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EXIT FROM CONTRACT

Oren Bar-Gill and Omri Ben-Shahar*

ABSTRACT

Exit from contract is one of the most powerful consumer protection devices, freeing consumers from bad deals and keeping businesses honest. Yet consumers often choose transactions with lock-in provisions, trading off exit rights for other perks. This article examines the costs and benefits of free exit, as compared to the lock-in alternative. It argues that present regulation of exit penalties is poorly tailored to address concerns about lock-in, particularly in light of increasingly ubiquitous market-based solutions. The article also calls (regulatory) attention to loyalty rewards, which are shown to be as powerful as exit penalties, and equally detrimental.

1. INTRODUCTION

There is longstanding concern about possible abuse in consumer contracts—about high, unexpected fees, high-pressure sales tactics that emphasize a product's benefits while underplaying associated risks, and misinformation. Lawmakers have long sought to address these concerns. Recently, Congress enacted statutes like the Credit Card Accountability Responsibility and Disclosure (CARD) Act (123 Stat. 1734) and the Dodd–Frank Wall Street Reform and Consumer Protection Act (124 Stat. 1376), specifically targeting abusive fee structures. The Consumer Financial Protection Bureau was established to protect consumers in financial product markets and has set out to regulate markets in which abuse has been prevalent (CFPB 2013). The Federal Communications Commission has moved to curb abuses in wireless contracts (see, e.g., *In the Matter of Verizon Wireless Data Usage Charges*, Federal Communications Commission File No. EB-09-TC-458, DA 10 - 2068

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(Consent Decree)). And courts are scrutinizing the use of different fine print terms in consumer contracts (see, e.g., *Cheshire Mortgage Service v. Montes et al.*, 223 Conn. 80 (1992)). A host of different regulatory techniques are employed in the service of consumer protection—from disclosure mandates, to pro-consumer default rules, to outright bans of abusive practices (Campbell et al. 2011; Bar-Gill & Ben-Shahar 2013a). But there is one, powerful antidote to abuse that has received less attention: Exit.

Consumers' ability to exit from undesirable deals provides meaningful protection against abuse. First, it allows the consumer to end the abuse by ending the contractual relationship. Second, the threat of exit deters abuse; sellers have a strong incentive to keep their customers happy when they know that bad behavior will result in consumer exit and hurt their bottom line.

Exit plays this important consumer protection role with respect to any seller–consumer relationship that is potentially long-term. Such relationships are, of course, prevalent, covering a large slice of the economy. And, as we demonstrate below, this slice is growing, as sellers work hard to generate customer loyalty, transforming traditionally one-off transactions into long-term relationships.

Consumer transactions in which exit plays a key role include most telecom markets—wireless, Internet, and cable. They include markets for consumer financial products, like credit cards, checking accounts, mortgages, and retail investment brokerage. They include products and services like insurance, fitness clubs, book clubs, newspaper and magazine subscriptions, home security, and even airline travel (through loyalty programs). In almost every market, long-term relationships are becoming more important. Consider a consumer who repeatedly shops at the same supermarket, drugstore or bookstore. Innovative contractual arrangements are transforming even these traditionally one-shot transactions into long-term relationships. In total, markets in which exit can serve as a powerful consumer protection tool represent a major part of the economy.

While protecting consumers, exit can also hurt sellers. No seller likes to lose business. And acquiring new customers may require costly outlays. It is not surprising, therefore, that sellers are working hard to prevent consumer exit. Many sellers do so simply by providing high-quality service. But many others try to make exit costly to consumers through contractual means.

These sellers use both sticks and carrots. Exit penalties, or early termination fees (ETFs), are the sticks that sellers use to lock consumers in. Such penalties are broadly used, although their popularity is in decline. The carrots that are used to keep consumers from exiting include loyalty programs of various kinds, where customers are rewarded for repeat business by discounts, rewards,

frequent-flyer miles, cash back, and more. While the use of sticks is in decline, the use of carrots is on the rise.¹

This article is divided into three Parts. Part 2 is descriptive. It begins with a review of the many consumer markets where exit plays or can play an important consumer protection function. It then documents trends in the utilization of different exit-preventing strategies, demonstrating the decrease in the use of exit penalties and the increasing prevalence of loyalty programs.

A striking trend in consumer transactions is the rise of the “No Contract” contract. Businesses entice consumers with the assurance that no commitment is required—that the consumer can terminate the service freely at any time, without paying a termination penalty. Web sites, storefront ads, billboards, and various marketing vehicles now carry the increasingly colloquial pledge of “No Contract.” Providers of wireless and internet service, cable TV, security and alarm systems, health clubs, energy utilities, and even bottled water suppliers, which used to lock consumers in with exit penalties, now lure new customers by the comfort of No Contract.

In addition to No Contract, exit penalties are declining as a result of another competitive strategy. Businesses are luring consumers away from existing lock-in arrangements by offering to pay the consumers’ termination fees and switching costs.

While these contractual innovations mark the decline of lock-in with sticks, lock-in with carrots is on the rise. Loyalty programs are proliferating, across an increasing range of consumer markets—from airlines and credit cards to supermarkets, web sites and bookstores. Visits to the retailer—a department store, drugstore, or hardware store—once a sequence of one-shot transactions, are now links in a chain (formed by opening an “account”), at the end of which awaits a dividend for the devoted.

Part 3 is normative and it contains the analytical core of the article. While exit has an obvious ex post appeal as a consumer protection measure, its ex ante value to consumers is less straightforward. A seller may offer consumers attractive discounts for surrendering their exit rights, presenting the fundamental trade-off between price and quality (here, the quality of the legal rights).

Our basic findings are the following. First, relative to lock-in, exit protects consumers against price increases. But this freedom to exit and avoid price hikes means that consumers will also receive less upfront discounts and

1 The power of exit as a consumer protection strategy is also limited by noncontractual switching costs. Switching from one seller to another requires time, effort, and sometimes money. Inertia—a behavioral switching cost—can also play an important role. These noncontractual switching costs interact with contractual switching costs, and can be exacerbated by sellers who seek to lock consumers in. The analysis in this article focuses on contractual switching costs.

perks. A standard benchmark result in the economic literature on “switching costs” thus applies here: the overall price paid by consumers for the multi-period service is independent of the contract form. Exit means less price hikes and lower prices down the road, but this price saving—actuarially anticipated by sellers—is exactly offset by higher initial prices. Whether locked-in or free to exit, consumers pay the same average periodic price.

This, however, is merely a methodological benchmark. As we relax the assumptions underlying the exit-invariance result, we discover various general circumstances under which lock-in makes matters worse for consumers, and reduces market efficiency overall. The up-front benefits of lock-in are accompanied by back-end costs—price hikes, deteriorating quality, and the inability to freely switch to a more attractive provider. Consumers with perfect foresight rationally trade off these benefits and costs. Consumers with less-than-perfect foresight might underestimate the back-end costs or overestimate the front-end benefits of lock-in and enter into welfare-reducing contracts. These contracts could result in quantity distortions—excessive purchases during the low-price periods and insufficient purchases during high-price periods. Moreover, long-term lock-in reduces flexibility and prevents consumers from adjusting to new market conditions and technologies by switching to better-matched products. Finally, lock-in contracts can deter entry by new sellers and thus stifle competition.

The rise of No Contract arrangements can thus be understood as a market response to the inefficiencies of lock-in. Consumers, who lacked the necessary foresight and oversubscribed to services that locked them in have learned to anticipate the hardship and regret that comes with a long-term commitment—the “bill shock” (or quality drop) that often occurs in the late periods of the lock-in contract. The reality of rapidly progressing technology, in which products become stale before the lock-in period expires, has taught consumers to appreciate the cost of inflexibility that is associated with lock-in contracts. These consumers are the target audience of billboards that trumpet the freedom of No Contract—the same billboards that, in the not-so-distant past, lured them into lock-in contracts with sign-up discounts and other front-end perks.

While No Contract symbolizes the decline of the stick-type strategies for restricting exit, carrot-type strategies in the form loyalty programs are proliferating. Why do consumers understand the cost of lock-in when enforced by exit penalties but not when supported by loyalty programs? The subtlety of the switching cost—foregone benefits rather than out-of-pocket costs—provides one answer. This answer is reinforced by the power of framing, as documented in the cognitive psychology and behavioral economics literatures: losses loom larger than forgone gains.

As part of our overall normative assessment, we also consider arguments in favor of exit restrictions. One intuitive conjecture is that free exit would lead to lower investment in product quality. Businesses that can no longer rely on a guaranteed duration of service and income from their customers would be reluctant to make costly investments in service infrastructure. And with the lower investment, the value of the service would likewise be lower. We demonstrate, however, that incentives to invest may in fact be greater with free exit, because businesses—under the constant threat of customer exit—have to keep their customers happy all the time, by maintaining high-quality service. This is the deterrence effect of exit.

Another argument emphasizes the signaling role of free exit. Free exit provides assurance against hidden fees, surprise price hikes, and declining quality. It serves as a signal of quality: the best service providers are the ones who can better afford to offer the free termination option, because their customers are less likely to want to exercise it.

Finally, Part 4 is prescriptive, or doctrinal. We begin with a critical review of what we call the law of lock-in. As a preliminary point, we note that the law has focused exclusively on stick-based lock-in, via exit penalties, completely ignoring carrot-based lock-in, via loyalty programs, which can be equally problematic. Moreover, the legal treatment of exit penalties, or ETFs, has been profoundly misguided.

Courts have been scrutinizing ETFs, occasionally striking them down as “excessive,” under the age-old “penalty doctrine” that forbids overcompensatory liquidated damages, or various provisions in states’ consumer protection laws that serve a similar function (e.g., Cal. Civ. Code § 1671). Viewing ETFs as a form of liquidated damages for breach of contract, courts have responded to consumer claims that ETFs must not be allowed to exceed the seller’s lost profit from early termination. For example, when two-year cell phone plans came with a fixed (\$250) ETF, which would be levied even if termination occurred at the very end of the plan’s duration, courts vacated such provisions, thus moderating the lock-in mechanism (e.g., *In re Cellphone Termination Fee Cases*, 193 Cal App 4th 298, 122 Cal Rptr 3d 726 (2011), reh’g denied (March 24, 2011), review denied (June 15, 2011), cert denied, 132 S Ct 555, 181 L Ed 2d 397 (2011)).

Our analysis suggests that, in a fundamental way, the question asked by courts—are ETFs overcompensatory?—is the wrong question. ETFs are part of lock-in contracts, in which consumers enjoy up-front discounts and sellers assume up-front losses. There is no a-priori reason to think that higher up-front prices and lower ETFs are better, for consumers, than lower up-front prices and higher ETFs. And it is misguided to argue that back-end ETFs overcompensate sellers, without considering the up-front discounts that cut into sellers’ profits.

This failure of the law of lock-in, coupled with consumers' increasing sophistication about ETFs, as evidenced by the rise of No Contract, suggests that legal intervention in stick-based lock-in should be scaled back.

We reach the opposite conclusion with respect to carrot-based lock-in. It is striking that the movement toward free exit and away from lock-in has completely ignored this alternative, and increasingly prevalent, form of lock-in. Sellers loudly advertise "No Termination Fees," but we do not see billboards trumpeting "No Loyalty Rewards." This, despite the fact that—as our analysis clearly shows—loyalty rewards lead to many of the same distortions that penalty-based lock-ins create. We conclude by wondering whether courts and regulators, concerned by the perils of exit penalties, should be refocusing their attention on loyalty programs.

2. CONTRACTING OVER EXIT

One of the fundamental characteristics of any transaction is the power of the parties to terminate it. In business-to-consumer relationships, consumers' right to exit and take their business elsewhere not only shapes their payoffs, but is correctly regarded as a powerful protective device. It is, therefore, a central feature in consumer protection legislation, and it is a key provision in many consumer contracts. We begin by describing the centrality of exit in consumer markets. We then proceed to describe a range of prevalent exit restrictions that sellers use to lock-in their customers.

2.1 The Domain of Exit

It is hard to imagine a consumer transaction in which exit does not play a key role. Consider once-in-a-lifetime undertakings, like purchasing a home. The purchase of a home is an alternative to rental—an arrangement granting the consumer of habitation services periodic exit options. Being a durable good, the purchase of a dwelling is often done with an eye to the resale (exit) market. Or, consider health services. Patients cannot exit the operation room midway through. But exit rights are important in purchasing medical care, when the consumer chooses a health plan and decides whether to reenroll. Billboards advertising hospital services cater exactly to those consumers who may switch from their current provider.

Indeed, many consumer markets offer an ongoing relationship with the provider of the goods or services, and present multiple opportunities to exit and reenter in the course of these relationships. Telecommunications services are a prominent example: the consumer's enrollment with a mobile phone carrier or internet service provider affords many occasions, and many temptations, to

switch providers. It is not surprising that the telecommunications market has become a major laboratory for contractual terms limiting or permitting early exit (more on this below). Insurance, likewise, is a service that people need continuously, but the relationship with any single provider can be terminated at any moment. Hence, the \$994 million advertising campaign rolled out by Geico Insurance in 2011 emphasizing that it takes only 15 minutes to exit (and switch to Geico).² Consumer credit transactions—through instruments like credit cards, mortgages, and bank loans—are often long-term contracts, but the options to prepay, refinance, or transfer debt balances allow the borrower to walk away from her current provider.

Exit is thus a fundamental dimension of long-term service transactions. But the importance of exit is no less pronounced in short term and even one-shot deals. Every purchase of a good is a stand-alone contract, but it too is potentially subject to exit as determined by the right to withdraw and return the purchased items for a refund. This right is secured either by contract (e.g., Walmart's 90-day free returns store policy) or by law (e.g., a 72-hour withdrawal right for consumers closing on a mortgage loan). Also, sellers are vying for the repeat business of their customers. The likelihood that a consumer will shift her patronage from Walgreens to CVS when filling her recurring drug prescriptions is shaped by contractual arrangements that affect the payoffs from switching. Many retail chains give discounts—but only to consumers that open an account and present the membership card. Likewise, each airline passenger flight is a one-time transaction (often nonrefundable and thus nonexitable), but much of an airline's commercial success depends on consumer loyalty—the entry into and exit out of long-term relationships. And there are many other similar examples: the consumption of entertainment spectacles—season tickets versus one event at a time; the consumption of cars—buying versus leasing a vehicle, or even the pay-per-drive arrangement with Zip Car; membership in health clubs—long-term service versus pay-as-you-go; and so on. The domain of exit is nearly congruent with the domain of contract, covering most consumer transactions and a major share of commercial activity.

2.2 Restricting Exit

Exit can be a powerful weapon in the consumer protection arsenal. But exit is not always easy or costless. Exit breaks the bond that holds the relationship together, and breaking this bond can be difficult. A large literature in economics studies these “switching costs”—frictions that are inherent to changing

2 “Fifteen minutes could save you fifteen percent or more on car insurance.” See https://en.wikipedia.org/wiki/GEICO_advertising_campaigns.

providers. We focus on synthetic switching costs—creatures of contract designed by sellers who benefit from restricted exit. To make exit harder and less attractive for consumers, sellers deploy two generic contractual techniques: penalties for exit (in the form of ETFs) and rewards for nonexit (in the form of loyalty rewards). Before proceeding, we note that the contractual switching costs that we focus on are but one category, albeit an important category, of switching costs. Noncontractual switching costs are prevalent. Technological compatibility, learning costs, and time (the time it takes to find an alternative and switch) are examples of noncontractual impediments to exit. Moreover, some of these impediments can be manipulated, i.e., enhanced by sellers. Much of the analysis below can be extended to these noncontractual switching costs.

2.2.1 *Stick-Based Lock-in.*

The most straightforward way to restrict exit is by imposing a fine on the exiting consumer. Such penalties, sometimes referred to as ETFs, are common in many consumer markets.³ Standard mobile phone contracts include a two-year no exit term and a sliding penalty scale for early termination.⁴ Likewise, some mortgage contracts include a prepayment penalty.

A more prominent, albeit implicit, exit penalty is inherent in any nonrefundable price: an irreversible commitment to pay for a set duration. A health club contract might quote an annual membership fee of \$1000, providing—explicitly or implicitly—that the obligation to pay the fee is independent of how often you attend the club and whether you decide not to attend at all after seven months. (Such an arrangement is known as a “take or pay” contract.) There is no explicit ETF in this contract. But paying for a service you do not use is, in effect, a termination penalty. Book clubs, magazines, and other subscription services, sell long-term membership at a discount, but require customers to commit to a minimum take-or-pay arrangement, measured either by volume of purchase or by the duration of service. Term life insurance with flat premiums is another way to reach the same result. Frontloading premiums in early years makes it too expensive to switch insurers in later years. Early period purchases cross subsidize late periods, a subsidy that the consumer would squander upon exit.

3 Early termination fees in wireless contracts are discussed below. Other examples include Xbox live (www.xbox.com/en-US/Legal/xbox-live-contract-terms); DirecTV (www.directv.com/DTVAPP/content/legal/customer_agreement); Fitness clubs (see, e.g., www.joinmysportsclubs.com/join.aspx?club=113); Home security (http://www.adt.com/downloads/legal/Contract_Terms_and_Conditions_Non-California_Customers_5401UE04.pdf).

4 See FCC Encyclopedia, Early Termination Fees (<http://www.fcc.gov/encyclopedia/early-termination-fees>).

In some prominent consumer markets, the use of contractual exit restrictions has declined—a development marked by the rise of what sellers promote as “No Contracts.”⁵ To be sure, “No Contracts” are contracts. They are legally binding like any other consumer contract. Consumers are obligated—most importantly, to make timely payments as long as they receive the service—and there is plenty of fine print. The service providers are also contractually obligated—most importantly, to provide the promised service at the promised rate. What the No Contract moniker intends to convey, and does so effectively and nondeceptively, is that consumers are not going to be stuck prospectively with a contract they do not like. There is no long-term commitment, no required duration (beyond, usually, month-to-month), and no termination fees or penalties.⁶

Further, the bite of early termination penalties is diminished if competitors induce consumers to switch to their service by reimbursing the consumers for ETFs levied by their existing providers. A major wireless carrier, for example, is luring consumers to switch to its network by covering such fees (Chen 2014).

2.2.2 Carrot-Based Lock-in.

Early termination penalties clearly make exit less attractive. Another, less conspicuous way to deter exit is by rewarding nonexit, through contractually designed carrots. Consider loyalty programs that reward consumers for repeat purchases with free flights, hotel discounts, cash back, and more. A consumer who switches from Seller A to Seller B might gain a benefit, e.g., a lower price or better-quality service, but also incur a cost in the form of forgone loyalty rewards. Rewards for nonexit are incentive-equivalent to penalties for exit, in the sense that they create the same wedge between the payoffs for stay versus leave.

While the use of stick-based, exit-detering strategies seems to be on the decline, carrot-based, loyalty programs are proliferating. In 2012, there were over 2.5 billion individual loyalty program memberships in the USA, the most popular in financial services (548 million) and air travel (371 million) (Berry 2013, exhibits 1 and 4).

Termination fees are viewed as penalties and are widely resented, while at the same time loyalty plans are adored. Firms do not brandish qualities such as

5 “No Contracts” are offered, for example, by fitness clubs and security systems providers. See, e.g., www.absolutefitness.com/2012/05/no-contracts-on-open-gym-memberships/ (fitness club); www.pointealarm.com/commitment.asp (security system). No Contracts are also commonly offered by telecom companies and Internet service providers; see <http://online.wsj.com/news/articles/SB10001424052748704895204575320700280294646>

6 Two types of no-commitment contracts are offered in wireless markets: monthly plans without an “upgrade” provision, and “No Contract” contracts that allow consumers to “upgrade” more frequently than the standard two-year waiting period. Specifically, Verizon Edge, AT&T Next, and T-Mobile Jump all provide this expedited upgrade opportunity. See Cheng (2013).

“highest termination penalties” but they loudly advertise “best reward program.” A broad range of businesses, from insurance companies to casinos, offer discounts and perks to loyal customers. Carrot-based lock-in is on the rise.

3. EXIT VS. LOCK-IN: THEORY

To examine the effects of exit on consumer welfare and on overall efficiency, we begin with what we call an “invariance result.” This is a fundamental insight that, under some well-specified assumptions, consumers’ freedom to exit does not matter, because it is fully anticipated and reflected in other terms of the transaction. This insight provides a useful benchmark for the subsequent analysis, which then relaxes the invariance assumptions one by one, demonstrates the welfare effects of free exit, and establishes exit as a powerful consumer protection tool.

3.1 A Benchmark Invariance Result

We begin with a simple example. Two sellers, A and B, offer an identical product. There are two periods and in each period a single consumer is seeking to buy one unit of the product. The price of the product can potentially vary across sellers and across periods. Assume for now that there is price competition between sellers, complete information, and no discounting across periods.

Once the consumer chooses the period-1 seller, there are three possible contractual arrangements:

- **Free Exit**—the consumer can switch at the end of period 1 from one seller to the other, at no cost.
- **Lock-in with Sticks**—the consumer can switch at the end of period 1 only after paying the period-1 seller a termination fee that is specified in the contract.
- **Lock-in with Carrots**—the consumer can switch at the end of period 1, but will then forfeit some loyalty rewards.

We begin the analysis by assuming that both sellers can produce each unit at a per-unit cost of \$100. We look at Free Exit first, and then proceed to examine Lock-in with Sticks and Lock-in with Carrots. We assume a switching cost of \$20, in the form of an exit penalty or foregone loyalty rewards.

Free Exit: In this case, competition between the two sellers will lead them, in each period, to set prices equal to the per-unit cost, \$100. Since the consumer can switch at no cost in period 2, no seller can charge more than \$100 in this period (and will lose money if they charge less). Expecting to make no profit in period 2, prices in period 1 must cover the period 1 cost, \$100, and competition ensures that they will not exceed cost. Accordingly, both sellers will set a price of \$100 in period 1 as well. The consumer may buy from a single seller in both

periods, or switch sellers after period 1. The total price paid by the consumer over the two periods will be \$200.

Lock-in with Sticks: Begin by considering period 2, after the consumer purchased from, say, Seller A in period 1. If she switches to Seller B, the consumer will have to pay a penalty of \$20. Seller B might try to lure the consumer to switch, but he cannot offer the consumer a price lower than \$100 (any loss Seller B would incur in period 2 will not be recouped because this is assumed to be the last period). Recognizing this, Seller A can charge the consumer a price of up to \$120 in period 2 without risking losing her business, thus earning a profit of up to \$20. Now consider period 1: the two sellers will compete to attract the consumer, and capture the opportunity to earn \$20 down the road. They will do it by setting below-cost prices in period 1. Both sellers will set a price of \$80—their per-period cost of \$100 minus the expected period-2 profit. The consumer will buy from the same seller in both periods—she is indifferent between A or B—and will pay a pair of prices \$80 and \$120 in periods 1 and 2, respectively, for a total two-period price of \$200. Because of the switching cost, the period-1 seller has ex post market power, which it uses to raise its period-2 price and earn a \$20 net profit. This profit, however, is perfectly dissipated by a discounted period 1 price. (Our analysis of Lock-in, in this and subsequent sections, builds on Joseph Farrell & Paul Klemperer 2007.)

Lock-in with Carrots: Loyalty rewards can be viewed as an opportunity-cost termination penalty; by exiting the relationship, the consumer forgoes the loyalty reward. Yet, the economic analysis of loyalty programs as lock-in mechanisms is different from the economic analysis when Lock-in is enforced by termination penalties. The main difference is that loyalty rewards are paid on the equilibrium path, whereas termination penalties are not. We focus, initially, on loyalty programs that do not entail an up-front fee. For example, many airlines allow customers to enroll in their loyalty programs free of charge. Begin by considering period 2, after the consumer purchased from, say, Seller A in period 1. Seller B will offer a price of \$100. To keep the consumer, Seller A has to offer a nominal price no greater than \$120, so that, accounting for the \$20 loyalty reward, the effective period-2 price is no greater than \$100. Moving back to period 1, since Seller A expects zero profit in period 2, the period-1 price will equal the per-unit cost of \$100.

Several comparisons emerge from this simple example. First, note that the total price in the Free Exit case and the Lock-in cases is identical, \$200, equal to the two-period production cost, $2 \times \$100$. Accordingly, the consumer is indifferent between Free Exit and either type of Lock-in. This is the benchmark invariance result. In the Lock-in with Sticks case, the invariance is due to the fact that any period-2 market power is fully anticipated in period 1. Since the discount in period 1 arises directly from the potential profit in period 2, its size

exactly equals the size of the profit. Every \$1 of profit that a seller will be able to extract in period 2 from the locked in consumer raises by \$1 the discount that the seller is willing to give in period 1 in order to lure the consumer. In the Lock-in with Carrots case, total price is, again, \$200, but also each per-period (effective) price equals \$100, as in the Free Exit case.

Second, although the total two-period price is invariant across the different cases, lock-in does matter. With lock-in, enforced with either sticks or carrots, the consumer buys from only one seller. And when lock in is enforced with sticks, price increases over time. Such escalating prices are commonly observed in markets with switching costs. Sellers appear to compete over consumers more ferociously at the outset, by offering them perks in the form of discounts, “teaser” rates, sign-up gifts, or free bundled products. Once a consumer is committed, when the proverbial “period 2” arrives, sellers raise prices and increase their per-period profits. The difference between the period-1 and period-2 prices is determined solely by the switching costs.

The invariance result is quite robust (Bar-Gill & Ben-Shahar 2013b). In particular, it holds when parties discount future payoffs. It also holds when we allow for more than two periods. We will soon turn to examine situations in which the irrelevance result is violated, and in which lock-in makes things worse. The inefficiencies will arise from the two effects just identified—the price distortions and the inability to switch. But first we must comment on the question of commitment: could not a seller commit, contractually, to fixed per-period prices? In our example, could not the seller commit to set a price of \$100 in each of the two periods? With such a commitment, the invariance result would extend beyond total price to the per-period prices, across all three cases.⁷

Commitment is indeed possible, and it is definitely observed in consumer markets. For example, wireless carriers commit to a fixed monthly fee.⁸ Yet, the

7 In the basic setup, the seller might commit to any pair of prices that sum-up to \$200, e.g., [\$100, \$100], [\$80, \$120] or [\$120, \$80]; when we introduce the distortions that come with deviations from the [\$100, \$100] price schedule, it will be clear that the seller would want to commit to [\$100, \$100].

8 Another interesting example where commitment appears to be possible is in the lock-in with carrots case. We are not referring to the lock-in with carrots analyzed above; there, no commitment was assumed. We are referring instead to a different type of loyalty programs, those with an up-front fee. For example, certain credit card issuers charge an up-front fee for enrollment in their loyalty programs. In the basic example, the effective period 1 price, inclusive of the enrollment fee, would be \$120. The effective period 2 price, accounting for the \$20 loyalty reward, would be \$80. Such loyalty programs with up-front fees rely on commitment—on the seller’s commitment to set a below-cost effective price in period 2. In the absence of commitment, Seller A would charge an effective price of \$100 in period 2 (as we have seen for loyalty programs without an up-front fee). And, anticipating a period 2 price of \$100, Seller A would not be able to charge an above-cost price of \$120 in period 1. Interestingly, loyalty programs with an up-front fee reverse the price profile obtained when lock-in is enforced using termination penalties.

ability of sellers to commit is limited. First, sellers can invent new prices and fees in the second period. Examples include late-payment fees, over-the-limit-fees, roaming charges, no-sufficient-funds fees, cash-advance fees, etc (Frank 2009; Bar-Gill 2012).⁹ Second, shifting focus from price to quality, sellers can reduce the quality of their product or service in the second period. Since quality is often less verifiable than price, it may be more difficult to contractually commit in advance to fixed quality (Farrell & Klemperer 2007, Sec. 2.3.2). Indeed, the proliferation of fees and degradation in quality are important consumer-protection concerns—concerns that exit can protect against. It is, therefore, important to study the implications of imperfect commitment.

3.2 The Cost of Lock-in

The analysis in Section 3.1 showed that the contractual arrangement does not affect the overall price consumers pay, and thus need not affect consumers' welfare or the efficiency of allocations. Like any invariance result, the useful way to think about it is not as an empirical prediction, but rather as a starting point for further exploration of the underlying reasons why different contractual regimes do matter. Such exploration shows that Lock-in has the potential to hurt consumers.

The analysis proceeds in three stages. We begin by relaxing the assumption of perfect foresight that underlies the invariance result. Without the heroic assumption of rational expectations, Lock-in triggers market failure. We then show how the adverse consequences of this market failure are exacerbated when we relax additional assumptions made in the benchmark analysis—that quantity is fixed and sellers are identical. Finally, we turn to a different type of market failure—a threat to competition that arises when the benchmark analysis is extended to allow for endogenous entry into the market.

3.2.1 *Information and Rationality.*

The main threat to efficiency arises from consumers' imperfect foresight. Recall that a Lock-in contract, enforced by an ETF, leads to higher period-2 prices (or reduced quality) and a penalty for exit. Consumers with perfect foresight anticipate this. They do not learn anything new in period 2. For them, the contractual allocation of costs between the two periods was merely a cash-flow arrangement with no economic impact on behavior. Hence, the invariance result. In the real world, it is difficult to find many consumers who are perfectly informed and perfectly able to predict pricing patterns. These boundedly

9 On the other hand, there is also a trend toward price simplification and fee reduction. See Bar-Gill (2012), ch. 2 (discussing Citi's "Simplicity Card").

rational consumers might not fully appreciate the intertemporal consequences of Lock-in.¹⁰

We can identify at least three distinct misperceptions that consumers might have. First, consumers might underestimate the cost of switching or overestimate the benefit from staying. Contractual penalties are likely to be underestimated because they are not a salient part of the contracting process. Information about the penalties is buried in the fine print that consumers do not read. Conversely, loyalty benefits, the other type of contractual switching cost, are likely to be overestimated, since loyalty programs are trumpeted in advertisements. Both the undercounting of penalties and the overcounting of rewards exacerbate the tendency of consumers to enter into Lock-ins.

Second, consumers might fail to anticipate the escalating prices associated with stick-based Lock-in contracts, especially when the price is broken down into a complex, multifactor formula that includes numerous itemized fees.¹¹ Also, the contract term that defines exactly when period 1 ends and period 2 begins is often nonsalient to consumers and rarely highlighted by sellers prior to the first escalated bill in period 2 (hence the colloquial term “bill shock”).¹² The mirror image of escalating prices—the risk of deteriorating quality—might similarly be underestimated by consumers. Likewise, consumers may envision the loyalty rewards they stand to receive, but not the increased prices they pay on the path to the loyalty milestone.

Third, consumers might underestimate their potential period-2 opportunities. Greater benefits might be captured in period 2 by switching to products and technologies that, at period 1, do not yet exist. If consumers underestimate the pace of change in technology or in market conditions, or the evolution of

10 A related consumer misperception is overestimating the benefit of Free Exit, failing to recognize that it does not eliminate other noncontractual (real) switching costs. Cf. Becker & Zarsky (2011).

11 When consumers are perfectly rational, escalating prices are unique to stick-based lock-in. When consumers are imperfectly rational, however, escalating prices appear also with carrot-based lock-in. With carrot-based lock-in, the escalation of effective prices is driven by overestimation of the promised loyalty benefit. Loyalty rewards often come with a wealth of fine-print restrictions: think blackout dates in airline frequent-flyer programs or expiration dates on reward vouchers. The concern is that consumers will underestimate the burdens imposed by these restrictions and thus overestimate the value of the loyalty rewards. In the basic model, the nominal period-2 price increase exactly matched the magnitude of the loyalty benefit. If consumers overestimate the value of the promised benefit, then the size of the increase in the nominal period-2 price will exceed the magnitude of the actual loyalty benefit. The resulting period-2 profit would also imply a reduction in the period-1 price, as observed with stick-based lock-in.

12 The FCC found that 30 million Americans—or one in six mobile users—have experienced “bill shock,” a sudden increase in their monthly bill that is not caused by a change in service plan. Nearly half of cell phone users and almost two thirds of broadband users with early termination fees do not know the amount of the fees they are accountable for. See FCC (2010).

their own preferences, they will underestimate the benefits from the option to switch and, correspondingly, the effective burden of Lock-in. For example, borrowers who agree to a loan prepayment penalty—even the sophisticated few who understand the meaning of this provision—may not realize the full economic cost of a diminished option to refinance.

Misperceptions about Lock-in do not always hurt consumers. For one, consumers can learn of the burdens that Lock-in imposes and adjust over time (more on this later). Also, competition between sellers can render the irrationality benign. Take our initial example of a product that costs \$100 to produce, where the price rose from \$80 to \$120 due to a lock-in penalty of \$20. Consumers experience a large decline in net payoff at period 2, but the fact that they might fail to anticipate this pattern does not necessarily change their conduct or choices. They might be upset or disappointed, but they would not have behaved differently, and they are not hurt by their limited foresight.

In other cases, however, consumers' irrational expectations might hurt them, and lead to inefficient trade. To illustrate, assume that a consumer is unaware of the \$20 lock-in penalty, mistakenly believing that it is \$0. The consumer would thus fail to anticipate the period-2 price increase. Assume now that, due to the period-2 price increase, the consumer would have a negative period-2 payoff, something that a rational actor would be able to predict (and take into account in period 1), but which an uninformed consumer fails to anticipate. Specifically, assume that the value of the product to the consumer is only \$95. The sellers will set a price of \$80 in period 1 and a price exceeding \$115 in period 2.¹³ The naïve consumer will make the purchase in period 1 but will exit in period 2. He will net \$15 in period 1, but will lose the \$20 termination penalty in period 2. His overall welfare will be $-\$5$. The private loss is also a social loss—it is due to an inefficient period-1 purchase, in which a product that is worth only \$95 is produced at a cost of \$100. Competition between firms does not resolve, and might even exacerbate this distortion, because firms will compete to attract consumers, including consumers with product valuation below \$100.

In general, because the deferred and imperfectly foreseen features of Lock-in involve costs and burdens, the total cost of a product or service that is accompanied by a Lock-in contract will be underestimated. Demand for these products and services will thus be artificially inflated: consumers will purchase products and services that they should not. One manifestation of this bias is the excessive allure of up-front perks that consumers accept, in return for

13 A period-2 price exceeding \$115 would induce consumers to exit and pay the \$20 penalty, because purchasing at this price would involve a loss greater than \$20. The seller would thus earn the termination penalty of \$20. A period-2 price of \$115 or lower would induce consumers to make the purchase, but the seller's net payoff will be, at most, \$15.

Lock-ins. Free gifts, high-end devices, and various other teasers are used to “seduce” consumers, but often these are consumption artifacts that rational consumers would choose to forgo, if they had to bear their true cost or price. Many consumers would hold on to their used smartphones longer, rather than upgrade them to a marginally improved device, if not for the opportunity to receive a “free” upgrade every time they renew a Lock-in arrangement with their provider. Similarly, demand will be artificially inflated when the promised loyalty benefits from Lock-in are overestimated, or when consumers underestimate the price increase that many loyalty programs can afford to charge.

Lock-in is a rational response by profit-maximizing sellers to the imperfect foresight or imperfect information of their customers. As compared to Free Exit, Lock-in comes with underestimated future costs or overestimated future benefits. Products accompanied by Lock-in contracts would thus appear to be more attractive. A seller who offers Free Exit would lose business to a seller who offers a Lock-in contract (Bar-Gill 2012).

3.2.2 *Variable Quantity and Heterogeneous Parties.*

The welfare loss caused by consumer misperception is exacerbated when we relax two additional assumptions of the benchmark analysis—that quantity is fixed and that the parties—both sellers and consumers—are homogeneous.

3.2.2.1 *Variable quantity.*—The invariance result assumed that a single unit of the good is purchased in each period. In practice, the quantity purchased is a function of consumer preferences and, critically, of the price charged for the product. Lock-in can result in inefficient quantity. This welfare concern is unique to stick-based Lock-in and derives from the escalating prices that characterize this contractual arrangement. In particular, under stick-based Lock-in, the price is low in period 1 and high in period 2, whereas Free Exit and carrot-based Lock-in induce constant per-period prices. This feature can lead to inefficiency. With Free Exit and with carrot-based Lock-in the per-period price, in both periods, is set equal to the seller’s cost. This pricing schedule leads to efficient quantities. In each period, the consumer will purchase the product if and only if the value she gains exceeds the seller’s cost of production.

With stick-based Lock-in, on the other hand, below-cost prices in period 1 lead to excessive quantities; and above-cost prices in period 2 lead to inadequately low quantities. These quantity distortions not only reduce efficiency, they also hurt consumers. For example, high period-2 prices in Lock-in utility contracts may deter beneficial consumption.¹⁴ Or, credit card contracts with

14 For a more comprehensive analysis of the inefficient quantity problem, and of the other welfare costs of lock-in, see Bar-Gill & Ben-Shahar (2013b).

low period-1 rates may lead to excessive borrowing. Perfectly informed and perfectly rational consumers would anticipate these quantity distortions. They would realize that Lock-in contracts, with their escalating prices, reduce the overall value of the transaction, and they would reject these contracts or calibrate their quantity choices to overcome the distortion. For example, they would realize that a deep up-front discount might lead them to purchase a good that they could not otherwise afford and that the full price will come due later. Or, they would know that loyalty plans might lead them to incur more expensive and less necessary purchases only to qualify for the reward. Less sophisticated consumers might underestimate the cost of such quantity distortions and thus fail to exert the demand-side discipline necessary to deter inefficient Lock-in.

3.2.2.2 Heterogeneous sellers.—The invariance result assumed that sellers were identical and, therefore, being locked-in to one seller did not matter. When sellers are heterogeneous, Lock-in can be costly. An important difference between Free Exit and Lock-in, which was displayed in the numeric example even when the price invariance held, is the “loyalty” of the consumer to one seller—the absence of any switching in equilibrium. In the benchmark analysis, this was inconsequential because it was assumed that sellers are identical—that the per-unit production costs and the per-unit benefit to consumers are fixed across time and across sellers. In the real world, this loyalty feature can lead to inefficiency. The intuition is the following: in dynamic competitive markets, sellers are constantly improving their products and offering lower cost or higher value products. The quality and cost of products thus vary over time and across sellers. And on a less optimistic note, the quality of a seller’s product might deteriorate over time. Loyalty, driven by switching costs, reduces the likelihood that consumers would switch to a better-value, innovative product, or away from a low-value product. We label this the inflexibility distortion. Note that this welfare concern applies to both stick-based and carrot-based Lock-in.

The inflexibility distortion deters ex post beneficial switching and reduces the total ex ante value of the transaction. As with variable quantity, the inflexibility distortion should be of little concern if consumers were able to foresee it. When sellers are heterogeneous and Lock-in might prevent switching to a more attractive seller, sophisticated consumers would realize that Lock-in contracts reduce the ex ante value of the transaction and reject these contracts. When consumers anticipate the potential cost of Lock-in, they will demand Free Exit (or a larger discount for Lock-in, beyond what sellers can give). But when less sophisticated consumers underestimate the inflexibility distortion, these offsetting demand-side forces cannot be counted upon to prevent costly Lock-in.

3.2.2.3 Heterogeneous consumers.—Suppose that the harm from Lock-in varies from one consumer to the other. Some consumers value flexibility and

the freedom to switch frequently between sellers, whereas others are creatures of habit and rarely contemplate a switch. Optimally, the former would enter Free Exit agreements more frequently than the latter, forgoing the up-front discounts or the loyalty perks that Lock-in provides.

It is possible, however, that the prevalence of Lock-in schemes would curtail the ability of some consumers to choose Free Exit. Consider a seller who offers attractive loyalty perks. We saw above that even in the absence of any other market imperfection the value of the perks is exactly offset by higher prices. In our benchmark analysis, consumers enrolled in, say, an airline frequent flyer program pay higher nominal prices per transaction but recoup these excess payments through loyalty rewards. Consumers who do not join the loyalty plan pay lower prices and forgo the loyalty rewards. When consumers are rational and informed sellers price differentiate across consumers on the basis of loyalty membership and consumers self-select into Free Exit or Lock-in.

But, as we have seen, many consumers are neither rational nor informed, and thus industry practices do not always reflect such efficient market segmentation. When many consumers are enrolled in the loyalty plan, and when sellers want to encourage more to enroll, sellers may offer uniform prices irrespective of the consumers' loyalty standing. Air travel or hotel prices, for example, are not discounted for consumers who opted not to enroll in the loyalty plan. The uniform prices reflect the expected rewards that consumers are entitled too. Airlines with generous frequent flyer programs charge premium prices, as do airlines that have high rates of enrollment. For example, if 80 percent of an airline's customers are enrolled in the loyalty program and if each travel segment entitles consumers to a reward valued at \$100, the uniform price will be \$80 ($=80 \text{ percent} \times \100) higher than the price charged by an airline without a loyalty program. Consumers seeking Free Exit and lower per-flight prices can fly in lower-tier discount airlines where loyalty rewards are less generous and where enrollment rates are lower, but their choices are limited. The presence of Lock-in, particularly of carrot-based Lock-in, imposes costs on consumers who value flexibility above loyalty rewards, i.e., on consumers who prefer Free Exit.

3.2.3 *Endogenous Entry.*

The invariance result in Section 3.1 was based on another simplifying assumption: that the number of sellers is exogenously determined. But sellers may enter and exit the market, and the intensity of competition can be affected by the contractual arrangement (Aghion & Bolton 1987). By making it more difficult for consumers to switch to a new entrant, Lock-in contracts—both stick-based and carrot-based—render entry less profitable. As a result, Lock-in helps sustain oligopolistic markets and deprives consumers of the benefits from more

intense competition (Farrell & Klemperer 2007, Sec. 2.7). These effects have been widely recognized in the airline industry, for example. Frequent-flyer programs, the airline version of loyalty programs, help the incumbent airline dominate key hub airports and, with this hub dominance, deter entry by potentially more efficient airlines. The dominant airline can then set high airfares, to the detriment of consumers. (See Cairns & Galbraith 1990; and Lederman 2008; but see Caminal & Claiici 2007.)

This anticompetitive, entry-deterrence effect persists even when consumers are perfectly informed and perfectly rational. A sophisticated consumer may fully understand that Lock-in will deter a more efficient seller from entering the market in period 2. But this sophisticated consumer would also realize that her own individual rebellion against Lock-in would not meaningfully increase the probability of entry by the efficient competitor. The problem here is one of externalities or collective action, not imperfect information or imperfect rationality.

3.3 Investment Efficiency

The value of a product or service is determined, in large part, by investments that the seller makes in improving the quality of the product or service. Cable companies can increase the value of their service by investing in better, more varied content, or in installation of broadband infrastructure. Wireless carriers can improve the quality of service by investing in a better network and building more towers. Satellite TV can install more powerful dishes. And health clubs can invest in new equipment. If exit is to serve as a consumer protection tool, it must incentivize investments that maintain, or increase, product quality. Does it? How does Free Exit fair, as compared to Lock-in, in promoting efficient investments?

A basic, intuitive conjecture may go as follows: Lock-in guarantees sellers a longer duration contract and, thus, greater returns from their investments. As a result, Lock-in will be associated with more investment and higher quality products. This conjecture turns out to be false, because it overlooks a more subtle effect: under Free Exit, despite the potentially short duration of the relationship, a seller would have an additional incentive to invest—to keep the consumer in the relationship. Instead of relying on switching costs to lock customers in, the seller will have to improve the product's value to convince consumers to stay.

Elsewhere, we showed that it is impossible to conclude that sellers will invest less under the Free Exit regime (Bar-Gill & Ben-Shahar 2013b). Lock-in forces consumers to stay for a longer period. Free Exit can induce consumers to voluntarily stay for a longer period. In equilibrium, Free Exit sellers invest in

quality and consumers stay more than one period (hence making the investment cost justified). When the strategic motivation to keep customers happy is sufficiently strong, investment under Free Exit exceeds investment under Lock-in. This result reflects one of the main features of Exit as a consumer protection device: deterring low quality.

3.4 Signaling

We have thus far assumed, implicitly, that buyers know the quality of the seller's product.¹⁵ In many consumer markets this assumption is unrealistic. Buyers are only imperfectly informed about product quality. Consider the quality of wireless service (reception) in a given geographical area. The wireless carrier knows the reception quality; consumers will generally be less informed. High-quality sellers ("H-types") want to convey their high quality to buyers. But simply announcing "my product is of high quality" would not convince buyers. Anyone, including low-quality sellers ("L-types"), can simply announce that their product is of high quality (anti-deception law cannot weed out all such fuzzy claims). H-sellers thus need a means of credibly signaling the high quality of their products. And, to be credible, the signal must be such that L-sellers would be unable to use it.

Free Exit is such a signal.¹⁶ The H-type seller knows that if a consumer buys its product in period 1, the consumer will be satisfied with the high quality and buy in the second period as well. Lock-in is unnecessary. The L-type seller, on the other hand, anticipates that the consumer will be dissatisfied with the low quality and, in the absence of lock-in, switch to another seller in period 2. This differential effect of the exit option on H- and L-types allows Free Exit to serve as a credible signal of quality. Only H-type sellers would offer Free Exit.¹⁷

The result is a signaling equilibrium: instead of simply announcing "my product is of high quality," H-type sellers will bundle this announcement with a Free Exit provision. Now that they can credibly signal their high quality, H-sellers will be able to charge higher prices for their high-quality products.

15 We did allow for imperfect information, and even for biased perceptions, about other contractual dimensions. See *supra* Section 3.2.

16 Other contractual design features perform a similar signaling role. For example, car sellers offer expansive warranties to signal the high quality of their product. See Grossman (1981). And sellers offer contracts, in which they bear high, liquidated damages in case of breach, to signal the low probability that they will in fact breach. See Aghion & Hermalin (1990).

17 What if L-sellers try to mimic H-sellers and offer Free Exit? The L-sellers will experience more exit and their market share will drop. Therefore, in the long-run equilibrium only H-sellers will offer Free Exit.

Some consumers would choose to pay these prices; others would prefer the low-quality, low-price products offered by the L-sellers.¹⁸

The signaling equilibrium exhibits an interesting feature: when consumers want to exit—to switch to another seller—because of low product quality, Lock-in contracts prevent them from exiting. And when consumers are happy with the high-quality product and do not want to exit, the H-sellers' Free Exit contracts allow them free exit.

3.5 Summary

We can now summarize our discussion of the economics of Free Exit. The counterintuitive benchmark for our analysis was the irrelevance result: Lock-in, by either sticks or carrots, was seemingly harmless, affecting, at most, the periodic prices but not the total multiperiod price. The harm, our further analysis showed, is due to the intertemporal allocation of costs and benefits that Lock-in creates, and the misperceptions that such a reordering of costs and benefits might trigger. Lock-in also slows down entry, thus inhibiting competition and innovation.

Moreover, our analysis of investment efficiency demonstrated the deterrence power of exit; the threat of exit keeps sellers honest, inducing them to maintain, and increase, the quality of their products. Finally, exit allows high-quality sellers to credibly signal their type and distinguish themselves from low-quality competitors.

Our analysis emphasized the costs of Lock-in. These costs, however, are neither inevitable nor do they manifest uniformly across all consumers and all markets. Not all consumers suffer from the information and rationality deficits that prevent an appreciation of the costs that Lock-in imposes. Indeed, as we discuss below, consumers are becoming more sophisticated about the benefits of exit and the costs of Lock-in. Similarly, the risk that Lock-in contracts would deter efficient entry is relevant in some markets, but not in others.

The analysis sheds light on the recent voluntary expansion of Free Exit as a contractual arrangement. When consumers underestimated the cost of Lock-in, especially stick-based Lock-in, it was profitable for sellers to offer Lock-in contracts and to extract rents from consumers who could not exit. This changed as consumers learned to appreciate the burdens of stick-based Lock-in—the escalating prices, exit penalties, and costly inflexibility. As a result, consumers have become more cautious about the short-term benefits that Lock-in provides.

18 And some, imperfectly rational consumers will also buy from L-sellers, because they underestimate the cost of lock-in. See *supra* Section 3.2.

This, in turn, prompted sellers to use Free Exit (often under the slogan of “No Contract”) as a bonding mechanism—as a commitment to maintain high quality and to avoid exploitation of consumers—and as a signaling device for high-quality sellers.

While misperception surrounding stick-based Lock-in is on the decline, the same cannot be said about misperception related to carrot-based Lock-ins. The switching costs that loyalty programs rely on are more subtle—opportunity costs rather than outright penalties—and thus many consumers continue to underestimate the disadvantages of Lock-in. Consumer awareness of the costs of termination penalties and relative unawareness of the costs of loyalty programs can also be attributed to the different framings triggered by these two types of contractual switching costs. Penalties are perceived as losses, while loyalty rewards are perceived as gains. And, as is well recognized, losses often loom larger than gains (Kahneman & Tversky 1979).

When signing up to receive “points” for hotel stays, airline travel, or car rental, consumers envision the perks that these points will eventually buy, holding all else equal. That all else is not equal—namely, that prices might be higher and switching to better deals more costly—often escapes the imagination of consumers. Even over time, the flow of loyalty awards would serve to numb the frustration associated with the drawbacks of Lock-in.¹⁹ It is not surprising that the Free Exit trend is manifested by the elimination of termination fees, not loyalty programs. Nevertheless, it is notable that at least some loyalty programs are becoming less generous (Tuttle 2013; Weisse 2013). While this contraction is popularly viewed as bad news for consumers, our analysis suggests otherwise. Less loyalty rewards diminishes the oft-unnoticed distortions of Lock-in, providing consumers the protection of exit.

4. THE LAW OF EXIT

We have shown that Lock-in can hurt consumers and reduce social welfare. These costs may explain the law’s suspicion toward some forms of Lock-in. Courts have been policing ETFs—the contractual footing of stick-based Lock-in—as potentially unlawful liquidated damages under the common law Penalty Doctrine and under Federal and State consumer protection laws. And legislators and regulators have been restricting the use of termination fees in specific

19 Some fine print limitations on the value of loyalty rewards, such as blackout dates limiting the ability to redeem frequent flyer miles, are becoming salient to consumers, through experience and through advertising by competing sellers. See, e.g., <http://www.starwoodhotels.com/aloft-hotels/programs/index.html>.

consumer markets. (Antitrust law can also be used, in certain contexts, to challenge exit restrictions.)

The law regulating exit penalties is reviewed in Section 4.1. Section 4.2 then evaluates this body of law in light of the theoretical framework developed in Section 3. We argue that the recruitment of the Penalty Doctrine to oversee ETFs is fundamentally misguided. Section 4.3 ends this Part on a more positive note: exit provisions in contracts are becoming increasingly salient to consumers and sellers are responding to the demand for exit generated by these informed consumers. The Free Exit trend, which is, in large part, a voluntary market response to consumers' increasing apprehensions about the costs of Lock-in, reduces the need for legal intervention. In fact, mandatory exit rights might undermine the ability of consumers to self-select into more or less generous exit rights.

There is, however, an important caveat to this happy ending: Loyalty programs. We saw that these are a type of contractual switching cost that also locks consumers in, but without the associated resentment. For this reason, Free Exit is responding to consumers' hostility toward ETFs and, at the same time, loyalty programs continue to expand. If legal intervention is to be considered, then—paradoxically—it may need to focus on loyalty programs, which consumers love, rather than on the abhorred termination penalties.

4.1 Unlawful Liquidated Damages

Lock-in is often enforced by an agreed upon fine for early termination, usually referred to in the contract as an ETF. Contract law views ETFs as liquidated damages for breach of contract by the consumer. Traditionally, these liquidated damages have been policed using the Penalty Doctrine, which allows courts to strike overcompensatory liquidated damages clauses.²⁰ In addition, state consumer protection laws sometimes include specific prohibitions against excessive liquidated damages (e.g., Cal. Civ. Code § 1671; Ill. Consumer Fraud and Deceptive Practices Act, 815 ILCS 505/2DDD (d)(6)(e)). And Federal statutes include similar prohibitions in specific markets, such as consumer leases and consumer loans (Federal Consumer Leasing Act, 90 Stat. 257 (15 §§ 1601, 1640, 1667, 1167a to 1667e); Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010, Pub. L. 111-203, Sec. 1414).

The main question the Penalty Doctrine addresses is whether ETFs are compensatory or punitive. In answering this question, the doctrinal methodology

20 See the Restatement (Second) of Contracts, Sec. 356 (1981); Uniform Commercial Code, § 2-718. For an application of the penalty doctrine to early termination fees, see *United Air Lines Inc. v. Austin Travel Corp.* 867 F. 2d 737 (2d Cir., 1989).

requires comparison between the magnitude of ETFs and the lost profit caused by early termination. Much of the relevant litigation involved wireless contracts.

Until approximately 2008, the typical wireless contract had a two-year Lock-in and a fixed ETF. A common provision would stipulate an ETF of \$250, regardless of the time of early termination—whether it was in the first or the last month of the two-year contract. The fixed ETFs in wireless contracts provided an easy target for courts. Since the loss to the service provider from early termination is a function of the time left on the two-year clock, such fixed ETFs did not provide a reasonable formula for ascertaining the loss. In particular, when termination occurred late in the two-year period, the ETF was clearly overcompensatory, *ex post*.²¹

Still, courts struggled to find the appropriate method of calculating lost profits from consumer exit—a necessary precondition for assessing the legality of ETFs. As a result, courts turned their attention to the question of intent: was the purpose of the ETFs compensatory?²² In a leading 2011 California decision, *In re Cellphone Termination Fee Cases* (193 Cal App 4th 298, 122 Cal Rptr 3d 726 (2011)) (“*Cellphone Cases*”), the court struck down the ETF in Sprint’s wireless contracts based on the absence of a compensatory purpose. Relying on internal communications between Sprint employees, the court found that the ETFs were intended to reduce so-called “churn rates”—the rate at which customers terminate contracts early—rather than to cover estimated harm to the carrier from early terminations. In other words, the court found that an ETF was unenforceable because of the purpose it served: deterrence of early termination, rather than compensation. The court thought irrelevant Sprint’s contention that the “ETF’s benefit consumers by allowing Sprint to offer reduced monthly fees and subsidized handsets.” ETFs that do not purport to assess the potential loss are unenforceable.

The practical ramifications of the ruling in the *Cellphone Cases*, or of other decisions that struck the ETF provisions in wireless contracts, is limited. In response to the ETF litigation and the threat of possible regulation by the Federal Communications Commission, every major carrier in the USA moved from invariant to prorated ETFs—fees that decline in proportion to

21 See, e.g., Bar-Gill & Stone (2009). The cell phone companies claimed that while actual harm varied with the timing of the breach, even the low-end of the actual harm range exceeded the fixed ETF. See *In re Cellphone Termination Fee Cases*, 193 Cal App 4th 298, 122 Cal Rptr 3d 726 (2011), reh denied (March 24, 2011), review denied (June 15, 2011), cert denied, 132 S Ct 555, 181 L Ed 2d 397 (2011).

22 The focus on intent is, to some extent, the result of a California-specific rule. See *Hitz v. First Interstate Bank*, 38 Cal. App. 4th 274, 289, 44 Cal. Rptr. 2d 890 (Cal. App. 1 Dist., 1995). (“[T]he focus is not . . . on whether liquidated damages are disproportionate to the loss from breach, but on whether they were intended to exceed loss substantially—a result of which is to generate a profit.”)

the remaining duration on the contract.²³ Prorated ETFs are much harder to attack on the basis of the Penalty Doctrine and indeed there has been no litigation involving prorated ETFs.²⁴

Beyond consumer telecommunications contracts, liquidated damages doctrines are often used to regulate early termination in a variety of long-term contracts. In leasing contracts, for example, the Federal Consumer Leasing Act, using language similar to that of the Common Law Penalty Doctrine, prohibits super-compensatory liquidated damages (Pub. L. 94–240, March 23, 1976, 90 Stat. 257 (15 §§ 1601, 1640, 1667, 1167a to 1667e)).²⁵ The Act has been effectively used to challenge ETFs in auto leases. Automobiles depreciate substantially when first purchased or leased. Lessors employed ETFs to ensure that most (or all) of this depreciation is born by the consumer who terminates the lease agreement prematurely. Some went further, setting ETFs in excess of the total payments due under the lease agreement. Courts have generally invalidated ETFs where they found that the early termination of the lease would grant a windfall to the lessor (e.g., *Mitchell v. Ford Motor Credit Co.*, 702 F. Supp. 2d 1356, 1368 (MD Fla. 2010)).

As we have seen, some courts strike ETFs based on a finding that the fee exceeds actual harm or that the purpose of the fee is not compensatory. Other courts, reluctant to second-guess the wisdom of Lock-in contracts, refuse to find that the ETFs are impermissibly high or lack a compensatory purpose. Alternatively, such courts question the very classification of ETFs as liquidated

²³ Verizon Wireless' contract has an ETF of \$350, less \$10 for each month completed (www.verizonwireless.com/b2c/globalText?textName=CUSTOMER_AGREEMENT&jspName=footer/customerAgreement.jsp, last visited July 24, 2012); AT&T's contract has an ETF of \$325, less \$10 for each month completed (<http://www.att.com/shop/legalterms.html?toskey=wirelessCustomerAgreement&>, last visited July 24, 2012); Sprint's contract has an ETF of months remaining on the contract times \$10 (\$20 for "advanced devices), with a maximum of \$200 and minimum of \$50 (maximum of \$350 and minimum of \$100 for advanced devices) (http://support.sprint.com/support/article/Learn_about_early_termination_fee/case-sp061027-20110823-171256, last visited July 24, 2012); T-Mobile's contract has an ETF of \$200 for over 180 days remaining, \$100 for 91–180 days remaining, \$50 for 30–90 days remaining, \$50 or monthly charges, whichever is less, for less than 30 days remaining (<http://support.t-mobile.com/docs/DOC-2938> last visited July 24, 2012). See also Bar-Gill & Stone (2009).

²⁴ In addition, carriers have argued, with some success, that state law, including restrictions on the magnitude of liquidated damages, is preempted by the Federal Communications Act, which prohibits states from regulating wireless rates. Section 332 of the FCA, 47 USC 151–615(b) (2006) provides that "no State or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private mobile service, except that this paragraph shall not prohibit a State from regulating the other terms and conditions of commercial mobile services."

²⁵ Under the statute, liquidated damages are allowed only if "reasonable" in the light of (i) anticipated or actual harm, (ii) the difficulties of proof of loss, and (iii) the inconvenience or nonfeasibility of otherwise obtaining an adequate remedy. See 15 USC § 1667b(b).

damages. Instead, they characterize ETFs as “alternative means of performance.” The consumer can perform the contract by continuing to pay the monthly service fee for the duration of the Lock-in contract *or* she can terminate and pay the ETF. Under this interpretation, a consumer’s decision to terminate the contract is not considered a breach, and so the ETF is not considered liquidated damages.²⁶ Some consumer contracts invoke this distinction and explicitly state that “the ETF is part of this Offer and is not a penalty.”²⁷

Shifting to market-specific rules, in certain consumer markets statutes and regulations set specific limits on the permissible magnitude of ETFs. A prominent example for such regulation is the rules targeting prepayment penalties in mortgage contracts. The Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 restricts prepayment penalties to a subset of prime, fixed-rate mortgages. Moreover, when allowed, prepayment penalties are restricted in amount and duration: the prepayment penalty may not exceed three percent of the prepaid amount during the first year after consummation of the mortgage transaction, two percent during the second year after consummation, and one percent during the third year after consummation. There can be no prepayment penalty after the end of the third year (Pub. L. 111-203, Sec. 1414).²⁸

26 See, for example, *Hutchison v. AT&T Internet Services, Inc.*, CV07-3674 SVW (JCX), 2009 WL 1726344 (CD Cal May 5, 2009) *affd sub nom Hutchison v. Yahoo! Inc.*, 396 F App’x 331 (9th Cir. 2010) (“the ETF’s true function is not as a penalty, but . . . [as] an alternative performance provision”); *Minnick v. Clearwire US, LLC*, 683 F. Supp. 2d 1179, 1184 (W.D. Wash. 2010) (same); *Schneider v. Verizon Internet Services, Inc.*, 400 F. App’x 136, 138 (9th Cir. 2010) (same); *Williams v. Oberon Media, Inc.*, CV098764-JFW AGRX, 2010 WL 1644888 (C.D. Cal. Mar. 4, 2010) (same, in a video game service contract). Among the courts that have viewed ETFs as “alternative means of performance,” some have sought to support their ruling by finding that the magnitude of the ETF is “relatively equal” to the cost, to the consumer, of fulfilling the contract. See, for example, *Minnick v. Clearwire U.S. LLC*, 174 Wash. 2d 443, 446, 275 P.3d 1127, 1129 (2012) (“Because the ETF, at the time of contracting, provided customers with a ‘real option’ and was of relatively equal value with the alternative option of fulfilling the contract, we hold that it is an alternative performance provision and not a liquidated damages clause” (emphasis added)).

Other courts held that ETFs were not “alternative means of performance,” noting that “a contract expressed to be performed in the alternative is in fact a contract contemplating but a single, definite performance with an additional charge contingent on the breach of that performance.” *Cellphone Cases*, 193 Cal App 4th 298, at 328 (2011).

27 See Xbox live contract, paragraph 11, available at <http://www.xbox.com/en-US/Legal/xbox-live-contract-terms>).

28 Similar restrictions exist in Europe, but reaching a broader range of consumer loans. In Germany, fees for early repayment of consumer loans may not exceed 1 percent of the amount repaid (and 0.5 percent if terminated within a year of the end of the loan agreement), nor may they exceed the amount of interest that would have been paid during the period between the early and scheduled repayment. See German Civil Code § 502.

In addition, many states regulate ETFs in utility contracts. In New York, ETFs in contracts with alternative energy companies may not exceed \$100 for any contract with a remaining term of less than 12 months, or \$200 if the remaining term is more than 12 months (NY Public Service Commission 2010). In Illinois, alternative gas suppliers may not charge an ETF exceeding \$50 (Illinois Commerce Commission 2014); and ETFs in cable contracts are regulated under strict formulae (220 ILCS 5/22-501(l)).

4.2 Is the Penalty Doctrine the Proper Framework?

The normative framework in Part 3 established the economic grounds for intervention in Lock-in contracts, by identifying the situations when, and the reasons why, Lock-in arrangements hurt consumers and reduce total welfare. We then saw that courts in fact scrutinize Lock-in contracts and release consumers from their long-term obligations when the ETFs are deemed excessive under the Penalty Doctrine. In this section, we ask whether the legal scrutiny of ETFs under the Penalty Doctrine is consistent with the economic grounds for intervention. We find limited consistency. The Penalty Doctrine and related statutory rules are not well-suited to implement the economics of lock-in.

In a fundamental way, the question asked by courts—are ETFs overcompensatory—is the wrong question. ETFs are part of Lock-in contracts in which consumers enjoy up-front discounts and sellers often assume up-front losses. If the seller gave the locked-in consumer a large period 1 discount (\$20 in our Section 3 example), the seller would in turn charge the consumer a large period-2 premium (the same \$20). The relevant question is whether sellers should be allowed to trade-off up-front perks for back-end costs, not whether ETFs are overcompensatory.

The intent-focused inquiry applied in the *Cellphone Cases* is similarly unhelpful. The court struck the ETF based on evidence that Sprint intended the ETF to reduce “churn rates.” Because they served a deterrence, rather than compensatory purpose, the ETFs were deemed unenforceable.²⁹ But deterrence and compensation are not mutually exclusive. ETFs can both work to deter early termination and compensate carriers for lost profit when deterrence fails. Moreover, even perfectly compensatory liquidated damages are commonly intended to influence the perform-or-breach decision.

The proper inquiry is not whether the business is enjoying supercompensatory damages or whether it harbored a noncompensatory purpose when adding

29 See discussion of the Cell phone Cases, *supra*.

the ETF.³⁰ Rather, the proper inquiry is whether consumers are able to anticipate the long-term costs of Lock-in, including the quantity distortion and the inflexibility distortion. This is an inquiry that courts, unfortunately, are not in the best position to perform, because it depends on factors beyond the evidence presented in individual cases.

Moreover, the economic analysis of Section 3 sheds doubt on the desirability of any legal rule that bans or restricts ETFs. Legal restrictions on lock-in prevent contract differentiation and hurt consumers who prefer low up-front prices, even when they are coupled with high ETFs. Also, as explained in Section 3.4, Free Exit can serve as a signal of quality. To serve this beneficial signaling role, sellers must be able to freely choose between the two contractual designs—Free Exit and Lock-in. If the laws were to impose Free Exit on all sellers, the signal would disappear.

The divergence between the Penalty Doctrine and the economics of lock-in does not mean that courts wielding the doctrine never reach good outcomes. On the contrary, since Lock-in is often less efficient than Free Exit (as shown in Section 3), striking an ETF may coincidentally be beneficial. In the wireless market, courts applying the penalty doctrine, together with the increasing salience of ETFs in the eyes of consumers, instigated a market-wide shift from fixed to graduated ETFs. Now, as the two-year contract duration progresses, the ETF is proportionally adjusted downward, making exit easier.

4.3 Market Solutions and Their Limits

The current law of exit, based on the Penalty Doctrine, is unsatisfactory. Perhaps we should abandon these legal restrictions, which are both over- and under-inclusive, and rely on market solutions. Unlike other legal terms in form contracts, which often remain obscure to most consumers and escape the discipline of competition, ETFs are increasingly salient. Many wireless users know that they are entitled to an “upgrade” (namely, a reset of the contract duration back to “period 1”) every two years. They understand that their contract does not allow them to freely switch to a new provider even if that competitor offers better technology or price. And they know that technology often advances at a pace that makes Lock-in costly. Similarly, health club members have gradually learned that low per-period membership prices come with long-term commitments. People learn about the cost of Lock-in from their own experience as repeat consumers of products and services that come (came) with ETFs. Or they learn from the experience of others, as stories propagate about difficulties encountered by consumers who tried to quit a service (e.g., Ducey 2014).

30 Similarly, the distinction between ETFs as liquidated damages and ETFs as “alternative means of performance” (see Section 4.1 above) seems arbitrary and without any solid economic foundation.

This increased consumer awareness has been recognized by several courts. In *Hutchison v. Yahoo! Inc.*, the Internet service provider waived an up-front installation fee (of approximately \$175) and provided a discounted monthly fee in return for a 12-month commitment backed by an ETF. The court held that the \$200 ETF does not constitute unlawful liquidated damages; rather it presents the consumer with a “rational choice” (*Hutchison v. Yahoo!, Inc.*, 1396 F Appx 331, 333 (9th Cir 2010)). See also *Schneider v Verizon Internet Servs., Inc.*, No. 09–55580, 2010 US App LEXIS 19974, 2010 WL 3825502 (9th Cir., September 27, 2010)). The court explained:

[W]hen Plaintiff agreed to this contract [with the ETF], Defendant correspondingly agreed to waive fees amounting to \$175. Defendant also agreed to charge a discounted monthly rate. Therefore, when Plaintiff chose to terminate the contract in the twelfth month, he had already accrued a benefit of more than \$175 . . . Therefore, viewed from the time of making the contract, the ETF provision provides a consumer with a rational choice. (*Hutchison v. Yahoo! Inc.*, at 334)

In *Hutchison*, the ETF was clearly overcompensatory. The consumer terminated the service only two weeks before the end of the 12-month lock-in period, and thus the service provider lost only two weeks’ worth of profit—less than the \$200 ETF. Nevertheless, the court enforced the clause, because the consumer made a “rational choice” to enter the Lock-in contract.

The rise of Free Exit as a contractual arrangement in many markets provides additional support for the view that consumers are becoming increasingly informed about the cost of Lock-in. The “No Contract” marketing campaigns appeal to ETF-averse consumers. Sellers are offering Free Exit, because a substantial number of informed consumers demand Free Exit. ETFs have become a locus of competition, and consumers’ distaste for ETFs provided the impetus for an expanding advertising strategy that trumpets the no-commitment feature. This does not mean that all consumers, or even all informed consumers, prefer Free Exit. It does mean that consumers who choose Lock-in arrangements probably do so with awareness of the ETFs and of the advantages they are trading away. The increasing salience and competition should alleviate much of the concern about ETFs.

In addition, and in further testament to the rising salience of Lock-in provisions, sellers are enticing new consumers by offering not only free exit, but also reimbursement of ETFs charged by other sellers.³¹ Such provisions have the potential to eliminate the distortions felt by consumers who enter Lock-in

31 See Chen (2014). Ting, another wireless provider set up a \$100,000 fund dedicated to compensating consumers switching to Ting for ETFs charged by former carriers, up to \$350 per transferred line.

contracts without fully understanding the costs of Lock-in. These consumers, able to invoke the escape hatch that competitors fund, are shielded from some of the downside of Lock-in.

Loyalty programs are a different story, posing a greater consumer protection challenge. They increase switching costs and enforce Lock-in—just like ETFs. But, unlike ETFs, the costs they impose are less salient, even when incurred. It is one thing to recognize the burden of fees charged upon early termination; it takes more sophistication to recognize the burdens created by potential rewards. In the ETF scheme, it is the penalty that consumers notice, whereas in the loyalty program it is the reward. Consumers may recognize that they are paying higher prices to remain within the reward network and qualify for the next level of “elite” status within the loyalty program. But it is more difficult to compare the higher prices to the value of the reward, and to see that the overall effect of this scheme is (often) a net loss. It is impossible for consumers to realize that by joining a loyalty rewards program they contribute to a more concentrated industry and forfeit some benefits of competition. And it is also impossible to compare Free-Exit prices with reward-based Lock-in, when, as we showed in the airline context, the presence of loyalty programs crowds out Free-Exit pricing. For these reasons, the market solutions that effectively address concerns about stick-based Lock-in have done little to stymie the proliferation of carrot-based Lock-in.

Market solutions, while clearly helpful, are imperfect. They work better with stick-based Lock-in and not so well with carrot-based Lock-in. Should policy-makers rely on these imperfect market solutions? Or should they attempt to regulate Lock-in? The question is a difficult one. With institutional constraints on courts and other lawmakers, any regulation would be less than optimal. Is suboptimal regulation better than imperfect market solutions? The answer is beyond the scope of this article.

5. CONCLUSION

It is not hard to discern why Free Exit (and the “No Contract” slogan) is increasingly appealing to consumers. Hidden fees penalizing consumers for various patterns of use or nonuse have proliferated in the consumer contract universe. A consumer signs up for a service, and before she knows it she faces a potpourri of charges, including application fees, activation fees, upgrade fees, fees for using the service, fees for not using the service, maintenance fees, replacement fees, and late fees (and we have not even begun to count the various taxes). Many of these fees

The fund was depleted in seven minutes! Ting now offers a more modest reimbursement of ETFs, up to \$75 per customer. See <https://ting.com/blog/ting-pays-out-etfs-up-to-75-per-line/>.

were not apparent when the consumer signed up, and might cause her to regret the entire transaction. With Free Exit, she can act upon this regret.

Some consumers have learned—often the hard way—that a “Contract” means fine print terms, and that the fine print rarely contains happy surprises. (The happy stuff, like generous return policies, is never hidden, but rather posted on large store signs.) Since the seller drafts the terms, this game seems rigged. The message of “No Contract” that promotes the free exit option has the appeal of removing the asymmetry and eliminating the platform through which sellers secure their advantage. It does not really matter that the No Contract label is technically incorrect and that in fact there *is* a contract, with plenty of sobering fine print. Exit is the great liberator.

And so Free Exit is good news. It is a market response to limitations in consumer choice, whether due to irrationality, lack of sophistication, or imperfect information. It is a response that does not rely on the heavy-handed use of prohibitions, regulations, liability, or mandated disclosures. Many consumers used to like, and some still do like, to enter into long-term contracts for the benefit of up-front discounts or free phones. But they have also learned that these “gifts” come at a price, which—although deferred into the future—may still be too high. With the choice between Free Exit and Lock-in so prominently offered, any propensity among courts to intervene in ETF-based Lock-in contracts is unnecessary, and could do more harm than good.

And yet, not all news is good. For consumers to choose the optimal contract duration, it is not enough to recognize the misery of termination penalties. There are more subtle ways to lock consumers into de facto commitments, to charge them higher prices, and restrict their ability to efficiently switch over time—all this without explicit exit penalties. We analyzed the effects of loyalty programs as a strategy that sellers employ to obtain the same benefits they were used to reaping through termination penalties. Consumers may refrain from exit as they work their way to the coveted rewards. It takes far more savvy to resist the enticement of promised discounts, frequent-flyer miles and cash-back rewards. Even without ETFs, exit, in many markets, is not free.

Our analysis uncovered a paradoxical state of the law: exit regulations are used most where they are needed least. Termination penalties present an obvious target for regulatory intervention, while loyalty programs seem benign, not warranting any regulatory attention. And yet penalties and fees are diminishing as a result of market pressures, thus reducing the need for regulation; whereas loyalty programs seem to flourish, requiring perhaps a more skeptical regulatory eye. It is not a coincidence that penalties are the focus of both regulation and market solutions: the same agony that consumers experience when struck with exit penalties drives both the regulatory and the market-based responses. It is also not surprising that rewards and perks attract neither regulation

nor market pressure: the harm they inflict is disguised behind the façade of free gifts.

Should the law of exit turn its gaze from sticks to carrots, from ETFs to loyalty programs? Even if loyalty programs hurt competition and reduce efficiency, is it the role of consumer protection law to prohibit contractual arrangements that people seem to like? Perhaps the solution lies not in heavy-handed regulation of loyalty programs, but rather in the gradual recognition by consumers that these beloved plans come at a cost. If “disloyalty” becomes the virtue consumers appreciate—a freedom to choose the cheapest and most convenient periodic transaction—competitors offering it would flourish. As “No Contract” is crowding out stick-based Lock-in, “No Loyalty” would be joining it in crowding out carrot-based Lock-in.

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