
ARTICLE

HELPING BUYERS BEWARE: THE NEED FOR
SUPERVISION OF BIG RETAIL

RORY VAN LOO[†]

Since the 2008 financial crisis, consumer regulators have closely supervised sellers of credit cards and home mortgages to stamp out anticompetitive practices. Supervision programs give financial regulators ongoing access to sophisticated firms' internal data outside the litigation process. This often enables examiners to identify and correct harmful conduct more rapidly and effectively than would be possible using publicly available information and cumbersome legal tools.

Consumers spend four times more on retail goods than on financial products. The retail sector's dominant firms—such as Amazon, Walmart, Unilever, and Kraft—employ large teams of quantitative experts armed with advanced information technologies, huge volumes of data, and in-store experimentation to develop behavioral economics-related practices analogous to those seen in consumer finance. The empirical data suggest those practices in the aggregate may significantly harm all households, costing even a family at the poverty line hundreds of dollars annually. Yet unlike in consumer finance, regulators have declined to supervise sellers of retail goods.

[†] Ph.D. Candidate, Law, Yale University; Resident Fellow, Information Society Project, Yale Law School; Policy Fellow, Institution for Social and Policy Studies, Yale University; J.D., 2007, Harvard Law School; Policy Analyst and Senior Advisor for Bank Supervision, Consumer Financial Protection Bureau, 2011; Consultant, McKinsey & Company, 2007–2010. I am grateful to Anne Alstott, Ian Ayres, Eric Fish, David Grewal, Henry Hansmann, Angela Littwin, Daniel Markovits, Robert Post, Reva Siegel, Gordon Silverstein, Diane Standaert, and the editors of the *University of Pennsylvania Law Review* for helpful comments on earlier drafts, and Jack Balkin, Molly Brady, Rebecca Crootof, Michael Graetz, Jacob Hacker, Edward Janger, Christine Jolls, Yair Listokin, Kerry Monroe, Katie Porter, Alan Schwartz, and participants in the Information Society Project Resident Fellows workshop for helpful conversations.

This Article argues for wider adoption of the financial sector's emerging—though largely unarticulated—paradigm that views regulatory supervision of firms as central to consumer protection. That paradigm suggests the consumer goods sector needs the inverse of what consumer finance needed in the wake of the 2008 crisis. Then, Congress created the Consumer Financial Protection Bureau to provide more consumer protection because regulators had previously focused excessively on supervising financial institutions to ensure firms' safety and soundness. In contrast, the consumer goods sector has a regulatory body—the Federal Trade Commission's (FTC) Bureau of Consumer Protection—that focuses solely on consumer protection but does not supervise firms. Fortunately, congressional action would not be required for the FTC to develop a supervision program. The agency's leadership would simply need to exercise the authority that Congress long ago granted.

INTRODUCTION	1313
I. THE SOPHISTICATION GAP BETWEEN FIRMS AND CONSUMERS IS LARGE	1324
A. <i>Defining Harm</i>	1325
B. <i>Limits on Consumer Sophistication</i>	1326
C. <i>Sophisticated Institutions Capitalize on Consumer Limitations</i>	1331
II. FIRMS SYSTEMATICALLY CHARGE ANTICOMPETITIVE PRICES	1335
A. <i>Evidence of Anticompetitive Practices in Retail Goods</i>	1335
1. Price Misperception from Non-Salient Dimensions	1336
a. <i>Misperceiving Stores' Prices</i>	1336
b. <i>Misperceiving Complex Products' Prices</i>	1339
c. <i>Misperceiving Deceptively Simple Products' Prices</i>	1340
2. Failing To Compare Effectively	1343
a. <i>Framing the Price as a Bargain</i>	1343
b. <i>Obfuscating Product Information</i>	1345
B. <i>Potential Market Constraints on Supracompetitive Pricing</i>	1347
1. Reputational Constraints	1347
2. Learning	1349
3. Protection by Sophisticated Shoppers	1351
III. AGGREGATE HARMS ARE POTENTIALLY SIGNIFICANT	1353
A. <i>The Costs of Market Failure May Be Significant</i>	1353
B. <i>Alternative Cost: Paying with Time</i>	1355
C. <i>Inequality Implications</i>	1357
D. <i>Market Inefficiency</i>	1359
IV. EXISTING INSTITUTIONS ARE INSUFFICIENT TO PREVENT HARM	1360

A. Legislatures.....	1361
B. Courts.....	1363
1. Doctrinal Basis for Lawsuits.....	1363
a. Common Law Doctrine	1363
b. Statutes Prohibiting Unfair and Deceptive Acts	1365
2. Procedural Designs for Lawsuits	1366
C. Agencies	1368
1. State Regulatory Efforts	1368
2. The FTC.....	1370
a. The FTC Has the Statutory Authority to Regulate <i>Supracompetitive Pricing Practices</i>	1370
i. Unfairness Statutory Language.....	1370
ii. Unfairness Policy	1372
iii. Unfairness Case Law	1373
b. <i>Ex Post Enforcement Focus Hinders FTC Consumer Protection</i>	1375
i. Narrow Legal Analysis	1377
ii. Information Asymmetries	1379
D. Summary: Existing Institutions Inadequately Protect Consumers	1381
V. POLICY CONSIDERATIONS	1382
A. Redesigning for Institutional Supervision.....	1383
B. Sector-Level Rulemaking: Information Disclosures	1386
1. Disclosures for Technological Intermediaries	1387
2. Disclosures to Consumers	1389
a. Mandated Consumer Unit Pricing	1389
b. Including Tax in Shelf Price	1390
c. Limits on Disclosures to Consumers	1391
CONCLUSION.....	1392

INTRODUCTION

Mass consumer goods are a \$2.6 trillion dollar industry accounting for 23% of household expenditures.¹ Despite this scale, the sector's dominant

¹ U.S. BUREAU OF LABOR STATISTICS, CONSUMER EXPENDITURES IN 2012, at 8-9 (2014), available at http://www.bls.gov/opub/reports/cex/consumer_expenditures2012.pdf; *National Data: National Income and Product Accounts Tables*, U.S. DEPARTMENT COM. BUREAU ECON. ANALYSIS, <http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=1&isuri=1> (open "Section 2-Personal Income and Outlays" menu; then follow hyperlinks to Table 2.1 and Table 2.4.5) [hereinafter *National Data*] (estimating aggregate spending on goods). Figures exclude expenditures on automobiles, gasoline, and cell phone services. The percent of expenditures is attained by

firms—such as Amazon, Target, Clorox, and Kraft—operate with little consumer protection oversight of the type found in consumer finance.² It is typically assumed that consumers should spend the time necessary to find the best deal or be held responsible for the price they paid on simple items like clothing, food, cleaning products, and household appliances.

The commercial and regulatory landscape in consumer goods today mirrors that in consumer finance prior to 2008. For years before the 2008 financial crisis, federal regulators mostly ignored the large body of scholarship arguing that financial institutions were becoming increasingly sophisticated at systematically exploiting consumers.³ The typical response was that consumers could handle it—that with a little effort and research they could

summing the categories of expenditures for food at home, alcoholic beverages, housekeeping supplies, household furnishings and equipment, apparel and services, audio and visual equipment and services, personal care products and services, reading, and tobacco products and smoking supplies. See U.S. BUREAU OF LABOR STATISTICS, *supra*. The aggregate spending on consumer goods is the sum of all goods categories in Table 2.4.5 except new motor vehicles, net purchase of used motor vehicles, gasoline and other energy goods, and pharmaceuticals, which totals \$2.6 trillion in 2012. See *National Data, supra*.

² The Federal Trade Commission does, however, enforce laws related to deceptive advertising in consumer goods markets, and its Antitrust Division monitors abuse of monopoly power. See, e.g., FTC, HORIZONTAL MERGER INVESTIGATION DATA: FISCAL YEARS 1996–2007, at 17 tbl.4.2 (2008), available at http://www.ftc.gov/sites/default/files/documents/reports_annual/horizontal-merger-investigation-data-fiscal-years-1996-2007/081201hsrmergerdata_0.pdf (reporting FTC antitrust investigations in the grocery industry); Press Release, FTC, FTC Complaint Charges Deceptive Advertising by POM Wonderful (Sept. 27, 2010), available at <http://www.ftc.gov/news-events/press-releases/2010/09/ftc-complaint-charges-deceptive-advertising-pom-wonderful> (announcing FTC complaint alleging that POM Wonderful made false claims about the health benefits of its products).

³ As far back as 1984, William Eskridge identified systemic market failures in the mortgage industry and argued that consumers' psychological limitations contributed to those failures. See William N. Eskridge, Jr., *One Hundred Years of Ineptitude: The Need for Mortgage Rules Consonant with the Economic and Psychological Dynamics of the Home Sale and Loan Transaction*, 70 VA. L. REV. 1083, 1145-46 (1984) (arguing that consumers' psychological limitations cause them to shift decisionmaking responsibilities to intermediaries who have incentives to recommend suboptimal deals, which creates market failures in the mortgage industry); see also Kathleen C. Engel & Patricia A. McCoy, *A Tale of Three Markets: The Law and Economics of Predatory Lending*, 80 TEX. L. REV. 1255, 1337-57 (2002) (proposing a number of legislative and regulatory solutions to protect consumers from exploitative practices in the subprime mortgage market); Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. CHI. L. REV. 1203, 1217-18 (2003) (arguing that boundedly rational consumers do not incorporate all available information into their purchase decisions, which creates incentives for sellers to include inefficient, low-quality terms); Ronald J. Mann & Jim Hawkins, *Just Until Payday*, 54 UCLA L. REV. 855, 881-84 (2007) (explaining how the mortgage industry practices of payday lenders make it difficult for consumers to estimate the cost of transactions or compare alternative transactions); Lauren E. Willis, *Decisionmaking and the Limits of Disclosure: The Problem of Predatory Lending: Price*, 65 MD. L. REV. 707, 754-806 (2006) (exploring how the subprime home loan industry used sophisticated knowledge of demographics and consumer psychology to sell overpriced loans).

understand simple concepts such as monthly mortgage payments or credit card late fees.⁴ After the 2008 crisis a consensus emerged across the political spectrum that regulation may be needed in the face of the financial industry's practices.⁵ Congress responded in part by adopting then-Professor Elizabeth Warren's suggestion, later articulated in greater depth with Professor Oren Bar-Gill, to create a new federal agency to oversee credit product safety on behalf of consumers.⁶ The response can be seen as a paradigm shift toward examining firms' data to correct market failures resulting from consumer irrationality and information asymmetries.⁷

If this new paradigm is valid in consumer finance, a similar one is needed in the consumer goods sector. To be sure, the sector's firms greatly benefit society. Large consumer goods companies such as Walmart enable significantly lower prices. They have thus helped reduce an important measure of poverty—what consumers are actually able to purchase with their income.⁸

⁴ See, e.g., Richard A. Epstein, *Behavioral Economics: Human Errors and Market Corrections*, 73 U. CHI. L. REV. 111, 118 (2006) (arguing that it is more efficient for individuals to protect themselves against error than it is to impose the burden on the legal system).

⁵ See, e.g., OREN BAR-GILL, *SEDUCTION BY CONTRACT: LAW, ECONOMICS, AND PSYCHOLOGY IN CONSUMER MARKETS* 116-22 (2012) (noting the role of subprime mortgage contracts in the 2008 financial crisis); JOHN A. SPANOGLE ET AL., *CONSUMER LAW: CASES AND MATERIALS* 3 (4th ed. 2013) (asserting that unfair consumer credit agreements "may have led in part to the epidemic of subprime mortgage foreclosures and the financial crisis of 2007–2008"); Alan Schwartz, *Regulating for Rationality*, 67 STAN. L. REV. (forthcoming 2015) (manuscript at 3) (on file with author) (discussing the connection between the financial crisis and attention paid to consumer protection); Edmund L. Andrews, *Greenspan Concedes Flaws in Deregulatory Approach*, N.Y. TIMES, Oct. 24, 2008, at B1 (discussing former Federal Reserve Chairman Alan Greenspan's admission that his free market ideology failed and that more regulation of the financial sector was needed).

⁶ See Elizabeth Warren, *Unsafe at Any Rate*, DEMOCRACY J., Summer 2007, at 9, available at <http://www.democracyjournal.org/pdf/5/Warren.pdf> (arguing for the creation of a new regulatory body to protect consumers of financial products). See generally Oren Bar-Gill & Elizabeth Warren, *Making Credit Safer*, 157 U. PA. L. REV. 1, 69 (2008) (providing in-depth analysis of the need for consumer protection in financial markets).

⁷ See Bar-Gill & Warren, *supra* note 6, at 21-22 (reviewing survey data indicating that consumers are uninformed and irrational in their approach to financial products). The Consumer Financial Protection Bureau's (CFPB) adoption of this paradigm was also influenced by, among others, Michael Barr and Sendhil Mullainathan, two leading scholars on behavioral economics-based regulation. See Michael S. Barr et al., *The Case for Behaviorally Informed Regulation* (explaining how "decisional conflict" often causes consumers to make choices that do not maximize value, and outlining a regulatory approach that takes empirical human behavior into account), in *NEW PERSPECTIVES ON REGULATION* 25, 27 (David Moss & John Cisternino eds., 2009). As the U.S. Treasury Department's assistant secretary, Barr was an architect of the Dodd-Frank Act and played a leadership role in laying the groundwork for the team, led by Elizabeth Warren, that would ultimately establish the CFPB. Mullainathan was an Assistant Director of Research at the CFPB.

⁸ See Daniel Markovits, *Snowball Inequality and the Crisis of Capitalism* 20-21 (unpublished manuscript), available at <http://isites.harvard.edu/fs/docs/icb.topic1308100.files/February%2027/>

Consumer financial products have similarly brought great benefits to society by providing greater access to credit, thus enabling families to purchase homes and weather financial storms.

The conclusion that the consumer goods sector nonetheless needs a regulatory paradigm similar to that in consumer finance rests on three counterintuitive premises, the case for each of which is absent from the literature. First, there is evidence of similar widespread behavioral market failures in both sectors. Second, the aggregate monetary harm from anti-competitive pricing in the consumer goods sector may be large, potentially even larger than in consumer finance. Finally, regulators cannot effectively monitor the consumer goods sector's anticompetitive practices based on publicly available information. Like in finance, it is crucial that regulators understand how firms operate on the inside.

The empirical evidence suggests the two sectors exhibit similar—and similarly widespread—behavioral market failures. The consumer protection literature has largely ignored these similarities. Legal scholars have occasionally referenced well-established anticompetitive practices for a particular good, such as lowering the price of printers and increasing the price of ink cartridges, as a rhetorical device to illustrate analogous practices in contractual products.⁹ But consumer goods are typically mentioned by legal scholars alongside other products only to contrast their simplicity with more complex contract-driven products needing regulation.¹⁰

Markovits%20-%20Snowballing%20Inequality.pdf (referencing Walmart as an example of a retail economy serving demand stemming from income inequality).

⁹ See Oren Bar-Gill, *Bundling and Consumer Misperception*, 73 U. CHI. L. REV. 38-39, 46-52 (2006) (discussing printers and ink cartridges as a preliminary example of product bundling to set up the main discussion of how such anticompetitive practices operate in three contractual products—health club memberships, credit cards, and cell phone subscriptions).

¹⁰ See, e.g., RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE* 242, 250 (2008) (“The invisible hand works best when products are simple and purchased frequently. . . . [N]udging makes more sense for mortgages than for soft drinks.”); Richard A. Epstein, *The Role of Accreditation Commissions in Higher Education: The Troublesome Case of Dana College*, 79 U. CHI. L. REV. 83, 83 (2012) (“One of the standard results of modern economic theory is that it is far easier for consumers to obtain reliable information about goods than it is about services.”); Elizabeth Renuart & Diane E. Thompson, *The Truth, the Whole Truth, and Nothing but the Truth: Fulfilling the Promise of Truth in Lending*, 25 YALE J. ON REG. 181, 211 (2008) (arguing that credit transactions have more variables and are therefore more difficult to price than food products); J. Thomas Rosch, Comm’r, FTC, *Managing Irrationality: Some Observations on Behavioral Economics and the Creation of the Consumer Financial Protection Agency*, Remarks at the Conference on the Regulation of Consumer Financial Products 6-7 (Jan. 6, 2010), available at http://www.ftc.gov/sites/default/files/documents/public_statements/managing-irrationality-some-observations-behavioral-economics-and-creation-consumer-financial/100106financial-products.pdf (asserting that only more complex products are likely in need of protection from information asymmetries).

This perception of simplicity is important because it can determine regulatory outcomes. A financial product's complexity is commonly seen as a key enabler of irrational decisionmaking.¹¹ An irrational decision is one that does not advance the consumer's objectives as well as an alternative choice; it may result from cognitive limitations such as overweighting short-term, teaser rates in a contract or incorrectly calculating costs.¹² Complexity increases the likelihood of irrational decisionmaking because consumers must process more information, causing them to use mental shortcuts and raising the costs of information acquisition. Importantly, consumer protection scholars and regulators can typically identify complexity in terms of individual products—such as the length of the contract or the many calculations needed to determine the total price.¹³ They are thus largely able to identify products in need of greater regulatory attention by analyzing only the product.

Applying the same product-centric analysis to goods can erroneously create the impression of simplicity. A growing percentage of individual technological goods arguably have inherent complexity comparable to that of contractual financial products, but most—such as a jar of peanut butter—do not.¹⁴ Instead, most of the complexity in consumer goods shopping can be seen by looking at the broader decisionmaking context rather than the product. For example, economists have found that online sellers can make shopping for individual products complex by lengthening descriptions and making it difficult to quickly assess the full costs of an item among numerous choices.¹⁵

Shopping in large retail stores also involves complexity. For example, between 1975 and 2008, the number of products in the average supermarket

¹¹ See BAR-GILL, *supra* note 5, at 117 (finding complexity of subprime contracts enabled poor consumer decisionmaking).

¹² See, e.g., Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1477 (1998) (arguing that consumers often make suboptimal decisions as a result of cognitive limitations).

¹³ See, e.g., Bar-Gill & Warren, *supra* note 6, at 12 (discussing “the complexity of the average credit card contract and the legalistic language used in this contract”).

¹⁴ But see Jerry Hirsch, *Objects in Store Are Smaller than They Appear*, L.A. TIMES (Nov. 9, 2008), <http://articles.latimes.com/2008/nov/09/business/fi-shrink9>, archived at <http://perma.cc/E3YT-E4E8> (reporting on how Skippy redesigned its peanut butter containers to have an indented bottom, thus reducing volume from 18 to 16.3 ounces, amounting to a visually imperceptible 10% increase in price).

¹⁵ See generally Glenn Ellison & Sara Fisher Ellison, *Search, Obfuscation, and Price Elasticities on the Internet*, 77 ECONOMETRICA 427 (2009) (presenting evidence that online sellers engage in practices that complicate consumer choices).

increased from 8948 to 47,000.¹⁶ Whereas stores previously sold only one version of Crest toothpaste, supermarkets typically carry twenty-seven varieties of Crest alone.¹⁷ While this innovation and scale have brought many benefits to consumers, a growing body of research suggests that the resulting complexity causes consumers to rely on mental shortcuts in making decisions.¹⁸ In deciding whether one store has better prices than another store, for example, consumers rely on prices of only a small number of highly salient items—often only three to five.¹⁹ Non-salient items are not factored into a consumer's decision of where to shop as much as they should be, and thus consumers may irrationally err in concluding which store will save them money. Part of the problem is that once in a given store, consumers can be made to pay higher prices on the non-salient items, which are perceived in accordance with their overall image of the store as “low-cost.”²⁰

It is worth noting that mass retailers can capitalize on decisionmaking complexity in ways that are surprisingly similar to those strategies employed by financial institutions. Professor Russell Korobkin, in building the case for contractual behavioral market failures, has argued that contracts have many product attributes that include various price- and nonprice-related clauses.²¹ Overall contractual complexity causes consumers to pay less attention to non-salient clauses, such as late fees.²² This inattention makes consumers vulnerable to irrationally underweighting non-salient clauses in deciding among contracts, leading to higher costs on the non-salient clauses than would be expected if consumers actually paid attention to and compared those clauses.²³ The non-salient clauses in a complex

¹⁶ See *The Downside of Too Many Product Choices on Store Shelves*, CONSUMER REP. (Jan. 2014), <http://www.consumerreports.org/cro/magazine/2014/03/too-many-product-choices-in-supermarkets/index.htm>, archived at <http://perma.cc/WZ4T-B66K>.

¹⁷ See *id.*

¹⁸ See, e.g., Ryan Hamilton & Alexander Chernev, *Low Prices Are Just the Beginning: Price Image in Retail Management*, J. MARKETING, Nov. 2013, at 1, 1 (explaining how consumers use “store-level price impressions” to decide where to shop and what to buy instead of always searching for the lowest price); see also Barr et al., *supra* note 7, at 27 (“[T]he addition of options can complicate (and, thus, ‘worsen’) the decision outcome . . .”).

¹⁹ Hamilton & Chernev, *supra* note 18, at 4.

²⁰ See *id.* (explaining how retailers use “known value items” to create a lower price image, which allows them to charge more for other items).

²¹ See Korobkin, *supra* note 3, at 1206 (asserting that terms in contracts are attributes of the product just like the product's price and physical characteristics, and that due to bounded rationality, “when making purchasing decisions [consumers] take into account only a limited number of product attributes and ignore others”).

²² See *id.* at 1206-07, 1244-45.

²³ BAR-GILL, *supra* note 5, at 21 (“Non-salient price dimensions and prices that impose underestimated costs create opportunities for sellers to reduce the perceived total price of their product.”).

contract are—from a psychological decisionmaking perspective—analogous to the non-salient items in a basket of goods at a mass retailer.

In short, when faced with the question of whether there is a behavioral market failure, policy designers should look to the empirical evidence on decisionmaking, not, as has often been the case, to a qualitative—indeed, in some sense impressionistic—assessment of individual products. The existing empirical evidence indicates that—like in consumer finance—decisionmaking in goods is sufficiently complex to facilitate widespread anticompetitive pricing.²⁴ In both sectors, making the best choice exceeds the mental processing ability of consumers, making it important for firms to exploit those limitations to remain in business.²⁵

Second, this anticompetitive pricing in goods may harm consumers significantly—and maybe in the aggregate even more than in financial services. Consumers spend four times more on goods than they do on financial services.²⁶ Scholars have documented anticompetitive practices in a piecemeal manner for a diverse array of products and retailers. Economists have also quantified the effects to provide a sense of the aggregate costs to consumers. Even in the most seemingly consumer-friendly venue—online shopping, where comparison information is just a click away—retailers have been found to increase prices by 6% to 9% solely by hiding costs and making product descriptions more complicated.²⁷ Economists have also concluded consumers pay more overall when sellers shift costs to add-on items that consumers irrationally ignore, such as charging high prices for printer ink or replacement heads of electric toothbrushes. Indeed, over the lifetime of a

²⁴ See *infra* subsection II.A.1.

²⁵ This imperative results from the fact that a firm not exploiting such decisionmaking limitations would earn less without necessarily getting credit from consumers for their lower prices. See generally Xavier Gabaix & David Laibson, *Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets*, 121 Q.J. ECON. 505 (2006) (explaining that once sophisticated consumers find out that they have a choice between a lower-priced product with expensive add-ons and a higher-priced product with cheaper add-ons, they purchase the lower-priced base product and choose to forgo the add-ons).

²⁶ See *National Data*, *supra* note 1, at tbls.2.1 & 2.4.5. The total for consumer finance is attained by summing “Financial services” from Table 2.4.5 and “Personal interest payments” from Table 2.1, which total \$745 billion.

²⁷ See, e.g., Ellison & Ellison, *supra* note 15, at 428-29 (“Given the extreme price sensitivity of the demand for low-quality products, a naive application of single-good markup rules would suggest that equilibrium price-cost margins might be just 3% to 6%. We find that the average markup . . . is about 12%.”).

product the price paid for the original product is often only a fraction of the cost of the largely ignored add-on items.²⁸

Legal scholars have built on these and other narrow studies to begin to paint a larger picture of market failures in the goods sector. In a seminal piece, Jon Hanson and Douglas Kysar identified the potential for grocery stores, gasoline stations, and cigarette manufacturers to manipulate consumer purchases using behavioral biases.²⁹ Ryan Calo extended the Hanson and Kysar analysis by looking at how firms of all kinds—including those providing services—leverage digital technologies to manipulate consumers.³⁰ However, in part because their policy focus was largely elsewhere—such as on tort liability and privacy—Hanson, Kysar, and Calo did not examine the economic literature quantifying overcharge to consumers.

This Article offers a more comprehensive treatment of the ways in which online and in-store sellers of goods engage in anticompetitive practices but focuses on the harm of higher prices paid by consumers.³¹ A sense of the aggregate overcharge paid in the goods sector is especially important because the nature of the harm is not very salient. In financial services, people may lose their homes due to predatory lending. Or they may pay infuriating credit card or bank account fees listed as separate line items on their bills. By contrast, shoppers may never even realize that they were harmed by paying more for goods than they would have had the market been governed by more informed and rational consumers. Nonetheless, as discussed below, empirical data suggest that higher prices paid may amount to hundreds of dollars or more annually and tens of thousands of dollars over a consumer's lifetime.³²

The sector's complexity and harm combine with a third challenge to round out the picture of regulatory inadequacy: problematic practices cannot be practically examined based on publically available information. As their operations become increasingly technological and scientific, sellers of goods become increasingly sophisticated at altering consumers' decisionmaking

²⁸ See, e.g., Gabaix & Laibson, *supra* note 25, at 506 ("Printer manufacturers advertise the low price of their ink-jet printers, but do not compete on the principal cost of ownership: patented ink cartridges that cost ten times more than the printer itself over the life of the product.")

²⁹ See generally Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: Some Evidence of Market Manipulation*, 112 HARV. L. REV. 1420 (1999) (exploring in great detail the interaction between companies and consumer psychology in the three contexts).

³⁰ See generally Ryan Calo, *Digital Market Manipulation*, 82 GEO. WASH. L. REV. 995 (2014) (discussing the way technology affects the "mediated consumer," who approaches the marketplace through the lens of technology).

³¹ See *infra* Part II.

³² See U.S. BUREAU OF LABOR STATISTICS, *supra* note 1 (showing average annual expenditures divided into categories of goods and services consumed); see also *infra* Section III.A.

context.³³ And as firms become larger, they can make meaningful profits by investing in developing ever more minor and subtle practices that may only amount to pennies on any given transaction. More sophisticated practices with more subtle harms are necessarily more difficult for regulators to observe externally.

Behavioral law and economics scholars have generally recognized that financial firms' growth in technological capabilities and increasing focus on decision science contribute to irrational consumer decisions.³⁴ However, the topic typically receives passing treatment in the literature.³⁵ Nor has there been discussion in the consumer protection literature of how that evolving sophistication makes it more difficult for regulators to identify market failures through publicly available information.

This omission is likely influenced by the fact that with financial products, much of the complexity and behavioral pricing that firms execute is observable within the four corners of the contract. Thus, monitoring the growing complexity of individual products has served as a proxy for examining

³³ Market failures of this sort are thus heavily dependent on context, including the size of the sophistication gap between firms and consumers. See Barr et al., *supra* note 7, at 26, 31, 33 (“Human behavior turns out to be heavily context dependent, a function of both the person and the situation. . . . The substantial influence of context on behavior naturally implies that institutions will come to play a central role in shaping how people think and what they do. . . . Because people are fallible and easily misled, transparency does not always pay off and firms sometimes have strong incentives to *exacerbate* psychological biases. . . .”); Robert J. MacCoun, *The Relativity of Judgment as a Challenge for Behavioral Law and Economics*, 2 DAITO BUNKA U. L. REV. 29, 30 (2006) (acknowledging the difficulty in current behavioral law and economics of choosing the best reference point by which to measure economic or psychological models).

³⁴ See, e.g., BAR-GILL, *supra* note 5, at 90 (noting that the design features of credit cards capitalize on consumer misperceptions); Willis, *supra* note 3, at 719-20, 807-08 (discussing how advances in computing capacity enable lenders to model borrower behavior by leveraging millions of data points).

³⁵ See, e.g., Bar-Gill & Warren, *supra* note 6, at 46 (exploring “seller behavior” in terms of “how sellers design their credit products. . . to exploit consumers’ imperfect information and imperfect rationality”); Ryan Bubb & Richard H. Pildes, *How Behavioral Economics Trims Its Sails and Why*, 127 HARV. L. REV. 1593, 1648-49, 1653-57 (2014) (giving limited attention to the topic of how firms are adept at adjusting to any proposed regulatory interventions that might make consumers more rational). Professor Bar-Gill in his seminal book on the topic, *Seduction by Contract: Law, Economics, and Psychology in Consumer Markets*, quotes an industry executive as saying that firms have brought the study of consumer transactions and psychology to a level of scientific precision. See BAR-GILL, *supra* note 5, at 108 (“No other industry in the world knows consumers and their transaction behavior better than the bank card industry. It has turned the analysis of consumers into a science rivaling the studies of DNA.” (internal quotation marks omitted)). But this paragraph comes in the section on how to design information disclosures for consumers, not to explain the problem. The book otherwise devotes limited if any attention to the internal operations of firms except as can be seen from product design. This is likely due to the difficulty of obtaining any information about the internal operations of private firms compared to the ease of observing the features of a product.

firms' increasing sophistication at exploiting consumer irrationality and information asymmetries.

However, product complexity is insufficient as a proxy for firm sophistication in consumer goods. Mass retailers continually fine-tune their pricing algorithms through advanced behavioral data-mining operations. They film customers' in-store movements, compile loyalty card data, and conduct many randomized controlled trials that easily provide statistical significance across thousands of stores and millions of transactions.³⁶ They can test whether unnecessarily confusing product descriptions, rebate offers, discount pricing, product bundling, price label designs, hidden costs, and other changes cause a fraction of consumers to pay even a few cents more on a fraction of purchases.

Whether firms succeed in moving consumers away from rational choices that would advance consumers' "true preferences" and toward irrational choices that advance firms' preferences is an empirical question. Non-field experiments demonstrating consumer irrationality in thinking about a purchase are generally insufficient to infer that the same irrationality happens in actual markets.³⁷ Consequently, as Alan Schwartz has argued, and as regulators have implicitly concluded, regulation is unwarranted absent evidence of irrationality in real-life commercial settings.³⁸ Yet because only retailers currently hold the keys to such consumer goods field experiments and closely guard their experimental findings as trade secrets, they essentially have knowledge monopolies that leave regulators without a strong foundation for regulatory decisions.³⁹ The main federal regulator of

³⁶ See Jayne O'Donnell & Sarah Meehan, *Retailers Want to Read Your Mind*, USA TODAY, Mar. 2, 2012, at 1B (describing retailers' use of consumer data).

³⁷ See, e.g., Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CALIF. L. REV. 1051, 1058 (2000) ("Before such legal reform proposals will be taken seriously outside the academy, legal scholars will have to develop tangible evidence that commercial actors in commercial settings are likely to respond to incentives in the same way as do student subjects."); Schwartz, *supra* note 5 (manuscript at 9) ("There is a temptation to believe that consumers exhibit the same biases in markets as subjects exhibited in the laboratory because they are all just people. There are two reasons to resist this temptation. First, some subjects do not make mistakes in the lab, which suggests that some consumers do not make mistakes in the market. . . . Second, many biases moderate or vanish with experience."). This argument is supported by studies attempting to replicate laboratory studies about consumer goods decisionmaking in the field. See, e.g., Koert van Ittersum et al., *Smart Shopping Carts: How Real-Time Feedback Influences Spending*, J. MARKETING, Nov. 2013, at 21, 31 (finding results in a third field experiment were weakened compared to two related laboratory experiments, and stating that such weakening is normal for field studies compared to lab studies).

³⁸ See Schwartz, *supra* note 5 (manuscript at 13) (arguing that when facts about actual consumer behavior are unavailable, regulators should assume bias did not affect contracting choice).

³⁹ Private control of information needed by consumers also contributed to the subprime mortgage crisis. See Joseph William Singer, *Foreclosure and the Failures of Formality, or Subprime*

consumer goods—the Federal Trade Commission (FTC)—currently relies mostly on publicly available information and consumer complaints in deciding whether to launch a consumer protection legal investigation.⁴⁰

The central policy recommendation in this Article is that the FTC put an end to this empirical–information monopoly by developing a supervision program. Supervision programs such as that used by the Consumer Financial Protection Bureau (CFPB) are staffed by non-lawyer examiners, who regularly collect firms’ internal data outside of any legal investigation.⁴¹ For example, the FTC would be able to look at the results of retailers’ field experiments and, when necessary, facilitate parallel field experiments that determine whether firms’ practices are capitalizing on consumer irrationality. Enacting a tailored supervision program would provide a crucial, empirical foundation for behavioral regulatory decisionmaking that Professor Schwartz and other legal scholars have identified as missing.⁴²

The three supporting premises underlying the case for reform are covered in Parts I through IV. Part I outlines the nature of the harm to consumers and expands on the growing sophistication gap between consumers and firms. Part II discusses evidence of widespread anticompetitive pricing practices in the consumer goods sector, and the consumer limitations, market complexity, and institutional sophistication that make such practices possible. It notes the similar behavioral market failures in the goods and finance sectors. Part III adds to the literature an aggregate analysis of the harm to consumers and society from such practices. This analysis involves applying the behavioral economics studies on overcharge to consumers’ aggregate expenditure figures.

Mortgage Conundrums and How to Fix Them, 46 CONN. L. REV. 497, 530 (2013) (“[H]omeowners seeking to renegotiate their mortgages could not do so when [Mortgage Electronic Registration Systems (MERS)] would not tell them who owned the mortgage. MERS would only tell them the name of the loan servicer and loan servicers often had incentives to foreclose rather than renegotiate.”).

⁴⁰ Other sources of information include complaints from competitors and other information submitted voluntarily by companies.

⁴¹ Examiners may have any number of professional backgrounds, including as lawyers, but are not acting as lawyers in their capacity as examiners.

⁴² See Korobkin & Ulen, *supra* note 37, at 1058 (“Before such legal reform proposals will be taken seriously outside the academy, legal scholars will have to develop tangible evidence that commercial actors in commercial settings are likely to respond to incentives in the same way as do student subjects.”); Schwartz, *supra* note 5 (manuscript at 6) (“[T]he regulator today needs new types of evidence, and new default normative premises when evidence is lacking, in order to intervene effectively in markets in which some consumers are making cognitive mistakes while others are not.”); Willis, *supra* note 3, at 832 (“Only by examining the evidence on the ground closely can we know whether procedural ‘framing’ or substantive ‘choice narrowing’ regulation—or . . . some combination of both—is likely to reduce the incidence of a social problem.”).

Part IV details how the current consumer protection institutional framework—including courts, legislatures, and agencies—is inadequate to respond appropriately. However, federal regulators have the legal power to collect information from companies and to act on what they learn. Based on these discussions, I propose in Part V a new regulatory approach built on supervising institutions. I also discuss the potential for mandated disclosures in goods. In particular, it may be possible to empower third-party technological intermediaries to do what they currently cannot: compare pricing information across online and brick-and-mortar stores, thus helping consumers to rationally select the best deals.

To be clear, I am not proposing a full-blown supervisory program akin to that in finance, in which the nation's largest banks host teams of regulatory examiners year-round. Any consumer goods supervision program would need to be tailored to the sector, which might mean a lighter model relying on remote monitoring of firms by requesting specific, easily transmittable information. Nor am I arguing that all identifiable anticompetitive practices should be regulated. Such a decision would require an in-depth institutional analysis of the benefits and costs of intervention.

Rather, the core claim of this Article is that the preliminary evidence suggests consumers overpay for goods by significant amounts at great cost to society. Faced with such evidence, regulators of goods should respond as have regulators of financial products: by first understanding what is going on. Congress gave the FTC the information-collection power to do so. Exercising that power would give the agency a better chance to make informed decisions in the face of a fast-moving, complex sector driven by highly sophisticated institutions.

I. THE SOPHISTICATION GAP BETWEEN FIRMS AND CONSUMERS IS LARGE

Economists agree that firms generally aim to find ways to profit from consumer irrationality and information asymmetries.⁴³ Large retailers are no exception. Like large financial institutions, they rationally invest in developing practices that confuse, redirect, or otherwise take advantage of consumers'

⁴³ See Glenn Ellison, *Bounded Rationality in Industrial Organization* ("In the recent psychology and economics-motivated literature, the rational firm-irrational consumer assumption has become the norm, and the question of what firms do to exploit irrationality is often the primary focus."), in 2 *ADVANCES IN ECONOMICS AND ECONOMETRICS: THEORY AND APPLICATIONS*, NINTH WORLD CONGRESS 142, 147 (Richard Blundell et al. eds., 2006).

limited time and information-processing capacity.⁴⁴ Whether any given practice merits regulatory action would require a full normative and institutional analysis. Still, as a first step, legal decisionmakers must understand that today's retailers are not just large versions of the mom-and-pop hardware store of the past: they are data-driven, psychologically informed institutions that systematically tailor prices and products to consumers' shopping shortcomings.

A. Defining Harm

Competitive markets offer great promise to contribute to societal welfare. The Supreme Court articulated one vision of this promise when it said, "the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality and the greatest material progress."⁴⁵ Indeed, competitive forces in the twentieth century pushed down prices on goods such as food and refrigerators, likely reducing the hardship of poverty.⁴⁶

At the same time, it is widely recognized that, left completely unregulated, businesses may contribute to market failures that undermine society's interests.⁴⁷ This is largely why antitrust authorities restrain mergers that would create too much market power; such power can and rationally would be used in ways that undermine competition, harming consumer interests and social welfare.

Similarly, economists have long believed that for markets to be fully competitive, consumers must make informed and rational decisions.⁴⁸ FTC commissioners appointed during the deregulatory Reagan administration described the agency's mission as being "to intervene only where market imperfections keep individual consumers from effectively making their own purchase decisions from among a full range of options."⁴⁹ Informed consumers would, among other things, have adequate information about

⁴⁴ See, e.g., Gabaix & Laibson, *supra* note 25, at 506-07 (offering a model for how firms gain profit by obfuscating information).

⁴⁵ N. Pac. Ry. Co. v. United States, 356 U.S. 1, 4 (1958).

⁴⁶ See Markovits, *supra* note 8 (manuscript at 16, 20, 26).

⁴⁷ See N. GREGORY MANKIW, PRINCIPLES OF ECONOMICS 11-13 (6th ed. 2012) (explaining the general importance of regulation for well-functioning markets); ROBERT PITOFSKY, HARVEY J. GOLDSCHMID & DIANE P. WOOD, TRADE REGULATION: CASES AND MATERIALS 2 (6th ed. 2010) (noting that there is "a widely shared view that private interests operating in free markets, and unchecked by effective government antitrust rules, will harm efficiency and consumer welfare").

⁴⁸ For some qualifications to this simplified statement, see *infra* Section I.B.

⁴⁹ Neil W. Averitt & Terry Calvani, *The Role of the FTC in American Society*, 39 OKLA. L. REV. 39, 40 (1986).

what products and prices are available to them in the market. And once they had such information, rational consumers would systematically make decisions that advanced their objectives—such as lowest price, highest quality, favorite brand, least time spent, or some prioritized combination of factors.

Informed and rational consumer decisions would motivate consumer companies to produce and price their goods in a way that best satisfies consumers' interests. Firms that satisfy consumers' preferences would be rewarded with sales, and those that do not would go out of business. This competitive process drives prices in commodity markets toward their marginal cost of production or the costs of producing one additional item.⁵⁰

However, competitive pricing breaks down in the face of information asymmetries and consumer irrationality. Assuming consumers seek a low price, if they are too poorly informed of the prices available in the market or are unable to process information so as to determine which products are priced best, firms have less incentive to compete on price. A firm in such a market might not attract significant additional sales by lowering prices because consumers would not appreciate the difference. Economic theory and empirics suggest that this failed market would have higher-priced goods than a fully competitive market filled with rational and informed consumers.⁵¹

In this Article, I deploy an informal and intuitive conception of harm, under which behavioral economics–related market failures harm consumers by reducing consumer surplus to below the levels that would exist if consumers made rational and informed decisions. The behavioral effects can produce this result both by allowing producers to charge higher prices and by influencing the quality, quantity, and variety of goods that producers sell into patterns that do not best suit consumers' interests.

B. *Limits on Consumer Sophistication*

Evaluating consumers' susceptibility to making irrational and uninformed decisions is thus central to determining harm. The empirical literature suggests consumers are highly susceptible to such harm. Furthermore,

⁵⁰ This marginal cost allows for a competitive return on investment.

⁵¹ See Jennifer Brown et al., *Shrouded Attributes and Information Suppression: Evidence from the Field*, 125 Q.J. ECON. 859, 869 (2010) (finding that, when shipping charges are hidden, increasing shipping charges significantly increases revenues); Ellison & Ellison, *supra* note 15, at 428 (finding that obfuscating online product descriptions increases profits); Gabaix & Laibson, *supra* note 25, at 506-07 (showing that firms are able to charge a higher price to "uninformed myopic consumers" and have no incentive to educate those consumers).

consumer-oriented information technologies have ultimately proved inadequate to protect consumers.

Even fully rational consumers may not make purchases that best advance their interests if they are unaware of better alternatives.⁵² One obstacle to obtaining such information in the goods sector is the time needed to acquire information relative to the benefits. Consumers are more likely to invest time researching prices for bigger-ticket items such as computers or cars than for the vast majority of lower-priced consumer goods. The high cost of acquiring information on hundreds of mass retail items among thousands of choices across different stores leads most consumers to make decisions with limited comparative information.⁵³

Consumers are also susceptible to systematic mistakes because of shortcomings in how they process whatever information they do have.⁵⁴ For example, consumers have limited computational skills, attention, and memory.⁵⁵ Remembering prices for hundreds of items changing across time and locations is a task beyond most consumers. And even if consumers could remember all of the prices, calculating the best configuration of shopping in terms of which items to buy where, factoring in transportation time and costs, would stretch most consumers' mental computation skills. Psychologists have found that in the face of these limitations, a large amount of decisionmaking happens in a quick manner largely unobserved by the individual, which requires use of mental heuristics or shortcuts.⁵⁶

Retailers study these decisionmaking limits closely.⁵⁷ As one former senior marketing executive of a multinational goods company describes it, "[t]he core benefit of modern decision science is to provide an analytical, systematic

⁵² See Steven C. Salop & Joseph E. Stiglitz, *Bargain and Ripoffs: A Model of Monopolistically Competitive Price Dispersion*, 44 REV. ECON. STUD. 493, 493-94 (1977) (concluding that information costs lead to prices above perfect competition).

⁵³ See generally Hamilton & Chernev, *supra* note 18 (explaining that research indicates consumer decisions are influenced both by actual prices and a retailer's price image).

⁵⁴ *Id.*

⁵⁵ See Barr et al., *supra* note 7, at 31 ("The amount of information people attend to is limited . . ."); Jolls et al., *supra* note 12, at 1477 (noting humans' "limited computational skills and seriously flawed memories").

⁵⁶ See Jolls et al., *supra* note 12, at 1477 ("To deal with limited brain power and time we use mental shortcuts and rules of thumb."). See generally DANIEL KAHNEMAN, THINKING, FAST AND SLOW 109-95 (2011) (showing the various heuristics and biases people resort to in the face of complex problems).

⁵⁷ See, e.g., PHIL BARDEN, DECODED: THE SCIENCE BEHIND WHY WE BUY 15 (2013) (explaining the limited amount of time a consumer will spend processing advertising media).

access to the autopilot system and, hence, to the implicit level of purchase decision making.”⁵⁸

This insight enables retailers to alter perceptions of price by leveraging an array of biases. For example, consumers are highly influenced by numerical anchoring, or being exposed to an initial reference point for the price of an item. In one study, consumers who were briefly exposed to an ad for a \$799 television, even though they viewed the price as excessive and more than twice as high as they thought the television was worth, subsequently thought a price of \$319 for the same television was 31% more valuable than those who had not been exposed to such an ad.⁵⁹

Also, the way a retailer presents a price can greatly influence a consumer’s purchase decision. Consumers are far more likely to buy items ending in the digit “9” than those ending in other numbers. For example, in one study consumers purchased more of the same clothing item at \$39 than at lower prices ranging from \$34 to \$38, or than at higher prices ranging from \$41 to \$44.⁶⁰ Although a cost–benefit analysis would likely weigh against regulating the practices in either of these examples, they demonstrate the ease with which consumers may make irrational decisions in response to seller behavior.

Technological tools can enhance a consumer’s overall shopping sophistication and offer a potential solution to information and rationality shortcomings. There is little doubt that technologies have enabled consumers to acquire information about products more easily and to purchase more conveniently, and online retailers have increased price pressure on brick-and-mortar retailers and thus in some instances moved markets closer to competitive pricing.⁶¹ However, from a regulatory perspective, whether the Internet has helped consumers and decreased some retailers’ market power is irrelevant.

The central question is whether consumers are generally able to make informed and rational decisions in consumer markets given the information technology tools available to them and to sellers. This is an empirical question, and the evidence suggests that whatever help information

⁵⁸ See *id.* at 27; see also WILLIAM POUNDSTONE, PRICELESS: THE MYTH OF FAIR VALUE (AND HOW TO TAKE ADVANTAGE OF IT) 16 (2010) (quoting Columbia University’s Eric Johnson’s statement that marketers who have been “in the field awhile . . . realize, yes, [they] can manipulate consumers”).

⁵⁹ See Joel E. Urbany et al., *The Effect of Plausible and Exaggerated Reference Prices on Consumer Perceptions and Price Search*, 15 J. CONSUMER RES. 95, 100–02 (1988).

⁶⁰ BARDEN, *supra* note 57, at 50–51.

⁶¹ See Alistair Barr, *EBay, PayPal Pinpoint Stores for Mobile Shopping*, USA TODAY (Dec. 5, 2013, 4:07 PM), <http://www.usatoday.com/story/tech/2013/12/05/ebay-paypal-stores-mobile/3871057>, archived at <http://perma.cc/4D3J-972A>.

technologies have provided to consumers has been insufficient to correct market failures related to decisionmaking. As two leading economists put it, the Internet “was to usher in the New Economy, but we seem mostly to have the Old.”⁶²

Technological intermediaries have mainly disappointed in failing to offer a more price-competitive online market. Economists have found that the online market has not offered the broadly competitive prices that were initially expected.⁶³ Retailers employ a number of techniques making it more difficult to compare products online, ranging from creating more complicated product descriptions⁶⁴ to offering multiple versions of essentially the same products⁶⁵ to paying for user comments.⁶⁶ And searching for products online brings complexity and time-consuming comparisons of its own, producing thousands of search results for a single product in a single online retailer. Consequently, consumers are susceptible to irrational decisionmaking and cognitive biases online.⁶⁷ Indeed, in some respects retailers have even more tools to undermine rational decisionmaking online, given that consumers have different cognitive biases and online retailers can

⁶² Glenn Ellison & Sara Fisher Ellison, *Lessons About Markets from the Internet*, J. ECON. PERSP., Spring 2005, at 139, 139.

⁶³ See *id.* at 151 (“[P]rice-cost margins on the Internet are not extremely low.”). See generally Xing Pan et al., *Price Dispersion on the Internet: A Review and Directions for Future Research*, J. INTERACTIVE MARKETING, Autumn 2004, at 116 (reviewing literature suggesting similar price dispersion online and offline).

⁶⁴ Ellison & Ellison, *supra* note 15, at 428.

⁶⁵ *Id.*; see also Elizabeth A. Harris, *The Social Showroom: Retailers Seek Online Partners to Put Products Out Where People Can See Them*, N.Y. TIMES, Nov. 27, 2013, at B1 (noting that retailers “swapped out bar codes to make them incompatible with their competitors”).

⁶⁶ See Mike Elgan, *Weeding Out Fake Reviews Online Takes Care, Incentive*, PCWORLD (Oct. 26, 2013, 2:05 PM), <http://www.pcworld.com/article/2057939/weeding-out-fake-reviews-online-takes-care-incentive.html>, archived at <http://perma.cc/LV8D-F4UW> (explaining that companies pay for writers to post positive comments about their products and criticisms of their competitors). Some states have begun to crack down on paid reviews. See David Streitfeld, *Give Yourself 5 Stars? Online, It Might Cost You*, N.Y. TIMES, Sept. 23, 2013, at A1 (reporting that New York regulators were issuing fines to companies that created deceptive reviews on the Internet). Online shoppers place great weight on user reviews, with a recent survey determining that 70% of consumers trust online reviews. *Consumer Trust in Online, Social And Mobile Advertising Grows*, NIELSEN (Apr. 10, 2012), <http://www.nielsen.com/us/en/insights/news/2012/consumer-trust-in-online-social-and-mobile-advertising-grows.html>, archived at <http://perma.cc/9VJM-ZQYA>.

⁶⁷ As an example of how susceptible consumers may be to online retailers exploiting cognitive biases, in one experiment, the choice of pennies rather than clouds as the website background design caused consumers to focus on price rather than quality in their decisionmaking and caused subjects to choose the cheaper sofa 56% rather than 39% of the time. POUNDSTONE, *supra* note 58, at 280-81.

more easily tailor the shopping experience based on previous browsing and purchasing history.⁶⁸

The second way in which technologies have failed to live up to their potential is in their ability to enable consumers to gather and analyze all market prices available. To see the theoretical potential for this to happen, consider a shopping application in which consumers input location, means of transportation, and a shopping list. The application would aggregate prices from all relevant brick-and-mortar and online retailers and run sophisticated algorithms to create optimized shopping itineraries from which the consumer could choose.⁶⁹ Importantly, the application would be immune from irrational decisions such as being more likely to purchase a product ending in “9” and being influenced by exposure to an advertisement for an overpriced \$799 television. It would be able to determine rationally which retailer had the best price on like items.

A number of existing personal shopping applications attempt to do this but fall short because retailers have an information monopoly about prices and items sold in their stores. Because retailers typically refuse to disclose such information, the applications must rely on highly ineffective alternatives such as consumer scanning of items in-store.⁷⁰ Consequently, while the applications do improve comparison shopping by showing online prices or a handful of local prices, most purchasing options are left out of the applications’ algorithms. This may yet change—Google, most recently, is piloting a different delivery service in which it enables consumers to browse product information from local stores.⁷¹ But no application currently enables a consumer to gather local and online pricing data and compare all options available. As a result, current information technologies are unhelpful for most items and are only partially helpful for the largest items.

⁶⁸ See Calo, *supra* note 30, at 1015-16 (discussing how companies are tracking web users’ activity online to provide personalized, targeted advertisements).

⁶⁹ It might, for example, recommend going to two specific stores and list the items to purchase at each store along with the total time and costs. The application would easily be able to offer multiple itineraries and adjust for consumer sensitivity to considerations such as time and money.

⁷⁰ Because prices and products change so rapidly, and so few consumers are willing to spend the time to upload such information for the majority of products, this tends to leave out most items available in any given location and raises the possibility of the pricing information listed being outdated.

⁷¹ Dan Adams, *Google Express Set to Launch Deliveries in Boston Area*, BOS. GLOBE (Oct. 14, 2014), <http://www.bostonglobe.com/business/2014/10/13/google-express-same-day-delivery-service-launches-boston-area/pkqltUr5V96c1Wv8v2xukM/story.html>, archived at <http://perma.cc/UU9B-HBG9>.

Thus, overall, consumers have low retail shopping sophistication. They have insufficient information due to the high costs of acquisition relative to the benefit, are subject to decisionmaking biases, and lack adequate technological tools.

C. *Sophisticated Institutions Capitalize on Consumer Limitations*

While consumers are boundedly rational, sellers have moved ever closer to the pinnacle of rationality: scientific decisionmaking. The nexus of this sophistication is the transformation of stores into laboratories of mass experimentation. This Section discusses how two main factors have made this transformation possible: technology and scale.⁷²

In recent years, firms have invested hundreds of millions of dollars to build information technologies that enable them to collect and mine data from billions of transactions—online and offline, loyalty card and otherwise.⁷³ They have also generated their own observational insights into customer behavior. They film consumers' in-store movements and install cameras that track the movement of consumers' eyes as they walk down the aisles.⁷⁴ Marketers combine these various data sources with the literature on decisionmaking to generate hypotheses about pricing practices that are then tested in stores.

A new generation of employees supports these analytics. The former Chief Science Officer of Amazon notes that retailers have started an “arms race” to hire mathematicians and statisticians to analyze the results of in-store experiments and to develop behavioral modeling algorithms from their troves of data.⁷⁵ Nor are retailers—such as Dollar Tree, Target, CVS, Walmart, and Home Depot—alone in this effort. They are legally allowed to develop their pricing and sales strategies together with the Fortune 500

⁷² See Stefan Biesdorf et al., *Big Data: What's Your Plan?*, MCKINSEY Q., Mar. 2013, at 1, 2 (discussing how to use advances in big data analytics to enhance productivity and profit).

⁷³ See JAMES MANYIKA ET AL., MCKINSEY GLOBAL INST., *BIG DATA: THE NEXT FRONTIER FOR INNOVATION, COMPETITION, AND PRODUCTIVITY* 6 (2011) (discussing the proliferation of big data and how it can be used to create value across sectors of the global economy). By contrast, in 1980, computers were just arriving in consumer goods companies, did not digitally collect data from stores, and were mostly used for internal financial tasks. See generally JUDITH A. QUILLARD ET AL., CTR. FOR INFO. SYS. RESEARCH, *A STUDY OF THE CORPORATE USE OF PERSONAL COMPUTERS* (1983) (looking at personal computer usage in ten corporations, including two Fortune 100 consumer goods companies).

⁷⁴ See O'Donnell & Meehan, *supra* note 36.

⁷⁵ See Charles Duhigg, *Psst, You in Aisle 5*, N.Y. TIMES, Feb. 19, 2012, (Magazine), at 30 (discussing one statistician's work for Target); Claire Cain Miller & Stephanie Clifford, *To Catch Up, Walmart Moves to Amazon Turf*, N.Y. TIMES, Oct. 20, 2013, at 1 (mentioning Walmart's pursuit of computer engineers to help the company use “big data” to compete in the e-commerce market).

companies that manufacture products, such as Procter & Gamble, Clorox, Pepsico, and Kellogg.⁷⁶ These investments in technologies and people pay nicely: industry estimates have placed the potential operating margin increase for using big data analyses at more than 60%.⁷⁷

Some of these advanced analytics generate procompetitive insights that arguably benefit consumers, such as more relevant coupons on the backs of receipts. These insights may make it more feasible—and less costly—for sellers to inform consumers of goods they would want to purchase.

However, some of the marginal increase comes from influencing consumers to purchase in ways that advance firms'—but not necessarily consumers'—interests.⁷⁸ Retailers track micro-behavioral patterns such as variations in consumers' price sensitivity by item at different times in different stores and adjust prices accordingly.⁷⁹ Online retailers also selectively charge consumers higher prices by, for example, profiling operating systems and tracking purchase history.⁸⁰ Staples's algorithm for online prices looks at the zip code to determine whether the consumer has other options nearby, which essentially enables the company to better pinpoint potential market failures relating to insufficient choice.⁸¹ The consulting firm McKinsey & Co. has disclosed that retailers use big data to “nudge customers to higher-margin products.”⁸²

Knowing exactly how sellers use analytics to pinpoint behavioral pricing opportunities—rather than merely to price discriminate—is impossible because analytical findings are closely guarded as trade secrets by firms, and

⁷⁶ See Bradley J. Lorden, Note, *Category Management: The Antitrust Implications in the United States and Europe*, 23 LOY. CONSUMER L. REV. 541, 543-44 (2011) (explaining that retailers delegate responsibility for certain product categories to leading manufacturers in the industry, who give information and advice based on consumer preferences in the product category).

⁷⁷ See MANYIKA ET AL., *supra* note 73, at 6. Of course, as mentioned above, not all of this profit is from supracompetitive pricing.

⁷⁸ See generally Duhigg, *supra* note 75, at 33 (“There is a calculus, it turns out, for mastering our subconscious urges. For companies like Target, the exhaustive rendering of our conscious and unconscious patterns into data sets and algorithms has revolutionized what they know about us and, therefore, how precisely they can sell.”).

⁷⁹ See Steve Lohr, *The Age of Big Data*, N.Y. TIMES, Feb. 12, 2012, at 1 (“Retailers, like Walmart and Kohl's, analyze sales, pricing and economic, demographic and weather data to tailor product selections at particular stores and determine the timing of price markdowns.”).

⁸⁰ See generally Aniko Hannak et al., *Measuring Price Discrimination and Steering on E-commerce Web Sites* (2014) (unpublished manuscript), available at <http://www.ccs.neu.edu/home/cbw/pdf/imc151-hannak.pdf> (finding e-commerce websites use data about operating systems and purchasing history to engage in price discrimination and steer consumers to certain products).

⁸¹ Jennifer Valentino-Devries et al., *Websites Vary Prices, Deals Based on Users' Information*, WALL ST. J., Dec. 24, 2012, at A1.

⁸² Biesdorf et al., *supra* note 72, at 7.

regulators do not currently collect such information.⁸³ But the fact that big data analytics provide a powerful tool to raise prices to consumers is well known in the retail industry.⁸⁴ And in a market filled with boundedly rational consumers, technology increasingly enables sellers to pinpoint opportunities to raise prices due to behavioral biases.⁸⁵

Firms' scale is also an important enabler of this scientific and technologically driven decisionmaking. Leading retailers today have far more stores than in previous decades. In 1992, Walmart, then the leading retailer, had 1928 stores. Today, it has over 11,000.⁸⁶ Dollar General alone, which caters to low-income shoppers, had 10,506 stores as of 2013.⁸⁷ Its competitor Family Dollar, as well as numerous drug and corner stores such as Walgreens, CVS, and 7-11, each have over 7000.⁸⁸ Retailers have also increased dramatically in terms of share of market and total items sold. In 2000, the ten largest grocery chains made up less than 30% of the market; by 2010, the ten largest accounted for 70%.⁸⁹

This scale helps retailers develop anticompetitive behavioral economics practices in two main ways. Most directly, the number of stores enables more experiments to be run in a small subset of stores with statistically significant sample sizes. For example, the way a price label is designed, such as whether a dollar sign is included, can influence how consumers view the actual price (prompting some states to regulate shelf labeling).⁹⁰ Scale enables larger retailers to run a far greater number of experiments on such minor label variations and produce valid results more quickly than ever before at lower risk to the overall business.

Retailer size is also important because it expands the number of behavioral pricing practices that are profitable. It takes a similar level of investment

⁸³ For a discussion of regulatory reform that would examine such internal data, see *infra* Part V.

⁸⁴ Biesdorf et al., *supra* note 72, at 6-7; see also Duhigg, *supra* note 75, at 33 ("Almost every major retailer, from grocery chains to investment banks to the U.S. Postal Service, has a 'predictive analytics' department devoted to understanding not just consumers' shopping habits but also their personal habits, so as to more efficiently market to them.").

⁸⁵ See *infra* Section II.A.

⁸⁶ See *History Timeline*, WALMART, <http://corporate.walmart.com/our-story/history/history-timeline> (last visited Mar. 21, 2015), archived at <http://perma.cc/2M3M-T4WB>.

⁸⁷ *Top 100 Retailers (2013)*, NAT'L RETAIL FED'N, <https://nrf.com/resources/top-retailers-list/top-100-retailers-2013> (last visited Mar. 21, 2015), archived at <https://perma.cc/634P-8JR2>.

⁸⁸ *Id.* Walmart, at a mere 4570 stores in the United States, and Kroger, the nation's largest grocery chain, at 3538 stores, are smaller in terms of stores but are the two largest retailers by annual sales at \$467 billion and \$92 billion respectively. *Id.*

⁸⁹ Niraj Dawar & Jason Stornelli, *Rebuilding the Relationship Between Manufacturers and Retailers*, MIT SLOAN MGMT. REV., Winter 2013, at 83, 84.

⁹⁰ See BARDEN, *supra* note 57, at 49-50 (discussing how retailers reduce perceived cost through various techniques).

in technology, and a similar number of employee hours, to collect and analyze data for a behavioral pricing practice whether the retailer has 1000 stores or 10,000. If a retailer sells 100 million units of a product annually, an experiment that increases the price of that product on average by two cents will still generate \$2 million annually in additional profit each year. A retailer of one-tenth the size would have a harder time justifying the same expenditures required to develop that practice, as it would earn only \$200,000 annually from the same practice.⁹¹

Mass retailers' institutional sophistication is similar to that identified by legal scholars as a driver of financial institutions' growing ability to exploit consumer limitations in recent decades. Professor Lauren Willis, for example, has discussed how increasing computing power in the 1990s gave lenders the means to design their credit products more creatively to capitalize on consumer behavior.⁹² Though lenders had always conducted analyses to model borrower behavior, they went from simpler, more subjective strategies to more advanced analyses such as through multivariate regression of millions of data points.⁹³ Another way of characterizing Professor Willis's account is that the lenders greatly increased their rationality relative to consumers. While consumer borrowers may have gained somewhat helpful new research capabilities from the Internet and spreadsheets, lenders gained powerful information processing tools that created enormous sophistication asymmetries in an already complex mortgage market.

Similarly, over the past several decades, sellers of consumer goods have developed game-changing sophistication in an increasingly complex market. Consumers, by contrast, have gained helpful search technologies, but they have major limitations and the empirical literature consistently finds that sellers control these interfaces to exploit consumer decisionmaking limits. Thus, in the modern technological and scale-driven commercial landscape, the sophistication gap between buyers and sellers of goods is large and has grown considerably, as it has in financial products.

⁹¹ This is a greatly simplified example; the difference in profits between the two firms may actually be greater given economies of scale in rolling out the practice for the larger firm.

⁹² Willis, *supra* note 3, at 719-20.

⁹³ *Id.* Behavioral market failures in the mortgage industry were identified well before the industry's adoption of powerful information technologies. See Eskridge, *supra* note 3, at 1214 (noting that because of their own cognitive biases and reliance on intermediaries, homebuyers often enter into deceptive deals or take on too much risk). However, the point by Willis and others is that technologies greatly enhanced lenders' ability to exploit consumer decisionmaking limitations. See Willis, *supra* note 3, at 719-20 (describing how lenders can use this technology to price discriminate based on risk).

II. FIRMS SYSTEMATICALLY CHARGE ANTICOMPETITIVE PRICES

This Part highlights some of the main ways sellers leverage their sophistication to raise prices for boundedly rational consumers. Because companies continually test new pricing strategies and typically design them to go unnoticed, any discussion based on publicly available data cannot fully capture the array of practices occurring in the market.

However, even those practices that are readily observable suggest behavioral market failures are widespread in retail goods. This Part begins with a review of those practices. It then discusses how market constraints such as reputation, consumer learning, and protection by sophisticated shoppers are insufficient to keep these practices in check. Part III then discusses the aggregate harm to consumers.

A. *Evidence of Anticompetitive Practices in Retail Goods*

Anticompetitive practices in retail goods are numerous and diverse. Still, the driving mechanism behind each practice places it into one of two basic categories. The first is price misperception due to low salience. As Oren Bar-Gill has stated of contractual products, “[c]omplexity hides the true cost of the product from the imperfectly rational consumer. . . . The imperfectly rational consumer deals with complexity by . . . overlooking non-salient price dimensions.”⁹⁴

Such price misperception in goods can occur at the store level, such as if consumers do not pay sufficient attention to any one of the many items in their shopping cart. Non-salient price dimensions can also occur on the individual product level, such as if consumers fail to pay adequate attention to the high price of the ink that they will later pay as a result of purchasing a printer. Consumers consequently could perfectly compare salient product dimensions and still overall pay higher prices because the seller has little incentive to price non-salient dimensions competitively.⁹⁵

The second main category includes practices that make it difficult for consumers who fully understand all price dimensions to make effective price comparisons. Sellers can make it difficult for consumers to compare prices by, for example, complicating product descriptions online. They also can cause a skewed comparison by providing the often implicit reference points consumers use through framing.

⁹⁴ BAR-GILL, *supra* note 5, at 18.

⁹⁵ See Oren Bar-Gill, *The Behavioral Economics of Consumer Contracts*, 92 MINN. L. REV. 749, 769-76 (2008) (explaining that multidimensional pricing and product dimensions enable the seller to drive a wedge between perceived price and actual price).

1. Price Misperception from Non-Salient Dimensions

a. *Misperceiving Stores' Prices*

One of the most important choices made by consumers in mass retail is where to shop. Research suggests that the complexity of deciding among various stores hides the true total cost of stores from consumers, causing them to overlook the prices of non-salient items.⁹⁶ Calculating the total price paid requires selecting a subset of products out of an average of 47,000 unique items.⁹⁷ Those prices continually fluctuate over time, often due to “high-low” pricing driven by discounts.⁹⁸ In the thirty-one states in which unit pricing is not required, consumers would also need to make calculations for many choices to compare differently sized products.⁹⁹ The complexity and time required to make such calculations leads consumers to use mental shortcuts in forming an “overall impression” of the store’s aggregate price.¹⁰⁰ A rational and informed consumer would calculate a store’s total cost for the consumer’s basket of goods and would compare that to what a similar basket would cost at other available stores. Instead, in comparing two stores, consumers consider only a small number of actual prices—as few as three to five out of hundreds of items purchased.¹⁰¹ In forming their overall price impression, consumers supplement these few actual prices using mental shortcuts, including location, décor, store size, promotional labeling, and price-match guarantees.¹⁰²

Just as financial institutions have responded to complexity by designing their pricing schemes to capitalize on consumer complexity by adding costs

⁹⁶ See Gabaix & Laibson, *supra* note 25, at 506-09 (explaining that consumer myopia causes consumers to overlook certain shrouded costs associated with products).

⁹⁷ See *The Downside of Too Many Product Choices on Store Shelves*, *supra* note 16.

⁹⁸ *Id.* (noting that there is a wide disparity between the high and low price for products within the same product line, in part because certain products in a line may be excluded from weekly discounts).

⁹⁹ Eleven states and many cities have passed mandatory unit pricing on retail shelves. See *A Guide to Retail Pricing Laws and Regulations*, NIST, <http://www.nist.gov/pml/wmd/laws/pricing-laws.cfm> (last visited Mar. 21, 2015), archived at <http://perma.cc/X9T4-BFKA>.

¹⁰⁰ Hamilton & Chernev, *supra* note 18, at 1 (stating that “consumers tend to rely on their overall impression of a store’s prices when making their purchase decisions”). In the face of complexity, even the decisions that are processed in a more deliberate fashion can be cognitively insufficient due to, for example, limited computational skills and memory. See Jolls et al., *supra* note 12, at 1477 (noting consumers’ “limited conceptual skills” and “flawed memory”).

¹⁰¹ See Hamilton & Chernev, *supra* note 18, at 4 (discussing how consumers use a “selective weighting model” as a proxy).

¹⁰² See *id.* at 2 (discussing price image as a marketing phenomenon).

through low-salient features, so have retailers.¹⁰³ Retailers leverage the big data analytics of billions of past purchases and real-time scientific experimentation across stores to model consumers' level of price attention to different items.¹⁰⁴ These analytics help them to identify the extent to which products are highly salient, or known value items (KVIs), and to selectively escalate prices to minimize the chances consumers will notice.¹⁰⁵ Retailers also design the mix of other factors, such as price-match guarantees, that might contribute to consumers' overall impression of the store's prices. Consequently, a retailer can maintain a "low price image" even though it overall may have higher prices than competitors on many items, causing consumers to make the wrong choice about which store would actually save them more money.¹⁰⁶

Moreover, this overall sense of a store's aggregate prices influences not only where consumers shop but also whether consumers believe individual items in that store are low-priced.¹⁰⁷ Even individual choices of what seem like straightforward products can involve decisionmaking complexity due to the total number of choices available for that particular product and the total number of goods purchased in a typical shopping trip. As a result of consumer companies' innovation, choice has greatly expanded in the sector over the past decades. For example, Tide detergent, which originally launched in 1949 as one product, now has forty-three distinct products enabling choice among dimensions such as scent, consistency (e.g., powder or liquid, concentrated or not), and function (e.g., stain removing or whitening).¹⁰⁸ The more choices available, the more likely a consumer is to adopt a simplifying strategy in the purchase of that good and risk "worsening"

¹⁰³ See BAR-GILL, *supra* note 5, at 2-3 (explaining the general effect of consumer complexity through behavioral economics).

¹⁰⁴ See Duhigg, *supra* note 75, at 36-37 (explaining Target's use of consumer purchasing data to track spending habits). One important contributor is loyalty card data, which allows retailers to track particular consumers' purchases over time.

¹⁰⁵ KVIs are typically the big ticket or most frequently purchased items, such as milk, beef and Coca-Cola. See POUNDSTONE, *supra* note 58, at 149 (describing how supermarkets use loyalty card data to selectively raise prices on infrequently purchased products); Hamilton & Chernev, *supra* note 18, at 4 ("By aggressively pricing these most influential items . . . retailers have a better chance of influencing consumers' impressions of the average level of prices than they would by just lowering prices across the board."). Consumers often fail to notice the elevated price either because it is raised by too small an increment or because consumers are not paying close attention to the particular product's price in the larger basket of items.

¹⁰⁶ Hamilton & Chernev, *supra* note 18, at 1-2.

¹⁰⁷ *Id.* at 1.

¹⁰⁸ See *Guess How Many Items the Average Grocery Shopper Buys in a Year?*, COUPONS IN THE NEWS (Jan. 23, 2014), <http://couponsinthenews.com/2014/01/23/guess-how-many-items-the-average-grocery-shopper-buys-in-a-year>, archived at <http://perma.cc/ENX7-WKUQ>.

the decision outcome.¹⁰⁹ The consumer's overall price image of the retailer provides such a simplifying strategy, and it can cause consumers to view individual items as being relatively low-priced even when they are not.¹¹⁰

Economic theory would suggest that these dynamics lead to higher prices on non-salient items than would be expected in markets with competitive pricing. The high complexity and cost of attaining information causes consumers to ignore a large number of items in deciding among stores. Instead, consumers use their overall impressions of the store, formed by mental shortcuts, to process low-salient items, leading them to believe they are getting a good deal on those items even when they are not. Retailers consequently have less incentive to compete on price for those non-salient items and thus charge supracompetitive prices.

Consumers thus make similar mistakes in choosing a mass retailer as they do in choosing a credit card or mortgage contract. Consumers often choose the wrong financial product because they focus on a small number of salient contract features, such as the overall interest rate of a credit card or the monthly payment of a cell phone contract. As Professor Bar-Gill has argued, the problem extends beyond terms hidden in the fine print.¹¹¹ Consumers also irrationally underweigh contract terms about which they are aware.¹¹² They incorrectly assume non-salient terms will benefit them even

¹⁰⁹ See THALER & SUNSTEIN, *supra* note 10, at 97 (“Social science research reveals that as the choices become more numerous and/or vary on more dimensions, people are more likely to adopt simplifying strategies.”); Bar-Gill & Warren, *supra* note 6, at 27 (describing evidence of consumer confusion in choosing between complicated credit card policies). Also, recent research has shown that the greater the number of choices available, and the greater the number of choices made, the more cognitive resources are depleted. See Kathleen D. Vohs et al., *Making Choices Impairs Subsequent Self-Control: A Limited-Resource Account of Decision Making, Self-Regulation, and Active Initiative*, 94 J. PERSONALITY & SOC. PSYCHOL. 883, 884 (2008) (highlighting a “series of studies [that] has provided evidence that some self-resource is depleted by acts of self-regulation”). Even deciding among basic consumer goods such as scented candles and colored pens can make it more likely that subsequent decisions will be processed using mental shortcuts rather than in a systematic manner. *Id.* at 885-86; see also Hamilton & Chernev, *supra* note 18, at 9 (“[R]esearch has shown that many common shopping activities tend to deplete consumers’ cognitive resources, leaving them less able to engage in systematic information processing and decision making.” (citation omitted)).

¹¹⁰ See Hamilton & Chernev, *supra* note 18, at 4 (summarizing research that showed “many consumers relying on as few as three to five key prices to form an overall impression of a store”).

¹¹¹ See BAR-GILL, *supra* note 5, at 1 (“That sellers hide one-sided terms in the fine print is not surprising. The goal of [this book] is to explain the design of pricing structures and other contract terms that are often clearly disclosed—‘dickered terms’ that consumers are aware of and consent to.”); Oren Bar-Gill, *The Law, Economics and Psychology of Subprime Mortgage Contracts*, 94 CORNELL L. REV. 1073, 1127 (2009) (analyzing how the presence of imperfectly rational borrowers increases market incentives to add complexity to contracts and hide fees).

¹¹² Bar-Gill, *supra* note 111, at 1127 (noting that some borrowers “naively assume that [terms] are favorable to [them]”).

though that is untrue.¹¹³ Similarly, shoppers irrationally assume the non-salient items in their basket are in line with consumers' overall impression of the store. Firms are able to capitalize on these errors by charging higher overall prices.¹¹⁴

b. *Misperceiving Complex Products' Prices*

A large and increasing portion of the consumer goods market is comprised of individually complex products, both because traditionally straightforward products are becoming more complex and because new products are emerging. For example, in 2012, the consumer electronics segment surpassed \$200 billion off 5.9% growth.¹¹⁵ Studies have concluded that when consumers have information about a higher number of individual product attributes, they make less accurate decisions in purchasing that product.¹¹⁶ Many technological consumer goods have a high number of product attributes that are important to consumers. For example, selecting the right computer requires considering attributes, such as price, size, memory, processing speed, sound system, operating system, and visual display, often based on metrics that require some technological expertise to understand. Thus, in some sense, many consumer goods resemble complex financial products in that they have a large number of features that are poorly understood or unknown to consumers. Even skeptics of behavioral law and economics-based regulations have acknowledged that greater consumer protection may be warranted in the face of technological products due to their complexity.¹¹⁷

This complexity paves the way for misperception in a number of ways. The most prominent in the literature is the shifting of costs toward non-salient add-on products that must be purchased to use the base item to its

¹¹³ BAR-GILL, *supra* note 5, at 21.

¹¹⁴ Some of the higher prices paid on non-salient items may be offset by lower prices on salient items. However, economists have concluded that such markets still end up in an anticompetitive equilibrium. See generally Gabaix & Laibson, *supra* note 25 (detailing the many mechanisms that shroud attempts at accurate price determinations and documenting retailers' pervasive use of those mechanisms).

¹¹⁵ Press Release, Consumer Elecs. Ass'n, CE Industry Yearly Revenues Expected to Surpass \$200B for First Time (July 24, 2012), available at [https://www.ce.org/News/News-Releases/Press-Releases/2012-Press-Releases/CE-Industry-Yearly-Revenues-Expected-to-Surpass-\\$2.aspx](https://www.ce.org/News/News-Releases/Press-Releases/2012-Press-Releases/CE-Industry-Yearly-Revenues-Expected-to-Surpass-$2.aspx).

¹¹⁶ See, e.g., Korobkin, *supra* note 3, at 1229 (describing the results of an experiment showing "that subjects employed simpler decision strategies when the number of attributes became large").

¹¹⁷ See, e.g., Rosch, *supra* note 10, at 6 (showing a former FTC commissioner arguing for minimal adjustments for behavioral economics but acknowledging that consumers may be "prisoners of circumstances" when there is "asymmetry of information" regarding a product, as is often the case with complex products, like personal computers).

fullest extent. Examples of these base items are printers, electric toothbrushes, razors, and mechanized cleaning devices.¹¹⁸ Printers often cost about one-tenth the cost of the lifetime cost of supplying the printer with ink.¹¹⁹ Similarly, electric toothbrushes cost less than the lifetime cost of replacing the toothbrush heads.¹²⁰ Knowing that consumers will underweight the follow-up costs, manufacturers offer the base product at a lower rate.¹²¹ This underestimation also undermines comparison shopping as consumers rarely compare the full lifetime price of the products and instead compare only the price of the base product.¹²² Information asymmetries factor into this problem, as consumers often do not know the price of the add-ons when they purchase nor are they guaranteed that the manufacturer or retailer will not modify those add-on costs after the consumer has purchased the original item, a move analogous to unilateral contract modification. Because of these bundling misperceptions, sellers do not compete on the full overall price, thus producing higher prices than what would be expected in markets absent such bundled pricing strategies.

c. Misperceiving Deceptively Simple Products' Prices

Firms can also create price misperception on what otherwise seem to be straightforward products. Two prominent examples are packaging adjustments and rebates.

Manufacturers have frequently decreased the quantity of product while maintaining the same packaging appearance. For example, Dial reduced soap size 11% while keeping the box and price the same.¹²³ Skippy similarly

¹¹⁸ See Bar-Gill, *supra* note 9, at 38-39 (using the cost of printers and ink to show opportunistic cost shifting); Gabaix & Laibson, *supra* note 25, at 506-07 (same).

¹¹⁹ Gabaix & Laibson, *supra* note 25, at 506.

¹²⁰ *Our Products*, PHILLIPS, http://www sonicare.com/en_US/OurProducts/BrushHeads.aspx (last visited Mar. 21, 2015), *archived at* <http://perma.cc/4KUQ-FK9R> (recommending changing electric toothbrush heads four times per year); *Philips Sonicare HX5610/30 Essence 5600 Rechargeable Electric Toothbrush, White*, AMAZON, http://www.amazon.com/Philips-Sonicare-HX5610-01-Rechargeable/dp/B0081MQ47C/ref=sr_1_8?s=hpc&ie=UTF8&qid=1422438455&sr=1-8 (last visited Mar. 21, 2015), *archived at* <http://perma.cc/2SMW-JCF3> (listing the price of a Sonicare toothbrush as \$39.95); *Philips Sonicare Toothbrush E Series Generic Replacement Heads Fits: Essence, Xtreme, Elite and Advance (2-pack) Hx7002/62*, AMAZON, http://www.amazon.com/Philips-Sonicare-Toothbrush-Generic-Replacement/dp/B00NAV4IZ4/ref=pd_sim_hpc_2?ie=UTF8&refRID=06NM7QQAD8VNXC2B1TN4, *archived at* <http://perma.cc/LZB4-4JS8> (last visited Mar. 21, 2015) (listing the cost of replacement brushes as \$6.00 each).

¹²¹ See *id.* ("Printer manufacturers advertise the low price of their ink-jet printers, but do not compete on the principal cost of ownership . . . [since] only 3 percent of printer owners claim to know the printing cost at the time they buy their printers.").

¹²² See *id.*

¹²³ Hirsch, *supra* note 14.

reduced its peanut butter 10% by introducing a divot in the bottom of the jar.¹²⁴ Downsizing has occurred in a variety of products, including cereal, ice cream, and toilet paper.¹²⁵ Such changes remain unnoticed by most consumers,¹²⁶ amounting to an unperceived per-unit price increase resulting from consumer inattention. Even the presence of per-unit pricing seems not to clue most shoppers in to such changes.¹²⁷ A rational consumer would decide whether to purchase based on the new, updated price because all the necessary information is immediately available to him.

Such subtle packaging modifications can be compared to unilateral changes frequently made in existing financial contracts. Credit card companies often have added fees or changed interest rates by simply stating as much in the fine print in the monthly bill. Such unilateral modifications contributed to calls for regulation among legal scholars, in part because “consumers may pay insufficient attention to apparent ‘junk mail’ that actually changes substantive provisions” and harms consumers in unexpected ways.¹²⁸

Rebates also lead to price misperception when consumers decide to purchase an item based on the rebate price but then fail to redeem. Industry estimates place the percent of uncollected manufacturer rebates at about 40%.¹²⁹ This amounts to over \$2 billion in unredeemed rebates each year.¹³⁰ Some non-redemption of rebates is consistent with a rational actor model.¹³¹ A large portion, however, is due to consumer error, such as losing the rebate sticker or forgetting.¹³² In this sense, rebates capitalize on a similar consumer bias as behavioral law and economics scholars have identified in anticompetitive contractual designs: excessive consumer optimism about their future

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ See POUNDSTONE, *supra* note 58, at 6 (noting that consumers’ “memories of prices are short, and memories of boxes and packages shorter”).

¹²⁸ Ian Ayres & Alan Schwartz, *The No-Reading Problem in Consumer Contract Law*, 66 STAN. L. REV. 545, 588 (2014). These frequent unilateral modifications also raise the costs of being an informed consumer. See Oren Bar-Gill & Kevin Davis, *Empty Promises*, 84 S. CAL. L. REV. 1, 25 (2010) (“[S]taying informed in the face of a stream of modifications is more costly than simply reading the initial contract.”).

¹²⁹ Brian Grow, *The Great Rebate Runaround*, BUSINESSWEEK, Dec. 5, 2005, at 34.

¹³⁰ *Id.*

¹³¹ See Matthew A. Edwards, *The FTC and New Paternalism*, 60 ADMIN. L. REV. 323, 356 (2008) (arguing that redeeming rebates “might not be wealth-maximizing, depending on the costs of redemption and the size of the rebate”). Rational non-redemption may occur, for example, when high-income consumers decide that the time spent pursuing the rebate would yield more money by working. *Id.*

¹³² Grow, *supra* note 129, at 34; see also POUNDSTONE, *supra* note 58, at 177 (pointing out that rebate processors sometimes “mail the [rebate] check in an unmarked envelope that looks and feels like junk mail” to increase the chances that consumers will not cash them).

behavior.¹³³ For example, consumers often overestimate the likelihood they will pay their monthly credit card bill on time, causing them to underestimate the actual costs of the credit card and thus be less effective at comparing the actual costs of various credit cards available.¹³⁴

Manufacturers can also increase complexity and difficulty of redemption so as to decrease the likelihood that consumers will redeem. Many manufacturers require that the consumer send in the store receipt with the price circled, the Universal Product Code (UPC) removed from the product packaging, and a long rebate form filled out.¹³⁵ Any small error will trigger an examination from the firm, often requiring the consumer to submit more information and causing the consumer to give up.¹³⁶ Another obstacle is short-term due dates as short as one week.¹³⁷

Rebates contribute to pricing misperception for those consumers who decide whether to purchase based on the rebate price but actually wind up paying the full price later. Consumers are consequently less sensitive to the price posted, and thus the retailer can charge a higher price to some consumers than otherwise possible.¹³⁸ Sellers of goods can now employ algorithmic modeling and experimentation of various rebate structures to maximize surplus profits from rebates, just as financial institutions model likelihood of consumer behavior such as incurring late fees under different offers.¹³⁹ Many states have responded to perceived harm from rebates by greatly curtailing allowable practices, with some going so far as to prohibit any rebate that cannot be redeemed immediately upon completion of the transaction. However, most states offer minimal or no restrictions on rebates.

Finally, goods can have low-salient costs that consumers simply do not fully consider. Studies have suggested that when the tax on an item is posted, consumers purchase less of the item even when consumers know

¹³³ See, e.g., BAR-GILL, *supra* note 5, at 90-91 (listing various underestimations credit card consumers often make).

¹³⁴ Bar-Gill, *supra* note 9, at 49.

¹³⁵ POUNDSTONE, *supra* note 58, at 177.

¹³⁶ See *id.* (“Minor omissions mandate ‘further research,’ requests for more paperwork, and transferring the case to a ‘special team.’”).

¹³⁷ Grow, *supra* note 129, at 36.

¹³⁸ At the same time, it is worth noting that rebates have the effect of enabling some price-sensitive consumers to pay lower prices for the same goods, thus potentially creating a progressive pricing scheme. However, this requires low-income shoppers to spend time in order to pay lower prices, which is arguably an inefficient manner of price discrimination.

¹³⁹ See Willis, *supra* note 3, at 778 (noting the exploitative behavior used by financial institutions that highlights “the salience of meeting immediate goals, with little or no mention of the price to be paid in the future”).

those items are taxed and the amount of the tax.¹⁴⁰ This implies consumers are less price-sensitive than they would be if the full price were posted and that some price-sensitive consumers make purchases they otherwise would not.¹⁴¹

2. Failing To Compare Effectively

The above anticompetitive practices all involved firms charging higher prices because consumers did not adequately weigh some price dimension in a purchase. Even if consumers do adequately pay attention to all price dimensions, firms still have a number of methods for charging supracompetitive prices.

a. *Framing the Price as a Bargain*

Much attention has been paid in the behavioral law and economics literature to lenders' ability to influence borrowers by leveraging cognitive biases such as susceptibility to framing. As Professor Patricia McCoy has stated, predatory lenders frame loans as large initial gains contrasted with small later payments.¹⁴² Retailers can also promote irrational decisions by designing the "frame within which information is presented."¹⁴³ Consumers generally assess the price of an item by comparison to reference price information seen in the past or immediately available.¹⁴⁴ Because it is difficult to remember prices in previous trips to stores, retailers can alter consumers' perception of these two reference points.¹⁴⁵ Research suggests

¹⁴⁰ See Raj Chetty et al., *Saliency and Taxation: Theory and Evidence*, 99 AM. ECON. REV. 1145, 1165 (2009) ("[M]ost consumers are well informed about commodity tax rates when their attention is drawn to the subject. However, they do not remember to include the tax when making consumption decisions . . .").

¹⁴¹ Consumers do generally purchase fewer of many items as price increases. See MANKIW, *supra* note 47, at 11. This is especially true for discretionary items, such as soft drinks, junk food, and entertainment products.

¹⁴² Patricia A. McCoy, *A Behavioral Analysis of Predatory Lending*, 38 AKRON L. REV. 725, 731 (2005); see also Adam J. Levitin, *Priceless? The Social Costs of Credit Card Merchant Restraints*, 24-25 (Georgetown Univ. Law Ctr. Bus., Econ. & Regulatory Policy Working Paper Series, No. 973974), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=973970 (describing the effect of framing on consumers' perceptions).

¹⁴³ Hanson & Kysar, *supra* note 29, at 1441.

¹⁴⁴ See POUNDSTONE, *supra* note 58, at 137-39 (describing this "anchoring" effect).

¹⁴⁵ Past prices are difficult to remember due to cognitive limitations on remembering hundreds of items' prices and also because prices change frequently in the modern retail context, which means that the current price must be compared to some range of prices previously seen rather than one price seen many times. See *The Downside of Too Many Product Choices on Store Shelves*, *supra* note 16 (discussing how the quantity of information that consumers must process in supermarkets is overwhelming); see also Jolls et al., *supra* note 12, at 1477 (discussing cognitive limitations such as memory).

retailers can leverage this control to cause consumers to pay significantly higher prices for goods.¹⁴⁶

Perhaps the most straightforward application of framing is retailers' frequent implication that their current prices are some kind of a discount compared to their previous prices or to other retailers' prices, even when that is not true. Though there are laws restricting such practices, they are almost never enforced.¹⁴⁷ Also, retailers list an item at a higher price for a short time to comply with the law, even if the sole purpose is to later make the discount price more attractive. A recent examination of 54,000 advertised holiday deals found that less than 1% in fact offered lower-than-normal prices.¹⁴⁸ Instead, companies will use an inflated manufacturer's suggested retail price or a pre-holiday, artificially increased price as the reference point for claiming huge discounts, even when the discounted price is actually the more standard price.¹⁴⁹ Experiments found clothing retailers sell significantly more when they mention a \$40 clothing product was previously sold at \$48 than if the item were simply listed at \$39.¹⁵⁰ Research also suggests that if a good is labeled in a way that suggests it is on sale, it will similarly be seen as cheaper solely due to that labeling.¹⁵¹ Thus, retailers have substantial power to frame a price as a gain, rather than a loss and thus to promote price misperception.

Retailers also control the framing by deciding which nearby prices are used as references. For example, in one experiment, participants were offered the choice between a "premium" beer at \$2.60, which had a rating of 70 out of 100 in quality, or a cheaper beer at \$1.80, which had a lower quality rating of 50.¹⁵² About 33% of participants chose the \$1.80 beer.¹⁵³ However, when an additional "extra" premium beer was offered alongside the first two beers, 90% chose the original premium beer, instead of the original 66%.¹⁵⁴

¹⁴⁶ See BARDEN, *supra* note 57, at 50 (explaining that customers are willing to pay more for goods when first exposed to a high anchor price); POUNDSTONE, *supra* note 58, at 151-52 (describing a study of beer consumers who consistently chose higher priced beer on the assumption that it was higher quality).

¹⁴⁷ See Robert Pitofsky et al., *Pricing Laws Are No Bargain for Consumers*, ANTITRUST, Summer 2004, at 62 (noting that the FTC has not brought a single case against fictitious discounting practices since 1979).

¹⁴⁸ Farhad Manjoo, *Online Deals for Holiday Shopping: Buyer Beware*, N.Y. TIMES (Dec. 10, 2014), http://www.nytimes.com/2014/12/11/technology/personaltech/online-deals-for-holiday-shopping-buyer-beware.html?_r=0, archived at <http://perma.cc/8QZE-8TQZ>.

¹⁴⁹ *Id.*

¹⁵⁰ BARDEN, *supra* note 57, at 51.

¹⁵¹ *Id.*

¹⁵² POUNDSTONE, *supra* note 58, at 151-52.

¹⁵³ *Id.*

¹⁵⁴ *Id.*

In other words, simply adding a premium item that nobody purchased caused a substantial portion of the market to pay 45% more than they otherwise would have paid. Similar results have been found in actual stores. Williams-Sonoma, for example, saw sales of its \$279 breadmaker nearly double after it introduced an adjacent higher-priced, \$429 larger breadmaker that hardly anyone purchased.¹⁵⁵

Retailers can leverage this framing to design pricing architecture. Using technology that shows where the eye is looking, retailers have determined where most consumers naturally look when they walk down an aisle. Because the first price the consumer sees creates an anchoring effect influencing the consumer's processing of subsequent items, retailers can anchor the consumer at a higher price so that subsequent items appear cheaper by comparison.¹⁵⁶ By testing various shelf layouts, retailers can thus empirically identify choice architecture that is most likely to yield supracompetitive prices. Similarly, Amazon can strategically determine the mix and order of search results for similar anchoring.

b. *Obfuscating Product Information*

Like sellers of financial products, sellers of goods can leverage information asymmetries to undermine comparison shopping. Perhaps the most straightforward approach is to label essentially identical products differently across retailers. Mattress manufacturers, for example, make it impractical to compare across stores by giving different model names and even manipulating the technical specifications for identical products.¹⁵⁷ Retailers have also "swapped out" bar codes to undermine consumers' ability to compare prices.¹⁵⁸

A more behaviorally-focused means of undermining comparison shopping is to make descriptions of products or prices needlessly complicated. Economists have found that even sellers in essentially a commodity-consumer market can raise their margins six to nine percentage points above what would be expected in fully competitive markets by such "obfuscation."¹⁵⁹

By way of illustration, a typical product search at Amazon, the leading U.S. online retailer, returns thousands of results. Consumers can no longer

¹⁵⁵ *Id.* at 156.

¹⁵⁶ On the anchoring effect in general, see THALER & SUNSTEIN, *supra* note 10, at 23-24, and, on the importance of reference prices, see Tridib Mazumdar et al., *Reference Price Research: Review and Propositions*, J. MARKETING, Oct. 2005, at 84, 99, available at <http://bear.warrington.ufl.edu/weitz/mar7786/articles/reference%20price%20review.pdf>.

¹⁵⁷ Ellison, *supra* note 43, at 157.

¹⁵⁸ Harris, *supra* note 65.

¹⁵⁹ Ellison & Ellison, *supra* note 15, at 428-29.

sort those results by unit pricing, as was previously the case. Moreover, when results are sorted by total product price, the results require considerable time to figure out which items are truly lowest price. Obfuscation techniques include listing prices as a range rather than a single price. For example, searching for “canteen” returns 15,344 results. If this is simplified to a 40-ounce Klean Kanteen, 64 results are returned. Sorting these results by price returns a “lowest price” item listed as “\$12.75 to \$67.00.” Clicking on this result yields a product page with twenty-three different product permutations, each with a different color, product bundle, size, and price. The cheapest 40-ounce canteen in this page was orange and cost \$20.34. To get a more mainstream color such as black in 40 ounces, it would cost more. After clicking on over twenty permutations in this listing, I was unable to locate any canteen for \$12.75, yet that is the price Amazon presumably used to list this particular product first. Moving through many other listings in the same search, each requiring specifying size and then looking at different prices by color, at the 17th listing (“\$18.20–\$32.85”) I located a lower-priced blue Klean Kanteen for \$20.13.

This time-consuming process would need to be undergone for many different results to locate the cheapest Klean Kanteen. If the specific size and brand were not determined, finding the best deal out of thousands of results would be even more time-consuming and presumably few consumers would actually go through hundreds of individual product pages to find what the Amazon algorithm could do in a microsecond if the company wished: locate the cheapest item.¹⁶⁰ Once Amazon’s best deal is found, comparing it to other websites’ best deals would be even more difficult and time consuming.

Difficulty in comparison shopping due to excessively long contracts has similarly contributed to market failures in consumer financial products, leading to a scholarly and regulatory push for greater standardization of products.¹⁶¹ Indeed, consumer protection law has long sought to address

¹⁶⁰ AMAZON, <http://www.amazon.com> (last visited Mar. 21, 2015) (search for “Klean Kanteen”; then click on “40 Ounces & Above” in the left-hand column; then select “Price: Low to High” from the “Sort by” drop-down menu).

¹⁶¹ See Willis, *supra* note 3, at 727 (criticizing the lack of transparency and absence of sufficient information for consumers in the prime and subprime loan markets). Professors Ayres and Schwartz attempt to solve a related problem, the fact that people do not read long and complex contracts, by recommending firms be required to know their customers’ expectations and to prioritize clearly and prominently communicating disclosures that would be harmful but unexpected. Ayres & Schwartz, *supra* note 128, at 551-55.

information asymmetries that enable sellers to charge anticompetitive prices.¹⁶²

B. *Potential Market Constraints on Supracompetitive Pricing*

Although the previous Section provides evidence of firm behavior that has the potential to systemically undermine consumer decisionmaking and thus create consumer goods market failures, markets have several potentially powerful self-regulating mechanisms that could theoretically mitigate the harm from such behavior. This Section discusses three: reputational constraints, consumer learning, and protection by a subset of sophisticated consumers.

A close consideration of each suggests that they are currently insufficient to protect today's markets from the harm created by the sophistication gap between consumers and firms. They likely were more effective checks on anticompetitive practices in the markets that existed in the early 1980s, when the Reagan administration ushered in a decades-long deregulatory era. However, firms' incredible growth in size, technology, and scientific pricing has diminished the potentially market-correcting effects of these mechanisms.

1. Reputational Constraints

One common argument in consumer protection is that reputational concerns will stamp out many bad practices, thus making some regulations unnecessary.¹⁶³ The argument is that consumers will be less likely to patronize businesses that engage in questionable practices.¹⁶⁴ Because those businesses will thus lose sales, they will have an incentive to refrain from such practices.¹⁶⁵ Economists have provided support for this view through survey evidence suggesting that consumers do view pricing practices that exploit market power, such as that gained by sellers of snow shovels after a snow storm, as

¹⁶² See Alan Schwartz & Louis L. Wilde, *Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis*, 127 U. PA. L. REV. 630, 631 (1979) (asserting that the normative question of whether consumer protection regulation is justified in the face of imperfectly informed consumers "should be whether the existence of imperfect information has produced noncompetitive prices and terms").

¹⁶³ See Eitan Gerstner & James D. Hess, *Can Bait and Switch Benefit Consumers?*, 9 *MARKETING SCI.* 114, 115 (1990) ("Consumers will eventually anticipate retailers' behavior, so stores that overuse these practices will eventually develop bad reputations and lose.").

¹⁶⁴ *Id.*

¹⁶⁵ See *id.* at 117 (studying how a company's "reputation for bait and switch" practices affects a consumer's decision to purchase).

unfair.¹⁶⁶ Observable firm behavior lends further support to this theory. For example, Home Depot does not raise prices following a devastating hurricane although it could make higher profits due to the increased demand. Presumably the retailer, like others who have behaved similarly during demand spikes, fears harm to its reputation.¹⁶⁷

Two responses mitigate this potential check on anticompetitive pricing practices in consumer goods. First, firms leverage their sophistication to ensure their practices go unnoticed.¹⁶⁸ Indeed, behavioral pricing practices are more successful when consumers are unaware. Retailers can scientifically test and hone practices that capitalize on irrationality just below the awareness threshold, or as industry executives sometimes describe it, within consumers' "autopilot" decisionmaking.¹⁶⁹ They then adjust at the first sign consumers have become aware. For example, a backlash resulted when Target's algorithms successfully identified early-stage pregnant shoppers and advertised directly to them. The company responded not by refraining from using such insights but by making its advertising seem random, such as by placing ads for lawn mowers alongside those for diapers.¹⁷⁰ Thus, reputational constraints surely do curtail some practices, but firms carefully adjust and scientifically test their practices to remain under the threshold of awareness that would trigger reputational costs.

Second, even when consumers become aware of supracompetitive pricing, such as through media coverage, most people suffer from an overconfidence bias: they think they are not susceptible to cognitive biases. Thus, even if they understood that discounted prices influence people and knew a retailer was questionably creating original prices for the purpose of influencing their decisions, many consumers would incorrectly think they were

¹⁶⁶ See Daniel Kahneman et al., *Fairness as a Constraint on Profit Seeking: Entitlements in the Market*, 76 AM. ECON. REV. 728, 734 (1986) (arguing that consumers feel entitled to a particular reference price, an expectation which is violated when a company attempts to exploit a sudden shift in demand).

¹⁶⁷ See Jolls et al., *supra* note 12, at 1514-15 (describing how Home Depot did not raise prices on building supplies after Hurricane Andrew hit Florida "despite the fact that the stock could have been sold at an enormous (short-term) profit, and despite the fact that no law banned price increases").

¹⁶⁸ See, e.g., Neil M. Richards & Jonathan H. King, *Three Paradoxes of Big Data*, 66 STAN. L. REV. ONLINE 41, 42-43 (2013), available at http://www.stanfordlawreview.org/sites/default/files/online/topics/66_StanLRevOnline_41_RichardsKing.pdf (noting that collection of data about consumers is, by design, invisible).

¹⁶⁹ See BARDEN, *supra* note 57, at 14-15 (stating that a person's "autopilot" system receives millions of bits of information each second).

¹⁷⁰ See Duhigg, *supra* note 75, at 36-37 (discussing how Target goes to great lengths to hide its use of advanced behavioral modeling from customers, thus avoiding negatively impacting its reputation).

unaffected by such practices.¹⁷¹ Consequently, a retailer's reputation for using practices capitalizing on psychological biases is unlikely to hurt it since most consumers would mistakenly assume they are unaffected by such practices and would consequently continue shopping at the retailer.

Indeed, reputational concerns may, if anything, hurt companies that do not engage in supracompetitive pricing. Much of supracompetitive pricing causes consumers to think they are getting better deals than they are.¹⁷² Retailers that refrain from supracompetitive pricing practices risk being perceived as offering lower value for their prices. J.C. Penney learned this in 2011 when a new CEO decided to get rid of rampant discount pricing and instead offer everyday low prices.¹⁷³ Even though the prices offered were ultimately about the same as they had been before, consumers believed they were higher.¹⁷⁴ Sales consequently plummeted 25%, causing the chain to return to discount pricing.¹⁷⁵

2. Learning

Consumers' ability to learn about prices provides, at least in theory, a particularly promising market constraint on anticompetitive practices in consumer goods. Unlike with products such as credit cards and mortgages, which consumers typically purchase once every few years or once in a lifetime, consumers purchase some individual goods, such as cereal and soap, several times each year. This repetition theoretically makes it possible for consumers to become more sophisticated shoppers over time as they learn from their mistakes. They may, for example, make a poor decision on one product and thereafter become more careful in purchasing the same or even unrelated products.¹⁷⁶ Consumers may also learn from others' purchasing mistakes. Thus, consumer learning can provide a check against anticompetitive practices in retail goods.

¹⁷¹ See Bubb & Pildes, *supra* note 35, at 1649-50 (raising concerns about the "sophistication by disclosure" approach due to consumer overconfidence and ability of businesses to exploit even a smaller remaining bias).

¹⁷² See *supra* subsection II.A.2.

¹⁷³ Jim Aisner, *What Went Wrong at J.C. Penney?*, FORBES (Aug. 21, 2013, 11:23 AM), <http://www.forbes.com/sites/hbsworkingknowledge/2013/08/21/what-went-wrong-at-j-c-penney/>, archived at <http://perma.cc/AXC2-JA5Q>.

¹⁷⁴ *Id.*

¹⁷⁵ *Id.*

¹⁷⁶ See JOSEPH P. MULHOLLAND, SUMMARY REPORT ON THE FTC BEHAVIORAL ECONOMICS CONFERENCE 9-10 (2007), available at <https://www.ftc.gov/sites/default/files/documents/reports/summary-report-ftc-behavioral-economics-conference/070914mulhollandrpt.pdf> (summarizing conference comments by Alan Schwartz on the possibility of consumers learning from past mistakes).

Learning is, however, insufficient to prevent a range of consumer goods behavioral market failures. Because much of shopping happens in “autopilot mode,” consumers’ focus is diverted, which hinders detection of errors and ultimately prevents the aforementioned consumer learning process. For example, once consumers form their overall impression of a store’s prices as low or high, they do not rationally adjust that impression even when a store’s actual prices have changed.¹⁷⁷ They instead continue to rely on non-price cues and their historical image of the retailer’s prices, even though that image was originally formed by heavily relying on heuristics.¹⁷⁸ One likely explanation for this is confirmation bias: consumers tend to block out new information that is inconsistent with their existing beliefs, such as higher prices at stores for which they have a low price image.¹⁷⁹

The high volume of available products and rapid changes in the market are also large obstacles to learning. In previous generations of retail with far fewer products and a far slower pace of innovation, it would be more feasible to remember how prices change over time. Given that consumers now purchase hundreds of different items multiple times annually, this memory task becomes more challenging. Also, sellers now frequently change product prices, names, sizes, labels, and even product locations within the store, despite minimal changes to the core product itself. While rapid product innovation benefits consumers in many ways, it also means that what is learned in one purchase is not necessarily applicable in a subsequent purchase.

Finally, the small value at stake for many products makes peer learning unlikely. While consumers may consult experts or peers for larger purchases, such as televisions or computers, they are unlikely to spend the time to do so for clothing or food purchases.¹⁸⁰ And even for larger purchases, it is difficult to find advice that can be trusted, that incorporates knowledge of the latest products in a fast-moving market, and that is tailored to the consumer’s particular interests (rather than the usage preferences of a friend).

¹⁷⁷ See Hamilton & Chernev, *supra* note 18, at 13 (“Specifically, consumers who have well-established opinions about the overall price level of a retailer will be less likely to change their price image on the basis of new information than those who hold weaker price image beliefs.”).

¹⁷⁸ See *id.* at 12 (outlining factors that affect the accuracy of price images formed by consumers).

¹⁷⁹ See *id.* at 13 (explaining that “the degree to which consumers adjust their price image of a given retailer in the presence of discrepant information is a function of the strength of their current beliefs about a retailer’s price image”).

¹⁸⁰ See Bar-Gill, *supra* note 95, at 757-58 (finding that consumers are likely to seek advice when faced with big purchase decisions).

3. Protection by Sophisticated Shoppers

Another possibility, articulated by Alan Schwartz and Louis Wilde in the legal literature, is that a critical mass of sophisticated consumers could shield unsophisticated consumers from harmful decisions.¹⁸¹ For example, if enough sophisticated shoppers switched stores when prices on low-salient items were raised, the gains from higher prices paid by unsophisticated customers might not justify the losses from sophisticated customers switching stores.¹⁸² This would keep stores from raising prices on low-salient items, thus benefitting even unsophisticated consumers. Meanwhile, if stores offer products for both kinds of consumers, unsophisticated shoppers might accidentally choose the sophisticated product simply because it is on the shelf, limiting the number of potential sales to the sophisticated shoppers who will not purchase unsophisticated goods.¹⁸³

While historically these dynamics may have protected consumers, they are likely becoming less important for three reasons. First, sophistication is relative, and as discussed above, seller sophistication and market complexity have grown so much over the past several decades that the bar for being a sophisticated shopper is quite high and growing.¹⁸⁴ Many individual products have become more complex. At the same time, sophisticated shopping for more straightforward items would require digital access to price and product information in a variety of stores or consumers would need to spend large amounts of time putting that information together. Once the information is acquired, it would be no simple task, even with a spreadsheet, to calculate the total costs of different configurations of store visits—how many stores to visit and which items to buy at which stores. Transportation costs and time estimates would also need to be considered. As such, the bar for sophistication is high, and there is no evidence that such sophistication has materialized within consumer goods markets in a sufficiently substantial mass.

Second, refined segmentation of product categories makes it less likely that consumers will accidentally make the best choice. Markets of only a few segments in the early 1980s, each with many consumers, have given way to highly segmented modern markets—in some instances moving toward

¹⁸¹ See Schwartz & Wilde, *supra* note 162, at 663-65 (outlining the difficulty that firms face in determining which consumers are sophisticated, leading to a fair price for all).

¹⁸² *Id.*

¹⁸³ *Id.*

¹⁸⁴ See *supra* Section I.B (discussing factors that, combined, have led to a less sophisticated consumer, particularly when shopping for nondurable goods).

segments of a single consumer.¹⁸⁵ In a market with ten product segments, the likelihood of an unsophisticated consumer stumbling on the sophisticated choice is innately less than in a market with three segments.¹⁸⁶

Finally, even if markets had fewer segments, the nature of behavioral pricing practices prevents unsophisticated shoppers from serendipitously selecting the best deals. Unsophisticated shoppers will not accidentally purchase the higher-priced printer that corresponds to the lower costs of ink. They will instead choose the cheap printer with (low-salient) expensive ink and pay more overall. Also, retailers leverage their scientific studies of consumers' eye movement sequences to place the sophisticated choices where consumers would be least likely to look—whether on a computer screen or on a store shelf. They can further direct shoppers toward anticompetitively priced items through in-store advertising.

It is important to note, however, that a critical mass of sophisticated shoppers providing protection for less sophisticated shoppers has the potential to play a more meaningful role than it currently does in moving goods markets toward competitive pricing. This could occur if retailers were required to provide information intermediaries with digital price and product information, thus arming a critical mass of shoppers. This policy recommendation is discussed further in Part V.

Ultimately, the question of whether market forces such as reputational constraints, consumer learning, and sophisticated shoppers correct anticompetitive practices is an empirical one. The persistence of “lemon” used car markets and the widespread predatory lending practices prior to the 2008 financial crisis support the notion that markets are often unable to self-correct for even highly visible, questionable practices.¹⁸⁷ The most convincing evidence that these market mechanisms do not keep anticompetitive practices in check within consumer goods markets is the systemic presence of those anticompetitive practices and the empirical evidence that they cause consumers to misperceive prices. It is difficult to reconcile such

¹⁸⁵ See DOUG STEPHENS, *THE RETAIL REVIVAL: REIMAGINING BUSINESS IN THE NEW AGE OF CONSUMERISM* 91-95 (2013) (noting that modern consumers are less likely to purchase “average,” general-purpose goods and instead demand more niche items tailored to their specific needs).

¹⁸⁶ Moreover, thanks to rapid replacement inventory systems, retailers can also devote less shelf space to the smart choices than the percentage of sophisticated shoppers in the market would suggest. So, if 30% of consumers would make the sophisticated choice, retailers could devote 10% of shelf space to that product and replenish the inventory rapidly, rather than devoting 30% of shelf space to the sophisticated choice permanently.

¹⁸⁷ For a discussion of pricing within used car markets, see generally George A. Akerlof, *The Market for “Lemons”: Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970).

empirics with a rationality-based theory of consumer behavior in the retail goods sector.

III. AGGREGATE HARMS ARE POTENTIALLY SIGNIFICANT

Sellers' anticompetitive practices have the potential to cost households hundreds of dollars or more annually. The alternative choice—spending additional time shopping to outsmart pricing practices—is impractical and itself harmful. The additional costs likely reach all consumers but are particularly troubling for low-income families, for whom even a few hundred dollars can have meaningful health and educational implications.¹⁸⁸

A. *The Costs of Market Failure May Be Significant*

Though more comprehensive studies are needed, a number of empirical studies indicate how much extra consumers may pay in specific contexts due to anticompetitive pricing. From these figures, it is possible to gain a sense of the total monetary cost to households annually. Related costs, such as any resulting overconsumption, are not readily quantifiable.

In the most empirically robust study available—the only one to have access to a firm's internal cost information—economists Glenn Ellison and Sara Fisher Ellison found that firms selling computer accessories to consumers online earned margins six to nine percentage points higher due to pricing obfuscation.¹⁸⁹ These findings were all the more striking because the markets otherwise demonstrated conditions that would be associated with fully competitive markets—ease of entry, minimal product differentiation, and low search costs.¹⁹⁰

Other field studies are less comprehensive because they measure only one anticompetitive practice rather than the total amount possible from an array of such practices. For example, purchasers of clothing items in a mail-order catalog paid 23% more when the price ended in “9” compared to prices ending in other numbers.¹⁹¹ Of course, retailers should be able to end their prices with whatever numbers they choose. And clothing may be

¹⁸⁸ Many of the working poor live on the verge of financial collapse. *See generally* Sara Sternberg Greene, *The Broken Safety Net: A Study of Earned Income Tax Credit Recipients and a Proposal for Repair*, 88 N.Y.U. L. REV. 515 (2013) (discussing the many challenges, including financial instability, faced by the 26.8 million families receiving the Earned Income Tax Credit).

¹⁸⁹ *See* Ellison & Ellison, *supra* note 15, at 428-29 (examining the computer modules market and comparing the existing 12% markup to the expected 3% to 6% markup at marginal cost pricing).

¹⁹⁰ *See id.* at 432 (describing the landscape of firms selling computer parts online).

¹⁹¹ BARDEN, *supra* note 57, at 50-51.

unrepresentative of many goods that consumers purchase more regularly. But this study provides another data point on the potential magnitude of behavioral pricing, especially given that it measured only the effect of the last number in the price. And it does so in a context in which consumers were typically purchasing a very small number of items; thus, presumably the prices of those few items were salient.

Indeed, given the underlying psychology, low-price items may be just as anticompetitively priced as more substantial purchases such as clothing. Low-priced items may be purchased more frequently, but they also have lower salience. An anticompetitive 15% price increase on a \$2 item would amount to \$0.30 extra, which provides less incentive to spend extra time or pay extra attention than the \$39 item of clothing.¹⁹² In the case of the imperceptible downsizing of packaging by Skippy, Dial, and others, although the equilibrium anticompetitive price increase is unknown, the changes typically amounted to a 10% price increase for an array of products.¹⁹³

Laboratory studies have also estimated consumer willingness to pay higher prices. Framing effects were found to make consumers pay on average 11% more for beer,¹⁹⁴ over 100% more for electronics items such as cameras and DVDs,¹⁹⁵ and 20% more for clothing.¹⁹⁶ Field studies typically find a smaller magnitude than laboratory studies. However, by focusing on one behavioral lever for increasing prices, many studies likely underestimate the magnitude of possible higher prices in their respective settings.

Reaching an aggregate annual figure for expenditures requires extrapolating from these existing studies to markets that exhibit anticompetitive practices but have not been directly studied. Assuming a 5% price increase—one percentage point below the low end of Ellison and Ellison's estimates and one-half to one-third of the magnitude found in other studies—would provide a conservative perspective based on the empirical data. A 10% figure is a reasonable high end of the range, as it is closer to the other studies

¹⁹² See Wagner A. Kamakura et al., *Measuring Market Efficiency and Welfare Loss*, 15 J. CONSUMER RES. 289, 289 (1988) ("Overall, since the benefits of searching to find the most efficient brand may fail to exceed the costs of doing so, the optimal decision may be to purchase an inefficient brand—one whose price is above the minimum for its characteristics.").

¹⁹³ See Hirsch, *supra* note 14 (explaining that the addition of a dimple to the bottom of some jars effectively reduced the volume without the public perceiving a change).

¹⁹⁴ See *supra* notes 152-54 and accompanying text. The figure was calculated by applying the 45% increase in price paid by 24% of consumers, or $0.24 * 0.45 = 0.108$.

¹⁹⁵ Rashmi Adaval & Robert S. Wyer, Jr., *Conscious and Nonconscious Comparisons with Price Anchors: Effects on Willingness to Pay for Related and Unrelated Products*, 48 J. MARKETING RES. 355, 358, 360 (2011) (reporting results of experiment in which subjects were exposed to low and high anchor prices and then asked the price they would be willing to pay for the item).

¹⁹⁶ *Id.*

finding double-digit price increases and is only one percentage point above the high end of Ellison and Ellison, which studied a setting favorable to comparison shopping.¹⁹⁷

Assuming expenditures on anticompetitively priced goods are made in proportion to general household expenditures,¹⁹⁸ a family earning between \$20,000 and \$29,999—which covers the poverty line for a family of four—would pay an extra \$370 annually at the 5% rate due to market failures.¹⁹⁹ At the 10% rate, families in this range would spend an additional \$740 as a result of anticompetitive practices. For a family earning \$50,000 per year—about the median U.S. salary—this overcharge would amount to \$600 to \$1200 annually.²⁰⁰

In different families, these several hundred dollars annually would be spent differently. However, economic development research suggests that many low-income families would spend additional income on health, better food, and education.²⁰¹ Studies also suggest that additional money available to low-income families can increase the quality of parenting, which has lifelong implications, especially for children's psychological health.²⁰² Because health and education are two important predictors of upward mobility and contribute to well-being, especially among low-income families, lowering the impact of supracompetitive pricing could contribute to a reduction of poverty and an improvement in upward mobility.

B. *Alternative Cost: Paying with Time*

[T]here may be some circumstances when consumers simply do not take the time or make the effort needed to act rationally. Think, for example, of instances in which an asymmetry of information (or understanding) between sellers and buyers exists only because consumers are slothful or are otherwise willfully "ignorant, unthinking,

¹⁹⁷ See Ellison & Ellison, *supra* note 15, at 448-50 (listing the price-cost margin markups from a study of price elasticities on the internet).

¹⁹⁸ See *infra* Section III.C (discussing the differential impact of market failures by income).

¹⁹⁹ A family at this income range spends an average of about \$7417 annually on consumer goods. See U.S. BUREAU OF LABOR STATISTICS, *supra* note 1, at 9. Figures exclude expenditures on vehicles, cell phones, and gasoline.

²⁰⁰ See *id.*

²⁰¹ See JOSEPH HANLON ET AL., JUST GIVE MONEY TO THE POOR: THE DEVELOPMENT REVOLUTION FROM THE GLOBAL SOUTH 6 (2010) (reviewing literature on developing country aid and concluding that children are the largest beneficiaries of all forms of cash transfers by decreasing malnutrition and school truancy).

²⁰² Moises Velasquez-Manoff, *When the Poor Get Cash*, N.Y. TIMES, Jan. 19, 2014, at 12 (summarizing a study concluding that an additional \$9000 provided to poor families improved behavior and psychological health in large part due to "improve[d] parenting quality").

or credulous.” In those circumstances, I am not at all sure that consumers are deserving of protection by the government (or anyone else).

— Former FTC Commissioner J. Thomas Rosch²⁰³

It is often assumed that shopping for consumer goods is so straightforward that consumers should be expected either to spend the time necessary to fully research prices or to be considered to be paying the price they deserve. However, many supracompetitive pricing practices increase the time needed to shop effectively. Lost time can have real opportunity costs. It is thus a harm worth considering in regulatory analyses of consumer goods.

Most behavioral economics–related practices create temporal costs for consumers. Significant time would be lost by repeatedly analyzing every price dimension of smaller items looking for the behavioral element, such as a subtly downsized product or framing effect. As one former senior marketing executive puts it: “If we were to reflectively think about every purchase decision in the supermarket, it would take so long to do our shopping that we would starve to death.”²⁰⁴

As another example, manufacturers add shopping time to cross-store comparisons by using separate names and UPCs in separate stores. To locate the same mattress in competing stores, a consumer must align numerous features, such as the height, coil count, quilt top, comfort padding, and edge support. If the same name or UPC were used for the mattress, comparison would require knowing just that one piece of information.

The average consumer spends about 130 hours per year shopping for consumer goods, excluding travel.²⁰⁵ It is unclear how much more time is required due to obfuscation practices that make it more difficult to understand product attributes or prices or how much additional time consumers would need to spend to correct market failures. But maximizing savings could require considerable amounts of time. For example, one dedicated couponer calculated that she was spending eight to twelve hours per week hunting down coupons for a savings of \$50 to \$70 per week—an hourly savings of only \$8.75, far less than she made at her full-time job.²⁰⁶

²⁰³ See Rosch, *supra* note 10, at 7.

²⁰⁴ See BARDEN, *supra* note 57, at 15.

²⁰⁵ BUREAU OF LABOR STATISTICS, AMERICAN TIME USE SURVEY—2012 RESULTS tbl.1 (2013). This number was calculated by averaging the time men and women spent per day on “consumer goods purchases” and multiplying by 365 days.

²⁰⁶ Lyz Lenz, *Does Cutting Coupons Really Save You? One Mom Does the Math*, LEARNVEST (June 21, 2012), <http://www.learnvest.com/2012/06/does-cutting-coupons-really-save-you-one-mom-does-the-math>, archived at <http://perma.cc/DF8Y-Q5CJ>; see also Naomi Mannino, *7 Smart Strategies of Extreme Couponers*, BANKRATE, <http://www.bankrate.com/finance/frugal/smart->

Time can have important implications for consumers' health and well-being. For example, parents' ability to spend time with their children is a major predictor of future academic success, psychological well-being, and even physical health.²⁰⁷ Being able to relax during non-work hours—which for most presumably does not include spending additional time shopping—has been linked to job performance.²⁰⁸

It follows that taking the time to shop “rationally” in a highly complex sector in which sophisticated firms engage in widespread obfuscation would require time investments that may be societally and individually harmful. Thus, the fact that consumers could spend considerable time researching options to lessen the effect of practices that make it more difficult to comparison shop should not be grounds for failing to examine whether regulation of such practices is appropriate.

C. *Inequality Implications*

The question of how behavioral market failures in the consumer sector translate into inequality has largely escaped direct study. Indirect studies that are available provide reason to believe that behavioral market failures in the consumer sector hit low- and middle-income consumers hardest.

Low- and middle-income consumers account for the bulk of annual consumer goods spending.²⁰⁹ However, the top 10% of income earners own 80% of stocks, including those held in retirement accounts.²¹⁰ Thus, any portion of supracompetitive pricing that becomes profit for businesses

strategies-extreme-couponers.aspx (last visited Mar. 21, 2015), *archived at* <http://perma.cc/GYU7-SC5H> (“Extreme couponers average more than 20 hours per week couponing, buy many multiples of products, [and] spend many hours each shopping trip . . .”).

²⁰⁷ See Sabrina Tavernise, *Poor Dropping Further Behind Rich in School*, N.Y. TIMES, Feb. 10, 2012, at A1 (“One reason for the growing gap in achievement, researchers say, could be that wealthy parents invest more time and money than ever before in their children (in weekend sports, ballet, music lessons, math tutors, and in overall involvement in their children’s schools), while lower-income families, which are now more likely than ever to be headed by a single parent, are increasingly stretched for time and resources.”).

²⁰⁸ See generally Charlotte Fritz & Sabine Sonnentag, *Recovery, Health, and Job Performance: Effects of Weekend Experiences*, 10 J. OCCUPATIONAL HEALTH PSYCHOL. 187 (2005) (summarizing the literature suggesting that the amount and quality of leisure time influences job performance and extending this finding to weekend time in particular). Consumer protection scholars focusing on the financial sector have also considered non-monetary harms. See, e.g., Angela Littwin, *Coerced Debt: The Role of Consumer Credit in Domestic Violence*, 100 CALIF. L. REV. 951, 955 (2012) (arguing that debt “becomes a major obstacle to escaping abusive relationships”).

²⁰⁹ See U.S. BUREAU OF LABOR STATISTICS, *supra* note 1 (listing consumer units earning \$150,000 and above as accounting for 14% of total spending on goods categories).

²¹⁰ LAWRENCE MISHEL ET AL., *THE STATE OF WORKING AMERICA* 387 tbl.6.6 (12th ed. 2012).

transfers wealth from low- and middle-income households to the top 10% of earners.²¹¹ Although the question of how much becomes profit has not been studied, industry indications suggest that behaviorally based pricing practices significantly increase margins.²¹²

This inequality mechanism is different from that typically discussed in the law and economics literature on consumer markets: inequality resulting from regressive prices.²¹³ For example, scholars have considered whether low-income consumers may pay more to use credit cards and mortgages if they are more likely to choose the wrong product.²¹⁴

Scholars have intensely studied the question of whether low-income consumers overall pay more for goods, but the literature is inconclusive.²¹⁵ Scholars have paid far less attention to the question of the distributional implications of anticompetitive practices in goods.

Even if low-income consumers currently pay about the same as high-income consumers for goods, anticompetitive practices could still have distributional implications. It is likely, for example, that some anticompetitive pricing practices are progressive because they enable price discrimination in accordance with ability to pay. For example, because low-income families are more price sensitive, they have greater motivation to spend time collecting and analyzing product information.²¹⁶ Spending time shopping pays off, by one estimate yielding 7-10% savings.²¹⁷ Low-income consumers may be more willing to spend this extra time shopping or sending in rebates.²¹⁸ These

²¹¹ Due to industry consolidation, the vast majority of consumer goods sales go to large companies. For example, the top 10 retailers alone control 68% of the supermarket industry. THE REINVESTMENT FUND, UNDERSTANDING THE GROCERY INDUSTRY 5 chart 2 (2011).

²¹² See MANYIKA ET AL., *supra* note 73, at 6 (claiming margins can increase 60% by using big data analytics); POUNDSTONE, *supra* note 58, at 148 (concluding that “optimizing a company’s prices typically increases profit margins by about 2 percentage points”). Some of the surplus prices paid are eaten up by the inefficiencies of supracompetitive pricing practices. See *infra* Section III.D (discussing market inefficiencies).

²¹³ BAR-GILL, *supra* note 5, at 97-101, 172-73.

²¹⁴ *Id.*

²¹⁵ See Christian Broda et al., *The Role of Prices in Measuring the Poor’s Living Standards*, J. ECON. PERSP., Spring 2009, at 77, 82-86 (arguing that the poor pay less for the same goods, based on store scanner data); Gregory Kurtzon & Robert McClelland, *Do the Poor Pay More Store-By-Store?* 4 (U.S. Bureau of Labor Statistics, Working Paper No. 437, 2010), available at <http://www.bls.gov/ore/pdf/ec100050.pdf> (asserting that the poor pay about the same overall, based on telephone survey data).

²¹⁶ See Hamilton & Chernev, *supra* note 18, at 8 (“As consumers become more price sensitive, they tend to pay greater attention to prices when shopping.”)

²¹⁷ See Mark Aguiar & Erik Hurst, *Life-Cycle Prices and Production*, 97 AM. ECON. REV. 1533, 1534 (2007).

²¹⁸ See Grow, *supra* note 129, at 34-36 (explaining that 40% of all rebates never get redeemed, in part because some “think the 50¢, \$50—or even \$200—is just not worth the hassle of collecting”).

consumers also may be more willing to look through hundreds of Amazon search results to find the lowest per-unit price.

On the other hand, economists and psychologists have found that low-income families suffer from reduced cognition overall—especially on money-related topics—due to the many general stresses of poverty and the extra stress that monetary decisionmaking entails when money is tight.²¹⁹ This implies that low-income working consumers, compared to high-income consumers, may disproportionately succumb to anticompetitive practices that increase the cognitive burden of making informed choices. This would be expected if low-income consumers are unable to make up for any reduced cognition by spending additional time.

Also, anticompetitive practices would hit low- and middle-income consumers hardest for the simple fact that spending on goods is a greater percentage of their budgets. Households earning over \$150,000 annually spend about 19% of their expenditures on mass retail goods, while households earning between \$55,000 and \$25,000 spend about 24% on those goods.²²⁰

Ultimately, the literature does not enable strong conclusions to be made about how anticompetitive pricing affects the prices paid by different income groups. But there is a stronger foundation for concluding that pricing practices increase income inequality by transferring wealth from mostly low- and middle-income consumers to large businesses that are disproportionately owned by high-income groups. It is also likely that low-income consumers disproportionately pay with their time and pay higher overcharge as a percentage of their expenditures. Thus, while more studies are needed, the existing evidence supports an inference that anticompetitive practices in mass retail goods likely contribute to inequality.

D. *Market Inefficiency*

Some portion of supracompetitive pricing never becomes profit and instead is lost to inefficient business activities. These additional expenditures include labor, technology, inventory management, rebate processing, pricing label adjustments, and product and packaging reconfiguration.

For example, the practice of naming mattresses differently across retailers requires additional expenditures on labeling, recordkeeping, and merchandising a greater number of products. If the actual mattress is made slightly

²¹⁹ See generally Anandi Mani et al., *Poverty Impedes Cognitive Function*, 341 *SCI.* 976 (2013) (implementing an experiment designed to show that similarly sized financial challenges can have different cognitive impacts on the poor and the wealthy).

²²⁰ See U.S. BUREAU OF LABOR STATISTICS, *supra* note 1.

differently to justify the different name, inventory or production costs are also raised.²²¹

Inefficient expenditures also likely come from the need for more computing power and quantitatively trained employees to implement practices that keep prices above competitive levels. Some economies of scale result from using big data capabilities for expenditures unrelated to supracompetitive pricing.²²² However, assessing the success of the anticompetitive activities mentioned above requires additional investments in people and technology to conduct behavioral decisionmaking experiments, analyze the results, and implement purchasing, merchandising, and pricing insights generated by those studies.²²³

The total amount of such inefficiency is not readily quantifiable. But an increase of 5% due to supracompetitive pricing for retail goods would amount to about an extra \$130 billion spent annually.²²⁴ Some portion of this is dissipated through inefficient business activity, while much of the rest may contribute to income inequality. When these effects are combined with the hit to household budgets and the extra time spent shopping, the harm from the sector's anticompetitive practices is potentially substantial.

IV. EXISTING INSTITUTIONS ARE INSUFFICIENT TO PREVENT HARM

The principal actors governing the retail sector—legislatures, private litigants, and agencies—have proven inadequate to prevent the consumer

²²¹ For example, a less interchangeable inventory could require that more inventory be kept on hand, adjustments to be made to the manufacturing process, or a longer lead time to fulfill orders. Each of these is inefficient for the consumer if the sole purpose is to make it more difficult for consumers to compare prices across stores.

²²² See MANYIKA ET AL., *supra* note 73, at 13 (“Using big data will become a key basis of competition for existing companies, and will create new competitors who are able to attract employees that have the critical skills for a big data world.”).

²²³ See O'Donnell & Meehan, *supra* note 36 (pointing out that many stores have “their own analytics departments”). By analogy, during a period of large-scale adoption of information technologies and scale that would be expected to bring increased efficiency, efficiency in the financial sector has instead remained stagnant over the past 30 years. See Thomas Philippon, *Has the U.S. Finance Industry Become Less Efficient? On the Theory and Measurement of Financial Intermediation* 5 (Nat'l Bureau of Econ. Research, Working Paper No. 18,077, 2014), available at http://pages.stern.nyu.edu/~tphilipp/papers/Finance_Efficiency.pdf (finding that “the unit cost of intermediation is about as high today as it was at the turn of the 20th century”). One commonly mentioned impact of predatory practices in the consumer finance industry, which grew significantly over this same period, is a decrease in market efficiency. See Christopher R. Leslie, *Predatory Pricing and Recoupment*, 113 COLUM. L. REV. 1695, 1743 (2013) (asserting that predatory pricing causes market inefficiency); Willis, *supra* note 3, at 711 (concluding that “predatory lending became a problem in the late 1990s”).

²²⁴ See *supra* note 1 (placing annual spending on goods at \$2.6 trillion).

harm resulting from anticompetitive practices. All three have been hindered by the sophistication gap and resulting information asymmetries between them and consumer goods companies. Each is also institutionally designed in a way that increases the likelihood it will react too slowly to fast-moving markets. And while legislatures have passed some powerful consumer protection laws, federal regulators have applied those laws narrowly. This Part outlines the inadequacies of each of these actors. They are stuck in a similar rational actor, ex post paradigm, just as consumer finance regulators were before the 2008 financial crisis.

A. Legislatures

Legislatures at the national and local level have played an important role in expanding consumer protection laws. They have passed general laws prohibiting unfair and deceptive business practices, adding significantly to the minimal common law protections afforded consumers in the marketplace.²²⁵ In passing these general laws, legislatures have acknowledged their own institutional limitations by largely leaving the details to agencies and courts.²²⁶

This delegation of authority is especially warranted because legislatures operate too slowly for fast-moving markets. Supracompetitive pricing practices are developed at a rapid pace—new practices are continually tested and can be rolled out in days. Legislatures, on the other hand, tend to take months, if not years, to move from the identification of a potential problem to the implementation of a solution.²²⁷ The lengthy process and negotiations among typically hundreds of elected officials, often across two chambers, is better suited for occasional action, not the kind of regular updating of rules needed in the consumer goods sector. While the legislative machinery slowly gears up for action, billions of potentially harmful transactions occur and the new legislation likely ignores the latest business practices. Indeed, Congress recognized this limitation when creating the FTC, as it declined

²²⁵ Those principal protections were for fraud, misrepresentation, and unconscionability. See *infra* subsection IV.B.1.a.

²²⁶ See Victor E. Schwartz & Cary Silverman, *Common-Sense Construction of Consumer Protection Acts*, 54 U. KAN. L. REV. 1, 8 (2005) (describing the broad authority granted to the FTC to regulate unlawful and deceptive consumer activity under the Wheeler-Lea Act of 1938).

²²⁷ See Nathan Alexander Sales & Jonathan H. Adler, *The Rest Is Silence: Chevron Deference, Agency Jurisdiction, And Statutory Silences*, 2009 U. ILL. L. REV. 1497, 1535 n.231 (discussing “institutional obstacles that inherently slow the legislative process”).

to “undertake an endless task” of specifying the list of prohibited unfair and deceptive acts.²²⁸

Legislatures also lack the information necessary to pass legislation that would speak to many of the sector’s potentially anticompetitive practices. They rely mostly on publicly available information or on advocacy groups to identify problems and potential solutions. This is insufficient in part because some of the subtle ways that firms are raising prices may be unobservable without looking under the hood of institutions’ experimental machinery.²²⁹ Nor will the results of those experiments always make it clear whether behavioral market failures exist, thus requiring follow-up analyses or surveys—which legislatures often lack the relevant expertise to conduct.

Political obstacles also limit legislatures’ ability to respond regularly to consumers’ interests. As leading political science and legal scholars have argued, legislatures acting alone will incur biases such as failing to update laws of general public benefit and demonstrating favoritism toward powerful groups.²³⁰ Consumer goods companies represent a highly concentrated and influential interest group that exerts considerable pressure on legislatures. In 2012, Walmart alone spent \$8.68 million on lobbying expenses and \$3.55 million on campaign contributions.²³¹

Although legislatures are not capable of addressing the lack of consumer protection in the consumer goods sector, they can play an important role in containing anticompetitive practices. Indeed, at times legislatures have followed up on unfair and deceptive acts with more specific legislation advancing effective shopper-level decisionmaking for consumer goods. For example, some state legislatures have mandated unit pricing,²³² restricted practices that made it difficult for consumers to redeem rebates, promoted disclaimers in warranties, and ensured that retailers sell an item at an “original” price for a minimum amount of time before subsequently offering

²²⁸ See Schwartz & Silverman, *supra* note 226, at 8 (quoting H.R. REP. NO. 1142, at 19 (1914) (Conf. Rep.)) (internal quotation marks omitted).

²²⁹ See *supra* Section I.C.

²³⁰ See William N. Eskridge, Jr., *Dynamic Statutory Interpretation*, 135 U. PA. L. REV. 1479, 1530 (1987) (“[T]he legislature acting alone will be subject to three biases which undermine the overall legitimacy of government: failure to enact or update public interest laws, avoidance of hard choices, and favoritism directed at power groups.”).

²³¹ Al Norman, *Wal-Mart’s ‘Invisible Army’ of Lobbyists*, HUFFINGTON POST (July 22, 2013, 9:29 AM), http://www.huffingtonpost.com/al-norman/walmart-lobbyists_b_3632526.html, archived at <http://perma.cc/3FL5-TY5R>.

²³² Eleven states and territories, along with many cities have passed mandatory unit pricing on retail shelves; ten more states have some form of unit pricing laws or regulations. See *A Guide to Retail Pricing Laws and Regulations*, *supra* note 99.

a “discount” price.²³³ And as practices evolve, legislative clarification may be needed. However, legislatures are not designed to monitor the fast-paced, technologically and scientifically sophisticated practices of the modern consumer goods sector.

B. Courts

Like legislative bodies, courts are not designed to reduce information asymmetries and technical deficits vis-à-vis mass retailers, and they are slow to catch up with market changes *ex post*. As discussed in this section, private lawsuits face additional challenges due to limitations in the underlying doctrine and procedure. Doctrinally, many states provide for private lawsuits for unfair and deceptive acts. Common law doctrine, however, is largely inapplicable. Procedurally, it is typically unfeasible to aggregate unfair and deceptive acts claims into a single lawsuit. Thus, while lawsuits can provide redress for a small subset of clearer harms, they are inadequate for addressing sector-wide supracompetitive pricing.

1. Doctrinal Basis for Lawsuits

a. Common Law Doctrine

The common law provides consumers with two main doctrines for protection against anticompetitive practices: unconscionability under contract law and the torts of fraud or misrepresentation.²³⁴ These doctrines are inadequate for providing consumers with means for redress in the consumer goods sector without significant evolution.

First, unconscionability is fundamentally inadequate because its primary remedy is to rescind contracts. This is impractical for practices diffused throughout a large number of goods purchased and used. Indeed, in most instances consumers could simply return goods if they saw a problem before using the items.

Second, substantive unconscionability has traditionally had a high bar of impropriety. Courts have typically held a term to be unconscionable if it “shocks the conscience,” or is “so one-sided as to be oppressive.”²³⁵ Harmful

²³³ See Pitofsky et al., *supra* note 147, at 63 (noting that at least forty states and the District of Columbia have statutes relating to fictitious pricing, including statutes requiring the seller to offer a product for a “reasonably substantial period of time” at the original price (internal quotation marks omitted)).

²³⁴ DOUGLAS J. WHALEY, PROBLEMS AND MATERIALS ON CONSUMER LAW, at xxiii (7th ed. 2013).

²³⁵ Korobkin, *supra* note 3, at 1273 (internal quotation marks omitted).

terms in credit card and mortgage cases have typically not been found to reach this high bar.²³⁶ Given the similarities in anticompetitive practices, but the lower salience of the harm in goods than in finance, the doctrine offers little hope in the consumer goods realm.

Scholars and courts agree that procedural unconscionability is also poorly suited to practices related to behavioral economics. It does, however, provide a relevant consideration: the relative sophistication of parties. Courts see a large sophistication gap between the parties—as determined by factors such as education level—as weighing in favor of invalidating the transaction upon suit by the less sophisticated party.²³⁷ This factor alone is of little use to litigants, as it would potentially invalidate most modern consumer transactions if judges were to conclude a large sophistication gap exists between consumers and retailers. Thus, unconscionability is largely inapplicable in its current form though it provides some common law foundation for a consumer protection doctrine that focuses on the sophistication gap between firms and consumers.²³⁸

Nor do common law fraud and misrepresentation apply to most anti-competitive practices in the modern consumer goods context. Misrepresentation under the common law typically requires that the seller knows of a misrepresentation and intends to misrepresent.²³⁹ This is a high bar that often discouraged consumers from using the doctrine in private suits against sellers—even those who allegedly made a false or misleading statement.²⁴⁰ Supracompetitive pricing does not usually rely on even false or misleading statements—indeed, false advertising has been vigorously prosecuted by the FTC and state entities while supracompetitive pricing practices have gone

²³⁶ *Id.* at 1278 (asserting that unconscionability tests are not “well-tailored” to the challenges created by bounded rationality); Melissa T. Lonegrass, *Finding Room for Fairness in Formalism—The Sliding Scale Approach to Unconscionability*, 44 *LOY. U. CHI. L.J.* 1, 3 (2012) (describing the weaknesses in the unconscionability doctrine as “discourag[ing] decision makers from inquiring whether boilerplate [contract] terms produce unacceptably harsh results”).

²³⁷ See, e.g., Korobkin, *supra* note 3, at 1266 (“Courts also sometimes find involuntariness sufficient to support a finding of procedural unconscionability when the buyer is poor, uneducated, or unsophisticated relative to the seller.”).

²³⁸ For proposals on how unconscionability might be expanded to cover non-salient contract terms, see Korobkin, *supra* note 3, at 1278-90.

²³⁹ See Ryan P. O’Quinn & Thomas Watterson, *Fair Is Fair—Reshaping Alaska’s Unfair Trade Practices and Consumer Protection Act*, 28 *ALASKA L. REV.* 295, 297 (2011) (explaining that “a plaintiff must show that the defendant made a false representation, knew of the falsehood, and intended to misrepresent the information” in order to establish fraud or intentional misrepresentation under the common law).

²⁴⁰ See Stephen Buckingham, Comment, *Distinguishing Deception and Fraud: Expanding the Scope of Statutory Remedies Available in Pennsylvania for Violations of State Consumer Protection Law*, 78 *TEMP. L. REV.* 1025, 1027 (2005) (describing the barriers to litigating valid consumer protection claims under common law fraud).

ignored.²⁴¹ Instead, supracompetitive pricing relies on making it more difficult for consumers to find the relevant information or on consumers' inability to rationally process the information that is available to them. Thus, there is no strong basis for claiming sellers are misrepresenting in most such instances as the common law concept is traditionally applied.

Tort law is most applicable in the context of remedies. Tort law remedies are typically awarded in the form of monetary damages for the harm done. This would potentially enable monetary awards for the cumulative monetary impact of many practices, each causing small amounts of harm from elevated prices.

Thus, the common law offers no clear avenue for effective private lawsuits against sellers of consumer goods for supracompetitive pricing. Elements of the needed doctrine can be drawn by combining remedies from tort law and arguments for breach of contract from the law of unconscionability. This potentially becomes important with respect to the FTC's power to enforce unfair and deceptive acts, discussed below, which courts have explicitly stated should be interpreted by drawing on common law principles.²⁴²

b. *Statutes Prohibiting Unfair and Deceptive Acts*

A more promising doctrine for protecting consumers comes through statutes prohibiting unfair and deceptive acts. All states allow for private actions by consumers for violations of unfair and deceptive acts, although courts have held that the Federal Trade Commission Act does not allow for private actions.²⁴³ In some states, local advocates have convinced state courts to adopt divergent interpretations of the Act's authority.²⁴⁴ But as discussed below, under the FTC's analogous authority, the doctrine likely provides the courts with a legal basis for prohibiting practices that lead to supracompetitive pricing in consumer goods.²⁴⁵

²⁴¹ See, e.g., *Dahlberg Elecs., Inc.*, 88 F.T.C. 319, 331-35 (1976) (ordering hearing aid manufacturer to cease advertising its products with false and misleading claims).

²⁴² See Patricia P. Bailey & Michael Pertschuk, *The Law of Deception: The Past as Prologue*, 33 AM. U. L. REV. 849, 871 n.108 (1984) (citing cases applying the common law test of unfair competition to claims under the FTC Act).

²⁴³ Matthew A. Edwards, *The Law, Marketing and Behavioral Economics of Consumer Rebates*, 12 STAN. J.L. BUS. & FIN. 362, 398 (2007).

²⁴⁴ See Margaret H. Lemos, *State Enforcement of Federal Law*, 86 N.Y.U. L. REV. 698, 758 (2011) ("[S]tates and private parties acting under state law persuaded state courts to adopt divergent interpretations of unfairness, and to reach an increasingly wide range of conduct 'adjudged unfair under current commercial mores.'").

²⁴⁵ See *infra* subsection IV.C.2.a.

2. Procedural Designs for Lawsuits

Where the doctrine permits lawsuits, procedural challenges erect additional barriers. The best hope for procedurally feasible lawsuits comes in the form of class actions, which enable litigants to aggregate claims.²⁴⁶

The ability to aggregate claims is important because the direct harm to any one consumer from any one retailer is likely relatively small.²⁴⁷ An individual consumer's spending is often spread out among many retailers—supermarkets, department stores, drug stores, and so on. Even if an estimated several hundred dollars of surplus expenditures were concentrated at one retailer, empirical studies suggest that a very small percentage of such consumers would even contact a lawyer, let alone sue, for such amounts.²⁴⁸ In the supracompetitive pricing context, consumers would almost certainly not sue since they are unaware they are impacted by the vast majority of such practices.²⁴⁹

Granted, it is conceivable that a subset of consumers could individually bring sizeable cases if they do most of their shopping across categories at mass retailers such as Walmart or Target. However, as large as mass retailers such as Walmart and Target are, they are, nevertheless, only a fraction of the overall retail market. Other retailers that constitute a smaller percentage of individual consumers' spending would likely not be feasible to sue in such a manner. This would leave large portions of the retail sector free to engage in anticompetitive practices. And individual suits could still make anticompetitive practices profitable for Target and Walmart, as infrequent shoppers would be less likely to bring such suits.

Also, questionable practices are spread out among retailers and manufacturers. For a consumer who incurs hundreds of dollars of additional costs from shopping at a particular retailer, some of that amount would be attributable to numerous manufacturers that produced the hundreds of

²⁴⁶ See Christopher R. Leslie, *A Market-Based Approach to Coupon Settlements in Antitrust and Consumer Class Action Litigation*, 49 UCLA L. REV. 991, 993 (2002) ("Class action litigation is supposed to protect members of society by allowing them to aggregate claims that are too small to litigate individually.").

²⁴⁷ For some of the most expensive consumer goods—such as automobiles, luxury items, and high-end electronics—individual lawsuits might provide redress, but even in such suits the legal case can be challenging. See, e.g., *Fields v. Yarborough Ford, Inc.*, 414 S.E.2d 164, 167 (S.C. 1992) (denying plaintiff relief for claim of unfair trade practices regarding the sale of a pickup truck because the plaintiff failed to prove actual damages).

²⁴⁸ See Debra Pogrud Stark & Jessica M. Choplin, *Does Fraud Pay? An Empirical Analysis of Attorney's Fees Provisions in Consumer Fraud Statutes*, 56 CLEV. ST. L. REV. 483, 490 & n.15 (2008) (sharing empirical results that only 2.4% of consumers who believed they had been the victims of fraud even contacted a lawyer—the median loss amongst the group was \$220).

²⁴⁹ See *supra* subsection II.A.1.b.

products that the consumer purchased. This further undermines the efficacy of even class action lawsuits for supracompetitive pricing due to the need to choose between either impractically complex litigation or an incomplete list of defendants that excludes manufacturers.

Nor are class actions even an option for many plaintiffs. They are simply not allowed by statutes and courts for unfair and deceptive claims in many states.²⁵⁰ This would mean that relying on class actions would leave supracompetitive pricing practices intact in many states. Also, the scale would be lessened for any given lawsuit as many states have resisted aggregating claimants across state lines.²⁵¹

Even in states that allow class actions, courts have often denied class certification in consumer cases when the group lacks common issues of fact.²⁵² In one rebate case, for example, the judge found that each litigant's history was unique because there were various reasons why a given claimant might have not received the rebate—such as being late or failing to provide the necessary information.²⁵³ This suggests that class certification would be unlikely in many jurisdictions for supracompetitive pricing suits. Given the large number of subtle practices that combine to influence different consumers in different ways, many courts would likely find that the mechanisms for inducing supracompetitive pricing would be different for different consumers. Additionally, in the mass retail context, different consumers purchase different baskets of items, thus potentially constituting different issues of fact.

Beyond class actions, several other procedural designs might help make lawsuits for supracompetitive pricing more feasible. Many states provide minimum damages awards, so that even if the harm to an individual consumer were smaller than the statutory amount, they could still recover between \$25 and \$2000 depending on the state.²⁵⁴ Some states have private

²⁵⁰ See Edwards, *supra* note 243, at 402 (“Several states explicitly prohibit [consumer protection] class actions, while other states’ courts have interpreted their [consumer protection] statutes to reach this result.”).

²⁵¹ Schwartz & Silverman, *supra* note 226, at 17 (“[T]he vast differences in the application of state laws makes it particularly inappropriate for courts to certify multi-state class actions alleging [consumer protection act] claims or to apply the [consumer protection act] of one state to conduct that occurred in another state.”).

²⁵² See Edwards, *supra* note 243, at 402 (describing a case in which consumer protection class certification was denied because “common issues of fact did not predominate among class members”).

²⁵³ *Id.* (citing *Stone v. CompuServe Interactive Servs., Inc.*, 804 So.2d 383, 388-89 (Fla. Dist. Ct. App. 2001)).

²⁵⁴ See Alexandra B. Klass, *Tort Experiments in the Laboratories of Democracy*, 50 WM. & MARY L. REV. 1501, 1522 (2009) (“[A]t least eighteen states allow successful consumer plaintiffs to

attorney general statutes to empower consumers to affordably bring lawsuits for unfair acts that cover plaintiff attorneys' fees and even to sue for injunctive relief.²⁵⁵ Although such procedural mechanisms help, they would likely only work in high-value cases or in combination with class actions. Large amounts in controversy provide the necessary scale to justify what would be considerable trial costs such as advanced quantitative analyses needed to establish supracompetitive pricing.

Thus, the procedural barriers to private lawsuits are, overall, considerable. Class actions would be essential for redress but are confined to certain geographies. Where available, class certification would prove challenging; not all defendants could easily be brought before the court and advanced analyses would prove prohibitively expensive. Nor would an ex post process be sufficiently expedient to keep up with fast-changing markets. Thus, judicial avenues are unlikely to succeed even in individual cases and are inadequate for addressing the issue on a national level.

C. Agencies

As currently configured, agencies are not set up to meaningfully curtail sector-wide supracompetitive pricing in consumer goods. State agencies can at best play a supplemental role in the face of national retailers with centralized control over vast territories. And at the federal level, the FTC's impact is limited by its self-imposed structure as an ex post enforcement-driven agency.

1. State Regulatory Efforts

Unable to deal with a large volume of consumer complaints often related to local businesses, the FTC initiated a nationwide effort in the early 1970s to convince states to adopt statutes prohibiting unfair and deceptive practices.²⁵⁶ Many did so throughout the 1960s and 1970s, modeling their statutes after

recover minimum damages . . . to encourage plaintiffs to litigate consumer protection violations . . .").

²⁵⁵ See *id.* ("Most states allow plaintiffs to recover attorneys' fees incurred in bringing a successful action under their consumer protection statutes."); Rebecca Eschler Russell, *Unlawful Versus Unfair: A Comparative Analysis of Oregon's and Connecticut's Statutes Encouraging Private Attorneys General To Protect Consumers*, 47 WILLAMETTE L. REV. 673, 673 (2011) ("[T]o encourage private enforcement of states' consumer protection laws, state statutes provide for attorney fees, costs, minimum damages awards, and punitive damages in addition to actual damages or equitable relief." (footnote omitted)).

²⁵⁶ See O'Quinn & Watterson, *supra* note 239, at 301 (noting that the FTC developed a model statute for states, the Unfair Trade Practices and Consumer Protection Law).

that of the FTC.²⁵⁷ Consequently, there is significant overlap between state and federal regulatory authority in the consumer goods sector. State agencies can meaningfully supplement federal regulation in the sector by paying closer attention to more localized operations. However, state regulators are mismatched in efforts to oversee national retailers that came to dominate the retail sector in the 1990s and 2000s.

The retail sector has undergone massive consolidation in recent decades. In 1980, when much of the FTC's regulatory approach took shape, Walmart had only 276 stores and Amazon did not exist.²⁵⁸ As of 2014, Walmart has over 11,000 stores worldwide, and Amazon is set to surpass \$100 billion in annual sales.²⁵⁹ Retailers now determine nationwide pricing and selling practices from central headquarters that are located throughout the country.²⁶⁰ Understanding the advanced technologies, quantitative analytics, and scientific experiments that drive any large company's practices requires investing regulatory resources that must be justified by the benefit to the regulator's constituency.

Even the most populous state, California, would find it difficult to justify building what would essentially be a national regulatory operation when its constituents constitute only 12% of the population that national retailers serve.²⁶¹ In an era of Internet sales and national vendors, a comprehensive solution would require cross-state action.²⁶²

²⁵⁷ See *id.* at 302 (recounting how forty-four states passed some version of the FTC's model act). Congress granted the FTC broad authority to regulate unfair and deceptive acts and practices in 1938. See Wheeler-Lea Act of 1938, Pub. L. No. 447, 52 Stat. 111.

²⁵⁸ *History Timeline*, *supra* note 86.

²⁵⁹ *Id.*; see also Krystina Gustafson, *Time to Close Wal-Mart Stores? Analysts Think So*, CNBC (Jan. 31, 2014, 3:21 PM), <http://www.cnbc.com/id/101380735>, archived at <http://perma.cc/9RRF-HXXQ> (discussing Wal-Mart's massive growth in the mid-2000s, when it opened an average of five stores a week); David Streitfeld, *Amazon Spends and Grows, but Still Wants for Money*, N.Y. TIMES (Oct. 23, 2014), http://www.nytimes.com/2014/10/24/technology/amazon-spends-and-grows-but-still-wants-for-money.html?_r=0, archived at <http://perma.cc/UE75-P6PE> (noting that Amazon's projected revenue will exceed \$100 billion in 2015).

²⁶⁰ Based on the author's work as a consultant for national retailers and consumer goods manufacturers.

²⁶¹ California residents are approximately 12% of the national population according to 2013 Census figures. *State & County QuickFacts*, U.S. CENSUS BUREAU, <http://quickfacts.census.gov/qfd/states/06000.html> (last visited Mar. 21, 2015), archived at <http://perma.cc/5WUF-EW84>.

²⁶² State regulation of national retailers also makes little sense from a market efficiency standpoint. Regulatory burden is minimized by having standardized rules across state lines. For example, implementing a nationwide regulatory approach rather than a hodgepodge of state practices requiring different internal institutional systems and compliance expertise would allow regulators to take advantage of economies of scale in labeling and organizational practices.

2. The FTC

The FTC has broad statutory powers to regulate supracompetitive pricing in consumer goods. It has not, however, exercised those powers. Some legal scholars have traced FTC consumer protection inaction on behavioral pricing to the deregulatory influences of the Reagan administration in the early 1980s.²⁶³ This Section articulates an explanation missing from the literature: the FTC's design as a predominately ex post enforcement agency without supervisory capabilities.

a. *The FTC Has the Statutory Authority to Regulate Supracompetitive Pricing Practices*

As a preliminary matter, it is important to examine whether the FTC has the authority to regulate supracompetitive pricing practices in goods. Congress gave the FTC broad powers to regulate harmful business practices in the consumer goods sector under the Federal Trade Commission Act (FTCA) authority to prohibit "unfair or deceptive acts or practices."²⁶⁴ This authority includes the ability to write substantive rules.²⁶⁵ The FTC has since its early years exercised its unfairness powers with restraint. Consequently, there is a lack of clarity about the doctrine.²⁶⁶ Nonetheless, the FTC's authority to regulate the market's evolution toward supracompetitive pricing is supported by statutory language, policy, and case law.

i. Unfairness Statutory Language

The FTCA's definition of unfair was codified by Congress in 1994 as governing acts that are "likely to cause [1] substantial injury to consumers

²⁶³ See Norman I. Silber, *Reasonable Behavior at the CFPB*, 7 BROOK. J. CORP. FIN. & COM. L. 87, 93-94 (2012) (noting that FTC commissioners appointed by President Reagan "embraced less market regulation"); see also WHALEY, *supra* note 234, at xxiv (attributing the lack of regulatory action to the Reagan administration's policies).

²⁶⁴ 15 U.S.C. § 45(a)(1) (2012).

²⁶⁵ See *id.* § 57(a) (granting the Commission the power to prescribe rules and statements of policy); Nat'l Petrol. Refiners Ass'n v. FTC, 482 F.2d 672, 698 (D.C. Cir. 1973) (holding that the FTC has been given statutory authority to promulgate rules); Charles H. Koch, Jr. & Beth Martin, *FTC Rulemaking Through Negotiation*, 61 N.C. L. REV. 275, 279 (1983) (recounting the history behind the FTC's legislative rulemaking authority); Thomas W. Merrill & Kathryn Tongue Watts, *Agency Rules with the Force of Law: The Original Convention*, 116 HARV. L. REV. 467, 549-57 (2002) (documenting the evolution of the FTC's legislative rulemaking powers).

²⁶⁶ See Stephen Calkins, *FTC Unfairness: An Essay*, 46 WAYNE L. REV. 1935, 1937 (2000) (writing that the applicable statute gives only "an illusion of precision").

which is [2] not reasonably avoidable by consumers themselves and [3] not outweighed by countervailing benefits to consumers or to competition.”²⁶⁷

A straightforward application of these three elements of unfair and deceptive acts and practices seems to fit consumer goods supracompetitive pricing. First, the harm from supracompetitive pricing can cause substantial injury to a large number of individual consumers. The rough estimates from field and laboratory studies, as well as industry representations, suggest that supracompetitive pricing has the potential to cost individual households hundreds, if not thousands, of dollars annually.²⁶⁸ While this harm is cumulative over thousands of individual product purchases, most of which are quite small, the FTC has issued policy guidance stating that a substantial injury to consumers could be shown by a practice causing “small harm to a large number of people.”²⁶⁹ Since millions of consumers shop at national retailers engaging in supracompetitive pricing practices, the requirement of substantial injury is met by a plain reading of the statutory language.

A slightly harder case is whether the harm caused by supracompetitive pricing practices is “not reasonably avoidable.”²⁷⁰ As discussed above, the common presumption is that consumers could easily spend more time researching or paying closer attention. Yet the empirical literature on behavioral decisionmaking biases suggests many consumers are unaware of retailers’ practices because those practices affect more automatic, heuristic-filled thinking processes.²⁷¹ Moreover, a growing body of behavioral economics research suggests that most people, including those who are highly educated, can be prompted to make very basic cognitive mistakes by simple mechanisms such as clever wording.²⁷² It follows that consumers cannot avoid making decisions influenced by some amount of bias or other psychological limitation. In the case of practices that increase search costs, the consumer must decide between either paying more money or spending more time. A choice between two harms does not involve “reasonably avoidable” harm.

²⁶⁷ 15 U.S.C. § 45(n) (2012).

²⁶⁸ See *supra* Section III.A.

²⁶⁹ Letter from Michael Pertschuk et al., Comm’rs, FTC, to Sens. Wendell H. Ford & John C. Danforth, FTC Policy Statement on Unfairness n.12 (Dec. 17, 1980), available at <https://www.ftc.gov/public-statements/1980/12/ftc-policy-statement-unfairness>.

²⁷⁰ 15 U.S.C. § 45(n).

²⁷¹ See *supra* Section I.B.

²⁷² See THALER & SUNSTEIN, *supra* note 10, at 21 (providing examples of the wording of questions leading people to incorrect answers).

The third definitional component, that acts not be “outweighed by countervailing benefits to consumers or to competition,”²⁷³ sets up an important cost–benefit analysis that depends on the policy considered. An effective analysis of each practice would require a thorough market analysis leveraging field-validated experimental results about how firm behavior intersects with consumers’ ability to make rational and informed decisions. Nonetheless, it is difficult to imagine such an analysis yielding countervailing benefits to consumers or markets in most of the practices mentioned above, such as selling products for only a limited time at an original price then later providing a large discount or creating different names for the same product at different stores. Nor is it clear how “consumers or competition” benefit from imperceptible downsizing of product quantity.

Thus, a straightforward application of the FTC’s statutory authority suggests the agency can regulate the types of anticompetitive pricing practices discussed in this Article.

ii. Unfairness Policy

Beyond the letter of the codification, the FTC has provided further guidance for evolving the doctrine of fairness, stating that even if a practice was not previously unlawful, it will be considered unfair if it “offends public policy as it has been established by statutes, common law, or otherwise—whether, in other words, it is within at least the penumbra of some common law, statutory, or other established concept of unfairness.”²⁷⁴ Policy is more likely to be viewed as a justification for applying the FTC’s unfairness powers to a given context if the policy is “clear and well-established.”²⁷⁵ One recent statute, in particular, meets this high bar for considering supracompetitive pricing unfair under public policy: the 2010 Dodd–Frank Wall Street Reform and Consumer Protection Act (Dodd–Frank), in which Congress, with bipartisan support, established the CFPB.²⁷⁶

The Act grants the CFPB the authority to regulate consumer financial products with essentially the same language as that used to grant similar powers to the FTC for consumer goods, giving it the power to prohibit “unfair” and “deceptive” practices.²⁷⁷ It has been widely concluded that

²⁷³ 15 U.S.C. § 45(n).

²⁷⁴ *Pfizer, Inc.*, 81 F.T.C. 23, 61 (1972).

²⁷⁵ Matthew W. Sawchak & Kip D. Nelson, *Defining Unfairness in “Unfair Trade Practices,”* 90 N.C. L. REV. 2033, 2059 (2012).

²⁷⁶ See Brady Dennis, *Senate Passes Landmark Bill in Triumph for Obama*, WASH. POST, July 16, 2010, at A1 (reporting on Congress’s passage of the Dodd–Frank Act).

²⁷⁷ See John E. Villafranco & Kristin A. McPartland, *New Agency, New Authority: An Update on the Consumer Financial Protection Bureau*, ANTITRUST SOURCE, Feb. 2012, at 1, 4–6 (describing

Congress established the agency based largely on a behavioral law and economics argument.²⁷⁸

The CFPB's actions are also consistent with the conclusion that prohibiting unfair and deceptive practices covers firms that exploit consumer limitations. The CFPB has implemented legislation that requires transferors of money to make disclosures that would prevent consumers from being surprised by "hidden fees," even when a consumer, with enough effort, could have independently acquired that information.²⁷⁹ As discussed above, mass consumer goods retailers arguably sell products at higher prices in a manner analogous to hidden fees in complex contractual products.²⁸⁰

Thus, Congress explicitly stated that the FTC's unfairness doctrine should evolve in accordance with how unfairness is viewed in other statutes. Because the recent Dodd–Frank Act is being applied to similar anticompetitive pricing practices in consumer finance, this adds further support for concluding the FTC can regulate such practices in consumer goods.

iii. Unfairness Case Law

Because the FTC does not bring unfairness suits for supracompetitive pricing, there is little direct case law on the agency's authority in this area. However, the D.C. Circuit has made it clear that the FTC was tasked with evolving its unfairness doctrine on an "incremental, evolutionary basis" to

similarities between the FTC and CFPB's authority to regulate unfair and deceptive practices). Dodd–Frank also added the authority to regulate "abusive" practices, but the CFPB has not exercised such authority and has no plans to do so. *See id.* at 6 (quoting CFPB Director Richard Cordray as saying the meaning of "abusive" practices is a puzzle to the agency). The implication is that the CFPB's activities have covered only unfair and deceptive practices, which situates it as illustrative on the FTC's unfair and deceptive powers.

²⁷⁸ See Joshua D. Wright, *The Antitrust/Consumer Protection Paradox: Two Policies at War with Each Other*, 121 YALE L.J. 2216, 2220 (2012) ("Dodd–Frank . . . represents the arrival of behavioral law and economics as the intellectual centerpiece of the current administration's approach."); Rosch, *supra* note 10, at 1 (noting that the establishment of the CFPB was "based—at least in part—on behavioral economics theory").

²⁷⁹ See Press Release, CFPB, CFPB Adopts Rule to Protect Consumers Sending Money Internationally (Jan. 20, 2012), available at <http://www.consumerfinance.gov/newsroom/consumer-financial-protection-bureau-adopts-rule-to-protect-consumers-sending-money-internationally/> (explaining that Dodd–Frank increased the scope of the Electronic Fund Transfer Act to increase protections for consumers).

²⁸⁰ As Elizabeth Warren, Oren Bar-Gill, and others have observed, for contract products such as cell phone plans and credit cards, firms often sell as a package both services with prices that are accurately perceived (such as the monthly cell phone plan bill) and services with prices that are misperceived (such as underestimating the costs of a hike in per-minute fees after the plan's base minutes are used). See Bar-Gill, *supra* note 111, at 1106-07 (discussing the impact of complexity on mortgage buyers). See generally Bar-Gill & Warren, *supra* note 6 (describing the danger posed to consumers by complex credit card contracts).

adapt to changing markets.²⁸¹ This would suggest that as firms increasingly use practices capitalizing on behavioral economics, the agency's authority should evolve to cover those practices. Additionally, the case law in related areas lends support to the conclusion that the FTC has authority over such practices.

The strongest argument against FTC authority in the case law is on the question of whether the harm is "reasonably avoidable" by comparison shopping. On many occasions, courts and the FTC have emphasized that free and informed market decisions are the best mechanism for consumer protection.²⁸² And, consumers do have great freedom to travel to various stores and to shop online in choosing goods.

However, early courts also found that the unfairness doctrine could be used to prohibit selling practices that capitalize on consumers' inadequate decisionmaking. For example, in *FTC v. R.F. Keppel & Brother, Inc.*, the Supreme Court found unfairness in candy packaging materials that led consumers to purchase an inferior product by leaving the price and amount of product to chance.²⁸³ The Court reached this determination even though the packaging made the element of chance abundantly clear.²⁸⁴ A modern equivalent could be found in the subtle downsizing of product content without changing the packaging; even though the contents are clearly labeled, the consumer would be getting less than expected based on previous purchases.²⁸⁵

More recently, the case law has reiterated that practices undermining decisionmaking fall within the purview of the unfairness doctrine. In 1980, the FTC issued a statement, defining the reasonably avoidable test as follows:

[I]t has long been recognized that certain types of sales techniques may prevent consumers from effectively making their own decisions, and that corrective action may then become necessary. Most of the Commission's unfairness matters are brought under these circumstances. They are brought, not to second-guess the wisdom of particular consumer decisions,

²⁸¹ *Am. Fin. Servs. Ass'n v. FTC*, 767 F.2d 957, 982 (D.C. Cir. 1985).

²⁸² *See FTC v. Neovi, Inc.*, 604 F.3d 1150, 1158 (9th Cir. 2010) ("In determining whether consumers' injuries were reasonably avoidable, courts look to whether the consumers had a free and informed choice.").

²⁸³ *See FTC v. R.F. Keppel & Brother, Inc.*, 291 U.S. 304, 307-08, 314 (1934) (holding packaging that led consumers to pay a price or receive an amount of candy determined by chance to be a violation of unfair practices).

²⁸⁴ *Id.* at 307-08.

²⁸⁵ *See supra* Section II.A.

but rather to halt some form of seller behavior that unreasonably creates or takes advantage of an obstacle to the free exercise of consumer decisionmaking.²⁸⁶

This definition was later adopted by courts²⁸⁷ and has become part of the accepted definition of the FTC's test for unfairness.²⁸⁸ Courts have concluded that, in determining whether injuries were reasonably avoidable, courts should "look to whether the consumers had a free and informed choice."²⁸⁹

In *American Financial Services Ass'n v. FTC*, the court cited a number of considerations consistent with supracompetitive pricing practices in holding that a financial institution had engaged in unfair practices in a credit contract.²⁹⁰ For example, the court suggested that the FTC could regulate business practices that caused consumers to "have little ability or incentive to shop for a better contract."²⁹¹ The court similarly suggested that the FTC could regulate practices that restricted consumers' ability to shop by exploiting cognitive limitations such as through "fine print and technical language."²⁹² Together, these cases provide some—albeit indirect—support for concluding the doctrine of unfairness covers sales practices that contribute to consumer irrationality or information asymmetries.

b. *Ex Post Enforcement Focus Hinders FTC Consumer Protection*

Deregulatory ideology from the 1980s does not, by itself, explain the FTC's inaction in the consumer goods sector. To be sure, the FTC underwent a tightening of regulatory activities starting in the early 1980s.²⁹³ But even before then the FTC rarely exercised its broad powers to regulate unfair business practices in the sector.²⁹⁴ Indeed, even during the 1980s, sellers of goods had far lower sophistication and goods markets were far less complex than they are today. Thus, the sector likely was less in need of consumer

²⁸⁶ Pertschuk et al., *supra* note 269.

²⁸⁷ See, e.g., *Am. Fin. Servs. Ass'n v. FTC*, 767 F.2d 957, 977-78 (D.C. Cir. 1985) (affirming the FTC's finding of unfairness based not on individual consumer decisions, but on the behavior of creditors that took full control of the decision away from consumers).

²⁸⁸ See Sawchak & Nelson, *supra* note 275, at 2061-62 (detailing the cases in which the FTC applied the "not reasonably avoidable" test).

²⁸⁹ *FTC v. Neovi, Inc.*, 604 F.3d 1150, 1158 (9th Cir. 2010).

²⁹⁰ *Am. Fin. Servs. Ass'n*, 767 F.2d at 972-78.

²⁹¹ *Id.* at 977.

²⁹² *Id.*

²⁹³ See Silber, *supra* note 263, at 93-94 (noting the deregulatory policies of the Reagan administration).

²⁹⁴ See Calkins, *supra* note 266, at 1937 (explaining how the FTC has shied away from asserting claims).

protection during that period.²⁹⁵ Also, the FTC's inaction in the sector has lasted over multiple administrations led by both parties. It has persisted through a financial crisis that largely discredited deregulatory ideology.

Finally, the FTC's more active role in other areas undermines a deregulatory explanation for inaction. Even during the height of the deregulatory Reagan era, the FTC vigorously prosecuted firms for easily identifiable anticompetitive practices, such as deceptive advertising in goods. And the FTC has demonstrated its willingness to pursue related anticompetitive practices in other sectors, such as consumer finance.²⁹⁶

A more comprehensive explanation of FTC inaction requires examining its narrow *ex post* enforcement focus. The agency's Bureau of Consumer Protection is largely staffed by lawyers and, in 2012, filed 109 legal actions while writing two rules.²⁹⁷ It rarely collects non-public information outside of formal legal investigations and consumer complaints.²⁹⁸ This overwhelming emphasis on litigation creates two main barriers to effective regulation. First, it constrains the FTC's activity within the traditional common law confines *vis-à-vis* a tort-based focus on individual practices or a contract-like focus on individual products rather than evolving legal rules, as Congress intended, to meet sector-wide problems that transcend those narrow legal boxes. Second, by focusing on enforcement, the FTC collects information from firms primarily as part of legal investigations, rather than more

²⁹⁵ An influential law review article at the time asserted that retailers were likely unable to overcome market constraints on their ability to exploit consumers' lack of decisionmaking sophistication. See generally Schwartz & Wilde, *supra* note 162. These market constraints include the randomness of consumer error, which would sometimes direct unsophisticated consumers toward smart choices, and the protection provided by sophisticated shoppers. *Id.* at 663-65.

²⁹⁶ See, e.g., *Int'l Harvester Co.*, 104 F.T.C. 949, 1062-66 (1984) (finding tractor manufacturer engaged in unfair, albeit not deceptive, practices in warning labels by failing to disclose certain types of dangers); see also *Am. Fin. Servs. Ass'n*, 767 F.2d at 962-64 (describing rules promulgated by the FTC that restrict anticompetitive practices in consumer finance lending); Bar-Gill & Warren, *supra* note 6, at 95-97 (describing the FTC's motivation to protect consumers in consumer finance, despite limited authority).

²⁹⁷ See *Annual Highlights 2012-2013: Stats & Data 2012*, FED. TRADE COMMISSION, <https://www.ftc.gov/reports/annual-report-standard/ftc-2013/stats-data-2012> (last visited Mar. 21, 2015), archived at <http://perma.cc/43W5-AYLY> (listing enforcement actions and rulemaking efforts for the year 2012).

²⁹⁸ When the FTC has sought to collect firms' non-publicly available information to better understand industry practices, it has done so through voluntary participation. See, e.g., FTC, SLOTTING ALLOWANCES IN THE RETAIL GROCERY INDUSTRY: SELECTED CASE STUDIES IN FIVE PRODUCT CATEGORIES, at ii (2003), available at <http://www.ftc.gov/sites/default/files/documents/reports/use-slotting-allowances-retail-grocery-industry/slottingallowancerpt031114.pdf> (describing how the FTC wrote letters to nine companies voluntarily requesting data and documents after the Senate instructed the agency to study slotting allowances in the grocery industry).

regularly supervising institutions. Ex post enforcement inherently has an important role to play in consumer protection²⁹⁹ but overemphasizing it hinders effective regulation of consumer goods.

i. Narrow Legal Analysis

The FTC's litigation mindset causes it to focus narrowly on either individual practices or individual products in its analysis of consumer goods. This maps a more traditional legal analysis of finding the particular act that caused a tort or the particular set of terms or clauses that make a contract problematic. This narrow focus goes further with individual practices, such as deceptive advertising. And it works better with individual products complex enough to combine many different practices or features that could confuse a consumer, such as mortgages or credit cards.³⁰⁰ But the narrow product or practice focus misses the type of systemic problem posed by the consumer goods sector, in which the significance lies not in any one practice or product, but in the combination of institutional practices over an array of products. A narrow analysis of the problem also hinders development of broad solutions.

The FTC Bureau of Consumer Protection's organizational structure reflects the paradigm through which it analyzes potential harms. Three of its seven divisions are organized around practices that stem from tort law: Privacy and Identity Protection, Advertising Practices (focused on false advertising), and Marketing Practices (focusing on consumer fraud).³⁰¹ One of the divisions is organized around a contract-driven sector, the Division of Financial Practices.³⁰² The other three divisions are Enforcement, Planning & Information, and Consumer & Business Education.³⁰³

When the FTC discusses complexity, it is in the context of individual products.³⁰⁴ While FTC leadership has acknowledged individual consumer

²⁹⁹ See Barr et al., *supra* note 7, at 39 (arguing for an "ex post, standards-based disclosure requirement" for the Truth in Lending Act).

³⁰⁰ See *Am. Fin. Servs. Ass'n*, 767 F.2d at 976 (identifying "a confluence of factors which create 'an obstacle to the free exercise of consumer decisionmaking' and which creditors are able to use to their advantage").

³⁰¹ *Our Divisions*, FED. TRADE COMMISSION, <http://www.ftc.gov/about-ftc/bureaus-offices/bureau-consumer-protection/our-divisions> (last visited Mar. 21, 2015), *archived at* <http://perma.cc/QN9B-A2UM>.

³⁰² *Id.*

³⁰³ *Id.*

³⁰⁴ The focus on individual products is again exemplified by former FTC Chairman Rosch. In a speech urging caution in regulating for behavioral economics, Rosch noted that consumers may be "prisoners of circumstances" when "there is an asymmetry of information respecting a product or the terms of an offering as between sellers and buyers. That arguably happens most

goods such as computers might be complex enough to enable firms to exploit consumer decisionmaking, individual consumer goods are generally seen as lacking the requisite complexity.³⁰⁵ Consequently, outside of a few more complex products, most items sold in the sector are likely to receive FTC attention only if they are implicated in a practice analysis.

The FTC's practice analysis is also very individualistic. The FTC typically identifies and then prosecutes a single practice that has elements of common law torts, such as false advertising or invasion of privacy. Over a five-year period between 2009 and 2014, it brought over 30 enforcement actions against robocall violations in diverse sectors.³⁰⁶ In that period it took no enforcement action related to widespread supracompetitive pricing practices in consumer goods that potentially cost families hundreds of billions of dollars. This is perhaps the result to be expected under a tort paradigm, as no one salient anticompetitive practice in goods clearly constitutes a tort.

This narrow focus also hinders identification of solutions. Given the large number of subtle practices that individually cause subtle harm, it would take a large number of rules to address the sector's problems in a practice-by-practice or product-by-product manner. Moreover, economists have found that narrow regulatory interventions against supracompetitive pricing practices may actually produce anticompetitive effects.³⁰⁷ Scholars have proposed promising policy reforms for consumer irrationality and information asymmetries that would require a broader view of market failures than product or practice-specific analyses reveal.³⁰⁸ The FTC's narrow litigation focus is in tension with the needed big-picture perspective on the sector's problems and solutions.

often when a product is complicated (think of personal computers) or when the terms of an offering are complex (think of financial derivatives)." Rosch, *supra* note 10, at 6.

³⁰⁵ See *id.* at 7 (explaining that under certain circumstances, consumers simply do not make the effort to inform themselves and thus may not deserve government protection).

³⁰⁶ See *Robocalls and the Do Not Call Registry*, FED. TRADE COMMISSION, <http://www.ftc.gov/news-events/media-resources/do-not-call-registry/robocalls> (last visited Mar. 21, 2015), archived at <http://perma.cc/4TBX-ZJAG> (listing press releases related to enforcement action taken by the FTC). In 2009, the FTC issued a rule prohibiting pre-recorded telemarketing calls ("robocalls"). See Press Release, FTC, New Rule Prohibiting Unwanted "Robocalls" to Take Effect on September 1 (Aug. 27, 2009), available at <http://www.ftc.gov/news-events/press-releases/2009/08/new-rule-prohibiting-unwanted-robocalls-take-effect-september-1>.

³⁰⁷ See Michele Piccione & Ran Spiegler, *Price Competition Under Limited Comparability*, 127 Q.J. ECON. 97, 101 (2012) (concluding that "regulatory interventions that enhance comparability may lead to a less competitive market outcome").

³⁰⁸ See, e.g., Ayres & Schwartz, *supra* note 128, at 579-89 (proposing that firms selling contractual products broadly be required to know which contract terms are both unexpected and unfavorable and to prioritize disclosures accordingly).

ii. Information Asymmetries

Probably the biggest obstacle preventing the FTC from regulating supracompetitive pricing has been a lack of information in two areas: firms' internal operations and consumers' decisionmaking process. Leading scholars on behaviorally informed regulation have emphasized the importance of consumer protection that builds on insight into both of these areas.³⁰⁹

FTC Commissioner J. Thomas Rosch conceded in 2010 that the agency lacked the necessary information about the first of these—firms' internal operations. He said that robust consumer protection would be needed if firms acted rationally in exploiting consumer irrationality and acknowledged that consumers act irrationally.³¹⁰ However, Rosch stated that the missing piece in this equation is the open question of whether firms are deciding rationally.³¹¹ Thus, Rosch essentially acknowledged that an open question about firms' internal operations prevents robust consumer protection from the kinds of practices discussed in this Article.

Like financial regulators, the FTC has the power to collect information directly from firms that would enable it to answer this open question.³¹² Indeed, in the 1970s, the FTC regularly collected non-public information from companies, such as profit figures according to line of business, and this information collection withstood legal challenges.³¹³

Yet, unlike financial regulators, the FTC does not exercise these powers. It does not regularly visit or request information from consumer goods institutions to assess general selling practices.³¹⁴ Rather, staffed overwhelmingly

³⁰⁹ See Barr et al., *supra* note 7, at 55 (“The challenge of behaviorally informed regulation, therefore, is to be well designed and insightful both about human behavior and about the behaviors that firms are likely to exhibit in response to both consumer behavior and regulation.”).

³¹⁰ Rosch, *supra* note 10, at 7. Rosch was previously the agency's former Bureau of Consumer Protection director, so he is intimately familiar with the agency's approach in this area.

³¹¹ See *id.* (asking “whether irrationality just exists on the buy side” and noting that “[t]here are arguments why it may exist on the sell side as well”).

³¹² See *A Brief Overview of the Federal Trade Commission's Investigative and Law Enforcement Authority*, FED. TRADE COMMISSION, <https://www.ftc.gov/about-ftc/what-we-do/enforcement-authority> (last updated July 2008), archived at <http://perma.cc/9MCP-S9JB> (“The Commission's 6(b) authority enables it to conduct wide-ranging economic studies that do not have a specific law enforcement purpose.”).

³¹³ See Note, *The FTC's Annual Line-of-Business Reporting Program*, 1975 DUKE L.J. 389, 394-96 (discussing courts' expansive interpretation of FTC's information collection powers, and the legality of previous programs aimed at collecting non-public information); see also Jonathan B. Baker, “Continuous” Regulatory Reform at the Federal Trade Commission, 49 ADMIN. L. REV. 859, 867-68 (1997) (discussing the history of the line of business program).

³¹⁴ See *The Identity Crisis at the Consumer Financial Protection Bureau*, 100 Banking Rep. (BNA) No. 4, at 2-3 (Jan. 22, 2013) (explaining that the FTC Bureau of Consumer Protection's interactions with the targets of its investigations are formal and adversarial rather than collaborative,

by lawyers, the FTC's consumer protection arm mostly collects information from institutions by serving papers as part of legal investigations.³¹⁵ The FTC decides whether to open an investigation by relying mostly on publicly available information and consumer complaints.³¹⁶

Because information is being collected as part of a legal investigation, the institution being investigated understandably consults its lawyers. These lawyers help the firm to provide information minimally necessary for the particular investigation and in a manner least likely to provide evidence that its practices violate any law.³¹⁷ The litigation-oriented environment thus decreases the helpfulness of the information, slows down its transfer, and requires more resources by regulators and firms to transfer information. Consequently, the FTC lacks the real-time inside information needed to more broadly understand the retail sector's continually evolving, scientifically developed pricing practices.³¹⁸

This enforcement-driven process contrasts with that of the financial regulators. For example, the main federal consumer finance regulator, the CFPB, balances accountability for both supervision and enforcement of laws related to consumer financial products.³¹⁹ Supervision is staffed with examiners—rather than lawyers—who regularly collect information outside the litigation process.³²⁰ The resulting free flow of information helps the CFPB understand how firms are generally going about their business and keeps the CFPB abreast of new practices and products in the sector.

Perhaps counterintuitively, the absence of a supervision program may actually be even more of an obstacle to identifying problematic behavioral law and economics practices in the retail goods sector than it is in consumer finance. As Professors Bar-Gill and Warren have noted, “[c]hanges in the credit card contract illustrate the growing sophistication of card issuers in

and therefore, its collection of information largely depends on serving civil investigative demands on its targets).

³¹⁵ *Id.* at 3

³¹⁶ *Id.*

³¹⁷ *Id.* (“For the most part, from the moment the FTC-BCP contacts a target, the activity consists of lawyers serving papers on each other, parsing their words, and documenting their communications. The FTC-BCP can thus be said to operate within a ‘litigation model’ of regulation.”).

³¹⁸ See Tom C.W. Lin, *The New Investor*, 60 UCLA L. REV. 678, 686-87 (2013) (“Big Data will change consumer habits in ways that we cannot fully foresee.”).

³¹⁹ See CFPB, GROWING OUR HUMAN CAPITAL: HUMAN CAPITAL ANNUAL REPORT TO CONGRESS 3 (2013), available at http://files.consumerfinance.gov/f/201312_report_annual-human-capital-report-to-congress.pdf.

³²⁰ See *id.* at 15 (noting that the agency's supervision team hired former state examiners and industry compliance professionals).

exploiting consumer imperfections.”³²¹ Looking at the design of an individual good is less helpful in revealing how retailers leverage information technologies, scientific experimentation, and scale to cause subtle consumer decisionmaking errors.

Importantly, outside-in information collection is insufficient to understand the other half of Rosch’s conditions for robust consumer protection: when consumers are behaving irrationally. As legal scholars such as Professor Schwartz have argued, the existing body of field-validated studies is insufficient to explain cognitively why consumers make the actual market purchases they do.³²² Laboratory studies and surveys, such as those conducted by academics and the FTC’s own Bureau of Economics, are seen as providing insufficient bases for regulatory interventions because they may not reflect how consumers behave in actual markets.³²³ But retailers essentially have a monopoly on real-world laboratories—their stores—in which they alone can run experiments.

Thus, the FTC’s regulatory design creates substantial asymmetries of information between it and the entities it must regulate. Retailers themselves regularly make decisions based on voluminous field experiments. The FTC, on the other hand, must rely on academic studies that are often inconclusive and vulnerable to criticism as lacking real-world validation. Thus, the FTC has a limited basis for knowing whether consumers are making irrational or uninformed choices. It also cannot know precisely what firms are doing to capitalize on consumer irrationality and misinformation. The agency consequently has done precisely what Professor Schwartz has advocated: refrained from cognitive-based regulation.³²⁴

D. *Summary: Existing Institutions Inadequately Protect Consumers*

The current regulatory framework for goods is thus poorly designed for addressing systemic market failures related to behavioral economics and information asymmetries. Congress gave the FTC the power to regulate the

³²¹ Bar-Gill & Warren, *supra* note 6, at 46.

³²² See Schwartz, *supra* note 5, at 9-10 (arguing that regulators lack a theory of cognitive function that enables them to predict when consumers will make the mistakes that laboratory subjects make).

³²³ See *id.* at 10 (“[C]onsumers may make better decisions than laboratory subjects because consumers may be experienced while the subjects commonly face the experimental task for the first time.”). Nor can academics or regulators typically attain reliable answers from field data available publicly, which presents difficulties in establishing causality and isolating variables. See *id.* at 10-12 (noting difficulties determining causation of consumer choices given numerous potential bias influences).

³²⁴ See *id.* at 11 (arguing that due to a “lack of a cognitive theory,” regulators “cannot sensibly make direct inferences from subjects’ laboratory choices to consumers’ market choices”).

sale of goods because it rightly recognized that legislatures, judges, and state agencies could not do the job alone.

Yet, the FTC has, perhaps understandably, given its institutional design, balked at using those powers. Its emphasis on ex post enforcement drives it toward narrow legal analyses that obscure market-level complexity, aggregate harm, and sector-wide solutions. Most problematic of all, the extreme enforcement focus has obscured the need for the regulatory tool around which consumer finance is centered: institutional supervision. The starting point for sound regulatory decisionmaking is the best information available. The FTC lacks that crucial input.

V. POLICY CONSIDERATIONS

The regulatory framework for consumer protection in retail goods needs to be overhauled. There is evidence of widespread practices that make it difficult for consumers to make rational and informed decisions, potentially causing them great harm. Yet, while the current regulatory framework provides the FTC with the power to regulate such practices, it does not provide the tools to determine whether such power should be exercised and, if so, how. A new framework should thus be considered to bring consumer protection in consumer goods closer in line with that in consumer finance.

Fortunately, it is possible to implement this new framework without congressional action if FTC leadership decides to redesign its regulatory approach.³²⁵ I propose that the FTC consider creating a supervision program in which non-lawyers periodically collect firms' internal information about pricing practices. This would enable the agency to place greater emphasis on sector-wide ex ante rulemaking aimed at supporting consumer decisionmaking, and thus competitive markets.

In a certain sense, the core of what is currently needed in the consumer goods sector to address the immense sophistication gap between firms and consumers is the inverse of what was needed for consumer finance in the wake of the 2008 crisis. Then, the answer was to create a bureau to pay more attention to consumer protection, which was arguably being neglected due to the regulatory focus on supervising firms to ensure institutional safety and soundness. In contrast, the consumer goods sector has a regulatory body—the FTC's Bureau of Consumer Protection—that focuses solely on consumer protection. The regulator, however, does not supervise firms.

³²⁵ Though the FTC has never had a supervision program, it has exercised the same underlying powers of information collection and withstood legal challenge against those information collection efforts. See *supra* subsection IV.C.2.

A. Redesigning for Institutional Supervision

To address the FTC's lack of knowledge about practices that leverage behavioral economics and information asymmetries, the FTC might consider developing a supervision program loosely modeled after that in consumer finance protection. From their early days, bank supervision programs had the ability to request non-public information to determine whether a bank was complying with the law.³²⁶ This power was necessary because it was not possible to determine compliance from publicly available information. As discussed above, it is not possible to understand mass retail goods firms' technologically and scientifically driven behavior from publicly available information. A supervision program would enable the FTC to make crucial regulatory decisions that it currently cannot.

Three basic design features would be important to consider: (1) emphasizing *ex ante* rulemaking; (2) collecting firms' data through remote monitoring, rather than with in-person examiners often seen in consumer finance; and (3) facilitating psychological studies to complement firms' knowledge gaps about consumers' rationality.

First, the supervision program would feed into more comprehensive *ex ante* regulation in several ways. Information would flow more freely than it currently does because supervision occurs outside antagonistic legal processes. The free flow of information would be aided by the fact that the FTC's internal reports based on that information would be considered by courts as privileged and highly confidential. Rapid exchange of information is important for *ex ante* regulation because it enables questionable practices to be cut off as they develop, or even before they develop.³²⁷

³²⁶ See generally Kris James Mitchener & Matthew Jaremski, *The Evolution of Bank Supervision: Evidence from U.S. States* (Oct. 2012) (unpublished manuscript), available at <http://www.economicshistory.ca/pdfs/2012/mitchener-jaremski.pdf>.

³²⁷ Because of the regular line of supervision communications, institutions have more of a voice in the regulatory process. They also may have higher levels of trust in supervision because the interactions do not occur in an adversarial context and the information is privileged. Thus, institutions may consequently be more compliant in handing over requested information and even checking with regulators to see if a new questionable practice is permitted. Cf. TOM TYLER, *WHY PEOPLE OBEY THE LAW* (1990) (empirically documenting how procedural elements such as having an opportunity to be heard and being treated fairly influence whether people obey the law in the criminal justice context). Alternatively, the free flow of information may simply cause the regulator to become more aware of a firm's plans to adopt practices before they are implemented. Thus, from a dispute systems design perspective, a regulatory approach resting on supervision may constitute a lighter, more effective form of preventing and resolving disputes than would a litigation-centered model. Cf. NANCY H. ROGERS ET AL., *DESIGNING SYSTEMS AND PROCESSES FOR MANAGING DISPUTES* (2013) (describing how factors such as greater participation of all stakeholders and greater flow of information will increase the likelihood of success for a dispute resolution process).

The collection of this information outside the legal process also facilitates its use in a market-wide, rather than narrow, manner. When information is collected as part of a legal investigation, it is natural that it would be used in accordance with the problem-solving tools offered by legal analysis. Because non-lawyer examiners would collect supervisory information as part of an *ex ante* effort to understand market failures, the information would readily translate into a broad view of the problem and potential solutions. For example, industry-wide aggregate exam reports—standard practice in consumer finance—help put firms on notice of nascent harmful practices that violate consumer protection laws. Additionally, industry-wide information collection would flow more smoothly into industry-wide rulemaking.

This *ex ante* process is preferable to the current approach of waiting for adequate public information to reveal problematic practices—which often takes years—and only then stopping those practices through punitive enforcement proceedings that are incapable of delivering compensation for widely dispersed harms.³²⁸ In many ways it also constitutes a lighter form of regulation than does a litigation-centered model.³²⁹

Second, a lighter touch remote model of supervision is more appropriate for the goods sector. The supervision model used for decades in finance is built around teams of non-lawyer examiners who take up residence at large financial institutions for months at a time, or, in the case of the largest banks, year-round.³³⁰ The foundation of in-person examinations is supplemented with remote information requests as needed. The goods sector should flip that model, having as its default the remote collection of

³²⁸ See generally Complaint at 5, Intel Corp., No. 9341 (F.T.C. Dec. 16, 2009), available at <http://www.ftc.gov/sites/default/files/documents/cases/091216intelcmpt.pdf> (discussing ten years of anticompetitive practices by Intel that resulted in higher prices for consumers, and ultimately led to an FTC enforcement action).

³²⁹ This approach results in lighter regulation compared to a litigation-heavy approach. For instance, if noncompliance is found by supervision examiners, the supervision arm would, with approval from FTC leadership, be able to come to a settlement agreement requiring the firm to refrain from certain practices and to pay a fine or compensate consumers as appropriate. The proceeding can remain confidential at the agency's discretion, with supervision agreements typically released only in aggregate reports. Though the agency may bring suit through its enforcement arm if necessary, this would probably not be required because regulated consumer companies have strong incentives to avoid the negative publicity that comes from litigation. This saves both regulatory and firm resources that might otherwise be spent on litigation.

³³⁰ This ongoing examination is sometimes seen as burdensome, and there have been calls for examinations only when there is evidence of wrongdoing. See Craig Boyd Garner, Comment, *Unconstitutional Regulatory Seizures Under the Federal Deposit Insurance Corporation Improvement Act of 1991: The Final Blow to the Business of National Banks*, 22 PEPP. L. REV. 131, 162 n.227 (1994) (noting that “the regulatory burden on the banking industry is more than \$17.5 billion a year in compliance costs” and that a detailed regulatory scheme creates inefficiencies).

information, and only supplementing that with in-person examinations as necessary. This approach would enable limited regulatory resources to reach a representative array of retailers and manufacturers that shape the sector's pricing strategies. Crucially, it would encourage using the collected information at the industry-level, rather than focusing too narrowly on any one product, practice, or institution.

A light-touch approach would also largely involve collecting the synthesized results of firms' big data analyses and field experiments. Institutions already convert the output of their analyses into digestible reports for internal consumption, which would make the production and consumption of such information less burdensome for firms to produce and for regulators to consume.

For example, consider the case in which the FTC learns that 40% of consumers redeemed a manufacturer's rebates. By operating a regular supervision program, the FTC would have data about what might be driving non-redemption and could determine whether it is harmful or benign.³³¹ The FTC could look at historical figures for rebate redemption at a particular manufacturer, or practices across manufacturers, to see if there are variations. This process could uncover that redemption rates decreased over time as more complicated rebate practices have emerged. The FTC might, for example, learn that the manufacturer had experimented with several different rebate forms, the more complicated of which led to 40% rather than 60% redemption. This would suggest that a deliberate choice by the firm for greater complexity may have caused some consumers who wanted to redeem not to do so. This may, depending on the FTC's knowledge of the given practice, be enough for regulatory action. With access to results from experiments across retailers, the FTC would be able to draw on studies from one business to understand a practice at another—thus developing empirically informed pattern recognition for practices that exploit consumer decisionmaking limitations.

Third, when necessary, the FTC could also facilitate complementary consumer surveys or other experiments, perhaps with the help of academics, to fill in the gaps in retailers' experiments.³³² This is important because in some cases it may be unclear why consumers are paying higher prices as a result of a practice. For example, if internal data is inconclusive about whether consumers are rationally or irrationally deciding not to redeem

³³¹ If consumers are deciding not to redeem because their time is better spent elsewhere, and the rebate process is streamlined, this could be an example of rational non-redemption.

³³² The FTC is well-equipped to do this through its Bureau of Economics, which has 70 Ph.D.-level economists. See Edwards, *supra* note 131, at 353.

rebates, the FTC may facilitate a customer survey to determine consumers' intent upon purchasing products with rebates. Alternatively, it could request that the manufacturer test-run less complicated rebate procedures, used by other companies, to determine whether redemption rates are significantly affected.³³³

Bringing this missing element to the consumer goods industry would place additional demands on the FTC. There is also an innate danger that the supervision program will be burdensome to business without making markets sufficiently more competitive. It is also possible that examiners would be captured.³³⁴ The supervision program's design would need to weigh these and other risks. Any such program should be piloted and have its performance rigorously analyzed. A sunset provision may ensure that the program endures not because of inertia but because it has demonstrated value.³³⁵

The potential gains to consumers and society by removing widespread market failures in a \$3 trillion sector are large. Supervision programs already inform regulators in other spheres, such as consumer finance and occupational health and safety. Such efforts could similarly usher in an era of more informed regulatory decisionmaking in consumer goods.

B. Sector-Level Rulemaking: Information Disclosures

An FTC supervision program would enable the agency to better understand systematic harm from limitations on consumer decisionmaking. Identifying industry-wide information disclosures that enable consumers to make better decisions would be one important application of this knowledge.³³⁶ This

³³³ If a large number of consumers purchase an item at \$10 assuming they would receive a \$2 rebate, but do not cash in that rebate because of forgetfulness, this could be an example of supracompetitive pricing causing the consumer to pay a 25% higher price due to a cognitive limitation—consumers thought they would pay \$8, and wound up paying \$2, or 25%, more.

³³⁴ Following the 2008 financial crisis, there was a move toward greater political oversight of agencies. See Stavros Gadinis, *From Independence to Politics in Financial Regulation*, 101 CALIF. L. REV. 327, 332 (2013) (finding a “move away from regulatory independence and toward greater political involvement in postcrisis banking regulation”).

³³⁵ See Roberta Romano, *Regulating in the Dark* (arguing that given the uncertainty under which regulators operate, sunset provisions could be a helpful solution), in REGULATORY BREAKDOWN: THE CRISIS OF CONFIDENCE IN U.S. REGULATION 86, 99-100 (Cary Coglianese ed., 2012).

³³⁶ The FTC has the authority to issue rules mandating disclosures under its existing rulemaking authority. The FTC has previously issued rules requiring information disclosures. See, e.g., Nat'l Petrol. Refiners Ass'n v. FTC, 482 F.2d 672, 673-74, 691 (D.C. Cir. 1973) (upholding the FTC's decision to require disclosure of gasoline octane ratings); Stephanie Schwab, *Disclosures For Bloggers And Brands*, SOCIAL MEDIA EXPLORER (Apr. 24, 2013), <http://www.socialmediaexplorer.com/social-media-marketing/disclosures-for-bloggers-and-brands/>, archived at <http://perma.cc/>

section discusses two categories of such reforms: those directed at technological intermediaries, and those directed at consumers.

1. Disclosures for Technological Intermediaries

The FTC should require large retailers to make their brick-and-mortar pricing and product information digitally available. Currently, retailers have an information monopoly on this data, preventing third-party technological applications from providing consumers with highly sophisticated shopping tools. With pricing and product data, technological intermediaries could aggregate and leverage market information to provide optimal purchasing recommendations to consumers. For instance, a consumer would be able to input information such as item(s) to be purchased, the maximum number of stores, and the means of transportation. The application would then present several shopping trip options that would each provide a list of which items to purchase at which stores, the total price including transportation costs, and the estimated amount of time spent.

A secondary information disclosure that would similarly help realize the potential of such third-party software applications would be to require retailers to share consumers' own purchase data with the consumers upon request.³³⁷ The consumer could then choose to share this data with third-party intermediaries. This is already implemented in the United Kingdom, and has led to the creation of software applications that help people lose weight and track their spending. If combined with store pricing disclosures, consumer-specific loyalty card information would enable shopping applications to offer even more advanced guidance, including more personalized shopping recommendations.

Unlike in consumer finance—where products are inherently complex even with the help of a third-party intermediary—in consumer goods such information could be rapidly integrated by existing third-party intermediaries and consumers. With goods, however, a greater portion of the complexity could be removed because the results of the intermediary's analysis would be delivered in a simple manner—the total cost and time of a shopping trip. Also, the Internet has become an important means of comparing prices and learning about goods, with two-thirds of smartphone owners planning to use their mobile devices in their shopping in 2013.³³⁸ Similarly, about

F73Y-7YJ9 (outlining the FTC's new rule requiring bloggers and online writers to disclose connections to brands or products endorsed).

³³⁷ For a similar proposal requiring disclosures in the credit card market, see BAR-GILL *supra* note 5, at 111.

³³⁸ Harris, *supra* note 65.

two-thirds of consumers are very interested in mobile shopping applications that save time and money.³³⁹ Numerous price comparison applications for goods are already in place, with one of them alone having been downloaded 27 million times.³⁴⁰

There are several potential downsides to mandated electronic price disclosure. One risk is that it could have anticompetitive effects, including being used by retailers for collusion.³⁴¹ If true, this would likely make the drawbacks of mandated disclosures outweigh the benefits. However, this is less of a concern in the retail goods context because retailers already regularly monitor competitors' price information, a process made more feasible by retailers' sophistication and scale.³⁴² Moreover, price collusion is regulated through antitrust mechanisms that are set up to monitor such illegal activities. Consequently, concerns about collusion should not prevent mandated price disclosures to third parties.

A potential drawback is that pricing disclosures might be less helpful to lower-income consumers. This cross-section of the population has lower usage rates for smartphones and information technologies and consequently might have a harder time directly adopting new technologies. Technological intermediaries thus risk increasing consumption inequality. At the same time, low-income consumers who adopt the technology would have the most to gain. Also, such applications could bring to markets the missing critical mass of sophisticated shoppers that Professors Schwartz and Wilde suggest would bring benefits to non-adopters of the technology.³⁴³

Finally, it would be important to weigh the costs to retailers of making their prices, items, and loyalty card data available digitally to third parties. It is likely that doing so would impose minimal costs. Large retailers already have this information in centrally accessible digital formats. Developing an interface would be a relatively small expenditure given retailers' immense

³³⁹ Phil Hendrix, *Survey: The Mobile Shopping Apps Consumers Value Most*, GIGAOM RES. (Oct. 31, 2013), <http://research.gigaom.com/report/survey-the-mobile-shopping-apps-consumers-value-most>, archived at <http://perma.cc/G345-ELCL>.

³⁴⁰ The application is called Red Laser. See Barr, *supra* note 61 (explaining how Red Laser has gained popularity by using consumers' context and location to improve shopping experiences).

³⁴¹ For a similar concern in the context of mandating margin disclosure, see Ian Ayres & F. Clayton Miller, "I'll Sell It to You at Cost:" *Legal Methods to Promote Retail Markup Disclosure*, 84 NW. U. L. REV. 1047, 1080 (1990) and Omri Ben-Shahar & Carl E. Schneider, *The Failure of Mandated Disclosure*, 159 U. PA. L. REV. 647, 738 (2011).

³⁴² One method for gathering weekly price information shared among major retailers is through Nielsen scanner data. See *About Us*, NIELSEN, <http://www.nielsen.com/us/en/about-us.html> (last visited Mar. 21, 2015), archived at <http://perma.cc/8AXQ-59XG> (describing a service that gathers and sells a wide variety of data about consumers).

³⁴³ See *supra* note 181 and accompanying text.

size. Indeed, retailers in select cities have made such information available for delivery services.³⁴⁴

With access to the right information, technological intermediaries are poised to significantly improve consumers' sophistication levels. A policy providing them with such information is attractive because of its political feasibility, minimal burden, and potential to correct significant market failures.

2. Disclosures to Consumers

a. Mandated Consumer Unit Pricing

Regulators should require large online and brick-and-mortar retailers to display unit pricing and should take steps to ensure effective labeling. Studies suggest that consumers use per-unit price information to purchase lower-priced goods.³⁴⁵ Yet only nine states currently have laws requiring mandatory per-unit pricing of some goods, and unit pricing is not required of online retailers.³⁴⁶

Even in states with mandatory unit pricing, competing items are often listed at different unit rates—for instance, pricing one tea product by quart and another per one hundred tea bags or providing price per dissimilarly sized paper towels.³⁴⁷ And batteries' unit price is calculated per battery, even though they have greatly varying life that is uncorrelated with price.³⁴⁸ Batteries of one brand can last up to six times longer than batteries of the same type from another brand—a factor that is completely unconnected to price.³⁴⁹ Investigations by consumer watchdogs have found that unit pricing calculations are often simply wrong.³⁵⁰ An issue with even a small percentage

³⁴⁴ Google has convinced retailers in several major cities to share this data so that the company can purchase goods from the stores and deliver them to consumers. But retailers have yet to release such data for direct consumer research purposes, and not all retailers are participating. Adams, *supra* note 71.

³⁴⁵ See, e.g., José Luis Méndez García de Paredes et al., *Unit Price Information on the Reference Price Formation*, 22 J. PRODUCT & BRAND MGMT. 413, 413-15 (2013) (explaining how availability of per-unit price information affects consumers' purchasing decisions and reference prices).

³⁴⁶ See *A Guide to Retail Pricing Laws and Regulations*, *supra* note 99. An additional ten states have voluntary guidelines for unit pricing. *Id.*

³⁴⁷ See Melanie Pinola, *How the Unit Pricing Labels in Stores Can Trick You into Spending More*, LIFEHACKER (Oct. 3, 2014, 8:00 AM), <http://lifehacker.com/how-the-unit-pricing-labels-in-stores-can-trick-you-int-1641793755>, archived at <http://perma.cc/9W7U-JRZK> (cataloging the ways in which unit pricing can mislead consumers, including basic math errors).

³⁴⁸ POUNDSTONE, *supra* note 58, at 179-80.

³⁴⁹ *Id.*

³⁵⁰ Pinola, *supra* note 347.

of unit labels leads to incorrect decisions or necessitates that consumers double-check all unit pricing. Either outcome defeats the labels' purpose.

Thus, for unit pricing to be effective, it should be standardized through industry guidelines and vigorously enforced by regulators. Doing so would significantly expand the presence and usefulness of unit pricing and would make consumers more effective decisionmakers.

b. *Including Tax in Shelf Price*

Another rule worth considering is requiring retailers to display products' full prices, including tax. Field studies suggest that consumers do not fully factor tax into their purchase decisions, even when they are generally aware of the sales tax rate that they will pay.³⁵¹ Including the tax in the shelf prices would thus reduce some level of consumer misperception and make the price slightly more salient, because, as a general principle, the higher the price the more salient it is.

Excluding tax may, at least on the margins, make it more likely that some price-sensitive consumers will make purchases that they cannot actually afford.³⁵² Full-price labeling may also influence choice among items due to different tax rates on different items in some states. Many states, such as New York, exempt most food from sales tax but tax less desirable categories of food, such as candy, soft drinks, and alcohol.³⁵³ This may have a perverse impact: if the consumer is not fully factoring in tax, the relative price of candy and soft drinks will appear more attractive relative to fruits and vegetables than it actually is.

At the same time, there are also several potential drawbacks of mandating the inclusion of taxes in shelf prices. First, there would be a one-time implementation cost of changing systems and prices to include the taxes. Second, a perceived increase in prices—even if due to more accurate representation—may deflate consumer spending. Further, there is also the possibility that tax coffers could be lowered as consumers cross state borders or switch to items that have lower taxes.

³⁵¹ See Chetty et al., *supra* note 140, at 1146 (studying how sales tax affects consumer purchasing decisions and finding that when sales tax is not included in product labels, nearly all consumers ignore it when calculating the total price of a basket of goods).

³⁵² Consumers generally purchase fewer of many items as price increases. See MANKIW, *supra* note 47, at 11 (“[B]uyers look at the price when determining how much to demand . . .”). This is especially true for discretionary items, such as soft drinks, junk food, and entertainment products.

³⁵³ *Listings of Taxable and Exempt Foods and Beverages Sold by Food Stores and Similar Establishments*, TAX BULL. (N.Y. State Dep't Taxation & Fin., Taxpayer Guidance Div., Albany, N.Y.), Apr. 13, 2011, at 1.

c. *Limits on Disclosures to Consumers*

Mandated information disclosures directly to consumers do have significant limitations. Omri Ben-Shahar and Carl Schneider have most prominently highlighted the dismal track record, arguing that among other drawbacks consumers are consistently unable to process mandated disclosures as intended.³⁵⁴ While debiasing can work in some instances, success is context-specific.³⁵⁵ In the consumer goods context, debiasing is likely to have only partial success due to the many different practices and goods involved, rapid sales practice innovation aimed at profiting from biases, and because people tend to believe they are not susceptible to being fooled.³⁵⁶ Also, given the large number of consumer goods purchases made, disclosures risk complicating the decisionmaking process further by adding more information.³⁵⁷ Finally, they could give policymakers the illusion of having solved a problem that actually requires more serious prohibitions, or at least create this false impression for constituents.³⁵⁸

Despite these limitations, the specific types of disclosures proposed above match those believed to be most effective by Ben-Shahar, Schneider, and others: disclosures with simple and minimal information, such as a single number, like in-unit pricing.³⁵⁹ And, in the case of technological intermediaries and tax inclusion in the price, the mandate would have a simplifying effect on decisionmaking. Thus, despite general limitations, the disclosures described above have great potential to enhance competitive pricing in consumer goods markets by empowering better decisionmaking.

³⁵⁴ See generally Ben-Shahar & Schneider, *supra* note 341 (exploring the failure of mandated disclosure as a technique to protect personal autonomy); see also Jolls et al., *supra* note 12, at 1542 (“[H]aving information per se does not automatically imply optimal behavior.”).

³⁵⁵ See generally Christine Jolls & Cass R. Sunstein, *Debiasing Through Law*, 35 J. LEGAL STUD. 199 (2006) (discussing methods for debiasing in various contexts).

³⁵⁶ See POUNDSTONE, *supra* note 58, at 13-14 (mentioning warnings to people not to let the random numbers influence their answers did not prevent anchoring effect); Jolls et al., *supra* note 12, at 1527 (“Unfortunately, such debiasing techniques appear either to have no effect on decisions or to reduce hindsight bias by only a limited degree, leaving a significant gap between ex post and ex ante decisionmaking.”); see also Bubb & Pildes, *supra* note 35, at 1649-53 (arguing failure of “sophistication by disclosure” approach due to overconfidence and ability of businesses to exploit even a smaller remaining bias, and also mentioning minimal impact from disclosure from field studies).

³⁵⁷ See Ben-Shahar & Schneider, *supra* note 341, at 721 (noting an inverse relationship between the amount of data available and a person’s ability to use it).

³⁵⁸ See *id.* at 749 (concluding that prohibitions “are sometimes inevitable and cannot be side-stepped by opting for seemingly easier solutions in the disclosure paradigm”).

³⁵⁹ See *id.* at 743 (“[B]rief, simple, easy disclosures are at least preferable.”).

CONCLUSION

Existing evidence suggests firms selling consumer goods, like those selling financial products, are systematically exploiting consumer irrationality and information asymmetries. As a result, families pay higher prices for goods. The empirical literature indicates this may amount to hundreds of dollars annually even for a family at the poverty line. The scale of this harm to consumers is made possible in large part by the rise of scientifically and technologically advanced large firms that have transformed their stores into laboratories of behavioral experimentation.

The main actors in previous generations of consumer protection—enforcement lawyers, deliberative legislatures, and local agencies—still have important roles to play but are inadequate for governing the modern retail sector. Nor has the FTC fully exercised its statutory authority to evolve its consumer protection powers with markets. A central obstacle to the exercise of this authority has been a lack of information about the underlying problem. Retailers alone hold the keys to the most reliable field data, and the FTC has chosen not to examine that data, despite being able to do so.

It would be wasteful and impractical for regulators to attempt to create their own large-scale field experiments and armies of data scientists. Rather, to regulate effectively they will need to leverage firms' sophistication. I propose they do so by creating a light-touch supervision program to regularly collect firms' market insights. Once they have a better sense of systemic problems, regulators will be better situated to think more holistically about solutions. One potentially high-impact policy move would be to require large retailers to make their pricing data digitally available to third-party private sector software applications.

The consumer goods industry may be unusually well positioned for correcting market failures through holistic information disclosures aimed at consumers and third parties. But supervision more broadly enables regulators to understand problems that are impenetrable if solely looking at firms' actions from the outside. Other sectors driven by sophisticated institutions, such as telecommunications and other services, might similarly benefit from supervision programs. The gains to society in terms of efficiency, distribution of wealth, and consumer welfare could be substantial.