

Louisiana Law Review

Volume 48 | Number 3

January 1988

An Economic Analysis of Liquor Price Affirmation Laws: Do They Burden Interstate Commerce?

Michael W. Pustay

Asghar Zardkoohi

Repository Citation

Michael W. Pustay and Asghar Zardkoohi, *An Economic Analysis of Liquor Price Affirmation Laws: Do They Burden Interstate Commerce?*, 48 La. L. Rev. (1988)

Available at: <https://digitalcommons.law.lsu.edu/lalrev/vol48/iss3/3>

This Article is brought to you for free and open access by the Law Reviews and Journals at LSU Law Digital Commons. It has been accepted for inclusion in Louisiana Law Review by an authorized editor of LSU Law Digital Commons. For more information, please contact kreed25@lsu.edu.

AN ECONOMIC ANALYSIS OF LIQUOR PRICE AFFIRMATION LAWS: DO THEY BURDEN INTERSTATE COMMERCE?

Michael W. Pustay* and
Asghar Zardkoohi*

Thirty-nine states¹ have price affirmation laws or policies requiring liquor distillers to sell to wholesalers within the state "at a price that is no higher than the lowest price the distiller charges wholesalers anywhere else in the United States."² These laws come in two forms. *Retrospective* price affirmation regulations require distillers to affirm that the prices charged in the state today (or in some future period) will be no higher than the lowest prices charged in any other state in some past period. *Prospective* price affirmation regulations require distillers to affirm that the prices charged in the state now will be no higher than the lowest prices charged in any other state in some future period.³

Price affirmation laws have been constitutionally challenged by distillers as burdens on interstate commerce. In 1966, a retrospective affirmation law survived the first such challenge in the Supreme Court, *Joseph E. Seagram & Sons, Inc. v. Hostetter*.⁴ Twenty years later, however, the same court declared a prospective law unconstitutional in

Copyright 1988, by LOUISIANA LAW REVIEW.

* Associate Professors of Management in the Business, Public Policy, and the Law Group, Department of Management, College of Business Administration, Texas A&M University. We would like to thank James W. Bowers, Associate Professor of Law at Louisiana State University, for his extensive and insightful comments on an earlier draft of the paper.

1. Of the 39 states, 18 are control states in which a state agency holds a monopoly over wholesale distribution of liquor. The control states are Alabama, Idaho, Iowa, Maine, Michigan, Mississippi, Montana, New Hampshire, North Carolina, Ohio, Oregon, Pennsylvania, Utah, Vermont, Virginia, Washington, West Virginia, and Wyoming. License states are states in which wholesale distribution is undertaken by private firms. The license states which have adopted affirmation laws are Arizona, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Minnesota, Nebraska, New Jersey, New Mexico, New York, Oklahoma, Rhode Island, South Carolina, and Tennessee. (See Distilled Spirits Council of the United States, Summary of State Laws & Regulations Relating to Distilled Spirits, 23d ed., 1981, Various Tables).

2. *Brown-Forman Distillers Corp. v. New York State Liquor Auth.*, 106 S. Ct. 2080, 2082 (1986). State laws generally permit distillers to make adjustments for differences in state taxes and fees and in actual delivery costs in the filing of their affirmed prices. See, e.g., N.Y. Alco. Bev. Cont. Law § 101-b (McKinney 1987).

3. *Id.* at 2085.

4. 384 U.S. 35, 86 S. Ct. 1254 (1966).

*Brown-Forman Distillers Corp. v. New York State Liquor Authority.*⁵

The *Brown-Forman* opinion suggests in dicta that the court might be persuaded to change its mind about the validity of retrospective affirmation laws as well.⁶ This paper demonstrates, using economic analysis, that both types of price affirmation regulation impose similar burdens on interstate commerce. It concludes that the Supreme Court's recent suggestion ought to be taken seriously. *Seagram* should be overruled.

There are two steps in our argument, one legal, the other economic. Legally, we show in Part I below that the commerce clause prohibits State A from burdening commerce by regulating prices charged in State B. Economically, in Part II, we prove that price affirmation regulation by one state will cause profit-maximizing interstate distillers to adjust the prices they charge in other states as well, so that the effect of the first state's regulation is, inevitably, to regulate prices charged elsewhere. That economic impact, we show, results from both retrospective and prospective regulatory schemes. Ergo, we conclude that both varieties burden interstate commerce.

I. THE CASE LAW

In assessing conflicts between state economic regulation and the commerce clause, the *Brown-Forman* Court noted that a two-tiered approach has been applied. A state statute that "directly regulates or discriminates against interstate commerce, or . . . favor[s] . . . in-state economic interests over out-of-state interests" will fail the first test.⁷ If

5. 106 S. Ct. 2080 (1986).

6. The Court offered a broad hint that it might reverse the *Seagram* decision: While we hold that New York's prospective price affirmation statute violates the Commerce Clause, we do not necessarily attach constitutional significance to the difference between a prospective statute and the retrospective statute at issue in *Seagram* If there is a conflict between today's decision and the *Seagram* decision, however, there will be time enough to address that conflict should a case arise involving a retrospective statute. Because no such statute is before us now, we need not consider the continuing validity of *Seagram*.

Brown-Forman, 106 S. Ct. at 2087 n.6. In his concurring opinion, Justice Blackmun argued that the Court should "go further and overrule" *Seagram*. 106 S. Ct. at 2088.

7. 106 S. Ct. at 2084. See *Philadelphia v. New Jersey*, 437 U.S. 617, 98 S. Ct. 2531 (1978) (New Jersey law prohibiting importation of solid and liquid wastes originating outside of the state found to discriminate unconstitutionally against interstate commerce; a state "may not isolate itself from a problem common to many by erecting a barrier against the movement of interstate trade." 437 U.S. at 628, 98 S. Ct. at 2538); *Shaffer v. Farmers Grain Co.*, 268 U.S. 189, 45 S. Ct. 481 (1925) (North Dakota attempted to control inspection, grading, and terms of transactions in the sale of North Dakota-grown wheat; its regulations found to unconstitutionally subject wheat purchased for interstate

the first test is passed, the Supreme Court will then judge whether the state has a legitimate interest in the action and whether the local benefits exceed the burdens imposed on interstate commerce.⁸ This protection extends to both interstate producers and consumers: "While a State may seek lower prices for its consumers, it may not insist that producers or consumers in other States surrender whatever competitive advantages they may possess."⁹

Liquor regulation cases involve a special complication, the potential conflict of the commerce clause with the twenty-first amendment,¹⁰ which

shipment to state regulation); *Edgar v. MITE Corp.*, 457 U.S. 624, 640-43, 102 S. Ct. 2629, 2639-41 (1982) (plurality opinion) (Illinois Business Takeover Act, which imposed prior notification requirements on potential acquirers of certain target companies, found to regulate and interdict interstate commerce directly in violation of the commerce clause).

8. *Brown-Forman*, 106 S. Ct. at 2084. See *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142, 90 S. Ct. 844, 847 (1970). In *Pike*, the state of Arizona, acting under its Fruit and Vegetable Standardization Act, attempted to forbid an Arizona grower from packing its cantaloupes in a nearby California packing shed. The practical effect of the state order would have been to require the company to build a \$200,000 packing shed in Arizona. The Supreme Court recognized the state interest in maintaining the reputation of Arizona produce, but held that the state interest was outweighed by the burden imposed upon interstate commerce because of the requirement that the grower pack in-state when the packing could in fact be done more efficiently elsewhere.

9. *Brown-Forman*, 106 S. Ct. at 2085. See also *Baldwin v. G.A.F. Seelig, Inc.*, 294 U.S. 511, 528, 55 S. Ct. 497, 502 (1935) (New York's attempt to prohibit milk dealers from selling in New York milk that had been produced outside the state and purchased at a price less than the minimum price established for milk produced in New York declared an unconstitutional burden on interstate commerce; a state is forbidden "to establish . . . a scale of prices for use in other states, and to bar the sale of . . . products" that fail to observe the scale. 294 U.S. at 528, 55 S. Ct. at 503); *Schwegmann Bros. Giant Super Markets v. Louisiana Milk Comm'n*, 365 F. Supp. 1144 (M.D. La. 1973), *aff'd*, 416 U.S. 922, 94 S. Ct. 1920 (1974) (*Schwegmann Brothers*, a New Orleans food retailer, challenged the constitutionality of the Louisiana Orderly Milk Marketing Law to the extent that the law regulated prices paid for milk products purchased in out-of-state transactions. The decision in *Schwegmann* followed *Baldwin* closely: "[E]ven though Louisiana has the power and the right to regulate the price at which milk products are sold within the State of Louisiana, it has no power to project its legislation into Tennessee by regulating the price to be paid in that state for milk acquired there." 365 F. Supp. at 1156. Following *Baldwin*, the court held that a state may not "neutralize an economic advantage possessed by a neighboring state by imposing its minimum price standards on the products purchased in that neighboring state" in order to protect its inhabitants. 365 F. Supp. at 1154. The court has also held that unconstitutional economic protectionism includes attempts to grant local consumers advantages over consumers in other states. See *New England Power Co. v. New Hampshire*, 455 U.S. 331, 338, 102 S. Ct. 1096, 1100 (1982). In *New England Power*, the state of New Hampshire attempted to withdraw permission given the New England Power Company to sell inexpensive hydroelectric power generated in New Hampshire in interstate markets. By so doing, the state hoped to reserve benefits of this inexpensive power for its own citizens. The Court held that, absent federal permission, a state cannot give its own citizens preferred access to natural resources located within its boundaries to the detriment of citizens of other states.

10. U.S. Const. amend XXI, §2 declares that the "transportation or importation into

grants each state control over the transportation or importation of intoxicating liquors for delivery or use therein. The Supreme Court has several times resolved the conflict geographically, limiting a state's liquor control power to liquor distributed for usage within its sovereign territory.¹¹ Three times, however, the question of whether price affirmation regulation steps over that territorial line has been before appellate courts.

Seagram,¹² the first of the three cases, dealt with a retrospective price affirmation statute. Challenging the newly passed 1964 New York Alcoholic Beverage Control (ABC) Law as unconstitutional on its face, Seagram asked for an injunction and declaratory judgment against the retrospective price affirmation provisions of the ABC.¹³ Seagram argued that the ABC Law violated the commerce clause and the due process and equal protection clauses of the fifth and fourteenth amendments.¹⁴ The trial court, the appellate division, and the New York Court of Appeals upheld the constitutionality of the statute.¹⁵ The decisions of the New York courts were affirmed by the United States Supreme Court.

In finding against Seagram, the Supreme Court rejected Seagram's arguments that the retrospective price provisions on their face necessarily constituted commerce-burdening extraterritorial extensions of New York's twenty-first amendment liquor regulatory powers. The Court admitted that retrospective price affirmation might be unconstitutional in some cases, but treated the possibility as a question of *fact*, not to be reached in a case mounting a strictly legal challenge to the facial validity of the act. It noted that "[w]e need not now decide whether the mode of liquor regulation chosen by a State in such circumstances could ever constitute so grave an interference with a company's operations elsewhere as to make the regulation invalid under the Commerce Clause. . . . No such situation is presented in this case."¹⁶ "The mere fact that . . . [the law] is geared to appellants' pricing policies in other States is not sufficient to invalidate the statute."¹⁷

any State, Territory, or possession of the United States for delivery or use therein of intoxicating liquors, in violation of the laws thereof, is hereby prohibited."

11. In *Hostetter v. Idlewild Bon Voyage Liquor Corp.*, 377 U.S. 324, 332, 84 S. Ct., 1293, 1298 (1964), the Court ruled that a state could not regulate liquor where ultimate delivery and use was in a foreign country. See also *Collins v. Yosemite Park & Curry Co.*, 304 U.S. 518, 58 S. Ct. 1009 (1938) (states may not regulate liquor sales in national parks); *United States v. State Tax Comm'n.*, 412 U.S. 363, 93 S. Ct. 2183 (1973) (state may not regulate liquor prices on federal military bases).

12. 384 U.S. 35, 86 S. Ct. 1254.

13. *Id.* at 37, 86 S. Ct. at 1257.

14. *Id.* at 41, 86 S. Ct. at 1259.

15. 45 Misc. 2d 956, 258 N.Y.S.2d 442; 23 A.D.2d 933, 259 N.Y.S.2d 644; 16 N.Y.2d 47, 209 N.E.2d 701, 262 N.Y.S.2d 75 (1965).

16. 384 U.S. at 42-43, 86 S. Ct. at 1259-60.

17. *Id.* at 43, 86 S. Ct. 1260.

The Court said New York could constitutionally insist on its prices being as low as those prices already offered elsewhere in the country. It dismissed as conjecture Seagram's allegation that it would be obliged to raise prices elsewhere if it desired to sell at higher prices in New York, so that the law had serious discriminatory effects. "It is by no means clear . . . that [the law] must inevitably produce higher prices in other states . . . rather than . . . lower prices . . . for New York."¹⁸ Since Seagram offered no facts showing that the alleged extraterritorial effects had occurred, that question was deferred by the Court. The opinion noted that "[t]he mere fact that state action may have repercussions beyond state lines is of no judicial significance so long as the action is not within that domain which the Constitution forbids."¹⁹ The Court concluded that on its face the New York ABC Law did not place an unconstitutional burden on interstate commerce.²⁰

The next significant price affirmation case was decided in 1983. In *United States Brewers Association v. Healy*,²¹ the Second Circuit Court of Appeals found Connecticut's prospective price affirmation law unconstitutional. The court determined that a distiller, once having affirmed a price in Connecticut, would be unable to lower its price in any other state below the price affirmed in Connecticut without violating Connecticut law. The court concluded that Connecticut's prospective affir-

18. *Id.*

19. *Id.* See *Osborn v. Ozlin*, 310 U.S. 53, 62, 60 S. Ct. 758, 761 (1940) (Virginia law required that certain insurance be issued only through registered resident insurance agents and that not less than one-half of the normal commission generated by such insurance be retained by these resident agents. The Supreme Court upheld the law, ruling that such policies could legitimately promote state interest by minimizing the risks of loss in Virginia through active servicing of policies by resident agents.) See also *Hoopeston Canning Co. v. Cullen*, 318 U.S. 313, 63 S. Ct. 602 (1943) (New York regulated reciprocal insurance associations based in other states that insured property in New York. The Supreme Court held that it was within the state's interest to protect its insured citizens despite the impact its regulations might have on the business practices of out-of-state companies.). Also *South Carolina State Highway Dept. v. Barnwell Bros.*, 303 U.S. 177, 189, 58 S. Ct. 510, 515 (1938) (South Carolina imposed weight and width restrictions on trucks on its highways. The Court found that in the absence of federal legislation, a state may develop regulations to promote safety on and conservation of its highways, as long as the state does not discriminate between intrastate and interstate carriers.) Cf. *Baldwin v. G.A.F. Seelig*, 294 U.S. 511, 528, 55 S. Ct. 497, 502 (1935) (New York's attempt to impose minimum price regulations on sales of out-of-state milk declared unconstitutional).

20. The Court summarily dismissed a variety of other claims made by Seagram including allegations that the price affirmation requirements induced Seagram to violate the Sherman and Robinson-Patman Acts, that the law was unconstitutionally vague, that it violated the equal protection clause, and that it ran afoul of the due process clause. *Seagram*, 384 U.S. at 46, 86 S. Ct. at 1261.

21. 692 F.2d 275 (2d Cir. 1982), summarily aff'd, 464 U.S. 909, 104 S. Ct. 265 (1983).

mation requirement "effectively sets minimum prices for the four-state area once the price is posted in Connecticut on the thirteenth of the month."²² By so doing, the Connecticut statute regulated commerce occurring wholly outside the state's boundaries.²³

In *Brown-Forman*,²⁴ the last of the three appellate cases, the Supreme Court itself discussed the constitutionality of prospective price affirmation. In 1967, subsequent to the ruling in *Seagram*, New York transformed its price affirmation regulation from retrospective to prospective.²⁵ In June 1986, the Supreme Court overturned the decision of the New York Court of Appeals which had upheld the constitutionality of New York's prospective price affirmation law.²⁶

The litigation concerned section 101-b of New York's Alcoholic Beverage Control Law, which required distillers to file a schedule of prices by the twenty-fifth of each month to be effective on the first day of the second succeeding month and to affirm that these prices are no higher than the prices the distiller would charge during the month the prices were to be effective in any other state or in the District of Columbia.²⁷

At issue was an appeal by *Brown-Forman*, whose license to operate in the state of New York was the subject of a revocation proceeding instituted by the New York State Liquor Authority. The Liquor Authority had determined that the payment of promotional allowances by *Brown-Forman* to wholesalers in other states was the equivalent of lowering the prices of the product in those states to levels which violated New York's affirmation law.²⁸

22. United States Brewers Ass'n, 692 F.2d at 282.

23. *Id.*

24. 106 S. Ct. 2080.

25. N.Y. Alco. Bev. Cont. Law §101-b (McKinney Supp. 1964 and Supp. 1967). Brief of the Distilled Spirits Council of the United States as Amicus Curiae, *Brown-Forman Distillers Corp. v. State of New York Liquor Auth.*, 106 S.Ct. 2080 (1986), at 16.

26. 64 N.Y.2d 479, 490 N.Y.S.2d 128, 479 N.E.2d 764 (1985).

27. N.Y. Alco. Bev. Cont. Law § 101-b (McKinney 1987). Section 101-b(3)(d) provides: There shall be filed . . . an affirmation duly verified by the owner of such brand of liquor . . . that the bottle and case price of liquor to wholesalers set forth in such schedule is no higher than the lowest price at which such item of liquor will be sold by such brand owner . . . to any wholesaler anywhere in any other state of the United States or in the District of Columbia, or to any state (or state agency) which owns and operates retail liquor stores . . . at any time during the calendar month for which such schedule shall be in effect

Section 101-b(4) provides that "[e]ach such schedule . . . shall be filed on or before the twenty-fifth day of each month and the prices and discounts set forth therein shall become effective on the first day of the second succeeding calendar month."

28. *Brown-Forman*, 106 S. Ct. 2080, 2083.

The payment of promotional allowances began in 1978. Brown-Forman asserted that it intended for wholesalers to use these allowances for advertising. However, the amount of the allowance payments were independent of either the wholesaler's advertising expenditures or of its purchases of Brown-Forman products. The allowances were explicitly designed to comply with Federal Bureau of Alcohol, Firearms, and Tobacco regulations regarding the marketing of liquor products.²⁹ As characterized by the Supreme Court, these payments were "unconditional, lump-sum payments to all wholesalers, in every State except New York, that purchase Brown-Forman brands."³⁰ Brown-Forman attempted to offer these promotional allowances in New York, but the State Liquor Authority determined that such allowances were illegal under New York's regulations.³¹

Brown-Forman claimed that it could not comply with the State Liquor Authority's regulations and still offer the promotional allowances in other states for two reasons. First, since the allowances were lump-sum in nature and independent of the wholesaler's sales, Brown-Forman would be unable to calculate and allocate the allowance to discrete quantities of the product being sold, and thus could not compute and file a schedule of prices. Second, since other states did not recognize such allowances as lowering the price of goods, if Brown-Forman were to reduce its New York prices to reflect the lump-sum promotional allowances, it would then violate the price affirmation laws of other states. Its only available option would be to cancel its promotional allowance program. Brown-Forman argued that "[b]y effectively forcing [Brown-Forman] to discontinue a promotional program in other states where that program was legal, . . . New York's regulation violated the Commerce Clause."³²

29. Brown-Forman's promotional allowances were approved by the Bureau of Alcohol, Tobacco, and Firearms (BATF) in 1978, pursuant to BATF Ruling 77-17. In approving the promotional program, BATF ruled that the distiller could have no control over how the payment was to be used by the wholesaler, that the payment must be independent of purchases made by the wholesaler, and that either party could cancel their participation in the program at any time. These requirements were imposed by BATF so that Brown-Forman's promotional program would be in compliance with the Federal Alcohol Administration Act, 27 U.S.C. §§ 201-211 (Supp. 1987). See Jurisdictional Statement at 4.

30. *Brown-Forman*, 106 S. Ct. at 2083.

31. Section 101-b(2)(b) of the ABC Law prohibits "'any discount, rebate, free goods, allowance or other inducement of any kind whatsoever' except for quantity and prompt-payment discounts of specified amounts." *Brown-Forman*, 106 S. Ct. at 2083 n.3.

32. *Brown-Forman*, 106 S. Ct. at 2084. The State Liquor Authority had determined that these allowances lowered the wholesale price of the liquor in other states, and thus held Brown-Forman in violation of its New York price affirmation responsibilities. The State Liquor Authority then proceeded to initiate license revocation proceedings against Brown-Forman.

The distiller also claimed that "the affirmation law on its face directly regulated interstate commerce in violation of the Commerce Clause."³³ These claims were rejected by the Appellate Division of the New York Supreme Court and the New York Court of Appeals.³⁴ The United States Supreme Court agreed with *Brown-Forman*. It held that the "practical effect" of the law was to control prices in other states, thereby rendering irrelevant the fact that the New York law directly regulated only intrastate prices.³⁵ The Court also found that the proliferation of state affirmation laws could tangle a manufacturer in a web of inconsistent obligations, thereby transmitting the regulations of one state to another. The Court cited New York's maverick view of *Brown-Forman's* promotional allowances as an example.³⁶

At a minimum, *Brown-Forman* eliminates one lingering doubt. It is now settled that the extraterritorial commerce-burdening effects of price affirmation regulation are not immunized by the twenty-first amendment. The Court held that the twenty-first amendment grants New York the right to regulate liquor sales only within its boundaries, and confers no authority to control sales in other states: "Our conclusion that New York has attempted to regulate sales in other States of liquor that will be consumed in other States therefore disposes of the Twenty-first Amendment issue."³⁷

II. ECONOMIC ANALYSIS

The Supreme Court relied on the prospective nature of New York's affirmation law to distinguish *Brown-Forman* from *Seagram*.³⁸ Little concrete evidence was introduced, however, as to why the two cases should be distinguished, nor was any economic analysis of the affirmation provisions offered.³⁹

In this part we adopt the traditional profit-maximizing behavior framework of microeconomics to analyze the interstate burden associated

33. *Id.* at 2084.

34. 100 A.D.2d 55, 473 N.Y.S.2d 420 (1984); 64 N.Y.2d 479, 490, N.Y.S.2d 128, 479 N.E.2d 764 (1985).

35. *Brown-Forman*, 106 S. Ct. at 2086. See also *Southern Pacific Co. v. Arizona ex rel. Sullivan*, 325 U.S. 761, 775, 65 S. Ct. 1515, 1523 (1945) (Arizona law regulating train length in the interest of safety declared unconstitutional because the law's practical effect was to control train operations beyond the state's boundaries).

36. *Brown-Forman*, 106 S. Ct. at 2087.

37. *Id.* at 2088.

38. 384 U.S. 35, 86 S. Ct. 1254.

39. This lack of evidence formed the basis of the dissent in *Brown-Forman*, which was decided by a 5-3 vote. In his dissent, Justice Stevens argued that the impact of New York's price affirmation law on interstate commerce was mere speculation, as *Brown-Forman* had not introduced any evidence demonstrating an impact of the New York law on other states.

with the two types of price affirmation laws. We begin by developing a general model of decision-making under price affirmation, temporarily ignoring the temporal difference between retrospective and prospective price affirmation.

Next we will allow for the time factor. Since using the profit-maximizing behavior framework is cumbersome for dynamic analysis, we use a simple simulation model to highlight differences between liquor prices associated with prospective and retrospective affirmation laws. In our dynamic analysis, we first assume a steady state where market conditions remain unchanged over time, and then relax that assumption to allow for changes in the market conditions. Both the static and dynamic analyses show that under standard and non-controversial assumptions about economic behavior, both prospective and retrospective price affirmation regulations have significant and similar extraterritorial impacts whether market conditions remain stable or fluctuate. Finally, we will address the question of why Brown-Forman was unable to supply evidence regarding the impact that New York's prospective affirmation law had on liquor prices in other states.

Our discussion employs technical concepts familiar to readers having a fundamental acquaintance with simple standard economic concepts and tools. Since we are also addressing our argument to audiences including lawyers, judges, teachers, and students who may not be acquainted with these techniques, we have taken some pains to provide, in the form of several explanatory footnotes, additional elaboration in lay terms of the significance of our principal technical assumptions and conclusions. For the convenience of more sophisticated readers, we have numbered such explanatory footnotes with asterisks to indicate that they are intended solely to make the technical points less forbidding to those unfamiliar with our profession's technique and terminology.

The Interstate Burden

To begin, we assume that there are only two states, that distillers face different demand curves in the two states, that the marginal cost of producing a liquor type is constant and is the same regardless of where the liquor is sold,⁴⁰ that liquor prices are determined by individual

40. Differences in the demand curve facing a distiller in the two states can develop as a result of differences in consumers' tastes, incomes, or the availability of substitutes. The assumption that the marginal cost of producing liquor is both constant and independent of where the liquor is sold substantially simplifies the forthcoming analysis. The assumption is conventionally made in economics for ease of analysis. Neither of these assumptions per se is critical to our analysis. What is critical is that there be differences in the profit-maximizing prices that would be charged in the two states in the absence of price

distillers each having market control over its differentiated products,⁴¹ and that market conditions (namely demand and the marginal cost of production) remain unchanged over time. Since market conditions are unchanging, the time dimensions of the affirmation laws can be ignored.^{1*}

Figure 1A shows the demand (D_A) and marginal cost (MC_A) of a liquor sold by a distiller in State A.^{2*} The corresponding curves for the

affirmation; otherwise, price affirmation would be irrelevant.

Differences in prices of goods often motivates arbitrage, so that prices exclusive of transaction costs are equalized across markets. However, the substantial legal barriers erected by the various states to regulate distribution of liquor suggests that arbitrage will not be extensive in the liquor market. Limited arbitrage may take place between two states, but the effects are generally localized at the states' boundaries and take the form of residents of one state driving across the state line to purchase liquor at a lower price in the other state. In practice, the extent of such arbitrage is not sufficient to eliminate price differences among the states. Significant price differences exist at the retail level. See Distilled Spirits Council of the United States, Annual Statistical Review 1980, Table 44, p. 45.

If indeed arbitrage were sufficiently prevalent to make prices the same across distinct political areas, then distillers would never have occasion to violate the affirmation law or even object to it. There would then be no affirmation regulation cases before the courts. The fact that such cases have arisen attests to the validity of our assumption that prices would differ in the absence of affirmation and that for all practical purposes arbitrage between the states is negligible.

41. We assume that various liquor types differ in terms of perceived quality. While liquor produced by different distillers may be relatively good substitutes, each distiller sets its own price. One may alternatively assume that each distiller is a price taker in a perfectly competitive market, thus having no impact on the price of the liquor it produces. The assumption that each distiller sets its own price, however, seems more realistic than the assumption of a perfectly competitive market because it can be observed that different liquor types fetch different prices. Furthermore, the existence of the affirmation laws implies an assumption on the part of state legislatures that distillers are not price takers in the market but set their own prices across the states. Be that as it may, the results below are independent of the type of market structure assumed.

1* Prospective affirmation differs from retrospective affirmation in only one respect, to wit: Which time period do you choose when looking at the prices charged in sister states, for purposes of knowing whether the prices set in the regulated state exceed the prices elsewhere? Retrospective schemes look at the sister states' actual prices for the preceding period and ask whether prices in the affirming state in the current period are higher. Prospective regulations look to the price charged in the following period. (This, incidentally, means that it is impossible, under a prospective plan, to tell whether a distiller is currently in compliance. One must wait until the next period to see if the regulated state's wholesalers were overcharged in the last period.) Since, by this assumption, the prices in all sister states remain constant in all time periods, today's price is always equal to the price charged both yesterday and tomorrow, and there is no economic difference between the two regulatory techniques.

2* Demand for a product shows the quantities that will be purchased of the product at different prices. The relationship between quantities purchased and the corresponding prices is called demand. This relationship is specified for a given period of time and is

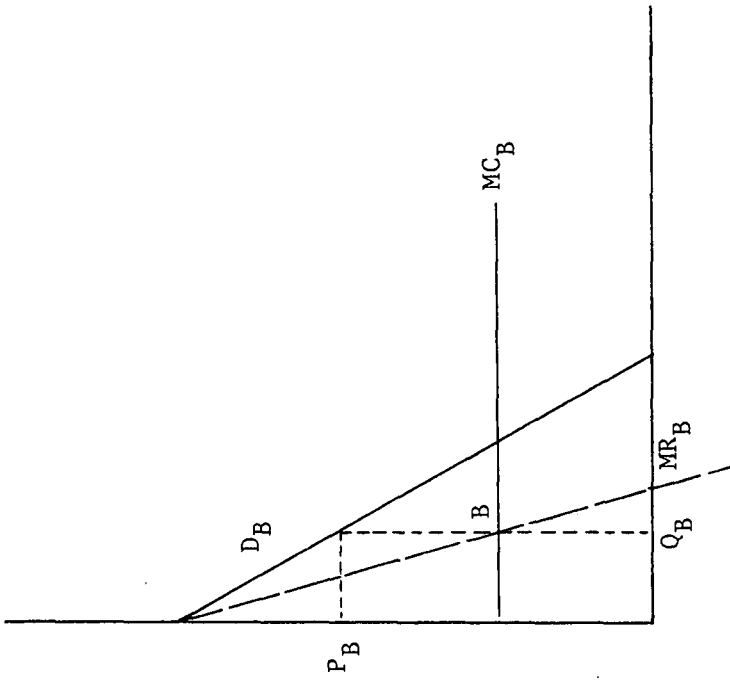


Figure 1A

Figure 1

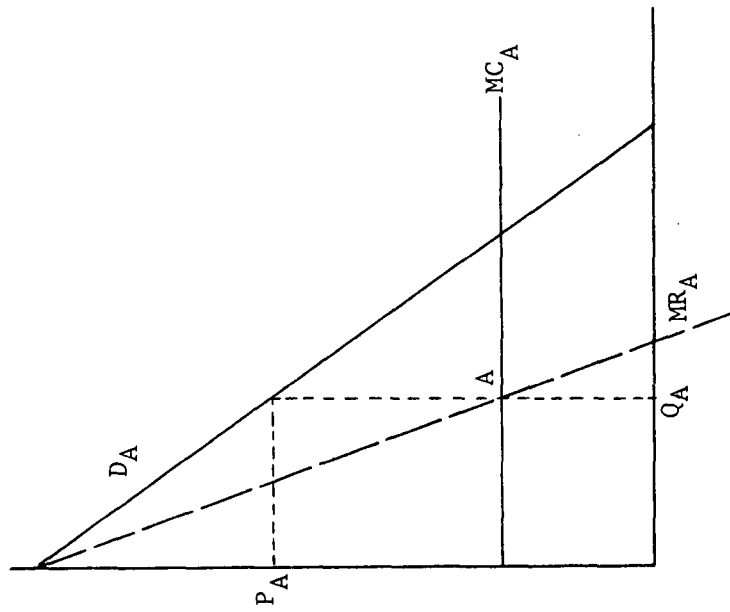


Figure 1B

distiller in State B are shown in Figure 1B as D_B and MC_B , respectively. Given the assumption that liquor prices are set individually by each distiller,⁴² the prices in States A and B are P_A and P_B , respectively.^{3*} The corresponding output (or quantity) levels in the two states are Q_A and Q_B . As the curves are drawn, the liquor price in State A, P_A , exceeds the liquor price in State B, P_B .

Let us assume that State A decides to adopt an affirmation law requiring distillers to charge prices in State A that are no higher than corresponding prices in State B.⁴³ To meet this requirement, a profit-

negative, implying that if the price of a product rises, compared to prices of other products, the quantity of the product purchased within a given period of time will decline. For example, consumers of beef will consume less beef if the price of beef rises compared to prices of other products. In Figure 1*, the quantity Q_1 is purchased at the price P_1 . When the price rises to P_2 , the quantity purchased falls to Q_2 . Figures 1*, 2*, and 3* are reproduced at the end of this article.

Marginal cost, MC, shows the cost of producing incremental units of a product. For simplicity of exposition, we assume that the cost of producing additional units of the product is constant, implying a horizontal MC curve. In general, however, MC curves are U-shaped. The assumption of a constant MC is conventionally made in economic literature for ease of analysis without affecting results. In Figure 1*, marginal cost is shown as the MC line.

42. See *supra* note 41.

3* The price-quantity determination is shown in Figure 2*. Distillers are assumed to be profit-maximizers. The profit-maximization criterion is to produce all those units of the good for which the revenue obtained for selling an additional unit, referred to as the marginal revenue (MR), exceeds the marginal costs of the additional unit (MC). In Figure 2*, MR is derived from the demand curve. For a straight line demand, as in Figure 2*, the corresponding MR is a straight line with the same intercept as the demand and twice the slope of the demand curve. See J. Hirshleifer, *Price Theory and Applications*, at 236-68 (3d ed. 1984), for a derivation of marginal revenue from the corresponding demand. MR exceeds MC up to point E, the intersection of the two curves. Thus the distiller will produce up to the level of output at which $MR = MC$, which is the quantity Q_1 , and charge the maximum price that guarantees selling Q_1 units of the product, which is the price P_1 . The distiller's profit is shown by the area P_1AER , the difference between total revenue, OP_1AQ_1 , and total costs, $OREQ_1$.

43. The decision to select the high price state as the one adopting the price affirmation law is deliberate. Price affirmation regulations have no effect if they are adopted by a single state which happens also to always have the lowest market price, since in such a world, the market would always induce the distiller to do of his own volition, even in the absence of the law, what the law is attempting to accomplish. That would be particularly true in the world described by our initial assumptions, in which prices in all states remain constant over time so that once the desired price in a state is low, it is always thereafter low as well. The possibility that a state could in fact be the low priced state, and thus not be guilty of affecting the distiller's decision in other states, is not sufficiently significant to justify the *Seagram* caveat that a factual showing ought to be required in order to strike down an affirmation regulation. In fact, thirty-nine states have adopted such statutes or policies, not all of which could claim that they would have had the lowest equilibrium price throughout the life of their law. Even if one state could make that claim, one

maximizing distiller will consider the two states jointly and will accordingly establish a price that reflects a single joint demand in the two states.^{4*} As is shown in Figure 2, the joint demand (D_j) is the sum of the liquor demands in States A and B, that is, $D_j = (D_A + D_B)$. Given the joint demand D_j , its corresponding marginal revenue (MR_j), and the marginal cost of production (MC), the jointly determined price and output are P_j and Q_j , respectively, as is shown in Figure 2C. The jointly

would wonder why it would adopt price affirmation anyway, and even assuming there were some perverse reason for doing so, no distiller would bother to object because the law would not restrain him from doing what would come naturally without it.

4* A profit-maximizing distiller faced with two different markets wants to charge two different prices depending on what each of the markets will bear. One market may be less price sensitive than the other market. The market with less price sensitivity will be charged a higher price. The price sensitivity of a market, or what is conventionally referred to as the price elasticity of demand, depends on the availability of substitute products. The greater the number of substitutes, the greater the price sensitivity of the market and the lower the price, assuming all else equal. For example, in the extreme where the market is perfectly competitive (i.e., many producers producing a homogeneous product) the elasticity of demand is infinite and producers have no control over price. Conversely, in a market with no substitutes or with relatively poor substitutes, the price elasticity of demand will be relatively low and the producer will charge a price above the otherwise competitive price. Assume that a distiller sells a brand of liquor in States A and B where the elasticity of demand in A is lower than the elasticity of demand in B. Profit-maximization implies that the distiller will charge a price in State A which is higher than the price it charges in State B.

Now assume that an affirmation law in State A prohibits the distiller from charging a higher price in that state than the price it charges in State B. This implies that the price in the two states must be uniform. The best that the distiller can do is treat the two markets jointly and charge a uniform price that reflects the sum of State A's and State B's demands. Two other alternatives are conceivable, but are not as profitable. One such alternative would be to lower the price in State A to the level of the price charged in State B, which the *Seagram* Court thought possible. This scheme does not maximize the overall profitability because it does not take into account the intensity of the demand in the high priced market. The second alternative would be to raise the price in the unregulated state (State B) to the higher level charged in the regulated state (State A). This alternative also fails to maximize the overall profitability of the distiller because, given the high elasticity of demand in State B, applying State A's high price in State B would unprofitably reduce the quantity demanded in State B. Given the affirmation law, the only profit-maximizing strategy would be to jointly consider both State A's and State B's demand curves in determining a price. See J. Hirshleifer, *supra* note 3*, at 255-57 for a more thorough discussion of this point.

The joint consideration means that the distiller adds D_A to D_B to obtain the joint demand D_j . This is shown in Figures 3.1* through 3.3*. For example, at the price P_1 , the quantity demanded in the two states are q_1 and q'_1 , respectively. The joint quantity at P_1 is $Q_1 = q_1 + q'_1$. At prices above point P_2 in Figure 3.2* quantity demanded is zero, thus the joint demand at prices above point P_2 would only reflect the demand in State A. For all prices below P_2 , such as P_1 and P_3 , the joint demand is the horizontal sum of the quantity demanded in the two states. The joint demand D_j has a kink point at point K because at prices above P_2 the quantity demanded in State B is zero, whereas the quantities demanded in State A at prices above P_2 are positive.

determined price, P_J , will necessarily be between the original prices, P_A and P_B , resulting in a decrease in the price paid by consumers in the affirming state, State A, from P_A to P_J , and an increase in the price paid by consumers in the nonaffirming state, State B, from P_B to P_J .^{5*} Consequently, consumption increases in State A from q_1 to q_2 and consumption decreases in State B from q_1' to q_2' . We note that, because demand and supply in the two states are assumed unchanged over time, the resulting burden imposed on consumers in the nonaffirming state will be identical regardless of whether State A adopts a retrospective law or a prospective law.

We have shown so far that, if market conditions remain constant, retrospective and prospective price affirmation regulations have identical economic effects. They lower price and raise consumption in the affirming state, but increase price and lower consumption in the nonaffirming state. The benefit to the consumers making lower priced purchases in the state having a price affirmation law not only causes losses to the distillers in both states, but also imposes additional costs on consumers in the nonaffirming state. That is precisely the phenomenon which is proscribed by the commerce clause.

It remains for us to show that nothing about the differences between prospective and retrospective affirmation laws alters that conclusion. In the next part, therefore, we discuss in more detail the operation of each type of law in a world of more than two states, first in an unchanging market, and then in markets which fluctuate.

The Effects of Affirmation Laws: A Dynamic Analysis

In this section we adopt a simulation framework which incorporates the time-dimensional differences between a prospective law and a retrospective law. We first will assume that market conditions remain unchanged over time (the steady state), and then will relax that assumption. Our comparison of the two laws will take the form of numerical examples in a tabular form, where a liquor price is given by state and period of time. We will consider four states (A, B, C, and D), and five time periods (0, 1, 2, 3, and 4).^{6*}

5* The intuitive reason for the jointly determined price P_J to be between the independently determined prices P_A and P_B is that the joint demand D_J reflects both D_A and D_B , and D_A has a lower elasticity of demand than D_B at each price. At each price the elasticity of demand for the joint demand is between those for D_A and D_B . While the low elasticity of D_A tends to push the price to a high level, the high elasticity of D_B tends to pull the price to a low level. The jointly determined price will thus be between P_A and P_B .

6* We use four states in order to demonstrate the effects of price affirmation regulation when adopted by more than one state. Five time periods are sufficient to depict the long-run equilibrium in our model.

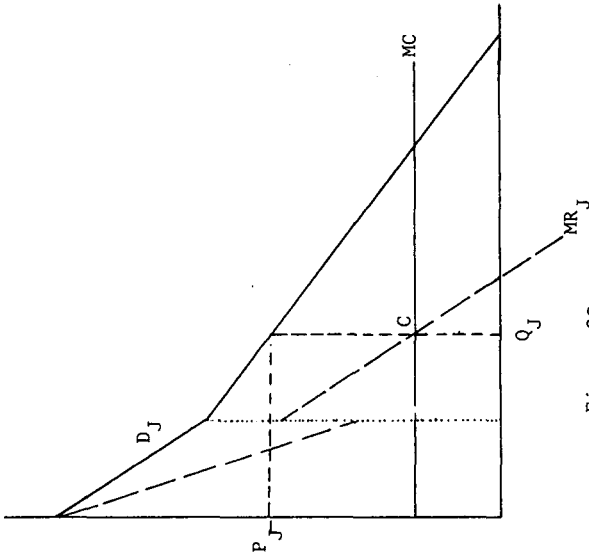


Figure 2C

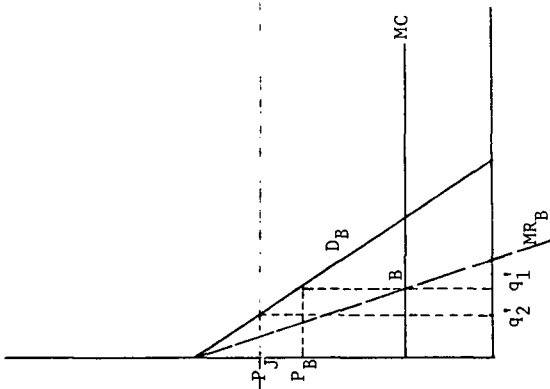


Figure 2B

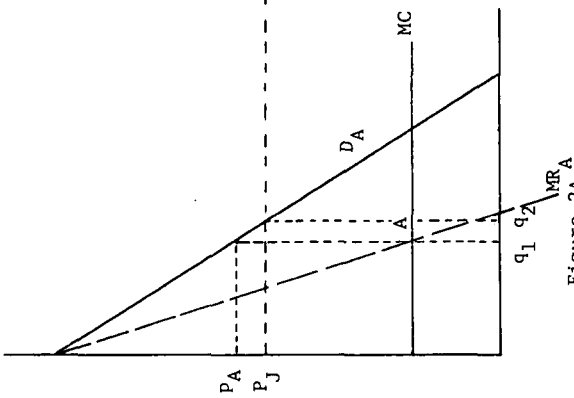


Figure 2A

Figure 2

Three tables are presented below. Table 1 illustrates the impact of a prospective law and a retrospective law when market conditions remain unchanged over time and when only one state adopts an affirmation law. Table 2 mirrors Table 1 but assumes market conditions undergo a change over time. Table 3 relaxes the assumption that only one state utilizes an affirmation law by allowing two states to utilize an affirmation law. It turns out that an important difference will be observed in the effects of the two types of affirmation laws when more than one state imposes an affirmation constraint. Each of the three tables has three parts: the first part consists of a liquor price by state and time period in the absence of any affirmation law; the subsequent two parts illustrate in turn the liquor price when a prospective law is adopted and alternatively when a retrospective law is adopted.

A. The Steady State Condition.

In this part we assume market conditions remain unchanged. Table 1(a) presents the prices that would be charged in the absence of price affirmation. Since the underlying market conditions do not change (demand and marginal cost remain constant), unconstrained prices for a given state will be identical over time. We will use the unconstrained prices in Table 1(a) to calculate prices for Tables 1(b) and 1(c).

Table 1(b) presents the liquor prices that would be charged if State A had enacted a prospective affirmation law that took effect sometime prior to period 0. Given the price affirmation law, the distillers determine liquor prices by considering the joint demands for liquor in the relevant states. Our analysis of Figures 2A through 2C above shows that the jointly determined price lies somewhere between the otherwise unconstrained high and low prices across the states. For analytical simplicity we assume that the jointly determined price is the simple average of the prices considered by the distillers. This assumption implies that the profit-maximizing behavior of the distiller in the joint market yields a price which is the simple average of the unconstrained prices.⁴⁴

State A's prospective affirmation law requires the price in State A in time period 0 to be no higher than the lowest price in States B, C, and D in time period 1. In the context of Table 1(a) this means that the \$5 price for State A in period 0 that the distillers would like to charge is illegal, as it is higher than period 1's prices in all the remaining states. The best the distillers can do is to determine a joint price across certain states which conforms with the affirmation law and perturbs the

44. Our qualitative analysis is not sensitive to this assumption, although the numerical calculations are of course simplified by it. This simplifying assumption is used to calculate the prices reported in parts (b) and (c) of Tables 1, 2, and 3.

Table 1

Effects of Affirmation Laws on Prices When
Market Conditions Remain Unchanged

(a) Prices Distillers Would Charge in Absence of Price Affirmation by
State and Period

<i>State/Time</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
A	(\$5)	[\$5]	\$5	\$5	\$5
B	4	4	4	4	4
C	[3]	(3)	3	3	3
D	[2]	(2)	2	2	2

(b) Prices Distillers Would Charge if State A Utilizes a Prospective Af-
firmation Law by State and Period

<i>State/Time</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
A	(\$3.33)	\$3.33	\$3.33	\$3.33	N.A.
B	N.A.	4.00	4.00	4.00	4.00
C	N.A.	(3.33)	3.33	3.33	3.33
D	N.A.	(3.33)	3.33	3.33	3.33

(c) Prices Distillers Would Charge if State A Utilizes a Retrospective Af-
firmation Law by State and Period

<i>State/Time</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
A	N.A.	[\$3.33]	\$3.33	\$3.33	\$3.33
B	4.00	4.00	4.00	4.00	N.A.
C	[3.33]	3.33	3.33	3.33	N.A.
D	[3.33]	3.33	3.33	3.33	N.A.

N.B. Joint prices are assumed to be a simple average of the prices con-
sidered by the distillers.

otherwise profit-maximizing prices in as few states as possible. Given our construction of Table 1(a), this means the distillers must consider prices in the States C and D in time period 1 (\$3 and \$2, respectively) together with the \$5 price in State A in period 0 in jointly determining a price for the three states that meets the affirmation requirement, $\$3.33 = (5 + 3 + 2)/3$. Including State B's price of \$4 in time period 1 is not necessary because the average of the three prices chosen, \$3.33, is less than the \$4 price in State B. The numbers averaged to determine the prices to be set in other states in the subsequent periods under a prospective affirmation law are thus those indicated by the parentheses in Table 1(a). The uniform joint prices (averages) are then inserted within the corresponding parentheses in Table 1(b).

The jointly determined price of \$3.33 is thus charged in State A in time period 0 and in States C and D in time period 1. This is shown in Table 1(b). The distillers are in conformity with the prospective law since the \$3.33 price in State A in time period 0 is no higher than the lowest price in any other state in time period 1. The remaining cells of Table 1(b) are calculated in similar fashion. The same prices are repeated for each state, reflecting our assumption that market conditions remain unchanged over time.⁴⁵

Table 1(c) reports the prices that would be charged if State A had enacted a retrospective law that took effect sometime prior to period 0. State A's retrospective law requires the price in A in time period 1 to be no higher than the lowest price in B, C, and D in time period 0. Accordingly, distillers will establish a price of \$3.33 in C and D in time period 0 and \$4.00 in B in time period 0, knowing that this will allow them to establish a legal price of \$3.33 in A during time period 1. In similar fashion, the remaining cells of Table 1(c) can be filled out.⁴⁶ The numbers averaged to calculate the prices in the affected states under a retrospective regime are indicated by the brackets in Table 1(a). The average of those set off by brackets are then inserted as the uniform joint price in the corresponding brackets in Table 1(c).

By comparing the prices in Table 1(b) with those in Table 1(c), one can easily see that the impact of prospective and retrospective affirmation laws on prices across states is identical under the assumed conditions.⁴⁷

45. Note that Table 1(a) does not provide sufficient information to calculate B, C, and D prices in period 0 and A's price in period 4 in Table 1(b). "N.A." is reported in these cells to indicate that the necessary information is not available.

46. Note that Table 1(a) does not provide sufficient information to calculate A's price in period 0 and B, C, and D's price in period 4 in Table 1(c). "N.A." is reported in these cells to indicate that the necessary information is not available.

47. Differences between Table 1(b) and 1(c) caused by the N.A.'s should be ignored, as they merely reflect the limitations of the information able to be extracted from Table 1(a), and not differences in the impacts of the two types of affirmation laws.

Both types of affirmation laws cause prices in the affirming state to be lower. Both types also cause prices in the nonaffirming states that are incorporated into the distiller's joint price-setting process—in this case, States C and D—to be higher than what they would be in the absence of affirmation. State A's adoption of a prospective or retrospective price affirmation law burdens interstate commerce by causing prices in States C and D to rise.

B. Changing Market Conditions.

We will next relax the assumption of constant market conditions. Two cases will be explored: first, if only one state adopts an affirmation law, and second, if more than one state adopts an affirmation law.

Table 2 presents the former case. Table 2(a) reports the liquor prices that would be charged if distillers could set prices unconstrained by price affirmation. Table 2(a) differs from Table 1(a) in that it assumes the prices distillers would like to charge increase in each state by \$1 in period 2 and remain at period 2's levels in succeeding periods. The increase in the prices in period 2 could be because of an increase in the demand for liquor or an increase in the cost of producing liquor.

Let us assume that State A enacted an affirmation law that took effect prior to period 0. Table 2(b) reports the prices that would be charged if State A's law is prospective in nature,⁴⁸ while Table 2(c) reports the prices generated under a retrospective law.⁴⁹ Table 2 indicates

48. Table 2(a) prices were used to derive prices for Table 2(b). The prices in Table 2(b) are computed using the same technique used for its counterpart Table 1(b)—by averaging the prices in the parentheses. The only difference is that prices are allowed to increase by \$1 in Table 2(a) in period 2, which, since this table portrays the effects of a prospective law, raises prices beginning with period 1 prices.

Consider as an example the formulation of prices in A in period 1 and in B, C, and D in period 2. Since the \$5 price is illegal in State A in period 1 (as it is greater than the prices of \$4 and \$3 in States C and D in period 2, respectively), the distiller will consider prices in the States C and D in period 2 with the \$5 price in State A in period 1 to determine a joint price which will comply with the prospective affirmation law. The average of these prices, $\$4 = (5 + 4 + 3)/3$, is used in Table 2(b) as the price in State A in period 1 and in States C and D in period 2. The distiller need not incorporate the price in State B in period 2 to determine the joint price because the \$4 average price is less than the \$5 price in State B.

49. Table 2(a) prices were used to construct prices for Table 2(c). The price formulation in Table 2(c) is similar to its counterpart Table 1(c). Consider as an example the formulation of prices in A in period 2 and in B, C, and D in period 1. In Table 2(a), since the \$6 price in A in period 2 is illegal (as it exceeds the unconstrained prices of \$4, \$3, and \$2 in B, C, and D, respectively), the distiller will determine a joint price which will comply with the retrospective law. The criterion in the joint price determination is to perturb prices in as few states as possible. Consideration of the \$6 price in A in period 2 with the \$3 and \$2 prices in C and D in period 1 yields an average of \$3.67 which will comply

Table 2
Effects of Affirmation Laws on Prices When
Market Conditions Change

(a) Prices Distillers Would Charge in Absence of Price Affirmation by State and Period

<i>State/Time</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
A	(\$5)	[\$5]	\$6	\$6	\$6
B	4	4	5	5	5
C	[3]	(3)	4	4	4
D	[2]	(2)	3	3	3

(b) Prices Distillers Would Charge if State A Utilizes a Prospective Affirmation Law by State and Period

<i>State/Time</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
A	(\$3.33)	\$4.00	\$4.33	\$4.33	N.A.
B	N.A.	4.00	5.00	5.00	5.00
C	N.A.	(3.33)	4.00	4.33	4.33
D	N.A.	(3.33)	4.00	4.33	4.33

(c) Prices Distillers Would Charge if State A Utilizes a Retrospective Affirmation Law by State and Period

<i>State/Time</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
A	N.A.	[\$3.33]	\$3.67	\$4.33	\$4.33
B	4.00	4.00	5.00	5.00	N.A.
C	[3.33]	3.67	4.33	4.33	N.A.
D	[3.33]	3.67	4.33	4.33	N.A.

N.B. Joint prices are assumed to be a simple average of the prices considered by the distillers.

that the long-term impact of prospective and retrospective affirmation laws on prices across state lines is identical when market conditions change, although minor transitory differences do exist in the price arrays (for example, time period 2). (In period 3, by contrast, the effect of both laws is identical, as the transitory effects have disappeared.)

Both types of affirmation laws cause prices in the affirming state to be lower and prices in those nonaffirming states which distillers are forced by the regulation to consider in their joint price setting (in this case, States C and D), to be higher than they would be in the absence of price affirmation. When prices rise during any period due to changes in market conditions, a comparison of Table 2(b) with Table 2(c) shows that prices rise more slowly in the affirming state and more rapidly in the nonaffirming states under retrospective laws than they do under prospective ones. While both types of laws have similar extraterritorial effects, such effects are manifested sooner under a retrospective scheme. Nevertheless, State A's enactment of either a prospective or a retrospective price affirmation law burdens interstate commerce by causing prices in States C and D to rise.

Table 3 incorporates the same assumptions as Table 2, except that in Table 3 States A and B both enacted affirmation laws that took effect prior to period 0. Table 3(a) presents the liquor prices that would be charged if distillers could set prices unconstrained by price affirmation and is identical to Table 2(a).

Table 3(b) reports the prices charged if both States A and B utilize prospective affirmation laws, while Table 3(c) illustrates the prices generated if both States utilize retrospective laws. Filling the cells in Table 3(b) takes the same form as in Tables 1(b) and 2(b), but with one critical difference illustrated by the parentheses in both Table 3(a) and 3(b). Because State B has also adopted an affirmation law, the distiller must now incorporate the price it would like to charge there in its joint pricing calculation as well. Consider as an example the formulation of the period 0 price in State A which, because the law is prospective, must be based on period 1 prices charged in other states. If State B had enacted no law, its unconstrained market price would have remained high enough to be irrelevant to the distiller in setting its period 0 price in State A. Because of State B's affirmation law, however, prices in State B must also be reduced from the unconstrained market level. To

with the retrospective affirmation law. The \$3.67 (which is less than the \$4 price in B) is used as the joint price in A in period 2 and in C and D in period 1. The price in State B, because it does not violate State A's affirmation law once the lower joint price is set for the other three states, remains undisturbed just as was the case in Table 1 above.

Table 3

Effects of Affirmation Laws on Prices
Under Changing Market Conditions

(a) Prices Distillers Would Charge in Absence of Price Affirmation by State and Period

<i>State/Time</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
A	(\$5)	[\$5]	\$6	\$6	\$6
B	(4)	[4]	5	5	5
C	[3]	(3)	4	4	4
D	[2]	(2)	3	3	3

(b) Prices Distillers Would Charge if States A and B Utilize a Prospective Affirmation Law by State and Period

<i>State/Time</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
A	(\$3.50)	\$4.00	\$4.50	\$4.50	N.A.
B	(3.50)	4.00	4.50	4.50	N.A.
C	N.A.	(3.50)	4.00	4.50	4.50
D	N.A.	(3.50)	4.00	4.50	4.50

(c) Prices Distillers Would Charge if States A and B Utilize a Retrospective Affirmation Law by State and Period

<i>State/Time</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
A	N.A.	[\$3.50]	\$3.50	\$3.50	\$3.50
B	N.A.	[3.50]	3.50	3.50	3.50
C	[3.50]	3.50	4.00	4.00	4.00
D	[3.50]	3.50	3.50	3.50	3.50

N.B. Joint prices are assumed to be a simple average of the prices considered by the distillers.

meet the separate requirements of A's and B's laws, the distiller must, therefore, jointly consider A's and B's period 0 prices and C's and D's period 1 prices, yielding an average of $\$3.50 = (5 + 4 + 3 + 2)/4$.⁵⁰ The \$3.50 average is used as the joint price in A and B in period 0 and in C and D in period 1. As with the preceding tables, the parentheses indicate the Table 3(a) prices used to determine the uniform joint price in the corresponding prices set off by parentheses in Table 3(b).

As in our former examples, Table 3(c) illustrates the prices charged in all states if States A and B both adopt retrospective laws. Calculating prices for Table 3(c), however, is not as straightforward as it is for its counterparts, Tables 1(c) and 2(c). The retrospective law of State A requires that the price in A in time period 1 be no higher than the lowest price in B, C, and D in time period 0. State B's law imposes a similar requirement. Accordingly, distillers will establish a price of \$3.50 in C and D in time period 0, knowing that this will allow them to establish a legal price of \$3.50 in A and B in time period 1.⁵¹ However, a problem arises when the distillers attempt to respond to the change in market conditions in period 2. If distillers follow the algorithm used previously, prices of \$4.00 would be established in C and D in period 1 and in A and B in period 2. However, these prices would violate the affirmation laws of both A and B. State A requires its period 2 prices to be no higher than the lowest period 1 price in any other state, which is \$3.50 in State B. State B requires its period 2 prices to be no higher than the lowest period 1 price in any other state, which is \$3.50 in State A. This interactive effect of retrospective price regulation by both State A and State B prohibits distillers from responding to the changed market conditions by raising their prices in A and B without violating the affirmation laws of the two states. Under retrospective laws, last period's prices in all other states set limits for current prices in each regulated state. Since last period's prices were set before the change in market conditions, such retrospective regulation thereafter

50. If the distiller established prices in State A by ignoring State B's affirmation law, it would set a price of \$3.33 in State A in period 0 and period 1 prices of \$4.00, \$3.33, and \$3.33, in B, C, and D, respectively. To comply with B's affirmation law, the period 0 price in B would then have to be \$3.33. If the distiller established prices in State B by ignoring State A's affirmation law, it would set a price of \$3.00 in State B in period 0 and period 1 prices of \$5.00, \$3.00, and \$3.00 in A, C, and D, respectively. To comply with A's affirmation law, the period 0 price in A would have to be \$3.00.

Neither of these two conflicting price schedules are optimal from the distiller's perspective. To maximize its profits while complying with the laws of both states, the distiller is forced to consider jointly A and B's period 0 prices and C and D's period 1 prices.

51. A's and B's retrospective affirmation laws induce distillers to consider jointly individual state prices in C and D in time period 0 and in A and B in time period 1, yielding a price of $\$3.50 = (3 + 2 + 5 + 4)/4$.

prevents distillers from adjusting to changes in the market conditions. Accordingly, prices in A and B, having initially been set at \$3.50, can never exceed \$3.50.⁵² The remaining cells in Table 3(c) reflect this fact.⁵³

Table 3 indicates that the effects of prospective and retrospective affirmation laws on prices across state lines differ when two (or more) states adopt an affirmation law. Retrospective laws create upward price rigidity in this circumstance. However, both types of affirmation cause prices to be lower in the affirming states and higher in those nonaffirming states used in the joint determination process than prices would be in the absence of affirmation. As such, both types of affirmation burden interstate commerce.

Lack of Empirical Evidence

As alluded to above, the Supreme Court in the *Seagram* decision held that there was no evidence that price affirmation would cause distillers to raise their prices in other states rather than lower their prices in New York. Three dissenting justices in *Brown-Forman* offered a similar judgment, stating that *Brown-Forman* at no time introduced "any evidence tending to prove that New York's ABC Law affected the price of its products in any other State."⁵⁴

Given the theoretical explanation of the extraterritorial impact of affirmation laws discussed above, why did *Brown-Forman* fail to provide empirical evidence as to the effect of price affirmation? There are two possible reasons. First, given the widespread adoption of price affirmation, it is difficult, to say the least, to observe which state would have had the lowest price in the absence of price affirmation. Price affirmation laws or policies have been utilized for several decades in thirty-nine states. Decoupling the effect of price affirmation empirically requires accurate information in each state about demand, price elasticity of demand, and marginal cost before and after price affirmation was

52. The price rigidity problem played a role in New York's amending the nature of its price affirmation law from retrospective to prospective in 1967. See *New York Times*, June 4, 1986, at D1. A major concern of the liquor distillers was that price affirmation laws in general restrict their ability to respond to seasonal shifts in regional demands—the pattern of monthly demand for warm weather drinks like rum differs between New York and Florida, for example. See *New York Times*, November 12, 1985, at D2. See also Brief for the Distilled Spirits Council of the United States as Amicus Curiae, *Brown-Forman Distillers Corp. v. State of New York Liquor Auth.*, 106 S. Ct. 2080 (1986), at 16.

53. Since States C and D did not adopt price affirmation, prices in those states can change. State C's price will rise to its profit-maximizing level in periods 2, 3, and 4 as depicted in Table 3(a). State D's price will not fall, however. If it did, price decreases in A and B would be triggered by their affirmation laws.

54. *Brown-Forman*, 106 S. Ct. at 2089.

imposed. We submit this is an enormous, if not impossible, empirical undertaking.⁵⁵

Second, payment of promotional allowances by Brown-Forman may have made the gathering of evidence even more complicated. One plausible reason for the payment of promotional allowances by Brown-Forman was to reduce the impact of affirmation laws on prices in other states. As alluded to above, affirmation laws tend to perturb prices away from their profit-maximizing levels. Relatively low prices in non-affirming states tend to be pushed to higher levels as the distillers determine joint prices across affirming states and nonaffirming states. Since the perturbation of prices lowers profits from their maximum levels, the distillers have incentives to neutralize price increases in the relevant nonaffirming states by using allowances as a means of partially undoing the impact of price affirmation on profits.⁵⁶ If this theory is correct, the task of providing evidence as to the extraterritorial impacts of price affirmation laws would be more difficult.⁵⁷

III. CONCLUSION

Thirty-nine states have adopted some type of price affirmation law or policy, with the first such law being passed by New York in 1964. The United States Supreme Court upheld the constitutionality of a retrospective price affirmation statute in its 1966 *Seagram* decision, but declared a prospective affirmation law unconstitutional in its 1986 *Brown-Forman* decision. The key issue in both cases was the impact of the state law on interstate commerce.

The Supreme Court reached its conclusion in *Brown-Forman* without explicitly overturning *Seagram*. However, as our analysis indicates, both types of price affirmation burden interstate commerce because they both

55. We should, however, acknowledge that one may look for indirect evidence for the effect of price affirmation. For example if State A's price affirmation regulations set wholesale prices below equilibrium market clearing levels, one may observe queuing for distributorships in regulated states, or attempts to tie sales of regulated goods to those of unregulated ones, or other attempts to disguise price rises by reducing service, or similar rationing devices. Likewise, in the unregulated states there may be signs of glutted supply, leading to extra advertising there and other types of disguised price cuts taking the form not only of allowances, but also of providing additional services. Furthermore, one may find that distributorships in regulated states have higher values and sell for more than those with similar sales volume in the unregulated states.

56. To assert that the promotional allowances rendered the affirmation laws ineffective is not to assert that affirmation laws are now harmless. The usage of economic resources in a world of price affirmation (with or without promotional allowances) is inefficient relative to a world without price affirmation.

57. One could infer, however, what wholesale prices would be in the absence of price affirmation by examining the pattern of promotional allowances paid across the states.

cause firms to consider jointly their demand and marginal cost curves in more than one state. Accordingly, the impact of an affirmation law adopted by one state will be transmitted to other states, affecting prices charged in those other states in the process. This impact on interstate commerce is inherent in any law that ties prices in one state to prices in other states.

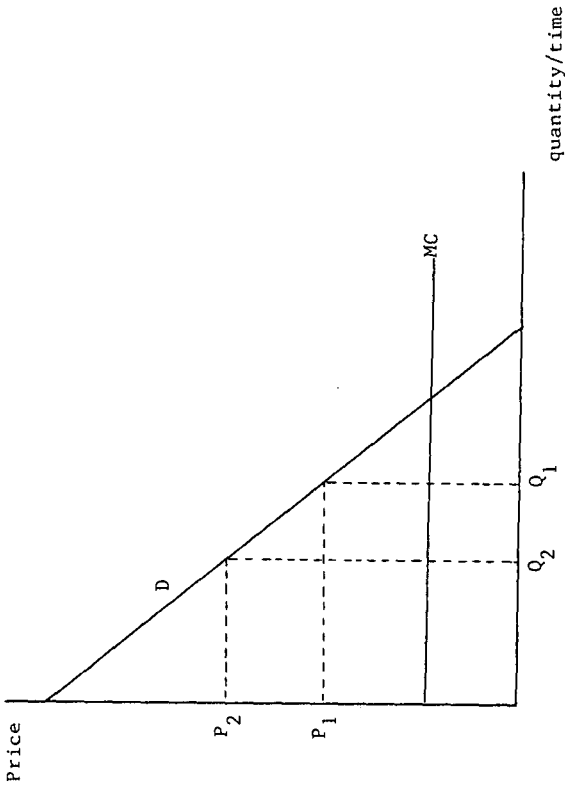


Figure 1*

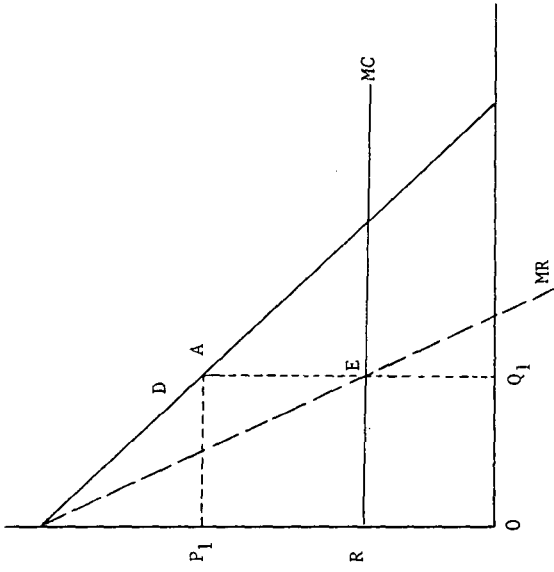


Figure 2*

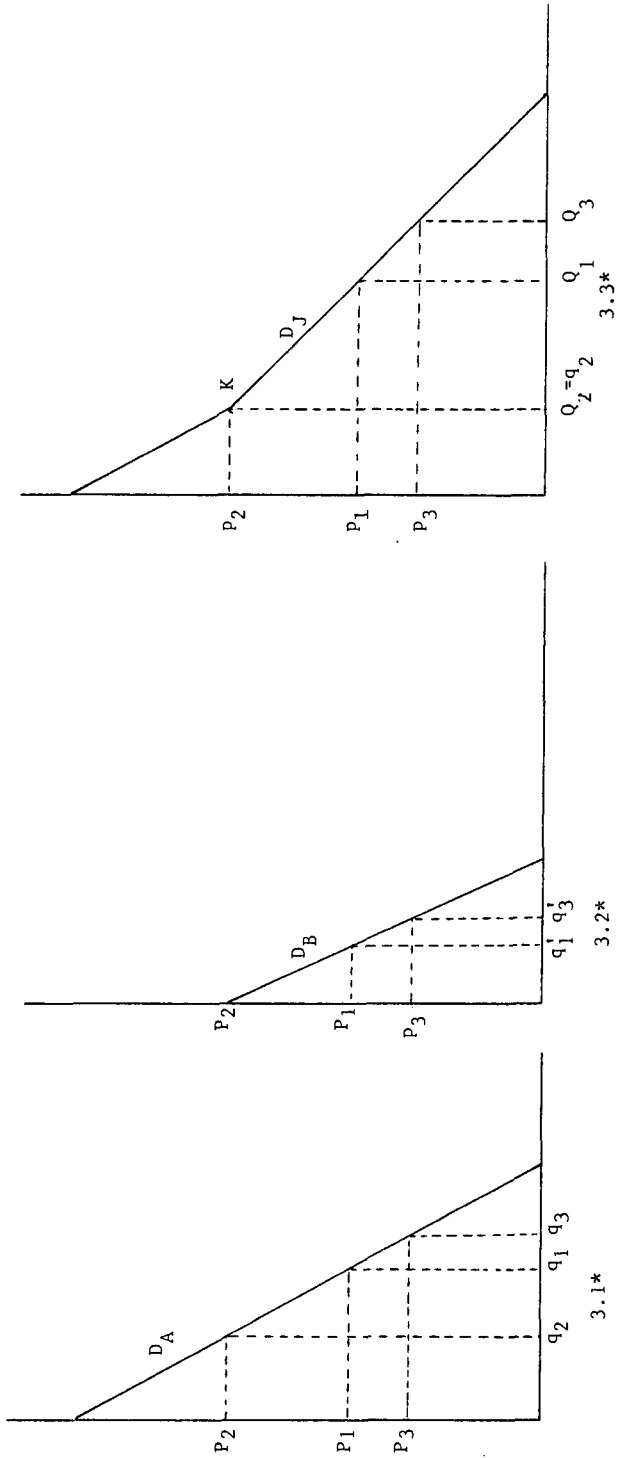


Figure 3*