

## Competition and the Effects of Price Controls in Hawaii's Gasoline Market

the effect of reducing the total revenues that a wholesaler receives from dealers, then the wholesaler is likely to have fewer dealer-operated stations than it would in the absence of the rent control and to spend less money maintaining the stations. Alternatively, the wholesaler might try to make up for the lost lease revenues by increasing the price it charges the dealer for gasoline (assuming the wholesale price cap on gasoline is not binding). In that case, the wholesaler effectively bears more risk, because more of its revenues would come from the sale of a commodity whose price fluctuates, rather than from rents. This increased risk increases the wholesaler's cost of selling gasoline through stations operated by lessee-dealers. The wholesaler likely would respond to this cost increase by using fewer dealer-operated stations or investing less money in maintaining the stations. In short, the rent controls likely would reduce the number and quality of gasoline stations, increase gasoline prices, and cause inconvenience for consumers, who would have to travel farther to find gas stations.

Third, and perhaps most important, Hawaii's law prohibiting "encroachment" (and its predecessor "divorcement" law(13)) constrain the ability of both incumbents and new entrants to establish new stations. In 1991, Hawaii passed a divorcement law that imposed a temporary moratorium on the building of any new company-operated stations, which was extended in 1993 for two more years.(14) In 1995, Hawaii continued the moratorium but revised it slightly.(15) In 1997, Hawaii replaced divorcement with an anti-encroachment law barring oil companies as well as jobbers from opening company-operated stations within a radius of one-eighth of a mile around every dealer-operated station in an urban area and one-quarter of a mile in other areas.(16)

Published economic research demonstrates that anti-encroachment and divorcement laws tend to increase retail gasoline prices. A National Bureau of Economic Research study found that company-operated stations can be the most efficient form of management for high-volume, low-service gasoline stations.(17) Laws that limit marketers' ability to establish new company-operated stations thus force them to adopt higher-cost organizational forms, and these increased costs likely are passed through to consumers in the form of higher gasoline prices. The most comprehensive of the published economic studies, conducted by a senior FTC economist, found that state divorcement and anti-encroachment laws tend to increase retail prices by an average of 2.6 cents per gallon.(18) Another study found Maryland's divorcement law, the first in the nation, raised self-service gasoline prices by 1.4 to 1.7 cents and full-service prices by 5 to 7 cents per gallon at stations that were formerly company-operated.(19) We are aware of no study specifically estimating the effect of Hawaii's divorcement and anti-encroachment laws, but we know of no reason that these laws would not have effects in Hawaii similar to their effects in other states. Indeed, the FTC warned in 1985 that the divorcement law already under discussion in Hawaii "would unquestionably increase the costs of gasoline distribution, eliminate legitimate price competition, and raise prices for motor fuel to consumers."(20)

Legal restrictions on a marketer's ability to establish company-operated stations also may discourage new entry. There is evidence from the record of *Anzai v. Chevron*, Hawaii's now-settled lawsuit against many of the gasoline marketers, showing that Hawaii's anti-encroachment law served to stifle the efforts of BHP, former owner of the Tesoro refinery, to embark on what it hoped would be a low-priced volume retail business.(21) This constraint may especially discourage retail entry by jobbers (who purchase unbranded gasoline from refiners) or smaller oil companies, which tend to rely more heavily on company-operated stations instead of franchised dealers.(22)

## 2. Likely Effects of Price Controls

Most economists and antitrust experts doubt that price controls are a viable mechanism to increase consumer welfare in markets where competition is possible, and we see no reason that competition is not possible in Hawaii's gasoline market. Historical experience demonstrates that price controls tend to create shortages, reduce quality, and generate other inefficiencies.(23)

The U.S. experience with gasoline price controls in the 1970s confirms the predictions of economic reasoning. In 1971, gasoline prices were regulated as part of the Nixon Administration's two-year adoption of economy-wide wage and price controls. In 1973, the federal government prohibited refiners and marketers from charging prices that exceeded their average prices on May 15, 1973, plus adjustments for changes in costs. Though not identical to the price controls in Act 77, the federal controls were similar in two key ways: (1) they applied both to wholesale and to

retail prices, and (2) prices were adjusted based on costs.(24) A report by the Federal Trade Commission's Bureau of Economics concluded that the federal price controls led to the adoption of higher-cost production methods and sporadic shortages manifested in gasoline lines.(25)

Customers queued up at gasoline stations are perhaps the most visible example of the inefficiencies resulting from the shortages created by gasoline price controls, but myriad other examples actually occurred during this period: limited station hours, Sunday station closures, "odd-even" purchasing restrictions based on license plate numbers, and restrictions on the number of gallons the customer could purchase in a single trip to the gasoline station. Also noteworthy are the secondary effects of such inconveniences, which included efforts to hoard gasoline and, in some instances, an increased hazard of car fires because people began storing additional gasoline in containers in their trunks.(26) Some research even shows that the inconvenience and other inefficiencies associated with gasoline station lines cost consumers more than they saved as a result of regulated gas prices.(27)

The price controls in Act 77 likely would create shortages. Act 77 ties maximum retail prices in Hawaii to wholesale prices on the West Coast. Tying regulated prices in Hawaii to West Coast prices might not always create shortages. For example, when other sources of imported gasoline are cheaper than the West Coast, the price cap is less binding. The price controls could, however, create shortages when low West Coast prices coincide with a refinery outage in Hawaii. In that case, the price cap would discourage imports precisely when they are most needed.

Even in the absence of refinery problems in Hawaii, the specific formula in Act 77 has the potential to create shortages. For example, the transportation margin needs to reflect not just the out-of-pocket cost of transporting gasoline, but also the time value of money while the product is in transport, the risk that prices might change while the product is in transport, and the likelihood that prices will fall when an entire tanker-load of product enters the market. The assumed transportation margin of four cents per gallon may be below the efficient level. FTC staff have seen no evidence that transportation costs are this low, and evidence from Hawaii's lawsuit against certain of the incumbent gasoline marketers sug 0 Td [(c)10per gallon may be b5ur cents per galJ ET 1 scn 70.56 43(nc)1(nt)2(1)13(en )7-a scn /TT0 b0.50 for the second se

• Under merger law, antitrust officials can challenge mergers or acquisitions likely to foster tacit or explicit collusion.(30) Hawaii's Attorney General should have resources sufficient to assess whether future mergers or acquisitions are likely to substantially lessen competition.(31)

The relationship between terminal access, import prices, and retail prices is another topic that may merit further consideration. Record evidence from Hawaii's lawsuit against the gasoline marketers, as well as economic logic,

11. This testimony focuses on factors that affect prices by affecting costs and competition. We are also aware that gasoline taxes directly affect retail gasoline prices, and that Hawaii's state and local gasoline taxes exceed the national average. (In 2002, combined state and local gasoline taxes in Hawaii averaged 35.1 cents per gallon, as compared with a national average of 23.6 cents.) See American Petroleum Institute, *Nationwide and State-by-State Motor Fuel Taxes* (July 2002). FTC staff have independently verified tax rate information reported in this publication.

12. The 1997 legislation circumscribing company-operated stations also imposed commercial rent control on rents that oil companies (refiner, marketer, or wholesaler/jobber) can charge lessee-dealers for the use of company-owned stations and prevents them from converting lessee-dealer stations to company-operated stations. The rent control aspects of this law have not been put into effect, pending litigation. Last year a federal court ruled that this aspect of the law is an unconstitutional regulatory taking, on the ground that the rent cap would not necessarily decrease retail gasoline prices and likely would increase them. *Chevron v. Cayetano*, 198 F. Supp. 2d 1182 (D. Haw. 2002). Act 77, enacted the following month, combines the rent cap with wholesale and retail price controls. The district court's decision is currently on appeal before the Ninth Circuit.

13. Anti-encroachment and divorcement laws both limit competition between refiners/marketers and lessee-dealers. Laws banning encroachment limit a refiner's and/or marketer's ability to establish new company-operated stations within a certain distance of existing dealer-operated stations. Divorcement laws either prohibit refiners and/or marketers from operating their own stations or prohibit them from opening and operating new stations.

14. Act 295 (S.B. No. 1757); Act 329 (S.B. No. 124).

15. Companies could open two new company-operated stations for every new dealer-operated station, and companyoperated stations that were closed could be replaced by a new company-operated station within a one-mile radius of the closed station. Act 238 (S.B. No. 487).

16. Act 257 (H.B. No. 1451).

17. Asher A. Blass and Dennis W. Carlton, "The Choice of Organizational Form in Gasoline Retailing and the Cost of Laws that Limit that Choice," 44 *J.L. & Econ.* 511 (2001).

18. Michael G. Vita, "Regulatory Restrictions on Vertical Integration and Control: The Competitive Impact of Gasoline Divorcement Policies," 18 J. Reg. Econ. 217 (2000).

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20. Letter from Terry Calvani, Acting Chairman, Federal Trade Commission, to the Honorable Peter K. Apo (Dec. 23, 1985). The bill was Hawaii House Bill 1376.

21. See, e.g.