Economics at the FTC: Mergers, Dominant-Firm Conduct, and Consumer Behavior

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Abstract:
Economists at the Federal Trade Commission (FTC) pursue the agency's competition and consumer protection missions. In this year's essay, in antitrust, we discuss the new Merger Guidelines, three exclusion cases, and R&D issues in the Thoratec/HeartWare merger and the Google/AdMob merger. In consumer protection, we discuss the FTC's new rule on debt settlement, our efforts to improve disclosures, and our recent work on appliance energy disclosures.

Keywords: antitrust, consumer protection, FTC, mergers, mandatory disclosures, appliance labeling

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1. Introduction

The Federal Trade Commission's (FTC) Bureau of Economics (BE) includes about 75 Ph.D.-level economists, a small group of accountants, and 25 other staff (including research analysts). Its work supports the FTC's competition (antitrust) and consumer protection missions. Most of the Bureau's efforts directly support the Commission's investigations and enforcement, but FTC economists also help promote competition-oriented policies domestically at state and federal levels, and contribute to the global adoption of modern, economically-oriented competition policies. In addition, Bureau staff pursues policy-oriented economic research.

In November 2009 our second annual microeconomics research conference was conducted jointly with Northwestern University's Center for the Study of Industrial Organization (CSIO) and Searle Center.[1] Topics included mortgage delinquency, competition and innovation policy, advertising and consumer behavior, empirical industrial organization, and asymmetric information and consumer choice. For our third conference, in November 2010, our call for papers solicits contributions on topics including advertising, information disclosure, mergers, vertical restraints in the supply chain, mortgages and credit markets, bundling, loyalty discounts, dynamic demand estimation, business practices and consumer choice, intellectual property, optimal penalties, and cost-benefit analysis in law enforcement.

2. Mergers

Merger enforcement is the bulk of our antitrust work. MergerStat reported that annual U.S. general merger and acquisition (M&A) activity fell again, to about $0.56 TR in 2009, compared with $1.4 TR in the peak year of 1999.2 Despite the decline, 2009 saw over 650 merger filings,

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[1] Northwestern University's CSIO website can be found at www.wcas.northwestern.edu/csio/. Northwestern University's Searle Center website can be found at www.law.northwestern.edu/searlecenter.

[2] Mergerstat Review. (2010, p. 10).

and the FTC challenged all or some aspect of 19 transactions.[3] Merger activity in 2010 shows signs of resurgence.

2.1 New Horizontal Merger Guidelines

Together with the U.S. Department of Justice's (DOJ) Antitrust Division, the FTC issued revised Horizontal Merger Guidelines.[4] In very broad terms, the 2010 Guidelines reflect the continuing evolution of antitrust analysis in two related directions. First, it is increasingly effects-based rather than rule-based, and the new Guidelines stress that the goal is to predict competitive effects on customers and consumers. Second, those predictions are based on a range of evidence, not only or even predominantly on market concentration. In this respect, the changes echo developments in industrial organization economics.

Merger simulation is now recognized, but is not a centerpiece. Rather, unilateral effects are discussed broadly based on the extent of direct competition between the merging firms' products, as captured by diversion ratios, and on how demand diversion affects incentives, as captured by relative margins. The 1992 Guidelines briefly sketched this analysis; section 6 of the new Guidelines offers more detail and puts less weight on possible links between diversion ratios and market shares.

Importantly, however, market definition and concentration evidence are still significant; indeed, section 4 discusses market definition at more length and with more nuance than did the 1992 Guidelines. Concentration continues to play a significant role, both broadly and more specifically for coordinated effects: "actions by a group of firms that are profitable for each of them only as a result of the accommodating reactions of the others." Section 7 of the new

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[3] FTC Chairman's Annual Report. (2010, p. 2). Retrieved from http://www.ftc.gov/os/2010/04/2010ChairmansReport.pdf.

[4] See http://www.ftc.gov/os/2010/08/100819hmg.pdf

Guidelines discusses these effects in a framework that is broader (and closer to the definition) than the 1992 Guidelines' discussion, which stressed a purposive "coordinate, detect, and punish" form of coordination. In particular, if firms naturally—without seeking to sustain a particular coordinated outcome—match one another's competitive initiatives, economists recognize that competition may be much softened. In the limit, price matching can sustain monopoly-like pricing without the kind of punishment strategies often envisioned in the repeated-game literature and in the 1992 Guidelines.

The new Guidelines update the analytical framework in many other ways; here we briefly mention two. First, significantly more attention is given to non-price effects, including innovation and variety. Second, while merger analysis has long recognized that otherwise troubling mergers are much less troubling if entry is easy, the new Guidelines are the first to note explicitly (e.g., Example 2) how a merger may make entry harder, by encouraging or facilitating exclusionary tactics.

2.2 Mergers and Innovation: The cases of Thoratec/Heartware and Google/AdMob

The FTC's 2004 review of Genzyme's acquisition of Novazyme focused on "whether the merged firm was likely to have a reduced incentive to invest in R&D, and also whether it was likely to have the ability to conduct R&D more successfully."[5] The same questions arose when Thoratec proposed to acquire HeartWare in July 2009 and when Google set out to acquire AdMob in early 2010.

Thoratec made the only FDA-approved left ventricular assist device (LVAD) on the market. LVADs are surgically-implantable blood pumps that sustain patients who suffer from end-stage

[5] Statement of Chairman Timothy J. Muris in the Matter of Genzyme Corporation/ Novazyme Pharmaceuticals, Inc. (2004, p. 6). Available at http://www.ftc.gov/os/2004/01/murisgenzymestmt.pdf.

heart failure. HeartWare was a potential entrant whose LVAD product was well into the FDA approval process and promised several advantages over Thoratec's LVAD. A potential benefit of the merger was that Thoratec's experience and distribution channels might help overcome remaining regulatory and marketing hurdles and enable the merged firm to get HeartWare's innovation to patients sooner than would an independent HeartWare. Against this potential efficiency benefit was the issue that Chairman Muris identified in *Genzyme*: Would Thoratec have as strong an incentive as would an independent HeartWare to bring the innovation to market? Weighing the evidence, the Commission issued a complaint to block the merger, which the parties abandoned.

The Complaint alleged that competition from HeartWare had already forced Thoratec to innovate (see paragraph 4), that no other firms working to develop LVADs posed as strong a competitive threat to Thoratec as HeartWare (see paragraph 18), and that upon receiving FDA approval HeartWare would take significant market share from Thoratec (see paragraph 21).[6] Taken together, these allegations lead to the conclusion that by purchasing HeartWare, Thoratec would face less competitive pressure to bring the new product to market. With information about the prices, margins, and likely diversion ratio, one can quantify this effect and compare the pre- and post-merger incentives to bring HeartWare's product to market.

The fundamental economics are described in Section 6.4 of the 2010 Horizontal Merger Guidelines. If introduced, the innovation will take customers from the incumbent's pre-existing product, and this "cannibalization" effect discourages the incumbent from introducing the new product. Suppose that firm 1 produces product A and that a rival, firm 2, is developing innovation B, which will compete with A. If introduced, product B will draw a fraction d of its sales from customers who would otherwise buy A (thus d is the diversion ratio). Let M_A be the profit margin that firm 1 earns on incremental sales of A, and let M_B be the profit margin that (for simplicity) either firm would earn on sales of B once introduced.

[6] The public version of the Complaint in the Matter of Thoratec Corporation and HeartWare International, Inc. can be accessed at http://www.ftc.gov/os/adjpro/d9339/090730thorateadminccmpt.pdf.

Firm 2's profit from introducing B and selling Q units exceeds its cost, C_2, of product introduction if $M_BQ \geq C_2$. But if the firms have merged and no other entry is imminent, the merged firm will find it profitable to introduce B only if $[M_B - dM_A]Q \geq C_M$, where C_M is the merged firm's cost of product introduction. If dM_A is not much less than M_B, then the merged firm may well find the introduction much less profitable than would an independent firm 2, even if its cost of introduction is considerably lower. This example illustrates how a merger can dramatically affect the incentives to introduce an innovative product.

Google's acquisition of AdMob shows how the presence of an additional competitor can change the analysis. AdMob was in some respects the leading mobile advertising network, and Google was a significant and particularly fast-growing rival. Mobile advertising networks place advertising and thus monetize many applications for mobile platforms -- notably, Apple's iPhone. Initially, there was concern that the merger would reduce future competition in the terms that mobile ad networks offered to advertisers and applications developers, and that Google would reduce its R&D in mobile advertising once it had AdMob's technology. During the course of the investigation, however, staff learned that Apple itself was about to enter mobile advertising. Apple was not just a potentially powerful entrant into mobile advertising, but also was the owner of the dominant mobile platform on which consumers use applications that show ads. Apple therefore had the ability, and had announced its intention, to manage its platform in a way that would provide its proprietary mobile advertising service with advantages that were unavailable to unaffiliated mobile ad networks. This set of circumstances made the merging firms' current market positions and historic trajectories poor predictors of their future competitive significance. The FTC closed its investigation and allowed Google to acquire AdMob.

3. Non-merger Antitrust

In non-merger antitrust, we worked on a number of cases that included Transitions photochromic lens treatments, Intel's practices in computer chips and related markets, and real estate broker exclusion (Realcomp II).

3.1 Transitions Photochromic Lenses and Market Share Discounts

For many years, Transitions Optical has produced by far the most popular brand of photochromic treatments for ophthalmic lenses.[7] These treatments cause lenses to darken in response to exposure to sunlight. In 1999, Corning introduced a competing product; and in 2005, Vision-Ease Lens, a producer of ophthalmic lenses, sought to integrate vertically into the production of these treatments for its own lenses. In response, Transitions began to require exclusivity from upstream lens makers and downstream lens distributors. This conduct effectively foreclosed perhaps as much as 85 percent of the lens making capacity and 40 percent of the downstream wholesale and retail optical market from rival photochromic lens makers. We explored potential efficiency rationales for Transitions' conduct, but our investigation indicated that anticompetitive rationales were more important. The FTC obtained a settlement that required numerous changes to Transitions' contracts with upstream and downstream firms and restricted its future ability to offer various terms such as market share-based discounts.[8]

While "discounts" sound good, discounts based on *market share* to non-final buyers can enable a dominant firm to tax sales by a nascent or small rival. Consider a dominant firm, T, that sets a list price p and a discount scheme that is characterized by a discount function *d*, so that the buyer pays T a total bill $B \equiv p[1-d(s)]x$ if it buys quantity *x* from T and *y* from rivals to T, giving T a share $s \equiv x/(x+y)$ of its purchases. If a rival sets a price *r*, then the effective (overall) marginal cost to the buyer of one more unit from that rival is not *r* but $r+\frac{\partial B}{\partial y}=r-xpd'(s)\frac{\partial s}{\partial y}=r+xpd'(s)\frac{s^2}{x}=r+pd'(s)s^2$. The last term is a "tax" on marginal sales

[7] For a more complete description, including a helpful diagram of the vertical structure of the industry, see http://www.ftc.gov/os/caselist/0910062/100303transopticalanal.pdf.

[8] See http://www.ftc.gov/os/caselist/0910062/index.shtm for the Commission's Decision and Order in this case. As is customary in settlements, there was no admission that the allegations in the Complaint were correct or (in this case) that Transitions had engaged in the strategies whose economics are discussed here.

by the rival. Meanwhile, the marginal cost to the buyer of buying an additional unit from T is

$$\frac{\partial B}{\partial x} = p[1-d(s)] - xpd'(s)\frac{\partial s}{\partial x} = p\left[1-d(s)-xd'(s)\frac{s(1-s)}{x}\right] = p[1-d(s)-s(1-s)d'(s)].$$

If, for example, the buyer will buy the marginal unit from the supplier offering the lower overall marginal cost of purchase, then to avoid losing market share, T's pricing is constrained not by $\frac{\partial B}{\partial x} \le r$ (let alone by $p \le r$ or by $p[1-d(s)] \le r$) but by $\frac{\partial B}{\partial x} \le r + \frac{\partial B}{\partial y}$. If the rival is willing to price down to its cost, *c*, this inequality constrains the ratio of T's net (and the rival's after-tax) price to cost, $\frac{\partial B}{\partial x}/c$, to be no greater than $1+\frac{s^2 d'(s)}{1-d-sd'(s)}$. That is, T can charge a true marginal price that exceeds its rival's cost by that ratio, without opening up a marginal opportunity for a rival willing to price down to its cost. As this formula suggests, the potential power of this tax-rivals'-sales effect increases sharply with T's market share, *s*.

3.2 Intel

In December 2009 the FTC issued a complaint alleging that Intel used a variety of exclusionary practices. As has been widely reported, at this writing a pending settlement proposal has been through a public comment period and is awaiting final action by the Commission.

The complaint alleged that Intel used exclusive dealing and market share discounts to foreclose competing CPU producers. The Analysis to Aid Public Comment for the proposed settlement points out that market share discounts can (in effect) tax rivals' sales. The complaint also alleged that Intel bundled products and made retroactive discounts that dropped the effective prices on some products to predatory levels. The proposed settlement prevents Intel from basing discounts on market-share targets, from issuing retroactive discounts, or from pricing product bundles in a way that drops the incremental price on any product below Intel's standard managerial accounting measure of incremental production cost for that product.

The complaint also alleged that Intel saw that graphics processors (GPUs) were becoming a threat to Intel's monopoly in central processors (CPUs). What had once provided graphics capability complementary to CPUs came increasingly to be capable of providing general computing capabilities that could substitute for many CPU capabilities. In response to the growing potential for GPUs to substitute for all but the basic CPU instruction set, and thereby reducing Intel's ability to sell high-powered CPUs, Intel allegedly restricted competing GPUs' interoperability with Intel's CPUs. Intel also bundled some of its CPUs with some of its GPUs to reduce competition from others' GPUs, as described above. The proposed settlement requires Intel to maintain certain industry-standard interfaces between its CPUs and rival GPUs for six years. It also clarifies and/or strengthens the intellectual property rights of Intel's two rival CPU manufacturers so that independent GPU providers have additional possible firms with whom to partner in the development of integrated CPU/GPU technology.

Raising disclosure issues traditionally associated with consumer protection, the complaint also alleged that Intel deceptively misrepresented the extent to which its compiler, a program that turns human-readable applications programs into machine-code, would produce good outcomes when used with rival microprocessors. The allegations were that Intel failed to disclose that its compiler was specifically designed to work less well with non-Intel CPUs, and that Intel helped to promote performance benchmarks for CPUs that would artificially make Intel's CPUs look superior. Such alleged actions illustrate how conduct that is more typically associated with consumer fraud cases can also reduce competition and maintain monopoly power; they are a reminder that consumer protection and antitrust enforcement are very closely related. The proposed settlement imposes certain disclosure requirements on Intel and creates a fund through which Intel will pay recompilation costs for software producers that were affected by Intel's alleged disclosure failures.

3.3 Real Estate Marketing (Realcomp II)

Real estate agents in the US traditionally charge five or six percent of the sales price of a home, and in 2004 commissions for residential real estate sales nationwide exceeded $60 billion annually.[9] As inflation-adjusted home prices escalated over the decades (notwithstanding recent declines), one might reasonably expect percentage commissions to fall, and they have to some degree but not as much as one might expect. Both the FTC and DOJ have brought cases alleging that this is in part due to exclusionary practices on the part of traditional, full-commission real estate agents.

A multiple listing service (MLS) is an institution that allows the sharing of information about properties among otherwise competing brokers. They have been recognized as very effective buyer/seller matching devices since their inception, which reaches back in nascent forms to the 1900s. Antitrust authorities have also been concerned with MLS-related activities for decades.[10] Sellers of real estate services that are excluded from access to a local MLS may have few viable approaches for offering their services. The advent of the Internet has made these information sharing mechanisms even more important as the listings are shared across a larger number of cooperating websites. The Internet is now the key marketing mechanism for home sales, surpassing the yard sign in importance. The Internet has also allowed various forms of competition to emerge among brokers as nontraditional brokers use the Internet to offer a different range of services to home sellers and buyers.[11]

In 2006, the FTC brought a case concerning the practices of a Detroit area multiple listing service called Realcomp II. Realcomp restricted "exclusive agency" (EA) contracts that are allegedly favored by low price, discount brokers who offered a nontraditional package of services. In particular, the MLS listings of those nontraditional agents working under EA

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[9] US Government Accountability Office. (2005, August). Real estate brokerage: Factors that may affect price competition. Retrieved from http://www.ftc.gov/bc/realestate/resources/GAOreport.pdf. Home sales and prices have fallen more recently, but real estate commissions nationally likely still exceed $40 BN annually.

[10] The FTC and DOJ competition cases that involve MLSs reach back to at least the early 1980s, with Multiple Listing Service of the Greater Michigan City Area (1985) 106 F.T.C. 95, and United States v. Realty Multi-List, 629 F.2d 1351 (5th Cir. 1980). These cases focused on membership in the MLS and its character as an essential element of competition among brokers.

[11] For a description of the real estate industry and the role of Multiple Listing Services, see Competition in the real estate brokerage industry (2007, April). Federal Trade Commission & US Department of Justice Report. Available at http://www.ftc.gov/reports/realestate/V050015.pdf.

contracts rather than the traditional “exclusive right to sell” contracts were excluded from certain Internet feeds to various websites.

One important economic issue was whether Realcomp had market power, or alternatively, whether neighboring MLSs, or non-MLS “for sale by owner” (FSBO) transactions were realistic substitutes. To answer this question, we analyzed detailed listing data from Realcomp and a nearby MLS and - to identify FSBO transactions - a detailed data base on house sales from a proprietary vendor. We found that Realcomp had a very large share of house listings and that the proposed alternatives were not significant. A second important issue was whether the EA restrictions were truly binding and had a material effect upon brokers or consumers. We combined listings data from Realcomp and a number of control MLSs that were located elsewhere in the country (resulting in a data base of over one million listings) and performed various cross-sectional and time series analyses. Among other things, the analyses revealed that Realcomp’s restrictions were associated with a large reduction in the number of EA contracts on the MLS relative to the controls.[12]

3.4 Drug Patent Dispute Settlements and Paying for Delay

In work since cited in *The Economist* and by members of Congress, BE economists estimated the consumer cost of “pay-for-delay” agreements in the pharmaceutical industry.[13] As described in the 2007 essay for this *Review*, typically in connection with the settlement of a patent dispute, a patent-holding firm pays a generic competitor if the latter agrees to hold its competing product off the market for a specified period.

Using data over a recent five year period, we found that on average patent settlement agreements that included compensation to the generic firm involved entry that was 17 months later than

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[12] For more discussion of the Realcomp case, see http://www.ftc.gov/os/adjpro/d9320/index.shtm.

[13] Federal Trade Commission Staff Report. (2010, January). Pay-for-delay: How drug company pay-offs cost consumers billions. Retrieved from http://www.ftc.gov/os/2010/01/100112payfordelayrpt.pdf.

when agreements contained no such compensation. We determined from recent sales data the amount of consumer savings that would be lost if generic entry for a given drug was delayed for 17 months. To predict the amount of brand sales that were likely to be involved in settlements with compensation in the future, we calculated the total sales of drugs that were currently subject to challenge that had not yet settled, and projected the proportion of those that would settle with compensation using recent settlement data. Combining these calculations, our best point estimate of annual consumer losses associated with pay-for-delay settlements was $3.5 billion. Although formal statistical error bounds could not be calculated for this estimate, an informal sensitivity analysis found that the harm could range from as low as $0.6 BN to as high as $7.5 BN if these parameters were to vary substantially from their recent historical means.

4. Consumer Protection

Consumer protection cases continue to evolve in ways that make evidence gathering more data-intensive, and the economists in our consumer protection division undertook a wide array of case-specific policy analysis and litigation support work.

We also continued to work on rulemakings for the mortgage rescue and debt rescue industries, which grew in often insalubrious ways with the credit crisis and the recession.[14] We also stressed the value of improved and unified disclosures to support better consumer choice for mortgage products.[15] In credit reporting we continue to pursue long-term empirical studies of (1) the effects of credit scoring on the pricing and sale of homeowners' insurance, and (2) the accuracy of credit reports more generally.

[14] Federal Trade Commission. (2010, July 29). FTC issues final rule to protect consumers in credit card debt. Press Release. Retrieved from http://www.ftc.gov/opa/2010/07/tsr.shtm.

[15] For an example of the work on mortgage disclosures using both detailed interviews of dozens of consumers and a larger survey of borrowers, see Lacko and Pappalardo (2010).

4.1 Providing Information for Better Consumer Policy

Improving consumer information through mandated disclosure is a classic consumer policy tool. Better information can improve consumers' choices among the available options, which in turn sharpens firms' incentives to make good offers to consumers. For instance, decreased search costs will often make markets more competitive and more efficient.

But people do not always read and interpret disclosures as intended. Sometimes, well-intentioned disclosures or disclosure mandates backfire. For example, FTC research finds that some mandated mortgage disclosures are so confusing that "bad" attributes are mistakenly thought to be "good" attributes.[16] Details matter: Seemingly similar messages may prompt very different consumer responses. Marketing researchers understand this and often rely on controlled, quantitative, consumer comprehension research before launching ad campaigns. We too use marketing research techniques, such as copy-tests to evaluate consumer comprehension.[17] This section briefly describes how we used systematic research methods to help the Commission choose a new appliance energy label. More broadly, we are currently reviewing the academic and policy literature on information disclosures across disciplines, seeking to summarize and understand how and why disclosures sometimes work well and sometimes not.

In June 2010, OMB Administrator Cass R. Sunstein released a memorandum on "Disclosure and Simplification as Regulatory Tools." It directed agencies to test consumer information regulations, whenever feasible, to ensure that they will meet regulatory objectives. It also sets out several principles for the development of disclosures and other consumer policy tools. One

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[16] Interviews with recent mortgage borrowers revealed that people often misunderstood the "discount fee" in their Good Faith Estimate to be a "discount" in upfront fees rather than a fee that they paid (Lacko and Pappalardo (2007), p. D-3).

[17] For examples of FTC studies using copy-test techniques, see Lacko and Pappalardo (2004), Lacko and Pappalardo (2007), Murphy et al. (1998), Murphy (2005), and Murphy et al. (2007). In addition to copy-tests, the FTC also uses content analysis; see Ippolito and Pappalardo (2002) and Virtual worlds and kids: Mapping the risks (2009).

principle is that "Summary disclosure through ratings or scales should be meaningful." Sunstein writes:

> Agencies should select numbers and scales that are meaningful to users. For example, the Energy Guide label provides an estimate of annual operating costs, along with a cost range for similar models. Annual savings or benefits, measured in terms of dollars, provide a metric that is both meaningful and easy to understand. When monetary values are at stake, agencies should give careful consideration to disclosure of savings or benefits in terms of dollars.[18]

The review process for a new EnergyGuide label began with a charge from Congress to consider whether to replace the continuous kilowatt hour (kWh) metric featured at the time with a categorical energy-use rating system, such as a star rating system.[19] The final design, as favorably noted by OMB, evolved through seeking information from interested parties, quantitative consumer research on alternative label designs, and the collaboration of FTC economists, attorneys, marketing researchers, and consumer education specialists.[20]

Our work sought to examine the likely effectiveness of alternative labels on consumer comprehension. We focused on the question: Overall, which label is best at conveying the most valuable information to consumers without causing confusion? To research this question, FTC staff developed an experimental design that allowed for comparisons among ten different label conditions. Four primary label designs were tested: the pre-existing EnergyGuide label featuring kWh, a revised label featuring kWh, a categorical "star" label (one star being poor performance and five being the best),[21] and a label featuring annual operating cost.[22] Two

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[18] Sunstein (2010, p. 5).

[19] Section 137 of the Energy Policy Act of 2005 (Pub. L 109-58).

[20] The research team included attorney Hampton Newsome, marketing professor Manoj Hastak, Office of Consumer and Business Education designer Callie Ward, and Bureau of Economics staff Jan Pappalardo, James Hilger, and Michael Pickford.

[21] Prior research conducted by the Association of Home Appliance Manufacturers (2006) and the American Council for an Energy-Efficient Economy (2002) tested alternative labels.

versions of each primary design were tested – one with the ENERGY STAR logo and one without. The research also explored two other issues, using two additional cells: a pure information condition without a label format, and a condition to test the effect of combining all refrigerators into one range of comparability, regardless of product features.

The study was conducted online using an Internet panel. Respondents were randomly assigned to one of the ten label design treatments. Each respondent was asked a series of questions using shopping scenarios for two different products: dishwashers and refrigerators. For example, respondents were ask to rank four different refrigerator models and four dishwasher models according to annual operating costs, annual energy use, and energy efficiency.

Overall, the research suggested that the operating cost label would be most likely to help consumers without causing miscomprehension that could inappropriately skew consumer choices and product competition.[23] A particularly interesting finding was that while the star label marginally outperformed other designs (including the operating cost label) on some objective tasks, it also caused more consumer misunderstandings than did other label conditions. Respondents who viewed the star label were significantly more likely to conclude, incorrectly, that products without the ENERGY STAR logo qualified for that logo. They were also most likely to infer that high ratings on the energy-use dimension signaled high levels of quality for unrelated product attributes.[24]

We also asked qualitative questions, and learned that consumers valued energy-use information conveyed in dollar terms more than energy-use information conveyed using a kWh metric or a

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[22] See Appendix I for examples of the four primary label designs.

[23] Discussion of study results can be found in the Appliance Labeling Rule, Proposed Rule (2007, February). Federal Register, 72, 6844-6848.

[24] A similar type of confusion for consumers was found recently in testing done for the labeling of lamps. See Appliance labeling rule, Final rule and opportunity for comment. (2010, July). Federal Register, 75:137, 41696-41724. Available at http://www.ftc.gov/os/2010/06/100719appliancelabelingrule.pdf.

categorical star metric, suggesting that dollar metrics might be most useful in real-life purchase settings and thus further supporting the operating cost design. The final design choice,[25] which appears in Appendix II, was based on the consumer research, public comments, and FTC staff analysis.

4.2 Debt Relief Rulemaking

Recently, radio, the Internet, and TV have featured many ads for firms that claim that they can quickly reduce a consumer's large credit card debts and get the debtor back on the road to financial equilibrium. Whether those firms actually achieve the claimed debt reductions for consumers was (and is) in serious question. Numerous law enforcers at the state and federal levels have undertaken hundreds of suits aimed at stopping the most outlandish claims and obtaining redress for consumers where the firms failed to deliver on their promises.

The firms that make the claims comprise the debt settlement industry: a relatively new option for handling debt problems. For debtors, the industry fits between traditional nonprofit debt counseling/debt management and the last resort of bankruptcy court. In a typical debt settlement arrangement, the firm collects fees (amounting to a few thousand dollars and about 15 percent of the debt) during the early part of the contract period, and promises to negotiate substantial reductions in the amounts that consumers owe to their creditors. The consumer, in addition to saving to pay the firm's fees, must also save to pay down a portion of his/her existing debt. Once significant savings are amassed relative to the size of a debt, the firm negotiates on behalf of the consumer to try to pay off the debt at perhaps 40 to 70 cents on the dollar. Settling all of a consumer's debts tends to take about three years or more. Consumers who opt for this service are hopeful that future negotiated debt reductions will more than offset the up-front payments. Such beneficial outcomes, however, do not appear to be the norm.

Although the debt settlement process has helped some consumers, the industry's overall success rate has been poor, with more than forty percent of consumers dropping out prior to the

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[25] Appliance labeling rule, Final rule. (2007, August). Federal Register, 72, 49949-49950.

settlement of even one debt. Those consumers are likely to be worse off in several ways than if they had never signed up: They typically have paid some fees to the settlement firm; they have incurred often steep interest and late charges; and the consumer's credit rating often falls as payments to creditors are stopped and collection actions ensue.[26] A small percentage of consumers - less than 25 percent (and perhaps much less depending on the firm) - make it through the entire process and have a substantial portion of each debt reduced. So some, but relatively few, consumers ultimately obtain the outcome that they likely expected at the time they signed-up for the program.

The FTC has been examining this industry for the past two years, and recently issued a new rule that requires better disclosures and bars for-profit debt settlement firms from collecting fees in advance of their settling consumers' debts. Beginning in October 2010, fees can only be collected on a proportional basis, beginning with the first settlement. This change in the payment regime will make the industry look more like the market for contingent legal services, where payment to the provider is very directly related to the ultimate outcome.

This "no advance fee" rule significantly modifies the previous market pricing institutions. The fee change will alter the incentives of both the firms and their customers. Most obviously, a firm will be more strongly motivated to achieve actual debt settlement than it previously would (unless reputation effects had worked very well, which they have not appeared to do). Less obviously, risks and costs will also be shifted. Firms will now care more than hitherto about whether their customers will stick with the necessary savings targets. Firms will also have to fund up-front costs such as customer acquisition and set-up activities from back-end payments. Customers will now have less fear that their money will go to the settlement firm rather than to payment of their debts should they drop out; this could affect their drop-out (and even sign-up) behavior. Such changes may encourage debt settlement firms to be more choosy about their customers, which could have both good and bad ex ante effects on consumers.

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[26] For a more complete description of the debt settlement industry and its performance, see Telemarketing sales rule, Final rule amendments. (2010, August). 75 Federal Register 48457.

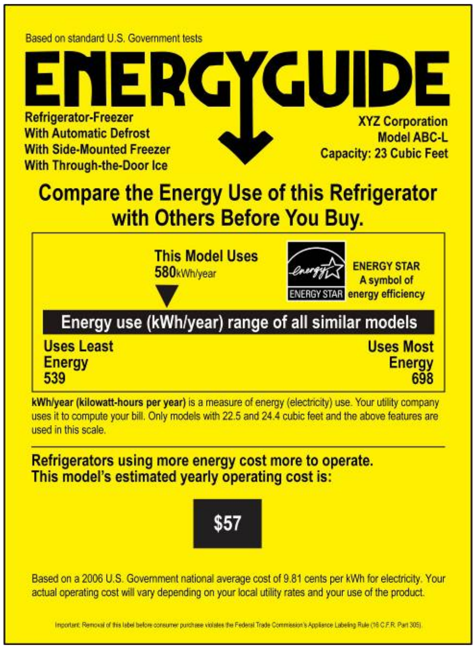
The Commission considered a range of such issues and judged that consumers on net will benefit. Competition in this industry did not appear to be operating well, largely because consumers had little reliable information about the true terms of the services that were being offered and about their personal chances for success: There likely was both short-run moral hazard (firms that had collected their fees had limited incentive to settle their customers' debts) and longer-term adverse selection (firms that more ruthlessly exploited the moral hazard faced little reputation penalty and may have found growth easier). The lack of repeat purchase did not encourage good service and truthful revelation. The new fee collection institution should alter seller incentives sufficiently to encourage better performance; we will watch to see how the industry and the outcomes for consumers evolve.

5. Conclusion

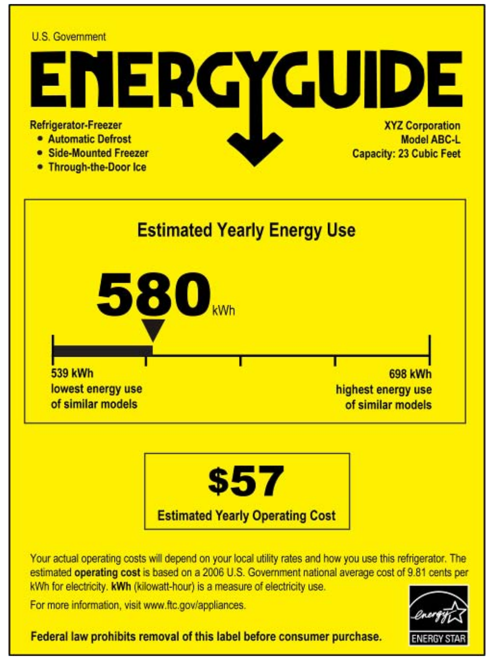
Economists at the FTC undertake analyses of a broad range of issues in microeconomics. This year, on the competition front, that work included improvements in the horizontal merger guidelines, merger cases involving research and development as a key component, and an evaluation of several cases involving exclusion. On the consumer protection front, we focused on changes in the provision of debt relief services and on labeling disclosures that would facilitate consumers' appliance choices.

Appendix I: Examples of Label Treatments for Refrigerator Model L (with Energy STAR)

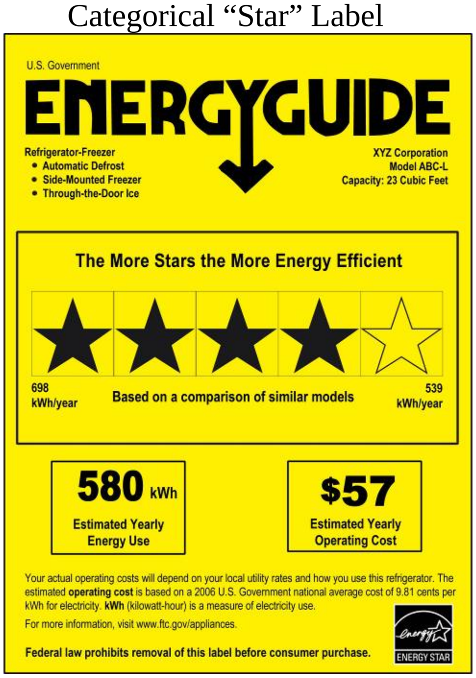
Pre-Existing (2005) Label



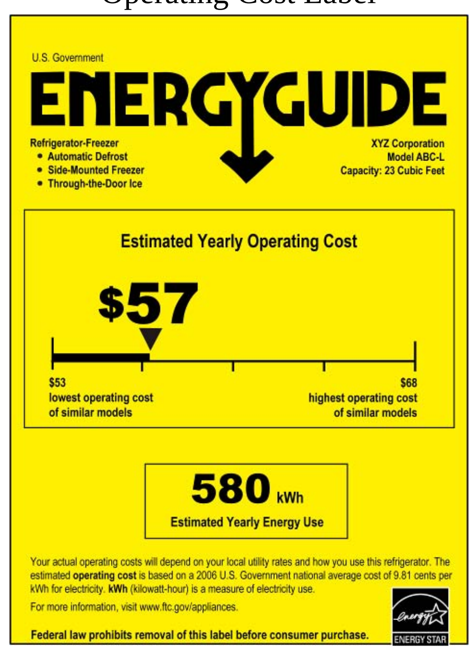
Modified kWh Label



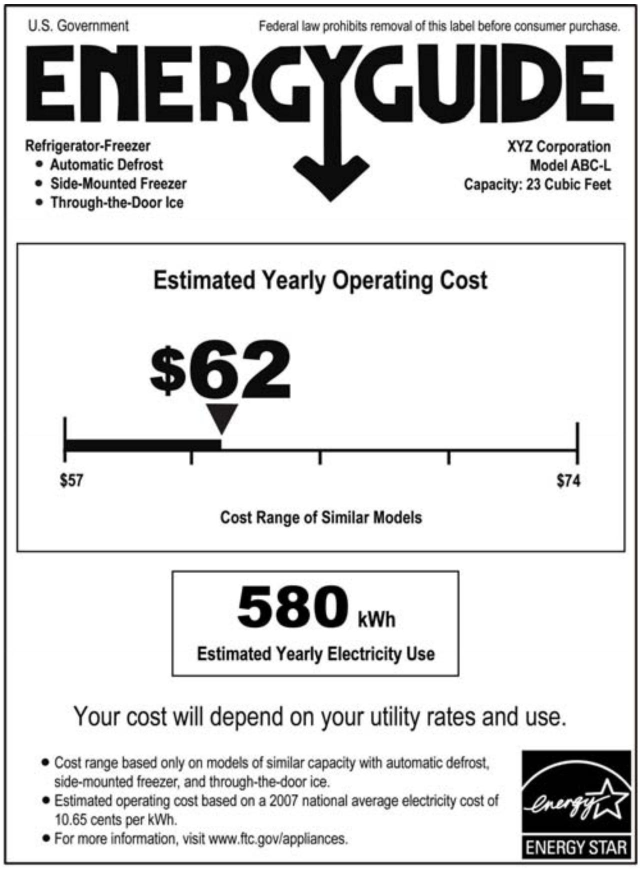
Categorical "Star" Label



Operating Cost Label



Appendix II: Final Label Design Example



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