

The Consumer Financial Protection Bureau and the Quest for Consumer Comprehension

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To ensure that consumers understand financial products' "costs, benefits, and risks," the Consumer Financial Protection Bureau has been redesigning mandated disclosures, primarily through iterative lab testing. But no matter how well these disclosures perform in experiments, firms will run circles around the disclosures when studies end and marketing begins. To meet the challenge of the dynamic twenty-first-century consumer financial marketplace, the bureau should require firms to demonstrate that a good proportion of their customers understand key pertinent facts about the financial products they buy. Comprehension rules would induce firms to inform consumers and simplify products, tasks that firms are better equipped than the bureau to perform.

Keywords: consumer finance, performance standards, disclosures, deception, Consumer Financial Protection Bureau

Title X of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 tasked the Consumer Financial Protection Bureau (CFPB) with ensuring that "consumers . . . understand the costs, benefits, and risks associated with" financial products and services (section 1032, 12 U.S.C. 5532). Despite this ambitious mandate, the bureau's pursuit of consumer comprehension has thus far focused on the same twentieth-century tool that has already proved ineffective at regulating consumer finance: required disclosures. No matter how well the bureau's "Know Before You Owe" disclosures perform in the lab, or even in field trials, firms will run circles around these disclosures when the experiments end, misleading consumers and defying consumers' expectations.

Even without any intent to deceive, firms not only will but *must* leverage consumer confusion to compete with other firms that deceive customers. Although firms are not always responsible for their customers' confusion, firms today take advantage of this confusion to sell products. As elucidated in a recent work by nobel laureates George Akerlof and Robert Shiller (2015), without effective regulation, markets in equilibrium will produce manipulation and deception.

To meet its mandate to ensure that consumers understand the financial transactions in which they engage, the CFPB must summon the innovative data-driven twenty-first-century spirit that otherwise characterizes the bureau's approach to consumer protection. Specifically, the bureau must induce firms themselves to promote consumer comprehension, whether by helping their customers understand financial transactions, by conforming transactions to their customers' understanding, or both. To generate this change in firm behavior, the bureau should require firms to periodically demonstrate, through third-party testing of random samples of their customers ("customer

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confusion audits"), that a good proportion of their customers know, at the time the customers can make use of this knowledge, the key pertinent costs, benefits, and risks of the financial products they have been sold.

For example, the bureau should require firms to prove that their customers are aware of all costs at the moment when the customers are deciding whether to take an action that will trigger those costs, whether that action be taking out a mortgage, overdrawing a checking account, or calling customer service to inquire about a prepaid debit card balance. Where consumers are confused about benefits, such as the benefit of signing up for a "credit repair" service, enrolling in a credit card rewards program, or paying a debt that is beyond limitations, firms should show that their customers understand restrictions on benefits the firm is offering.

In promulgating comprehension rules, the bureau could set the proportion of a firm's customers that must pass a customer confusion audit in a variety of ways. For example, the proportion might be set with reference to existing false advertising law, on the basis of median industry performance, or at whatever proportion of consumers understand mandated disclosures in the bureau's lab-based consumer testing.

Demonstrating sufficient customer comprehension could be a precondition firms must meet before enforcing a term or charging a fee, or firms could be sanctioned (or rewarded) for low (or high) demonstrated comprehension levels. In effect, rather than prescriptively regulating the marketing and sales process with mandated disclosures or pursuing firms on an ad hoc ex post basis for unfair, deceptive, and abusive marketing and sales practices, the bureau would monitor firms and incentivize them to minimize customer confusion as the marketing and sales process unfolds over time.

Comprehension rules are a form of performance-based regulation, in that they regulate outputs not inputs. Performancebased regulation is widely used in other fields and its use has been expanding. Environmental and building code regulations have long employed it. Rather than the law dictating the scrubber a factory smokestack must use or the material a builder must use, the law sets emissions limits or imposes strength and durability requirements, and the factory owner or builder can decide how to meet those limits or requirements. In the consumer arena, the law now requires firms affirmatively to demonstrate compliance with safety standards for food and children's products through routine performance testing (Title I, sections 103–5 of the FDA Food Safety Modernization Act, 21 U.S.C. 350j, 350g, and 2201; Title I, section 102 of the Consumer Product Safety Improvement Act of 2008, 15 U.S.C. 2063).

Specifically with respect to consumer comprehension, the Food and Drug Administration requires pharmaceutical firms to show that actual customers understand the usage and dosing directions for a medication during a trial of over-the-counter sales before the firm can broadly sell the drug directly to consumers (Leonard-Segal et al. 2009). In the European Union, food sellers making front-of-package nutrition claims will soon be required to affirmatively demonstrate "scientifically valid evidence of [consumer] understanding [of the claims]" (Article 31, Regulation [EU] 1169/2011 on the Provision of Food Information to Consumers [OIL 304/18]). Customer confusion audits are also used in the United States by regulators to establish deception claims and by competitors to prove false advertising claims, although testing is currently ex post and ad hoc.

Making firms responsible for effectively informing their own customers would capitalize on firms' greater knowledge of and access to their customers and greater ability to experiment and innovate. Comprehension rules would incentivize firms to educate rather than obfuscate and to develop product designs that align with rather than defy consumer expectations.

The CFPB already has more than an inkling that mandated disclosure is a poor tool for regulating financial products. A bureau policy statement acknowledges that the effectiveness of such disclosures is only an "assumption," albeit one on which much of consumer protection law is based (Consumer Financial Protection Bureau 2013a, 64392). The bureau's inaugural banner project was "Know Before You Owe," but recently it has turned to approaches that step beyond disclosure and even tiptoe toward comprehension rules. The bureau has moved testing of disclosures from the lab to the field. It has been trying to stimulate firms to develop creative disclosure methods. It has performed its own testing of consumer understanding of arbitration clauses and class action waivers. These steps implicitly acknowledge that (a) disclosures that do well in experimental conditions may not work in real-world conditions, (b) firms are better situated than regulators to innovate to achieve consumer comprehension, and (c) valid, reliable consumer confusion audits are possible. What is needed now is for the bureau to pull these insights together and see that they collectively suggest applying comprehension rules to any number of consumer financial transactions.

Of course, Congress may have been mistaken in thinking that understanding would protect consumers. Even knowledgeable consumers make bad decisions, whether as a result of inadequate willpower or decisionmaking biases. On the other hand, if firms were to make it easier for consumers to understand financial products, consumers likely would have more willpower available and be less likely to succumb to decision biases.

Cognitive capacity and willpower function as a single "cognitive-willpower bandwidth" resource in the brain, such that if cognition is taxed, so, too, is willpower (Baumeister et al. 2008). Similarly, cognitive load increases decision-making biases, including overconfidence (Kruger 1999), overoptimism (Tanner and Carlson 2009), and the effects of some other biases (Epley and Gilovich 2006; Drolet, Luce, and Simonson 2009). If consumers could more easily understand financial transactions, they would likely spend fewer cognitive resources on financial decisions, freeing up cognitive-willpower bandwidth to use for exercising self-control and reducing overconfidence, overoptimism, and other biases that might otherwise lead to improvident choices.

In this article I explain the feebleness of mandated disclosures, the inherent flaws in the alternatives the CFPB has been pursuing, the advantages firms have over regulators in ensuring their customers' comprehension, and the CFPB's legal authority to require customer confusion audits and enforce comprehension rules. I then elaborate on a few examples of how this form of regulation might operate in practice, including these four key elements:

- Measuring the quality of a valued outcome (comprehension) rather than of an input that is often pointless (mandated or preapproved disclosure);
- Assessing actual customer comprehension in the field as conditions change over time, rather than imagining what the "reasonable consumer" would understand or testing consumers in the lab or in single-shot field experiments¹;
- 3. Requiring firms to affirmatively and routinely demonstrate customer understanding, rather than relying on the bureau's limited resources to examine firm performance ad hoc when problems arise²; and
- 4. Giving firms the flexibility and responsibility to effectively inform their customers about key relevant costs, benefits and risks through whatever means the firms see fit, whether that be education or product simplification, rather than asking regulators to dictate how disclosures and products should be designed.

I conclude with a discussion of some further benefits of establishing comprehension rules and implementing customer confusion audits. In particular, the process might lead to the discovery of many situations in which the

1. This proposal thus parts from Barr, Mullainathan, and Shafir (2008), which suggests using an "objective reasonableness test" accompanied by "safe harbors for reasonable disclosure," preapproved "model disclosure forms," and "ino action' letters" issued to firms ex ante (7–8).

2. This proposal again parts from Barr, Mullainathan, and Shafir (2008), which suggests ad hoc enforcement by making unreasonableness a defense to payment in foreclosure or bankruptcy proceedings (8).

benefits of consumer understanding are low and the costs are high. Certainly comprehension is often neither necessary nor sufficient for good decisions, and it might well be more cost effective for society to engage in substantive regulation of product design or performance-based regulation of consumer welfare outcomes resulting from financial transactions.³ Fundamentally, we cannot know the real costs and benefits of consumer comprehension until we seriously pursue it, *and Dodd-Frank requires the CFPB to do so*.

THE FLAWS IN THE BUREAU'S CURRENT APPROACH TO CONSUMER COMPREHENSION

The CFPB today is testing disclosures in the lab and in the field and is trying to stimulate firms to generate new disclosures themselves. Each of these implicitly recognizes some of the elements of a regulatory policy that seriously pursues the goal of consumer comprehension. But, tethered to the straitjacket of "disclosure," none of these can reach that goal.

DOUBLING DOWN IN THE LAB: DISCLOSURE 2.0

The fact that consumers are unable to use mandated disclosures well has prompted widespread concern. The CFPB has responded by doubling down on disclosure. Disclosures were at one time formatted according to regulators' notions about what consumers would notice, read, and understand. But the last fifteen years has seen the emergence of Disclosure 2.0: disclosures developed through multiyear lab testing of iteratively redesigned disclosures.

The bureau's redesign of mortgage disclosures epitomizes the approach. Consumers are brought into the lab and asked to read through a proposed disclosure and think aloud, explaining what they understand the information to mean and how they might hypothetically use the information. In response, the regulator makes changes to the disclosure and tests the new design. Testing and modification are repeated until the regulator can obtain no further improvement in subject comprehension of some product attributes without decreasing comprehension of more important attributes. The regulator then shows the new and old disclosure forms to a large swath of consumers, and determines whether consumers understand more about the transaction when looking at the new disclosure than at the old one. The bureau has embarked on similar disclosure redesign processes for other products, such as prepaid debit cards and student loans.

Testing actual consumers is an improvement on regulators sitting around a table deciding what disclosure format seems best to them. But there are serious limits to comprehension and effective use of disclosure that Disclosure 2.0 does not surmount: bounds that impair understanding in the lab; even more bounds that affect decisions outside the lab; and the exploitation of these bounds by firms when disclosures are deployed in the field.

Even without all of the real world's challenges, comprehension and decision quality in the lab are limited. In none of the government's Disclosure 2.0 efforts have anywhere near 100 percent of the consumers tested understood or accurately used 100 percent of the information disclosed.⁴ Comprehension is inherently constrained where literacy and numeracy are below the level needed to use the disclosure. Further, many decisions require basic financial knowledge that consumers lack.

3. In related work, I develop a proposal for performance-based regulation of consumer transactions based on consumer welfare outcomes (Willis 2015). The CFPB has proposed regulations that also incorporate performance-based rules. For certain small dollar loans, a lender that does not follow the bureau's underwriting rules can instead demonstrate annually that no more than five percent of its loan portfolio defaulted (or face a penalty of having to refund to its customers all origination fees it collected from them over the past year) (Consumer Financial Protection Bureau 2016).

4. For example, on average, subjects in lab conditions could provide correct answers to only about three-quarters of questions asked about a hypothetical mortgage using the CFPB's new disclosure (Kleimann Communication Group 2013, 41). In mall-intercept testing, fewer than half of subjects were able to use regulators' new financial information privacy disclosures as regulators intended (Garrison et al. 2012).

For example, effective annual percentage rate for a credit card account, a figure that retrospectively incorporates interest and fees into a single number, is a concept that "defies plain language efforts" because consumers lack the background needed to make sense of the concept (Hogarth and Merry 2011, 11).

A related problem is that consumer rationality is bounded. Consumers are capable of taking only a few attributes into account when making a decision (Agnew and Szykman 2005). If the transaction has more moving parts than consumers can consider at one time, it will make no difference that all those parts are disclosed.

Less well recognized in the literature is that consumers' priors can prevent consumers from understanding disclosures. When consumers' background mental models or beliefs conflict with the information disclosed, mandated disclosure may not be able to shake these beliefs. One example is double-cycle billing in credit card contracts, a billing method whereby when a borrower pays late, the creditor in the next billing cycle retrospectively charges interest for the normally interest-free grace period between the time of purchase and the due date of the late payment. The Federal Reserve Board tried mightily to explain this to consumers using various text and disclosure formats. These efforts failed (Bernanke 2009). In the abstract, the concept is probably not beyond the ken of the average consumer. But in reality, the idea that a card issuer could retrospectively charge interest when none had been charged previously is too antithetical to consumers' mental models of how credit cards work to be believed, even in the lab.

The real world is a far more demanding decision environment. In the lab, consumers face at most a few products, presented clearly, with nothing to do but read the disclosures. In the field, consumers encounter a plethora of options positioned variously in a sea of distractions. In the lab, even adding a single distraction—casual conversation—can markedly reduce comprehension of a mortgage disclosure (Stark, Choplin, and LeBoeuff 2013). In the real world, people have many more distractions and habitually spend as little of their limited resources as possible to make many decisions. Even for significant consumer transactions such as obtaining a home mortgage, many consumers spend less than a minute reading disclosures (Sovern 2010).

Moreover, consumers have less cognitivewillpower bandwidth in the real world than in the lab. Stress, including the stress created by the decision itself, depletes cognitive resources (Kahn and Baron 1995, 325–26). Consumers having difficulty meeting financial obligations are particularly likely to have constrained cognitive-willpower bandwidth and thus to engage in "tunneled thinking"—considering only the most immediate costs, risks, and benefits (Mullainathan and Shafir 2013).

Finally, consumers in the real world use their mental resources selectively. They attend to the pieces of information they want to hear and ignore those they find unpleasant (Loewenstein, Sunstein, and Golman 2014). They then process this limited information in a manner that supports the decision they want to make (Kunda 1990). Outside the lab they may apply more effort, but effort cannot overcome limits on knowledge and rationality.

MOVING TO THE FIELD: DISCLOSURE 2.5

Implicitly acknowledging the limited external validity of lab testing, the CFPB has launched Disclosure 2.5: designing disclosures using field experiments. The first of these is a rollout by the Pentagon Federal Credit Union (PenFed) of a new, bureau-designed credit card disclosure (Consumber Financial Protection Bureau, n.d.). Customers are randomized into one group that receives the new disclosure and another that receives the disclosure PenFed usually gives its customers. The bureau is testing whether customers who receive the new disclosure are more accurate in their answers to questions about the card's terms, such as the interest rate on purchases and the size of the fee charged for late payments. This improves on the lab-based approach because the experiment is run on consumers who have selfselected the product, in their actual decision environments, where they are distracted by life and are not directed to read the disclosure.

It remains to be seen whether Disclosure 2.5's experimental results will indicate that the

new disclosure has improved these PenFed customers' understanding of the products they have bought. However, no matter what the experiment shows, it cannot capture changes that take place after the experiment. Some of these changes happen organically, as product offerings and market structure evolve. Consider, for example, the old Truth-in-Lending Act and Real Estate Settlement Procedures Act forms that were used for home mortgages. These may have been useful to consumers when mortgages were structured in only a few ways (thirty-year or fifteen-year fixed-rate mortgages) and were homogeneously priced (on any given day, each creditor lent at a single price for each type of mortgage). But these disclosures failed many consumers when the market changed to one of heterogeneously structured loans, carrying individualized "risk-based" (or vulnerability-based) prices that might not be known until the consumer was well into the application process (Willis 2006).

More problematic is that Disclosure 2.5 cannot account for the effects of firm responses to the new disclosures. The firm that cooperates with the bureau to facilitate the experiment will not work to undermine the disclosure during the study (and may even be an atypical firm, as PenFed likely is) but may well do so later, when the experiment has ended.

Indeed, firms have a bevy of means at their disposal to undermine mandated disclosures' effectiveness.

First, firms can defuse disclosures by altering the design of the transaction. If some price components must be disclosed prominently, firms stuff more of the cost of the product into less visible components (Bar-Gill and Bubb 2012). Firms build complex products not merely to satisfy diverse consumer preferences, but also to confuse consumers and raise the cost of comprehension high enough that consumers will not bother to spend the time and effort that would be required to eliminate confusion. Firms shape purchasing processes to ensure that the consumer has sunk significant costs into the effort, and has perhaps switched from a decision making to an implementation mindset, before receiving the disclosure. Firms can also use social pressure to discourage consumers from reading disclosures, as, for example, when closing agents discourage borrowers from reading mortgage documents.

Second, firms wield advertising and sales talk to frame consumers' thought processes long before consumers see a disclosure. Consumers may think they are unaffected, but advertising works (Wood and Poltrack 2015; Lewis and Reiley 2014). Individualized sales pitches can be even more powerful. A former loan broker explains how idle chitchat distracts consumers, creates positive consumer feelings, and engenders trust (Brunner 2006):

You tell the loan salesperson you want the loan to upgrade a room. He or she will ask you why, and you innocently will say that you want your daughter to have a nice new room. "Oh really, what color?" asks the loan arranger. Purple, you say.

Rest assured, as the process moves along, the salesperson . . . will continuously remind you that your goal is to "paint a nice new purple room." The salesman seems to . . . truly care that the room . . . ensure[s] your daughter's complete happiness.

It's easy to forget that your goal is not a purple room, it's a loan at the best price and terms possible.

Trust in a salesperson or in a brand may lead a consumer to misinterpret a disclosure in a way that favors the outcome suggested by the salesperson or advertising. Alternatively, trust may lead a consumer to select a product without bothering to read the disclosure carefully, or at all. For example, merely adding a brand name to over-the-counter drug packaging in the lab led some subjects to read the label more quickly and to fail to notice or understand a number of contraindications (Catlin, Pechmann, and Brass 2011).

Third, firms physically divert attention from disclosures. An example comes from AT&T's addition of a mandatory arbitration clause to its contract with its customers; it designed the envelope, cover letter, and amended contract after extensive "antimarketing" market testing to ensure that most consumers would *not* open the envelope, or if they did open it, would not read beyond the cover letter (*Ting v. AT&T*, 319

F.3d 1126, 9th Cir. 2003). Another example: in an online survey, a reminder about who could see subjects' answers delivered just before subjects answered some very personal questions led subjects to behave in more privacyprotective ways. But adding just a fifteen-second delay between the privacy disclosure and the loading of the webpage where the subjects answered the questions eliminated the privacyprotective effect of the disclosure (Adjerid et al. 2013).

Fourth, firms take proactive steps to ferret out easy marks, or even to place consumers in situations where disclosure is likely to be ineffective. Locating vulnerable customers is becoming increasingly sophisticated now that consumer activity online and on cell phones can be tracked. Late-twentieth-century mortgage sellers fished for disclosure-insensitive prospects by mailing "live checks" that when cashed would result in loans at exorbitant interest rates; homeowners who cashed the checks were good prospects for a high-priced mortgage. Firms in the early twenty-first century buy lists of consumers who engage in impulse shopping or are financially stressed (Office of Oversight and Investigations Majority Staff, U.S. Senate Committee on Commerce, Science, and Transportation 2013). Marketing lists include "Rolling the Dice" and "Oldies but Goodies" segments, so as to allow marketers to pinpoint consumers who are "gullible [and] want to believe that their luck can change" (Duhigg 2007).

Firms can even engage in real-time marketing through Internet and mobile devices to reach consumers at vulnerable moments (Calo 2014). As noted earlier, cognitive load can decrease willpower and increase overconfidence, overoptimism, and other decisionmaking biases. In addition, mood (Keller, Lipkus, and Rimer 2002) and stress levels (Mather and Lighthall 2012) can affect risk perception and responses. Savvy firms might use inferred cognitive load, mood, or stress levels to sell consumers products at the very moment when mandated disclosures will be misinterpreted or ignored. Advertisers already track consumers as they play online games and differentially target advertisements to consumers experiencing success or defeat, to tailor the advertising

pitch to exploit the consumer's likely mood (Carney 2013). Firms can even influence consumer mood, cognitive load, and risk-taking propensity directly (Kramer, Guillory, and Hancock 2014; Shapiro and MacInnis 2002).

Ultimately, the bureau's single-shot field experiments occur under conditions that are not realistic in crucial respects. Field testing is the right approach, but the testing should measure the effects of firms' actual activities over time, not in a single experiment.

BRINGING FIRMS INTO THE DISCLOSURE DESIGN PROCESS: PROJECT CATALYST

The CFPB recognizes that firms have information and expertise that could allow them to design disclosures better than regulators can do. Dodd-Frank authorizes the bureau to give firms the opportunity to conduct trials of disclosures designed "to improve upon any model form" (section 1032, 12 U.S.C. 5532). The bureau's program—called Project Catalyst—has used this authority to encourage firms to develop their own disclosures (Consumer Financial Protection Bureau 2013a, 64389), explaining:

There may be significant opportunities to enhance consumer protection by facilitating innovation in financial products and services and enabling companies to research informative, cost-effective disclosures.... Inmarket testing, involving companies and consumers in real world situations, may offer particularly valuable information with which to improve disclosure rules and model forms.

Unfortunately, Project Catalyst takes an approach to consumer comprehension that is at odds with modern business-to-consumer communication techniques in at least three repects.

First, the approach requires languagebased, minimally interactive disclosures; under the policy, a trial disclosure's content must "be in plain language, reflect a clear format and design, and be succinct" (Consumer Financial Protection Bureau 2013a, 64393n12). But modern communication techniques are not limited to words, and the best communication techniques are often interactive. A picture is worth a thousand words—and might be worth 2 percent interest per month. In one experiment, adding a photo of a pretty woman to an advertisement for a consumer loan increased men's take-up of the loan as much as lowering the monthly interest rate by 2 percent (Bertrand et al. 2010). A video can often convey far more information, more effectively, than a document or script. Turning the process into a game, called "gamification," might be the best way to help some consumers understand a product. Imagine consumers winning points for discovering a financial product's "hidden" price components. The most effective communications may well not use plain language, employ a clear format and design, or be succinct.⁵

Second, the policy assumes a relatively static approach to communication. It requires firms to submit "a copy of the trial disclosures to be tested . . . and a clear statement of how they would be provided to consumers" (Consumer Financial Protection Bureau 2013a, 64393n14). Although the policy purports to permit firms to engage in the iterative testing and redesign process used by marketers, every tested disclosure must be specifically authorized by the bureau.

Such preapproval is at odds with modern marketing, which employs a quickly evolving five-step trial-and-error approach (Akerlof and Shiller 2015, 53–54):

- 1. Release marketing that is diverse in content, format, channel, audience, etc.
- 2. Measure results.
- 3. Tweak the marketing for each audience segment in response to the data.
- 4. Measure results.
- 5. Repeat.

The velocity of this process is only increasing with the ever-increasing capacity of data analytics. The bureau is unlikely to be able to preapprove disclosures at anything like this pace.

Third, effective modern communication techniques are often emotion-based and targeted, segmented by detailed personal characteristics, sometimes right down to the individual consumer and in real time to leverage mood, as described earlier. CFPB approval of such communications is problematic.

Public sentiment is likely to be hostile to government approval of segmentation and mood manipulation. When Illinois required some consumers in targeted zip codes hard-hit by foreclosure to receive pre-mortgage counseling, the state was accused of racism and quickly rescinded the rule. Mood manipulation by the government would almost certainly provoke outrage; recall the criticism Facebook received for intentionally manipulating user emotions. In addition, the bureau has committed to making information about each firm's disclosure testing public. Firms are unlikely to want to divulge details about how they segment consumers and manipulate mood. Like sausagemakers, marketers do not want the public to know how their product is made. It is therefore unsurprising that few firms have yet taken up Project Catalyst's invitation to engage in a trial disclosure program, and it is likely that none have put their marketing departments on the case.

Project Catalyst is on the right track in its assumption that firms are better at effectively communicating with consumers than regulators. But bureau preapproval of the communication will undermine that effectiveness.

COMPREHENSION TESTING BY THE BUREAU TO INFORM DISCLOSURE AND PRODUCT DESIGN REGULATION

The CFPB also recognizes the feasibility and utility of testing consumers to determine what they do and do not understand about financial products. Using third-party experts on consumer survey and testing techniques, the bureau has begun assessing consumer comprehension in a number of controlled trials and field experiments (Consumer Financial Protection Bureau 2014) and surveying consumers about their understanding, for example, of their legal rights (Consumer Financial Protection Bureau 2015a, 49). A completed bureaucommissioned survey of credit card account holders has revealed that consumers generally

5. Even if the bureau were to eliminate such language requirements, it lacks the expertise to assess and preapprove photos, videos, and highly interactive materials such as games. do not know their dispute resolution rights and that most consumers whose card agreements prohibit suing in court and participating in class actions wrongly believe that they can do both (Consumer Financial Protection Bureau 2015b, 11).

The testing the bureau is doing is the right idea. Regulating the font size and color of arbitration clauses in credit card contracts is useless. Requiring certain words to appear in debt collectors' letters to consumers is a very long way from achieving consumer comprehension of their debt collection rights. Determining whether a firm "meaningfully conveyed the information required for a typical consumer to make a reasonable judgment" (Barr, Mullainathan, and Shafir 2008, 7) is not possible without data about what actual consumers know at the time they are making those judgments. The CFPB experience with commissioning experts to perform consumer testing can inform the bureau's oversight of third-party auditors that will perform the customer confusion audits necessary for firms to comply with a comprehension rule.

The experience can also inform the bureau's cost-benefit calculations in selecting the right policy response to consumer confusion. When the testing undertaken by the Federal Reserve Board, discussed earlier, demonstrated that consumers did not understand double-cycle billing terms in credit card contracts, the board banned issuers from using this billing method. This is the right response where the financial product term or feature provides little benefit to consumers, but it is possible that some terms will be beneficial for one group of consumers and misunderstood and harmful for another group. Comprehension rules would preserve greater space for welfareenhancing innovation by firms, but would be more costly to enforce than a ban. The bureau's experience with testing consumers could help it estimate how much more costly, and thus to choose the right policy response.

ADVANTAGES FIRMS HAVE IN ATTAINING COMPREHENSION

Comprehension rules would align firms' goals with the CFPB's mandate to ensure consumer

understanding of financial product costs, benefits, and risks. Such rules would bring to bear on the regulatory problem the firm's greater knowledge of its own processes, greater facility with experimentation, and greater ability to segment consumers and to adapt to changes in the environment and in technology. Firms know a lot about their customers, as they already collect this information for marketing and product development purposes. Firms have access to their customers through many "touch points"-marketing, sales talk, and product packaging and presentation. Firms are not constrained by political concerns that prevent the bureau from tailoring disclosures to consumer segments and leveraging consumer emotions. The bureau may even be legally prohibited from mandating particularly effective disclosures. Some courts have struck down regulations requiring firms to place on product packaging graphics intended to evoke an emotional response so as to ensure consumer retention of disclosed information (R. J. Reynolds Tobacco Co. v. FDA, 696 F.3d 1205, 1216, D.C. Cir. 2012). In contrast, evoking emotional responses and ensuring that consumers retain information are the bread and butter of marketing.

The very capacities that modern firms use to market products and defeat mandated disclosures enable them to attain better consumer comprehension more quickly and at a lower cost than regulators. The bureau can try to educate consumers, but nothing beats professional marketers when it comes to sending consumers a message. The bureau spent three years developing its "Know Before You Owe" mortgage disclosures. Without the constraints of notice, comment, and Office of Management and Budget approval, firms can engage in the trial and error market testing process described above and obtain results within days or weeks, adjust their approach accordingly for the next round, and do it again a few days or weeks later.

The bureau has recognized: "In-market testing of consumer behavior and reactions to new products or new ways of delivering services is a constant of modern life. Companies routinely carry out such tests using their customer base" (Consumer Financial Protection Bureau 2013a, 64391). Through this process, marketers have discovered that "even minute details such as ink color and envelope size" matter (Lewis and Reiley 2014, 237n3). Firms could use the same dynamic consumer testing approach to determine how to effectively inform their customers about key relevant costs, benefits, and risks of the financial products firms sell their customers. Firms can further leverage the approach to discover how to adapt their educational methods over time as technology, social practices, and cultural understanding change.

In addition, firms can creatively manage the comprehension problem by increasing education or eliminating complexity and counterintuitive features, and by making tradeoffs between these approaches over time. For example, if a customer confusion audit would demonstrate that the customers of a prepaid debit card issuer believe they will not be charged a fee to inquire about their account balances, the issuer can select between effectively informing its customers about this fee or changing its card pricing structure to eliminate the fee. Firms are in a better position than regulators to decide when it is worth the cost of educating consumers about complex or unintuitive features and when simplifying products is more cost-effective. Firms already know more about consumer valuation of product attributes than regulators and can learn more about these valuations at lower cost.

The bureau would need to remain mindful of firm agility at circumventing disclosure, and guard against firms' manipulation of customer confusion audit results. One can imagine poorly constructed tests that might allow a firm to teach its customers to answer the questions correctly without teaching them about the underlying substance of the transaction. Early responses to environmental emissions performance standards provide a cautionary tale. Firms built higher smokestacks so that the emissions monitors at ground level would produce lower pollution readings, allowing the firms to pass the tests without reducing their emissions. Regulators responded by changing testing methods to take both ground-level emissions readings and smokestack height into account (U.S. Government Accountability Office 2011).

Consumer testing in the context of false advertising claims presents the same issue. As per the Federal Judicial Center's Manual on Scientific Evidence, courts demand the use of generally accepted practices in the consumer studies field, such as proper sampling techniques; clear, precise, nonleading questions; rotating the order of questions and answers; avoiding nonresponse bias; and robust statistical analysis (Diamond 2011). The bureau would need to certify and oversee thirdparty auditors to ensure use of these generally accepted practices. Again, the bureau's experiences with its Disclosure 2.0, Disclosure 2.5, and Project Catalyst trial disclosure programs could inform the oversight function it would need to perform to maintain the validity of customer confusion audits under a comprehension rule.

But if firms teach their customers to pass a test that accurately gauges comprehension, this teaching is the intended result of comprehension rules. For example, even a firm teaching its customers not only that their contract contains an arbitration clause but also that arbitration is better for the customer than litigation, is not problematic.6 If arbitration is better, the customer should choose it, and if it is not better yet the customer has been fooled into thinking it is, the right public policy response may be to ban these clauses. Without comprehension rules, arbitration clauses can be slipped silently into a contract with an unwitting consumer. The firm avoids market competition over dispute resolution terms in consumer contracts and avoids public engagement with the question of whether the clause should be permitted.

Comprehension rules would place an evaluation of the product features currently controlled entirely and silently by firms squarely into public discussion, facilitating market competition and democratic control.

6. This puts aside the potential second-order effect whereby arbitration clauses may decrease firm liability and thus undermine firm incentives not to engage in unfair, deceptive, or abusive practices.

AUTHORITY FOR IMPOSING COMPREHENSION RULES

The Dodd-Frank Act plainly gives the CFPB authority to establish comprehension rules and to require firms selling consumer financial products to obtain customer confusion audits. The bureau's very statutory purpose is to ensure that the fast-moving financial marketplace encountered by consumers is "fair, transparent, and competitive" (section 1021, 12 U.S.C. 5511). As previously noted, where firms understand products and consumers do not, poorly regulated market forces dictate that firms will take unfair advantage of consumers. Savvy consumers may benefit, but the less savvy suffer. Markets are not transparent to consumers unless consumers understand their choices within them. Substantive competition over transaction terms depends on consumers' understanding transactions well enough to drive prices down and benefits up.

More directly, section 1032 of Dodd-Frank sweepingly supports comprehension rules. Under this section, the bureau has authority to promulgate and enforce "rules to ensure that the features of any consumer financial product or service, both initially and over the term of the product or service, are fully, accurately, and effectively disclosed to consumers in a manner that permits consumers to understand the costs, benefits, and risks associated with the product or service, in light of the facts and circumstances." The statute directs that "in prescribing rules under [section 1032], the Bureau shall consider available evidence about consumer awareness, understanding of, and responses to disclosures or communications about the risks, costs, and benefits of consumer financial products" (section 1032, 12 U.S.C. 5532).

The evidence discussed previously shows both that many consumers have little awareness or understanding of mandated disclosures and that firms can and do effectively communicate with consumers through marketing. This suggests that the best way to ensure that product features are "effectively disclosed... in a manner that permits consumers to understand costs, benefits, and risks" is to require that firms be held responsible for widespread confusion among their customers. In fact, it may be the only way to do so in today's market.

Of course, every consumer financial product presents a plethora of potential costs, benefits, and risks. Deciding which of these a consumer needs to understand, selecting which facts and circumstances consumer understanding must account for, and pinpointing when consumers need to know these things are not easy tasks. But answering these questions is not impossible, and every regulation mandating disclosure already implicitly does so by selecting what to disclose and when to disclose it.

Dodd-Frank itself suggests that the universe of what customer confusion audits would test for is a smaller set of facts than those disclosed in the bloated mandated disclosures common today. The only features that must be "effectively disclosed" are those that must be understood to comprehend the costs, benefits, and risks of the financial product. A consumer who knows she is buying a mortgage that requires identical monthly payments and leaves no balance at term does not need to understand the details of amortization.

Further, the consumer must understand the product not in an abstract sense, but "in light of the facts and circumstances." Not every consumer needs to understand every feature. A credit card account holder who carries a balance and is making domestic purchases only would need to understand the interest rate applicable to those purchases but not the cost associated with foreign transactions. A jet-setting account holder who pays off her balance each month would need to know about foreign transaction fees but not the interest rate on prepaid balances

In addition, reading section 1032 in light of Dodd-Frank's purpose, consumers do not need to possess a continuous understanding of these personally relevant product costs, benefits, and risks. Rather, consumers need to understand the pertinent information at a time and in a way that allows them to use the information well in making financial decisions, so as to help drive the market toward better outcomes.

Even knowledge of the costs the particular consumer will encounter, the benefits she can

expect, and the risks she is taking on, at the time she is making the pertinent financial decision, is an ambitious goal, given current product offerings. But firms can set their own bar by managing the complexity of products and the intuitiveness of product features.⁷ Consumer comprehension will be higher for a product that is easier to understand, ceteris paribus. Further, the way in which information is conveyed dramatically affects the skills needed to use that information. Consumers need minimal skills to use a well-constructed energy star rating; consumers need expertise that few possess to use a set of technical energy use specifications. Comprehension rules hold

firms responsible for reaching consumers where firms find them, which is where firms sell to them.

Additional support in Dodd-Frank for comprehension rules includes explicit authorization for the bureau to promulgate rules that identify and prophylactically prevent unfair, deceptive, or abusive acts or practices (section 1031, 12 USC 5531).⁸

A practice is unfair if it is likely to cause substantial injury to consumers that is not reasonably avoidable by consumers themselves, and is not outweighed by countervailing benefits to consumers or competition (Federal Trade Commission 1980). A feature of a transaction that is not understood by most consumers is not reasonably avoidable by them, and any resultant injuries will rarely be outweighed by benefits to consumers, given that competition over the feature will not take place.

A deceptive practice is a material act or omission that is likely to mislead a reasonable member of the group of consumers to whom the firm's sales practices are directed (Federal Trade Commission 1983). A firm's failure to ensure that most of its customers comprehend all material features of a product is thus a deceptive omission, even where the firm makes no affirmatively misleading statements.

An abusive practice is one that "takes unreasonable advantage of—(A) a lack of understanding . . . of the material risks, costs, or conditions of the product . . . or (B) the inability of the consumer to protect the interests of the consumer in selecting or using" the product (section 1031, 12 U.S.C. 5531). Consumers who do not understand material product features cannot protect their own interests and selling a product with material terms that consumers do not comprehend can take advantage of this inability and the underlying lack of understanding.

Regulation keyed to actual consumer comprehension would be the ideal tool, and perhaps the only feasible tool, for preventing unfairness, deception, and abuse. The bureau has tiptoed toward recognition of this in its examination procedures, which contemplate that examiners might survey or interview samples of a firm's customers during the examination process (Consumer Financial Protection Bureau 2012, 5, 7, 16, 30). But examiners have insufficient resources to do the market-wide customer confusion audits that would be required to uniformly pressure firms to effectively inform their customers.

Some operations that the bureau would need to perform to deploy comprehension rules would be new, but Dodd-Frank envisioned that the bureau would engage in new activities along these lines. The bureau's primary statutory functions include supervising firms that are covered by the act, issuing rules and orders, taking enforcement actions, and "collecting, researching, monitoring, and publishing information relevant to the functioning of markets for consumer financial products and services to identify risks to consumers and the proper functioning of such markets" (section 1021, 12 U.S.C.

7. To the extent that heterogeneity among products and services offered and terminology used by different firms drives consumer confusion, comprehension rules might need to be complemented by increased uniformity in product designs and marketing terminology, perhaps specified by the bureau, trade associations, or national standards-setting bodies such as the American National Standards Institute.

8. One of the bureau's five statutory objectives is to protect consumers from unfair, deceptive, or abusive acts or practices (section 1021, 12 USC 5511). The bureau has broad authority to issue rules and orders to prevent evasion of federal consumer financial laws (section 1022, 12 U.S.C. 5512).

5511). The statute also requires the bureau to monitor the market for "risks to consumers," considering consumer "understanding" of those risks, and gives the bureau authority to require firms to produce reports and answers to specific questions to assist in this monitoring (section 1022, 12 U.S.C. 5512). The bureau would likely, at least initially, confine the application of comprehension rules to large firms that it examines regularly, or exempt smaller firms for which customer confusion audits might be disproportionately costly. But lessons learned from large firms could inform the bureau's approach to enforcement actions, substantive product regulation, and even disclosure rules that would affect all firms.9

The CFPB has authority to issue rules requiring disclosures and to produce model disclosures, the use of which gives firms a safe harbor from the disclosure rules (section 1032, 12 U.S.C. 5532). But both authorities are discretionary. Other than for home mortgages, the bureau need neither require particular disclosures nor produce model forms. There may be instances where comprehension rules and mandated disclosures would be complementary, such as when the disclosures provide standardization that assists firms in preventing customer confusion. Nothing in Dodd-Frank would prevent the bureau from using disclosure and comprehension rules as complementary tools in ensuring fair, transparent, and competitive markets.

MECHANICS

Nearly any financial transaction could be regulated using comprehension rules. The content tested for in customer confusion audits will depend on how far the CFPB wants to go in pursuit of comprehension, given the costs and benefits of this form of regulation. Testing for bare knowledge might require only a simple true-false, fill-in-the-blank, or multiple-choice test. Testing for applied understanding might be accomplished by assessing whether the reasons given by a customer for a product choice reflect an accurate or inaccurate understanding of the product.¹⁰

These approaches involve not insignificant per-subject testing costs, but sufficient information to make valid inferences will often be possible with small random or stratified (to capture subpopulations) samples of each firm's customers. An alternative would be to test only traditionally underserved consumers; if they comprehend a product, less vulnerable populations likely do too.

To ensure reliability, testing should be performed by independent, qualified, bureaucertified auditors assigned randomly.¹¹ Auditors would need to have the necessary expertise in survey research to perform the testing and interpret the results, the same qualifications required of experts in deceptive advertising litigation and consultants who currently perform consumer research for the bureau. Random assignment is necessary to ensure that the auditor is not beholden to or otherwise biased

9. In the specific case of predispute arbitration clauses in contracts for consumer financial products, the bureau has explicit authority to "prohibit or impose conditions or limitations on the use of" these clauses if it is "in the public interest or for the protection of consumers" (section 1028, 12 U.S.C. 5518). Particularly given that the bureau's own comprehension testing demonstrates that consumers do not understand the arbitration clauses in their own credit card contracts, meeting comprehension rules would be a natural condition to impose on firms going forward, if the clauses are not prohibited altogether.

10. In developing new mortgage disclosures, the bureau asked subjects in a simulated mortgage choice experiment to explain their reasons for preferring one mortgage over another (Kleimann Communication Group 2013, 65). Published results of that testing report only the average number of reasons given by subjects for selecting one loan over another and not the accuracy of the reasons. Customer confusion audits, in contrast, would assess whether, for example, customers who reported that they chose loan A because they preferred a fixed-rate loan were accurate in their assessment that loan A's rate was fixed.

11. Analogously, the third parties from which manufacturers and importers of children's products must obtain safety testing must be accredited by the Consumer Product Safety Commission or an independent accreditation organization designated by the commission (Consumer Product Safety Improvement Act of 2008, 15 U.S.C. 2063, Title I, section 102).

toward the firm who hires the auditor. Thirdparty auditors and government oversight also would protect consumer privacy, preventing firms from using individual customer test results to, for example, target marketing of unsuitable products on those who test poorly.

Firms should be free to give customers an incentive to answer the questions in confusion audits accurately. Firms might engage in their own testing and refuse to transact with potential customers who do not understand the transaction. Firms might also reward customers who perform well in confusion audits performed by third parties.¹²

The benchmarks against which firm performance in customer confusion audits ought to be judged depend on which of the bureau's statutory purposes it is pursuing: transparency, competition, or fairness. If the goal is for transactions to be transparent to most consumers engaged in them, the benchmarks would need to be high, perhaps as high as the approximately 85 percent benchmark implicitly used in false advertising cases (see Willis 2015, 154, reviewing cases). If the goal is to ameliorate the market failure caused by consumer confusion and thereby increase substantive product competition, the benchmarks might be lower, depending on the firm's ability to differentiate informed from uninformed consumers. If the goal is merely to prevent firms from undermining mandated disclosures, the benchmarks might be set at the comprehension levels the bureau can obtain in its disclosure testing, provided that the bureau's subject pool is similar to the firm's actual customers. If the goal is only to increase consumer comprehension from where consumers stand now, the benchmark might be set based on industrywide performance, perhaps penalizing firms whose customers test below the median and rewarding firms whose customers beat the market.

Sanctions (or rewards) for a firm that fails to meet (or exceeds) the benchmark would be tailored to the context. For example, if a sufficient proportion of a firm's tested customers did not understand a price component, the sanction might be to require the firm to disgorge that price component over a lookback period.¹³ If a firm's tested customers failed to meet the benchmark for comprehension with respect to the true nature of a benefit the firm appeared to be offering, the sanction might be to require the firm to provide the full benefit customers expected or refund the price the consumers paid for that illusory benefit. Where the issue is customer confusion about waiver of a legal right, a nonperforming firm might be required to refrain from enforcing that term until testing demonstrated that the firm's customers' confusion was dispelled. Exceeding a benchmark might be rewarded with a longer hiatus before the firm must conduct the next round of customer confusion audits.

In the following section I sketch out how comprehension rules might operate in several contexts. This is not to advocate that comprehension rules be used in all of these contexts. Upon further study, it may become clear that substantive regulation of terms or performancebased regulation of consumer financial outcomes would be a more reliable or more costeffective regulatory method. But before dismissing Dodd-Frank's presupposition that consumers would use their own understanding to instigate substantive product competition and promote their own welfare, we must map out how to produce this understanding and assess the costs and benefits of pursuing this path.

COMPREHENSION OF PRICE

Firms are required to disclose the price components of the financial products they sell, but consumers do not always understand these, particularly at the time when they could use the knowledge to select a product or choose whether to take an action. When buying a product, consumers consider the most salient and easily understood price components, which are typically lump sum amounts expressed in dollar terms such as the annual fee

12. To maintain anonymity, the third party auditors would administer the rewards.

13. Disgorgement over a look-back period would parallel the bureau's proposed small dollar loan regulation described in footnote 3.

for a checking account or credit card. But consumers often do not understand or fail to account for back-end fees, fees contingent upon future events, fees buried in fine print, and fees expressed in terms that would require consumers to perform calculations to determine the total dollar amount they will pay.¹⁴

One such fee is overdraft charges on checking accounts. These fees are, in effect, very small, very expensive, very short-term loans, with a typical implied APR of over 17,000 percent (Willis 2015, 171-72). The price structures banks use for calculating overdraft fees are complex, shifting, and multifarious. Banks are required to inform consumers about overdraft fees and obtain affirmative consumer consent to overdraft coverage, a process that regulators hoped would ensure comprehension. But a PEW Charitable Trusts survey found that over half of consumers who had incurred overdraft fees in the prior year did not understand that they had agreed to overdraft coverage. Most overdrew their accounts unintentionally and did not realize it until they received their account statements (Pew Charitable Trusts 2014, 5, 9).

A major contributor to consumer confusion is the invisibility of overdraft fees at the moment they are incurred. Consumers are not informed in real time that they are about to overdraw their accounts and thus to incur a fee, and therefore are not given the choice at that moment to decline the loan by not overdrawing. Consumers may not know the account balance their bank will assign them at any moment because deposits take varying amounts of time to clear, holds can be placed on account funds, banks reorder transactions within a single day, and account balance statements can be inaccurate (U.S. Government Accountability Office 2008, 21, 62). In addition, people who are already financially stressed might not realize they are about to overdraw their accounts because they have insufficient cognitivewillpower bandwidth and must focus on immediate financial demands.

The law might respond with a disclosure mandate to address this, but banks are adept at sabotaging overdraft disclosures (Willis 2013). A requirement that banks demonstrate that their customers know that they are about to incur an overdraft fee and know the size of the fee shortly before incurring it would stimulate banks to develop (and redevelop as technology and customs change) the best methods for informing their customers about these fees in a timely manner, whether it be through text messages, automated cell phone calls, ATM screen messages, or new methods that would be invented for this purpose. A comprehension rule might also encourage banks to simplify their fee structures so that their customers could understand them.

Confusion audits would be straightforward. Third parties could test a bank's customers with questions such as "Which, if any, of the following recent transactions overdrew your account?," followed by a list of recent transactions and their dates. If the customer indicated knowledge of a transaction that overdrew the account, the follow-up question could be "How many dollars did your bank charge you in fees as a result of overdrawing your account on that date?" The same basic design could be used for any financial product fee that is opaque at the time it is incurred.

A similar approach might be applied to short-term credit that is commonly used as a longer-term cash flow solution, such as payday and auto title loans. For example, the cost of payday loans seems clear, disclosed at the time the loan is disbursed in both dollar and APR terms. But these figures represent the price for a single period of borrowing. Payday lenders depend on long borrowing sequences to turn a profit (Pew Charitable Trusts 2013, 62n9) and most borrowers stay indebted for months.¹⁵ Consumers know the periodic fee on a payday

14. This is why monthly payments for high-priced mortgages must include taxes and insurance for the first year. Because the monthly payment is the most salient figure for most borrowers, a payment that includes taxes and insurance will ensure that consumers take these costs into consideration in addition to the loan principal and interest payments when deciding whether to enter the transaction.

15. Long borrowing sequences are long periods over which payday loan borrowers remain indebted nearly continuously, with breaks of less than thirty days, indicating that the borrower lacks sufficient income to simultaneloan and a recent study suggests that many consumers, if asked, can estimate the time it will take them to retire the debt fairly accurately (Mann 2013). But even those consumers who know they will take a long time to repay the loan are unlikely to estimate their total borrowing duration, multiply it by the periodic fee, and then ask themselves whether they want to pay, for example, \$525 over and above the principal they will have to repay to borrow \$350 for ten pay periods.¹⁶

A \$525 fee figure at the moment of a \$350 loan decision might be sufficiently dramatic to cause even a desperate consumer to change course. One experiment found that providing borrowers with information about the dollar costs of the loans over time, the number of times most loans are rolled over, and the relative prices of other sources of borrowing can collectively somewhat reduce the frequency and amount of payday borrowing (Bertrand and Morse 2011). The law might require that the disclosures used in this experiment be given to consumers, but again, mandated disclosures are easily foiled in the field.

Instead, payday lenders could be required to demonstrate that at loan origination, their customers understand how and when the customer expects to retire the debt and the total dollar cost of borrowing if the customer retires the debt on the anticipated date. In effect, lenders would need to spur consumers to consider how and when they will repay their loans and then to disclose the total price the consumer will pay if the loan is paid off on that date. This might lead lenders to redesign the product into a longer term less expensive loan or to lend only to borrowers who are likely to repay the loan on its due date.¹⁷

COMPREHENSION OF BENEFITS

Where confusion about benefits is common, firms could be required to demonstrate that their customers understand the true benefits the transaction provides. Add-on products and debt settlement (or "credit repair") services might fall into this category. Firms have far better information than consumers about the value of these products and services.

For example, customers of debt settlement services likely believe that the service will reduce their total debt, even when it will not (Abrams and Silver-Greenberg 2014, B1). The bureau has brought charges against firms that charge up-front fees and provide consumers little if any benefit in return. But these companies are not deterred. On its website, the bureau warns consumers that debt settlement services can be a bad deal for a long list of reasons: these services can reduce consumers' credit scores and future ability to obtain credit; fees payable to the firms, taxes payable on forgiven debt, and penalties and late fees on existing bills the firms require consumers to stop paying can collectively leave consumers deeper in debt than they were when they started, and so forth.¹⁸ But few people read the bureau's warnings.

To ensure that consumers understand these sorts of limitations on the benefits of this product, debt settlement firms could be required to demonstrate through confusion audits that their customers knew about these limitations at the time the customers signed up. This might stimulate these firms to change their pricing structures; if consumers knew that benefits are uncertain, they might demand pricing that is contingent on benefits received.

ously pay other monthly expenses and pay off the payday loan. Sometimes the loans are rolled over on the dates they become due, but sometimes there is a brief break between loans.

^{16.} In a 2013 study, the bureau found that \$350 and \$15 per \$100 were the median payday loan size and fee. It also found that the median number of loans a borrower took in twelve months of data was ten (Consumer Financial Protection Bureau 2013b, 17 table 1, 23 table 3).

^{17.} The CFPB's proposed regulations require payday lenders in most instances to do the latter, lending only to borrowers who are likely to repay.

^{18.} Most debt settlement firms require their customers to suspend making regular payments on the customers' existing debt.

Add-on products present an even easier case for comprehension rules. Currently the law requires that the fact that the consumer is buying the add-on product, and in some cases the consumer's right to decline to buy it, be disclosed. But in the midst of a stack of paperwork for a car loan, for example, a consumer might not notice that she had agreed to credit life, disability, unemployment, property, and debt cancellation insurance. Even if she notices these add-ons, she might assume that she is required to buy them or that they provide her a cost-justified benefit. However, these products frequently provide few benefits. For example, some consumers think credit life insurance is life insurance, when it only pays off the remaining debt on a loan at the beneficiary's death.

Comprehension rules would require firms to draw their customers' attention to these add-on products at the time the transaction takes place and to educate their customers about limits on the benefits add-ons provide. Alternatively, firms could redesign add-on products to conform to their customers' expectations.

COMPREHENSION OF LEGAL RIGHTS

A similar approach could also be used for other terms about which consumer confusion is widespread, such as legal rights and waivers of those rights. For instance, the Fair Debt Collection Practices Act of 1978, its implementing regulations, and applicable state law give debtors a host of legal rights, many of which must be disclosed in dunning letters. But do consumers actually know that debt collectors are prohibited from threatening to sue the consumer for the debt once the statute of limitations for that debt has passed? How many consumers know that if they agree to a new repayment schedule, the debt can be revived? Sophisticated consumers and those being aided by counsel or counselors may know, but it seems likely that others do not.

Rather than requiring more disclosures of consumers' rights in debt collection, an alternative would be customer confusion audits. For example, before a collector could treat an out-of-limitations debt as revived, the collector might be required to demonstrate that its debtors knew their actions would revive the debt. Collectors could then choose between educating their debtors or ceasing collection efforts on out-of-limitations debt.

Comprehension rules might similarly be employed for fine print clauses that waive consumers' legal rights. These clauses include arbitration clauses, class action waivers, caps on damages consumers can recover, clauses substantially shortening limitations periods within which consumers can raise claims against the firm, and more. Except for the few transaction types where such clauses are prohibited, firms regularly use these to change the background procedural and substantive rules of the civil justice system that apply to their interactions with their customers. As noted, the bureau's testing found that consumers are confused about arbitration clauses and class action waivers. The bureau has proposed prohibiting arbitration clauses that deny consumers the right to file or join class actions, and such an approach might work well for other fine print waiving consumers' legal rights. Alternatively, the bureau might employ comprehension rules. Firms could then decide whether to teach their customers about these waivers or remove the waivers from their contracts

BENEFITS OF COMPREHENSION RULES

The effect of successful regulation through comprehension rules would be to bring transactions into closer alignment with consumer expectations, whether because consumers become educated about the transaction or because firms simplify the transaction or eliminate unintuitive features. Clearer explanations of financial transactions and increased product simplicity and usability would reduce demands placed on consumers' attention, time, and effort in selecting products and would give consumers increased confidence in the marketplace. The quality of decisionmaking would almost certainly improve, not only because consumers would understand transactions better, but also because the reduced demands on consumer cognitive resources would likely increase consumers' willpower and decrease their overconfidence and overoptimism. The ultimate direct benefit of comprehension rules

is increased consumer decisional autonomy; consumers would get what they think they are getting, not whatever hidden features firms can slip into the transaction.

Rhetorical support for decisional autonomy runs deep—the imagined "empowered consumer" a favorite of liberals and the imagined "free market" a favorite of conservatives. But empowered choices free of confusion are only possible, and the market is only driven to efficiency, when consumers comprehend the transactions in which they engage. Today we pretend that individual consumers use disclosures to drive market competition and make welfare-enhancing decisions, but we do not spend the resources needed to realize actual consumer understanding. As a result, consumers neither discipline the market nor consistently enhance their own welfare.

When some degree of demonstrated consumer comprehension becomes legally required, we may find that decisional autonomy is overrated. As discussed previously, the Dodd-Frank Act's mandate to the CFPB to ensure consumer understanding of financial transaction costs, benefits, and risks rests on the assumption that consumers will use this understanding to instigate substantive product competition and promote their own welfare. This assumption may be incorrect. For many financial transactions, comprehension is probably neither necessary nor sufficient to ensure consumer welfare.

Even where solid consumer understanding of financial products would lead to better consumer choices, it might be an inefficient means of getting there. Firms might find that educating their customers is so costly that it would be cheaper for firms to directly channel consumers to suitable products. Some confusing products, when sold only to consumers for whom they are suitable, might improve consumer welfare more than simplified, transparent versions of those products.

Moreover, consumers might rather not have to understand much about the financial transactions in which they engage. They might prefer for regulators to discipline the marketplace directly. Substantive product design regulation thus might produce more consumer welfare and be truer to deep consumer autonomy—including the autonomy to decide *not* to become financially educated and make informed choices for oneself—than comprehension rules. But unless the bureau complies with Dodd-Frank's mandate to ensure consumer understanding of financial products—a mandate that can probably only be met, if at all, through comprehension rules—we will not know when and where informed consumer decisionmaking is worth its price.

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