustrate, suppose that a buyer and a seller want to deal with each other through a long-term requirements contract rather than in spot transactions, for all the usual reasons. However, neither the buyer nor the seller knows what market conditions will be like in the future. Because of this uncertainty, the buyer is unwilling to commit now to a fixed price that may prove to be significantly above the prevailing spot price later. If the contractual relationship is valuable enough to the seller, then he can solve this information problem by offering the buyer an MFN provision. In this setup, the operative evidence of changed market conditions is the seller's own subsequent pricing to other buyers. If the market price falls, as reflected in the seller's own prices,

then the buyer gets the benefit of that development. With this reduction in risk, the buyer is more willing to enter into a mutually beneficial long-term contract with the seller.³³

That illustration concerned uncertainty between two parties over many time periods, but MFNs can also deal with uncertainty between many parties within a single time period. Again to illustrate, suppose that the buyer (e.g., Blue Cross) wants to buy a product from many sellers (e.g., hospitals)—rather than just from just one seller as in the previous example—but the sellers have substantially different costs and therefore may sell profitably at substantially different prices. In the first illustration, the buyer had intertemporal uncertainty about getting the best prices from a given seller over multiple years; here, the buyer has contemporaneous uncertainty about getting the best prices over multiple sellers in a given year. All of the parties, let us suppose, place some value on a contractual relationship, but the buyer has a concern about locking in a disadvantageous price. That concern may lead him to contract with fewer sellers than would be the case without this uncertainty. Here too MFNs can help overcome a barrier to contract. By pledging to grant to the contracting buyer the lowest prices at which they have in fact sold to other buyers, each of the sellers can provide the strongest evidence practicably available that their promise to the buyer of a low price is genuine. With this assurance, the buyer may enter into contracts that, without this credible “best price” guarantee, uncertainty might have prevented.

Thus MFNs are useful in situations where buyers don't know just how low the lowest available price actually is. One general manifestation of such market ignorance is the dispersion of prices within the market; a high degree of ignorance and a high degree of price dispersion go hand-in-hand.³⁴ To enlighten the price dis-

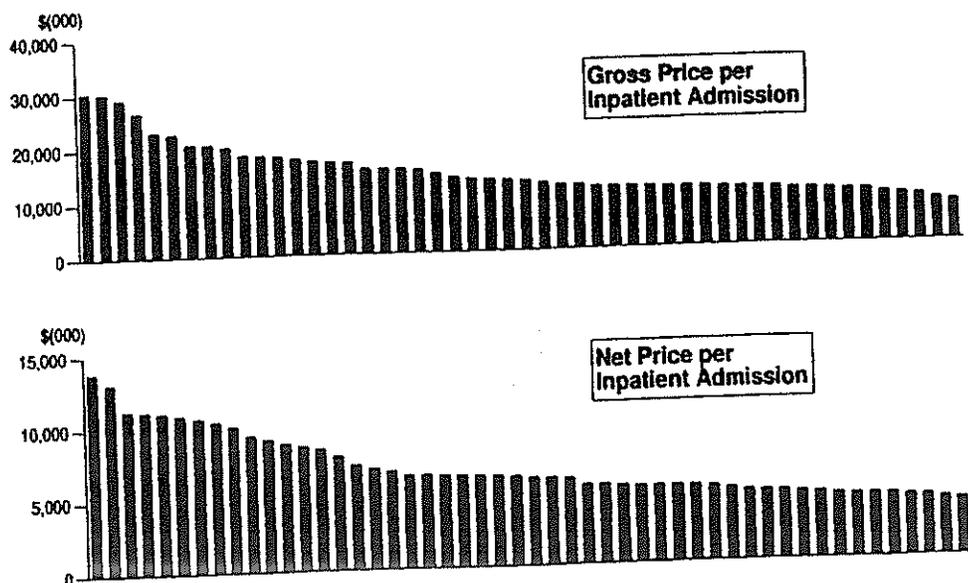
³³ Although it is not worth developing at length here, I note that had market risk been more the concern of the seller than of the buyer, the MFN clause could have been written in reverse, at least for a nonrequirements contract: for example, if the buyer later bought at a higher price from any other seller, then the seller with the MFN contract would receive the benefit of that higher price.

³⁴ See George J. Stigler, *The Economics of Information*, 69 J. POL. ECON. 213 (1961) and subsequent derivative research. For applications in

person issue empirically, I examine the distribution of Philadelphia metropolitan area hospitals' average list prices (that is, before any discounts) and average transaction prices (that is, net of all discounts). These are the prices that reflect the market environment within which IBC adopted its MFN provision in 1992.

List prices for Philadelphia metropolitan area hospital services have a huge degree of variation; see figure 10 (upper panel) for the 1992 average gross charge per inpatient admission, which ranges from a high of \$30,392 to a low of \$7262. Since it is the common wisdom that "nobody" pays list price, we might ask

Figure 10
Average Gross and Net Prices for Philadelphia Area Hospitals—1992



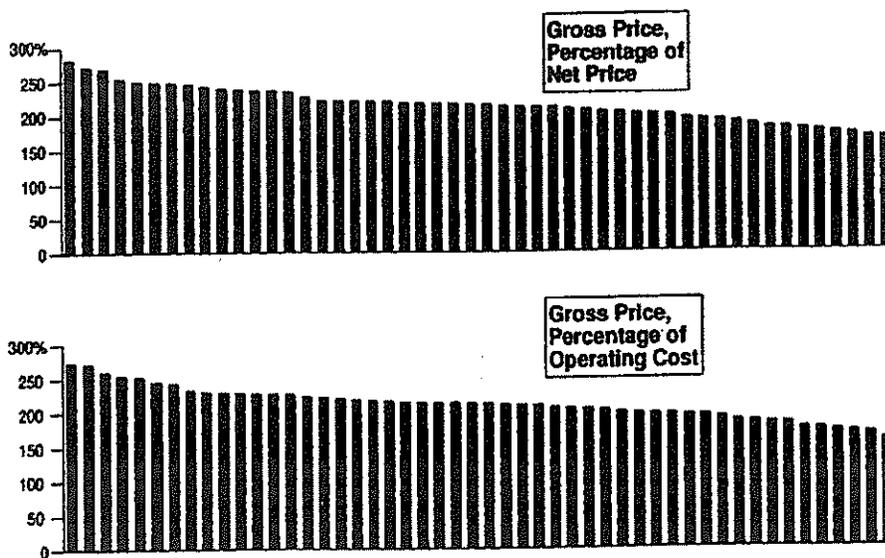
SOURCE: See table 2.

health care markets, see, e.g., Barry S. Eisenberg, *Information Exchange Among Competitors: The Issue of Relative Value Scales for Physicians' Services*, 23 J. L. & ECON. 441 (1980); William J. Lynk, *Physician Price Fixing Under the Sherman Act: An Indirect Test of the Maricopa Issues*, 7 J. HEALTH ECON. 95 (1988); and Martin Gaynor & Solomon W. Polachek, *Measuring Information in the Market: An Application to Physician Services*, 60 S. ECON. J. 815 (1994).

whether the “real” price—net price after discounts—has significantly less variability across hospitals than list price does. It doesn't: figure 10 (lower panel) shows us that the average net charge after all discounts has nearly as much dispersion as list price, ranging from a high of \$13,818 to a low of \$3912.³⁵ Thus we see tremendous price variability in both list and net prices.

In this environment, it is a problem for a purchaser of hospital services to figure out how low a price it can realistically negotiate with each of the individual hospitals in the area. A single, flat price won't work, because the metro area hospitals vary greatly in their list and net prices. If a “flat price” approach won't work, then maybe a “flat discount” approach would, in which the purchaser demands the same percentage discount from gross charges from all of the metro area hospitals. For this to result in a net

Figure 11
Gross Price Percentage Multiples for Philadelphia Area Hospitals—1992



SOURCE: See table 2.

³⁵ More formally, the coefficient of variation of the distribution of prices (i.e., the standard deviation expressed as a percentage of the mean) is 39.6% for list price, while for net price it is 37.4%.

price to the purchaser that is, say, the same as the average net price that the hospital receives from all other purchasers, it would have to be the case that all hospitals' nominal (i.e., list) prices are marked up by roughly the same percentage over their real (i.e., net) prices. But figure 11 (upper panel) reveals no market uniformity on that pricing characteristic; list price is marked up to anywhere from 281.5% of net price to 165.7% of net price, which is to say equivalently that net price is discounted from list price by anywhere from 64.5% to 39.6%.³⁶

As an alternative and more aggressive strategy, the purchaser might seek a single pricing formula that results in a discount from list price that achieves a net price roughly equal to the hospital's operating costs. For this to work, it would have to be true that all hospitals had roughly the same percentage markup of list price over operating costs.³⁷ But they don't; as we see in figure 11 (lower panel), list price is marked up to anywhere from 273.1% to 157.4% of operating cost. For a purchaser to attempt to negotiate a discount from list price that gave it a net price equal to each hospital's operating costs, those discounts would range from a high of 63.4% to a low of 36.5%. Based on both types of figure 11's markup percentages, a flat-discount approach would not be materially more effective than a flat-price approach would be.

We see from this high degree of observed pricing heterogeneity in the hospital market that a "one size fits all" approach to price negotiation won't work well. Moreover, these broad all-payor hospital-average price and markup statistics are too crude to be a particularly useful guide to specific private-pay price discounting possibilities, because every one of these figures reflects not only a hospital's HMO and other private-pay discounts but also substantial discounts forced upon it by Medicare and Medicaid, a burden that varies greatly from one hospital to another.

³⁶ The percentage price ratios shown in the figure are calculated as total gross patient revenues (inpatient plus outpatient) as a percentage of the corresponding net patient revenues.

³⁷ That markup percentage is defined for these purposes as total gross patient revenues as a percentage of total operating costs.

Nevertheless, the variation in even these figures' aggregated statistics is highly suggestive of why an MFN provision would seem to a health care purchaser like a prudent approach to bargaining for the best price that it could realistically obtain. We see an immense spread within the metro area of hospitals' average list prices, net prices, markups of list price to net price, and markups of list price to operating cost. There is every reason to expect a roughly similar spread in the corresponding figures for specific purchasers' private-pay prices, but that measure cannot be teased out of the available data (which are averaged over all of the hospital's payors). Failing that, one available alternative in the effort to pay no more than must be paid is the focused price inquiry that is the defining element of an MFN provision.³⁸

A health care purchaser's objectives in this effort are no different than those of any other buyer who wants the best available prices from multiple sellers in a market where actual prices are confidential. By simple analogy, a consumer in the market for a new car faces much the same problem when canvassing multiple dealers offering multiple makes of cars. The buyer knows that ordinarily he should hold out for a purchase price less than list price, but knows also that if he insists on a price that is less than the dealer's actual cost he won't get an offer. Services like dealer cost guidebooks, and tactics like demanding to see the dealer's factory invoice, help somewhat; but because of practices like off-invoice factory rebates these resources are at best only a rough and upward-biased guide to the dealer's wholesale acquisition cost, and are no guide at all to the dealer's own costs of distributing the product. Under these circumstances, the best and most relevant guide that the price-conscious consumer could seek would be information on the lowest actual prices that these heterogeneous dealers have in fact accepted for their products. These are

³⁸ All of the relevant research of which I am aware (*see, e.g.,* note 34 *supra* and references cited therein) has confirmed that price heterogeneity is strikingly high in markets for health care services generally. It may be a promising speculation that, because of that fact, MFNs are more common in health care markets than in most other markets, and that that commonality is what explains the antitrust enforcement agencies' apparent focus on the health care industry when pursuing MFN investigations.

the lowest prices that are demonstrably not too low for a deal to be struck. This information is, of course, precisely analogous to the pricing information that health care purchasers seek through the mechanism of an MFN.

V. Conclusions

The applicable economic theory on MFNs assists us not by proving generalizations that must always be so, but rather by disproving false generalizations about that which cannot be generalized. Here, as in most of economic analysis, the role of economic theory is not to single-handedly prove a result. It is instead to point us more specifically to the relevant areas of factual or empirical investigation, and to guide our interpretation of the results of such investigations.

If there is one lesson that is warranted from this analysis, it is that across-the-board presumptions opposing MFNs are groundless. I suspect, but cannot prove with the cases that I have examined, that the opposite consumer welfare presumption is equally groundless. A corollary of this lesson is that any generalizations that eventually do emerge about the consumer welfare effects of MFNs will emerge only through a succession of empirical studies of their circumstances and consequences, studies that may employ a common theoretical framework but that apply that framework to divergent sets of facts. It may be that there are such generalizations to be discovered—for example, that purchaser-initiated MFNs are likelier than provider-initiated MFNs to have favorable consumer welfare effects—but hypotheses like these do not become empirical generalizations without empirical research.

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APPENDIX

My objective is to explain the variation that we see across hospitals and over time in (1) net hospital price per inpatient admission; (2) the overall hospital discount (average net price reduction, relative to list price); and (3) hospital operating profitability. To do so, I account for the following explanatory variables that potentially may have a causal influence on each of these three variables of interest:

1. the number of patients admitted;
2. the total number of days of inpatient care received by the admitted patients;
3. the casemix severity index, a measure of the severity of medical condition or treatment of the hospital's average Medicare patient;
4. the number of full-time-equivalent employees per patient, as a measure of quality or intensity of care;
5. the fraction of the hospital's beds that are devoted to long-term nursing care, rather than short-term acute care;
6. the fraction of the hospital's patient days that are provided to Medicare patients, and reimbursed at Medicare rates; and
7. the fraction of the hospital's patient days that are provided to Medicaid patients, and reimbursed at Medicaid rates.

As for the variables to be explained, (1) net price (that is, net inpatient revenue per inpatient admission) is deflated to 1995 dollars using the Medical Care Component of the CPI, and then converted to logarithms; (2) average discount is expressed as the difference between dollars of gross patient charges minus dollars of net patient revenues, divided by gross charges and then converted to logarithms; and (3) hospital profitability is measured by net operating revenues divided by operating costs, then converted to logarithms. As for the explanatory variables, the Medicare, Medicaid, and long-term beds percentages are expressed as fractions, and the other explanatory variables are converted to logarithms. In addition, I add binary "hospital fixed effect" variables to the model, one for each hospital, to capture the overall full-period effects of any hospital-specific factors that are not accounted

for by the explicitly included explanatory variables. Finally, I append to the explanatory model 6 year-specific binary indicator variables, one for each of the years 1989–1991 and 1993–1995. The pattern of these “year effects,” each relative to a baseline of 1992—the MFN transition year—is the measure of any detectable effect of the MFN in 1993–1995 relative to trends seen in 1989–1991.

Table A.1 reports the regression estimates of the parameters of my explanatory model, with the corresponding *t*-statistics in parentheses.¹ The results for most of the explanatory variables provide no surprises. The composition of hospital output—the number of admissions, given patient days, and the number of patient days, given admissions—has a significant effect on net price and degree of discounting, supporting the decision to include both output measures in the model.² Higher casemix severity of hospital output is reflected in a higher price, and less discounting, for that output. Higher labor intensity of patient care (more specifically, for my rough FTE proxy for it) has a positive effect on net price, with no statistically significant effect on discounting or profitability. The effect of the long-term-care bed proportion is economically negligible and statistically insignificant. Finally, as for payor composition, the Medicare patient proportion has, surprisingly, no effect on a hospital’s average net price in this model, but a strong positive effect on both the overall degree of discounting and the level of profitability. The Medicaid patient proportion has, as expected, large and significant negative effects on average net price and profitability, and a positive and significant effect on the degree of discounting.

¹ In samples of this size, *t*-statistics above roughly 2.0 are referred to as statistically significant by conventional standards (that is, a five-percent confidence level, two-tailed test).

² I note that the sum of the price coefficients on admissions (–.7762) and days (.7561) is –.0201, implying that an equiproportionate increase in both variables, all else equal, is associated with a very small decrease in net price. The same arithmetic implies that size has essentially no effect on the degree of discounting, and a positive association with profitability.

Table A.1
Regression Estimates of Net Price, Average Discount,
and Operating Profitability
1989-1995

Explanatory variable	Dependent variable		
	Net price	Average discount	Operating profitability
Log admissions	-.7762 (-9.62)	-.4125 (-4.17)	.0756 (1.18)
Log days	.7561 (9.52)	.4180 (4.29)	.0245 (.39)
Log case severity	.5171 (3.80)	-.4655 (-2.79)	.1557 (1.45)
Log FTE per patient	.1175 (2.55)	.0642 (1.14)	-.0481 (-1.32)
Nursing bed fraction	-.0088 (-.12)	.1089 (1.23)	-.0184 (-.32)
Medicare fraction	.0081 (.04)	.5326 (2.36)	.4455 (3.06)
Medicaid fraction	-.5258 (-3.24)	1.0260 (5.15)	-.3330 (-2.59)
1989 effect	-.0346 (-1.87)	-.1899 (-8.37)	-.0332 (-2.27)
1990 effect	-.0384 (-2.12)	-.0834 (-3.76)	-.0204 (-1.43)
1991 effect	-.0178 (-1.06)	-.0307 (-1.49)	-.0040 (-.30)
1993 effect	.0036 (.22)	.0484 (2.35)	-.0070 (-.52)
1994 effect	-.0062 (-.32)	.1120 (4.70)	-.0041 (-.26)
1995 effect	.0080 (.33)	.1832 (6.21)	.0143 (.75)
R ²	.954	.743	.441

NOTE: N = 350 (50 hospitals, 7 years). *T*-ratios in parentheses. Coefficients of 50 hospital fixed effect variables not reported. All revenues and costs converted to 1995 dollars.

SOURCE: See table 2.

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Examining the estimated coefficients and significance levels of the year variables (which are all that we are ultimately really interested in here), we may say that prices, discounting, and hospital profitability had all risen by 1992, and that these increases were statistically significant relative to at least some of the pre-MFN years. After the introduction of the MFN, the level of discounting in subsequent years is greater than it had been in 1992, and the differences in discounting are all statistically significant. For both net price and hospital profitability, there were no statistically significant differences between the 1992 transition year and any of the subsequent post-MFN years.

Together, all of these variables, including the hospital fixed-effect variables, account for 95.4% of the total variation in hospital net inpatient price, 74.3% of the variation in overall average discount, and 44.1% of the variation in hospital profitability.

I have described the interpretation of the data in terms of comparing post-MFN trends to pre-MFN trends, and to carry that descriptive theme through to the empirical work I also estimate an explicit trend model. In lieu of the discrete pre-MFN and post-MFN year variables, the model now has a log-linear pre-MFN trend line from 1989 to 1992, joined to a post-MFN trend line from 1992 to 1995.³ The results from this pretrend and posttrend model are reported in table A.2.

These results confirm, with additional precision, the inferences that I drew from table A.1. There is a statistically significant growth trend of about 1.24% per year in real net hospital prices prior to the MFN; afterward there is essentially no trend in prices. There is statistically significant growth in the degree of discounting both before and also after the MFN; the differential between the two estimated rates of growth is not statistically significant.

³ Specifically, this is a regression on a 1989–1995 trend variable (trend = -3, -2, -1, 0, 1, 2, 3) plus a post-MFN trend differential variable (differential = 0, 0, 0, 0, 1, 2, 3). The net effect is a trend line with a kink (but not a discontinuous jump) at 1992. The *t*-ratios for the level of the post-MFN trend are calculated for the sum of the coefficients of the trend and the trend differential variables.

Table A.2
Regression Estimates of Net Price, Average Discount, and Operating Profitability
1989–1995

Explanatory variable	Dependent variable		
	Net price	Average discount	Operating profitability
Log admissions	-.7724 (-9.82)	-.3809 (-3.90)	.0965 (1.55)
Log days	.7557 (9.83)	.3754 (3.93)	.0009 (.01)
Log case severity	.5188 (3.85)	-.4904 (-2.94)	.1506 (1.41)
Log FTE per patient	.1218 (2.68)	.0422 (.75)	-.0546 (-1.52)
Nursing bed fraction	-.0099 (-.14)	.1048 (1.17)	-.0222 (-.39)
Medicare fraction	.0108 (.06)	.3998 (1.81)	.3917 (2.79)
Medicaid fraction	-.5194 (-3.24)	.9484 (4.77)	-.3619 (-2.86)
Pre-MFN trend	.0124 (2.16)	.0612 (8.61)	.0102 (2.26)
Differential in trend	-.0100 (-.98)	-.0072 (-.57)	-.0083 (-1.03)
Post-MFN trend	.0024 (.32)	.0540 (5.83)	.0019 (.33)
R ²	.953	.735	.435

NOTE: N = 350 (50 hospitals, 7 years). T-ratios in parentheses. Coefficients of 50 hospital fixed effect variables not reported. All revenues and costs converted to 1995 dollars.

SOURCE: See table 2.

And finally, the trends in hospital profitability mirror those for price; positive and significant at about 1.02% per year prior to the MFN, and essentially flat afterward. Both here and in table A.1, there is no empirical support whatsoever for the proposition that

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the introduction of IBC's MFN injured competition in the affected market for hospital services. To the contrary, the increasing pace of discounting continued unabated, and the prior uptrends in hospital price and profitability were extinguished.