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SEDUCTION BY CONTRACT

Law, Economics, and Psychology in Consumer Markets

OREN BAR-GILL

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LAW, ECONOMICS,
AND PSYCHOLOGY IN
CONSUMER MARKETS

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Abbreviations

CHAPTER 1

APR	Annual Percentage Rate
OIRA	Office of Information and Regulatory Affairs
TBO	total-benefit-of-ownership
TCO	total-cost-of-ownership

CHAPTER 2

CARD	Credit Card Accountability, Responsibility, and Disclosure
FRB	Federal Reserve Board
NSF	no sufficient funds
T&E	Travel & Entertainment
TILA	Truth-in-Lending Act

CHAPTER 3

ARM	adjustable-rate mortgages
CBO	Congressional Budget Office
CFPB	Consumer Financial Protection Bureau
FDIC	Federal Deposit Insurance Corporation
FRM	fixed-rate mortgage
FTC	Federal Trade Commission
GAO	Government Accountability Office
HMDA	Home Mortgage Disclosure Act
HOEPA	Home Ownership and Equity Protection Act
HUD	Housing and Urban Development
LTV	loan-to-value
OCC	Office of the Comptroller of the Currency
OTS	Office of Thrift Supervision
PMI	private mortgage insurance
RESPA	Real Estate Settlement Procedures Act

CHAPTER 4

CDMA	Code Division Multiple Access
CPUC	California Public Utility Commission
EA	Economic Areas
ETF	early termination fee
FCC	Federal Communications Commission
GSM	Global System for Mobile
HHI	Herfindahl-Hirschman Index
HV	High-Variation
LV	Low-Variation
TCO	total-cost-of-ownership
TDMA	time division multiple access

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Introduction

We are all consumers. As consumers we routinely enter into contracts with providers of goods and services—from credit cards, mortgages, cell phones, insurance, cable TV, and internet services to household appliances, theater and sports events, health clubs, magazine subscriptions, transportation, and more.

This book is about consumer contracts. It traces design features common among multiple types of consumer contracts and explores and explains the forces responsible for these design features. Why, for example, do sellers design contracts to provide short-term benefits and impose long-term costs? Why are low introductory prices so common? Why are cell phones given away for free, so long as the consumer signs a two-year service contract?

Why are the contracts themselves so complex? What's the rationale behind creating credit card and mortgage contracts featuring numerous fees and interest rates calculated via complex formulas? Why do cellular service contracts use complicated, three-part tariff pricing—a fixed monthly fee, a number of included minutes, and an overage fee for minutes used beyond the plan limit—and then further complicate matters by distinguishing between peak minutes, night and weekend minutes, in-network and out-of-network minutes, minutes used to call a pre-set list of “friends,” and minutes used to call everyone else? Separate and equally complex pricing structures are developed and enforced for messaging and data services.

While clearly contributing to a consumer contract's complexity, a contract's “fine print” is not the focus of this book. That no one reads the fine print is old news. That sellers hide one-sided terms in the fine print is not surprising. The goal of *Seduction by Contract* 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.

Market Forces and Consumer Psychology

A main theme of this book is that the design of consumer contracts can be explained as the result of the interaction between market forces and consumer psychology. We consumers are imperfectly rational, our decisions and choices influenced by bias and misperception. Moreover, the mistakes we make are systematic and predictable. Sellers respond to those mistakes. They design products, contracts, and pricing schemes to maximize not the *true* (net) benefit from their product, but the (net) benefit *as perceived by the imperfectly rational consumer*. Consumers are lured, by contract design, to purchase products and services that appear more attractive than they really are. This *Seduction by Contract* results in a behavioral market failure.

Competition, many believe, works to increase efficiency and protect consumers. But competition does not alleviate the behavioral market failure. It may even exacerbate it. Here's why: In a competitive market, sellers have no choice but to align contract design with the psychology of consumers. A high-road seller who offers what she knows to be the best contract will lose business to the low-road seller who offers what the consumer mistakenly believes to be the best contract. Put bluntly, competition forces sellers to exploit the biases and misperceptions of their customers.

The interaction between market forces and consumer psychology explains many of the complex design features so common in consumer contracts. The temporal ordering of costs and benefits—with benefits accelerated and costs deferred—is linked to consumer myopia and optimism. Complexity responds to bounded rationality, to the challenge of remembering and then aggregating multiple dimensions of costs and benefits. These two features—complexity and cost deferral—serve one ultimate purpose: to maximize the (net) benefit from the product, as perceived by the imperfectly rational consumer.

This behavioral-economics theory is subject to the standard critique that questions the robustness of the underlying biases and misperceptions in a market setting. I take this critique seriously. Therefore, I begin by studying possible rational-choice, efficiency-based explanations for specific contract design features. Only when I conclude that the rational-choice accounts are unconvincing or incomplete do I develop the behavioral economics alternative. The prevalence of contracts and prices that cannot be fully explained

within a rational-choice framework proves the robustness of the biases and misperceptions driving the behavioral-economics theory.

A main goal of this book is to explain the design of consumer contracts. But the descriptive story is the beginning, not the end. Understanding consumer contracts as the product of an interaction between market forces and consumer psychology raises a host of normative questions and legal policy challenges. Addressing these questions and challenges is another main ambition of this book.

Social Costs of the Behavioral Market Failure

The behavioral market failure mentioned earlier threatens social welfare at several levels. As contractual complexity increases in response to consumers' imperfect rationality, the cost of comparison shopping also increases, resulting in hindered competition. Recall the complex, multidimensional cell phone contract. Now imagine an imperfectly rational consumer trying to choose among several such complex, multidimensional contracts. The task is a daunting one. Many consumers will simply avoid it. Markets don't work well when consumers do not shop for the best deal. In the absence of effective comparison-shopping, prices rise, hurting consumers. Also, consumers who do not compare offers from different sellers might not be matched with the seller that best fits their needs. This reduces market efficiency.

While hindered competition reduces social welfare, even intense competition would not ameliorate the behavioral market failure. The competitive forces that remain would work to maximize the perceived (net) benefit rather than the actual (net) benefit from the product. Specifically, short-term, salient prices would be reduced while long-term non-salient prices would be increased. Examples of this dynamic are the low credit card teaser-rates accompanied by high back-end fees and rates, or the free cell phones that you get when you "agree" to pay a host of usage fees and penalties for the duration of the two-year lock-in contract.

Prices that are salience-based rather than cost-based produce skewed incentives—for both product choice and product use. And as the perceived total price falls below the actual total price, demand for the product becomes artificially inflated. For example and as we will see later in the book, inflated demand for subprime mortgages, *fueled by contract design*, contributed to the subprime expansion and, later, to the subprime meltdown of 2008.

Finally, complexity and deferred costs raise distributional concerns, since their effects are not evenly distributed across different groups of consumers.

The interaction between market forces and consumer psychology, then, creates a market failure. This behavioral market failure imposes substantial welfare costs. Can legal intervention help? A comprehensive answer is beyond the scope of this book. Instead, the book focuses on a single regulatory technique: disclosure mandates. It develops a new approach to disclosure, one that directly responds to the imperfect rationality problem.

Toward More Effective Disclosure Mandates

While existing disclosure mandates focus largely on product attribute information—*what* the product is and what it does—the analysis and findings described in this book suggest that more attention should be given to the disclosure of product-use information, namely, *how* the product will be used by the consumer. Rational consumers can be expected to predict their future-use patterns fairly accurately or at least know their own use patterns better than the sellers do. Disclosure of product-use information by sellers is, therefore, superfluous in a rational-choice framework.

The same is not true, however, when consumers are imperfectly rational. As we will see, consumers often have a poor sense of their future use patterns. Do you know how much you talk on your cell phone? How many text messages you send and receive? How many megabytes of data you use? Do you how much you will borrow on your credit card? How fast you will pay down your balance? Whether you will ever require a cash advance? How likely are you to miss a payment and incur a late fee? The imperfectly rational consumer can benefit substantially from disclosure of product-use information—information that sellers, like cell phone companies and credit card issuers, make it their business to know.

Moreover, the imperfect rationality of consumers suggests that, to be effective, disclosure regulation must adopt one of the following two strategies:

- First, simple disclosures that target consumers. The idea is to design aggregate, one-dimensional disclosures that facilitate comparison between competing products. For example, cell phone companies could be required to disclose the total annual cost of using a cell phone. The disclosure would combine both product-attribute information and product-use

information. The annual cost of cellular service would combine rate information with the consumer's use-pattern information. Such simple, aggregate disclosures would help imperfectly rational consumers make better choices.

- Second, re-conceptualized disclosure aimed not at imperfectly rational consumers, but at sophisticated intermediaries. Accordingly, this disclosure could be more comprehensive and complex. Consider a consumer who is considering switching from her current cell phone company to a competing provider. Consider also an intermediary who wishes to help the consumer identify the best plan for her needs. The intermediary has information on the different plans offered by all cell phone companies. The intermediary, however, has little information on how the specific consumer uses her cell phone. Since different plans can be optimal for different consumers, depending on their use patterns, not having product-use information substantially reduces the ability of the intermediary to offer the most valuable advice. Now, the consumer's current cell phone company has a lot of information on the consumer's use patterns. It could be required to disclose this information in electronic form so that the consumer could forward it to the intermediary. The intermediary could then combine the product-use information with the information it has on different plans and provide the consumer with valuable advice.

★ ★ ★

This book aims to tell a general story about consumer contracts. But each consumer contract or, more accurately, each class of consumer contracts in each particular market has its own story. Accordingly, after fleshing out common themes in Chapter 1, the lion's share of the book is dedicated to three case studies of three important consumer markets—credit cards (Chapter 2), mortgages (Chapter 3), and cell phones (Chapter 4). A detailed market-specific analysis is necessary to fully answer the descriptive question—why do these contracts look the way they do?—the normative question—what's wrong with these contracts?—and the prescriptive question—what can the law do to help?.

I

The Law, Economics, and Psychology of Consumer Contracts

Introduction

Outcomes in consumer markets are the product of interactions between market forces and consumer psychology. Most of this book explores these interactions and their legal policy implications in three consumer markets: credit cards (Chapter 2), mortgages (Chapter 3), and cellular phones (Chapter 4). These three chapters present case studies that expose the unique features of economics–psychology interactions in each market. Indeed, they show that broad generalizations can rarely be drawn, especially when considering if and how the law should intervene in consumer markets.

While each market is unique, a common methodology can be applied to analyze different consumer markets. Such a common methodology—a behavioral–economics methodology—is described in this chapter. The bulk of the analysis is descriptive, examining how market forces interact with consumer psychology to produce observed contract design and pricing structures in the market.¹ In this chapter, the descriptive analysis begins with consumer biases and misperceptions and ends with contracts and

1. See Michael S. Barr, Sendhil Mullainathan, and Eldar Shafir, *Behaviorally Informed Financial Services Regulation* (New America Foundation, 2008) (similarly emphasizing the importance of the interaction between consumer psychology and market forces, but not focusing on the implications of this interaction for contract design). Important contributions in the burgeoning field of Behavioral Industrial Organization consider questions of contract design, albeit with less emphasis on policy implications. For an excellent recent textbook that summarizes and synthesizes this important literature—see Ran Spiegler, *Bounded Rationality and Industrial Organization* (Oxford University Press, 2011). Spiegler's text, and the economic theory literature that it summarizes, is of foundational importance to many of the themes explored in *Seduction by Contract*. Through-