

Fiona M. Scott Morton: Letting the Data Speak

Fei Deng

Fiona Scott Morton, a Professor of Economics at Yale School of Management, was recently appointed as the Deputy Assistant Attorney General for Economic Analysis at the U.S. Department of Justice. During her twenty years of teaching and conducting empirical research, Scott Morton has specialized in competitive strategies and dynamics. She has performed extensive research on the economics of the pharmaceutical industry, with two main areas of focus: the effect of government-sponsored insurance plans—Medicaid and Medicare Part D—on prices and competition in the pharmaceutical industry, and entry strategies of generic drug manufacturers and the resulting industry dynamics.

Antitrust practitioners may be less familiar with Scott Morton's work beyond health care, but her other published research spans a wide range of areas relevant to antitrust. These areas include cartels, bundling, the competition-enhancing effect of the Internet, and behavioral economics, plus a wide range of industries, such as shipping, automobile, supermarket, magazines, and funeral goods and services. The overriding impression left by a review of her work is that she is pragmatic, non-doctrinaire, and lets the data speak.

Medicare and Medicaid

Given that "Medicare Part D enrollees combined with Medicaid enrollees generate close to 50% of prescription drug spending in the United States,"¹ empirical studies can play an important role in assessing the success of health care policies on the cost and quality of pharmaceuticals delivered to participants in these programs. Scott Morton's research indicates that good mechanism design, as in the case of Medicare Part D, can provide appropriate incentives, while poor mechanism design, as in the case of Medicaid, can have adverse, unintended consequences on incentives.

In a series of papers, Scott Morton studied the effect of Medicaid's procurement rules, such as the most-favored-customer (MFC) clause, on pharmaceutical prices.² The Medicaid MFC clause was established by the Omnibus Budget Reconciliation Act of 1990, under which Medicaid reimburses a pharmaceutical manufacturer only at the lowest price the manufacturer offered to any

■
Fei Deng is Senior
Consultant at NERA
Economic Consulting
and an Editor of
The Antitrust Source.

¹ Fiona M. Scott Morton, *Medicaid Rebates, the Economics of the Pharmaceutical Industry, and the Medicare Part D Program*, Testimony Before the House Oversight and Government Reform Comm. (July 24, 2008), available at <http://oversight-archive.waxman.house.gov/documents/20080724103756.pdf>.

² Fiona Scott Morton, *The Strategic Response by Pharmaceutical Firms to the Medicaid Most-Favored-Customer Rules*, 28 RAND J. ECON. 269 (1997) [hereinafter *The Strategic Response*]; Fiona M. Scott Morton, *The Interaction Between a Most-Favored-Customer Clause and Price Dispersion: An Empirical Examination of the Medicaid Rebate Rules of 1990*, 6 J. ECON. & MGMT. STRATEGY 151 (1997) [hereinafter *The Interaction*]; Mark Duggan & Fiona M. Scott Morton, *The Distortionary Effects of Government Procurement: Evidence from Medicaid Prescription Drug Purchasing*, 121 Q. J. ECON. 1 (2006).

buyer of the product, if the manufacturer chooses to enroll in the Medicaid program. On its face, an MFC clause would seem to ensure lower prices for Medicaid, but Scott Morton's research casts doubt on this presumption.

Using data from 1989 to 1991, before and after the time when the MFC clause took effect, Scott Morton found that the MFC clause resulted in a price increase of 4 percent on average for branded drugs facing generic competition.³ She also found that the extent of price dispersion declined in the hospital channel.⁴ The size of these effects for a given drug was positively correlated to the share of the drug covered by Medicaid and the level of price dispersion before the MFC clause took effect.⁵ Her later study, using drug utilization and expenditure data for the top 200 drugs in 1997 and 2002, confirmed her earlier findings, indicating that "a 10-percentage-point increase in the MMS [(Medicaid market share)] is associated with a 7 to 10 percent increase in the average price of a prescription."⁶

The government might not have considered the possibility of these price-increasing effects when designing the MFC clause. Scott Morton concluded that the MFC clause gave pharmaceutical manufacturers disincentives to provide discounts to customers in the commercial market because the price to Medicaid recipients would be lowered as well. Private insurers and their customers were also negatively affected because they had to pay more for some prescription drugs than they otherwise would have, especially those drugs for which a large share of sales is to Medicaid recipients.

Scott Morton's studies on the Medicare Part D program show a much brighter picture.⁷ Scott Morton found that the Medicare Part D program lowers branded drug prices by approximately 20 percent on average, which in turn lowers out-of-pocket costs for Medicare recipients, especially for those who did not have insurance before Part D.⁸ This is due to the successful design of the Medicare Part D program, which uses a formulary to encourage competition among branded drugs for market share.⁹ As Scott Morton described, this mechanism gives the program strong buyer power because "Part D plans could exclude certain treatments from their formulary or steer their enrollees away from certain treatments in response to the prices of those treatments, which a cash-paying individual could not typically do on her own."¹⁰

Generic Drug Entry

Entry has long been a favorite subject for industrial organization economists due to the challenges and opportunities posed by the dynamics and strategic interaction involved in entry decisions.¹¹

³ See Scott Morton, *The Strategic Response*, *supra* note 2, at 288.

⁴ See Scott Morton, *The Interaction*, *supra* note 2, at 152.

⁵ See Scott Morton, *The Strategic Response*, *supra* note 2, at 282–83; Scott Morton, *The Interaction*, *supra* note 2, at 171–72.

⁶ Duggan & Scott Morton, *supra* note 2, at 1.

⁷ Mark Duggan et al., *Providing Prescription Drug Coverage to the Elderly: America's Experiment with Medicare Part D*, 22 J. ECON. PERSP. 69 (Fall 2008); Mark Duggan & Fiona Scott Morton, *The Effect of Medicare Part D on Pharmaceutical Prices and Utilization*, 100 AM. ECON. REV. 590 (2010).

⁸ See Duggan & Scott Morton, *supra* note 7, at 592, 605.

⁹ *Id.* at 590.

¹⁰ *Id.* at 591.

¹¹ See, e.g., Steven T. Berry, *Estimation of a Model of Entry in the Airline Industry*, 60 ECONOMETRICA 889 (1992).

Scott Morton has

published several

articles on entry

dynamics in the generic

pharmaceutical

industry.

Scott Morton has published several articles on entry dynamics in the generic pharmaceutical industry.¹²

She studied generic drug entrants between 1984 and 1994 and found that markets with “larger prepatent expiration brand revenue, larger shares to hospitals, and drugs that treat chronic conditions” attracted more entry.¹³ She also found that firms with prior experience in similar drugs or therapies would be more likely to enter a particular market, perhaps due to “economies of scope in distribution channels and sales relationships.”¹⁴

As for interaction between branded drugs and generic drugs, Scott Morton found that pre-expiration brand advertising, although endogenous with respect to generic entry because both depend on the expectation of profits in the post-entry market, is not effective in deterring generic entry.¹⁵ Scott Morton also found that a company’s ownership of both a branded drug and a corresponding generic drug application does not facilitate generic entry.¹⁶ This finding is consistent with the general attitude the DOJ and FTC have taken with respect to merging of firms specializing in generic and branded drugs and their stance against pay-for-delay agreements.

Retail Pricing and Retailer-Manufacturer Negotiations

In the retail industry, Scott Morton has studied the effect of the Internet on new car pricing, and retailers’ use of store brands in their negotiations with branded manufacturers.

The invention and development of the Internet not only revolutionized the information technology industry, but also affected pricing and competition in traditional industries, such as the automobile industry. Scott Morton conducted a series of empirical studies on this subject and found that customers who bought cars online (i.e., used Internet car referral services) paid 1.5 to 2.2 percent less than they would have if buying offline.¹⁷ Another interesting finding of her studies is that African-American and Hispanic buyers pay on average 2.1 percent more than white buyers for identical cars when buying offline, 35 percent of which is not attributable to observable factors such as income, education, and search costs.¹⁸ However, this “minority price premium” disappears almost entirely when buying online, indicating that minority buyers benefit the most from buying online.¹⁹

In the supermarket industry, Scott Morton studied retailers’ strategic use of store brands and found that “retailers are more likely to carry a store brand in a category if the share of the leading national brand is higher,” indicating that store brands are used by retailers as a tool in negotia-

¹² Fiona M. Scott Morton, *Entry Decisions in the Generic Pharmaceutical Industry*, 30 RAND J. ECON. 421 (1999) [hereinafter *Entry Decisions*]; Fiona M. Scott Morton, *Barriers to Entry, Brand Advertising, and Generic Entry in the US Pharmaceutical Industry*, 18 INT’L J. INDUS. ORG. 1085 (2000) [hereinafter *Barriers to Entry*]; Fiona M. Scott Morton, *Horizontal Integration between Brand and Generic Firms in the Pharmaceutical Industry*, 11 J. ECON. & MGMT. STRATEGY (2002) [hereinafter *Horizontal Integration*].

¹³ Scott Morton, *Entry Decisions*, *supra* note 12, at 422.

¹⁴ *Id.*

¹⁵ See Scott Morton, *Barriers to Entry*, *supra* note 12.

¹⁶ See Scott Morton, *Horizontal Integration*, *supra* note 12.

¹⁷ See Fiona Scott Morton et al., *Internet Car Retailing*, 49 J. INDUS. ECON. 501, 501 (2001); Florian Zettelmeyer et al., *How the Internet Lowers Prices: Evidence from Matched Survey and Automobile Transaction Data*, 43 J. MKTG. RES. 168 (2006).

¹⁸ Fiona Scott Morton et al., *Consumer Information and Discrimination: Does the Internet Affect the Pricing of New Cars to Women and Minorities*, 1 QUANTITATIVE MKTG. & ECON. 65, 67 (2003).

¹⁹ *Id.* at 86–87.

Scott Morton's studies of British shipping cartels link the social characteristics of the market players with the competitive strategies employed. This fits into the new trend in economic studies, where social or psychological factors are studied and considered in economic modeling.

tions with branded manufacturers over supply terms.²⁰ She ruled out an alternative explanation for retailers' use of store brands, namely that the retailer seeks to maximize sales by imitating the national brand's positioning. She tested this alternative explanation by examining the correlation between the market share of the store brand and the market share of the leading national brand (controlling for other factors as well).²¹ If maximizing sales through imitation were the explanation for store brands, one would expect to see that this correlation is positive. Instead, she found a small, negative correlation.²² Her conclusion regarding retailers' motivation for introducing store brands suggests that the economic relationship between retailers and national brands can be quite complex. Her findings also have implications for the analysis of mergers between national brands. For example, a merger between two competing national brands may induce retailers to introduce a store brand as a counter-measure to increase their buyer power.

Entry, Predation, and Behavioral Economics

Scott Morton studied the attempted entry by various merchant shipping lines and the reactions of incumbent cartel members during the British shipping cartel period of 1879–1929.²³ She found that entrants with “fewer financial resources, less experience, smaller size, or poor trade conditions” were more likely to be met by incumbents with a price war.²⁴ This is consistent with the “long-purse” theory of predation, which points to the significance of financial resources of an entrant for its ability to survive incumbents' attempts to drive it out of the market.²⁵

In addition, Scott Morton found that the social status and regional affiliation of the entrant impacted whether the incumbents would engage in predation. She found that “high social status entrants are significantly less likely (40 percent) to be preyed upon than the low social status entrants.”²⁶ She also found that an entrant being located at the same port as one of the incumbents increased the probability of predation, but being British lowered the probability of predation, which implies that the community-enhancing effects of similar origin outweighs the competitive effects at the national level but not at the local level.²⁷

Scott Morton's studies of British shipping cartels link the social characteristics of the market players with the competitive strategies employed. This fits into the new trend in economic studies, where social or psychological factors are studied and considered in economic modeling. Another example of Scott Morton's behavioral economics work is her study linking consumers' time-inconsistent preferences with magazine prices.²⁸ She found that “magazine publishers

²⁰ Fiona Scott Morton & Florian Zettelmeyer, *The Strategic Positioning of Store Brands in Retailer-Manufacturer Negotiations*, 24 REV. INDUS. ORG. 161, 190–91 (2004).

²¹ *Id.* at 188–90.

²² *Id.* at 189.

²³ Fiona Scott Morton, *Entry and Predation: British Shipping Cartels 1879–1929*, 6 J. ECON. & MGMT. STRATEGY 679 (1997); Joel M. Podolny & Fiona M. Scott Morton, *Social Status, Entry and Predation: the Case of British Shipping Cartels 1879–1929*, 47 J. INDUS. ECON. 41 (1999).

²⁴ Scott Morton, *supra* note 23, at 679.

²⁵ See, e.g., Patrick Bolton & David S. Scharfstein, *A Theory of Predation Based on Agency Problems in Financial Contracting*, 80 AM. ECON. REV. 93 (1990).

²⁶ Podolny & Scott Morton, *supra* note 23, at 41.

²⁷ *Id.* at 62.

²⁸ Sharon M. Oster & Fiona M. Scott Morton, *Behavioral Biases Meet the Market: The Case of Magazine Subscription Prices*, 5 ADVANCES ECON. ANALYSIS & POL'Y 1 (2005).

appear to be setting subscription prices to take advantage of time-inconsistency on the part of consumers.” Magazines, such as investment magazines that are more “worthy” purchases that will benefit the reader in the future, have a lower ratio of newsstand price to subscription price than leisure magazines that provide more immediate gratification.²⁹

Bundling and One-Monopoly Rent

Bundling is another favorite subject of both industrial organization economists and antitrust practitioners. The classic Chicago School theory of “one monopoly rent” argues that if a firm has market power in market A, it cannot achieve more market power by bundling its product in market A with its product in competitive market B. Others have noted several situations in which the one-monopoly-rent theory does not hold, including when the product in market B can be used as an effective tool for price discrimination.³⁰ Thus, it is left to empirical tests to determine whether the one-monopoly-rent theory applies to a particular bundling situation.

Scott Morton examined whether the one-monopoly-rent theory applies to the funeral goods and services industry, where funeral goods like caskets can be purchased together with funeral services through funeral homes, or separately from retailers such as Costco.³¹ The latter option is only available in certain states where no regulations restrict the sales of funeral goods to licensed funeral homes only. She found that “when courts lift funeral goods sales restrictions, the prices of funeral goods fall but the prices of funeral services rise by nearly as much,” thus indicating that the one-monopoly-rent theory holds in this industry.³²

Conclusion

Scott Morton’s research touches on various areas in antitrust law. Her approach has been empirically oriented, and the emphasis has been on competitive strategies and dynamics.³³ These features of her research may have been what led to the DOJ to appoint her to her present position. Scott Morton seems to be a good fit with the emphasis of the new Merger Guidelines on empirical evidence. Based on her published research, she can be expected to continue to let the data speak in her new role as an antitrust enforcer. ●

²⁹ *Id.* at 23.

³⁰ See, e.g., Michael D. Whinston, *Tying, Foreclosure, and Exclusion*, 80 AM. ECON. REV. 837 (1990).

³¹ Judith A. Chevalier & Fiona M. Scott Morton, *State Casket Sales Restrictions: A Pointless Undertaking?*, 51 J.L. ECON. 1 (2008).

³² *Id.* at 1.

³³ In addition to the empirical studies reviewed above, Scott Morton also coauthored an econometrics paper, applying alternative approaches in addressing the issue of misclassification of a dependent variable in a discrete-response model. See Jerry A. Hausman et al., *Misclassification of the Dependent Variable in a Discrete-response Setting*, 87 J. ECONOMETRICS 239 (1998).