



# CHICAGO JOURNALS

**The University of Chicago**  
**The University of Chicago Law School**

---

The Right to Withdraw in Contract Law

Author(s): Omri Ben-Shahar and Eric A. Posner

Source: *The Journal of Legal Studies*, Vol. 40, No. 1 (January 2011), pp. 115-148

Published by: [The University of Chicago Press](#) for [The University of Chicago Law School](#)

Stable URL: <http://www.jstor.org/stable/10.1086/658403>

Accessed: 04/10/2011 01:52

---

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at  
<http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).



*The University of Chicago Press, The University of Chicago, The University of Chicago Law School are collaborating with JSTOR to digitize, preserve and extend access to The Journal of Legal Studies.*

<http://www.jstor.org>

# The Right to Withdraw in Contract Law

Omri Ben-Shahar and Eric A. Posner

## ABSTRACT

European law gives consumers the right to withdraw from a range of contracts for goods and services; American law, with narrow exceptions, does not. Yet merchants in the United States frequently provide by contract that consumers have the right to return goods. We analyze the right to withdraw in a model that incorporates a trade-off between allowing consumers to learn about goods that they purchase and protecting sellers from the depreciation of those goods. The right to withdraw—at least, as a default rule—has a plausible economic basis. We identify a nascent version of it in the well-known, controversial case of *ProCD v. Zeidenberg*.

## INTRODUCTION

A buyer orders a computer over the Internet. When it arrives, she discovers that the computer does not operate as quickly as she hoped, or that it does not look good on her desk, or that it has a more limited warranty than she remembered reading about on the Web site. She calls up the seller and demands that it take back the computer and return her money.

Many sellers would comply, but not all, and usually sellers have no legal obligation to take back conforming goods that do not satisfy buyers—unless they agreed to do so by contract. In the United States, there are few exceptions to this rule. A Federal Trade Commission regulation provides for a 3-day cooling-off period for certain goods that are pur-

OMRI BEN-SHAHAR is Frank and Bernice J. Greenberg Professor and ERIC A. POSNER is Kirkland & Ellis Professor at the University of Chicago Law School. Posner thanks the Microsoft Fund and the Baker Scholars Fund of the University of Chicago Law School for financial assistance. Thanks to Adam Badawi, Oren Bar-Gill, Yair Listoken, Richard McAdams, Ariel Porat, Mike Schill, and participants at workshops at the University of Chicago and at the University of Amsterdam for helpful comments and to Hanna Chung for research assistance.

[*Journal of Legal Studies*, vol. 40 (January 2011)]

© 2011 by The University of Chicago. All rights reserved 0047-2530/2011/4001-0004\$10.00

chased away from the seller's permanent place of business, such as goods purchased at home from door-to-door salespeople.<sup>1</sup> Some states provide more generous treatment. For example, New York gives consumers the right to return unused and undamaged goods within 30 days unless the store conspicuously posts a different return policy (New York Code, General Business, sec. 218-a; see also California Civil Code, sec. 1723). In Europe, mandatory rights of withdrawal exist for transactions that take place by phone or on the Internet and for other transactions that do not fully take place on the premises of the seller. Depending on the type of transaction, consumers may have as long as 2 weeks to return the goods for a refund. These rules apply to a range of transactions, including ordinary goods, services, and loans, and sellers cannot opt out of them.

European law in this way recognizes the consumer's "right to withdraw." There is no such generic right in the common law of contract or in the Uniform Commercial Code in the United States. We will argue, however, that the right to withdraw has a plausible efficiency rationale. In our model, the buyer does not know how much she values the good until she has had a chance to take it home and inspect or use it. By using it, she learns whether she gives it a high valuation or a low valuation. If the buyer gives it a low valuation, she does best by returning the good to the seller. However, the buyer also has an incentive to use the good excessively. To eliminate this incentive, the buyer must pay damages equal to the depreciation of the good, or the right to withdraw should be available only when the value of the good to the buyer is less than the depreciation loss to the seller.

Our model suggests that American law is excessively strict but that European law is excessively generous. American law should recognize a generic right to withdraw, as European law does. However, the rule should be a default rule, not a mandatory rule, as it is in Europe. In addition, it is important that the seller have the right to recovery of depreciation costs—which is not as clearly recognized in European law as it should be.

In the second part of the paper, we hunt for traces of the right to withdraw in American law and suggest that some courts have recognized an embryonic version of it. Notably, the holdings in *ProCD v. Zeidenberg*

1. See the FTC's cooling-off rule for door-to-door sales, 16 CFR pt. 429 (2008). Some state statutes provide similar protections for particular types of transactions, such as sales made by telemarketers. See, for example, Code of Alabama 1975, sec. 8-19A-14, which provides for a 14-day cancellation period.

(86 F.3d 1447 [7th Cir. 1996]) and *Hill v. Gateway 2000, Inc.* (105 F.3d 1147 [7th Cir. 1997]), two well-known cases that have long been criticized as excessively harsh toward consumers, reflect the policy concerns that underlie the right to withdraw. In these cases, buyers were held to have the right to withdraw from transactions if they discover, after the purchase, that the goods come with undesirable legal terms. However, we argue that *ProCD* and *Gateway* do not address these policy concerns in a doctrinally satisfying way. The cases rely on offer-and-acceptance doctrine, which is poorly suited to the problem. And they suggest that the policy concerns are tied to the problem of hidden boilerplate terms in contracts, when in fact the policy concerns apply more generally to all the characteristics of a product or service.

Prior law and economics scholarship on the right to withdraw is extremely sparse. Scott and Triantis (2004, pp. 1488–89) argue that courts should enforce a default right to withdraw in consumer contracts so as to encourage merchants to specify termination rights in the contracts. However, they do not appear to believe that the right to withdraw would be optimal for the parties; instead, they propose it as a “forcing rule” that would encourage merchants to specify the optimal terms rather than a majoritarian rule that merchants would accept. Unlike us, they do not claim that the right to withdraw would appear in an optimal contract. Stremitzer (2010), who wrote his paper at the same time as we wrote as ours, defends the right to withdraw where the seller has monopoly power on the grounds that the right curtails the seller’s bargaining power and in doing so may have positive efficiency and redistribution effects. By contrast, we describe the right to withdraw as an aspect of the optimal contract between sellers and buyers regardless of relative bargaining power.<sup>2</sup>

The literature on consumer protection law focuses on the typical American rules—such as disclosure requirements, rules governing advertising, and limits on certain types of contractual provisions such as cross-collateral clauses (for example, Beales, Craswell, and Salop 1981). The problem of consumer information is addressed by securing the buyer an opportunity to learn information prior to the sale, not after it (for example, Craswell 1988). A large literature on the unconscionability doctrine and related judge-made rules that police contracts typically

2. See also Matthews and Persico (2005), who seek to explain why sellers permit returns and offer refunds that exceed the salvage value of the item returned; they attribute this pattern to information asymmetry where the seller has market power.

involving consumers also focuses on the disclosure of information to the buyer prior to sale (for example, Craswell 1993).<sup>3</sup>

Our argument relies on the familiar model of breach of contract that has been used to analyze contract remedies (Shavell 1980). The right to withdraw along with the duty to pay depreciation costs is analytically the same as breach of contract along with the duty to pay reliance damages; the right to free withdrawal is the same as breach of contract along with the duty to pay zero damages. We modify the model at the margins to capture effects of the specific rules connected with the right to withdraw as well as hypothetical alternative regimes. Our main goal is to deflect traditional hostility to the right to withdraw in American legal circles by providing it with a simple foundation in economic efficiency.

## 1. BACKGROUND

The right to withdraw has its origins in the national legal systems of various European countries, but in recent years it has emerged as a prominent feature of European contract law (Loos 2009, p. 239). A series of directives issued between 1985 and 2008 introduced the right of withdrawal in transactions relating to life insurance, real estate time-shares, distance selling of goods and financial services, and consumer credit. In 2008, the European Commission proposed a new Directive on Consumer Rights (DCR), which would subsume and extend some of the previous directives. Chapter 3 of the proposed DCR recognizes a general right to withdraw for most distance and off-premises contracts (CEC 2008). The right to withdraw also appears in the 2008 draft Common Frame of Reference for European Private Law (von Bar et al. 2008), an academic effort at codifying European private law, including contract law.

In all of these documents, the right of withdrawal simply provides the consumer the right to cancel the contract within a period of time after the contract has been entered. The consumer must return the goods or discontinue use of the services, and in return the seller must refund the purchase price. Typically but not always, the consumer must pay the cost of depreciation, if any.

We will focus on the draft DCR. The right to withdraw applies to

3. We do not address possible justifications for consumer protection laws, including cooling-off periods, that rely on cognitive biases (Camerer et al. 2003, pp. 1240–42; Hillman and Rachlinski 2002; Sunstein and Thaler 2003, pp. 1187–88).

“distance contracts” (where the seller and consumer make the sale using a means of “distance communication” such as a telephone or the Internet) and “off-premises contracts” (where the seller and consumer conduct business in each other’s physical presence but away from the premises of the business; CEC 2008, art. 2(6)–(8)). The seller has an obligation to inform the consumer of the right to withdraw at the time of contracting (art. 9(b)). The consumer has a 14-day period in which to exercise the right to withdraw. Withdrawal is entirely discretionary; the consumer need not have, or provide, a reason for withdrawing from the contract (art. 12(1)). After the consumer exercises the right to withdraw, the seller must return any payments received within 30 days (arts. 16, 17(1)).

The consumer bears the cost of returning the goods unless the seller has agreed otherwise. The consumer is also liable for “any diminished value of the goods resulting from the handling other than what is necessary to ascertain the nature and functioning of the goods,” unless the trader did not give notice of the right to withdraw prior to contracting. Likewise, the consumer is not charged for any benefit he derived prior to withdrawal. Thus, in the case of service contracts, the consumer is not liable for the cost of performance prior to withdrawal (CEC 2008, art. 17).

There are numerous exceptions to the right of withdrawal. For distance contracts, examples include goods and services whose prices depend on fluctuations in financial markets, customized goods, sealed recordings and software that have been unsealed by the consumer, newspapers and other periodicals, gaming and lottery services, and auction contracts (CEC 2008, art. 19(1)). For off-premises contracts, examples include food items sold by grocery stores that were ordered by the consumer and delivered to her home, emergency services, and certain repair and maintenance services performed on the consumer’s property (art. 19(2)). Other excluded contracts include sales involving real estate, sales conducted through vending machines, and sales of food and beverages in restaurants, as well as certain credit, insurance, and financial services contracts (art. 20).

The legalization of the right to withdraw serves a number of purposes. Loos (2009, pp. 245–49) identifies four: protecting consumers from aggressive sales tactics, encouraging consumers to engage in long-distance purchases, encouraging consumers to use the Internet to make purchases, and enabling consumers to understand complex contracts. As Loos notes, the second and third justifications are not persuasive, at least in

the United States. If there ever was a psychological barrier against buying goods from someone outside one's presence, it has by now surely crumbled. These justifications may reflect special European concerns, namely, the drive to integrate national markets.

The first and fourth motivations are plausible. There are long-standing concerns about aggressive doorstep sales tactics, telemarketing, and other situations in which consumers are vulnerable to "seduction," such as purchases of time-shares made during vacations. In the United States, national regulations and state statutes regulate these transactions—often by mandating rights to withdraw during cooling-off periods. However, there is no counterpart in the United States for the right of withdrawal from complex contracts. Rather than giving consumers a right to withdraw, American law relies on mandated disclosures, requiring sellers only to alert consumers of onerous, unexpected terms by using conspicuous language in the contract. If the consumer is merely unhappy with the goods once she has had a chance to inspect or use them, she has no remedy (so long as the goods conform to the descriptions and warranties), unless the contract itself gives her the right to return the goods.

And, indeed, common experience teaches that nearly all retail stores in the United States permit customers to return merchandise for a refund.<sup>4</sup> The details of store policies differ, of course. Customers might have just a few days to return goods or a very long time; they might be able to return the goods for cash or just for store credit; they might have to pay shipping or restocking fees, or not. But the core right to withdraw, at least for stores selling new goods, seems virtually universal.

We examined the return policies of two major retail stores, Walmart and Target. Walmart has the largest share of the retail market in the United States, about 11 percent (Kapner 2009). Target has the sixth largest market share. Walmart offers the same terms for goods sold in brick-and-mortar stores and goods sold over the Internet. Customers can return virtually all items for cash or credit. Apparel must be returned unworn, with tickets attached. Music, movies, and software must be unopened. Books must be unused and unmarked. Autographed memorabilia must include the certificate of authenticity. Some products may only be returned to a physical store because of shipping regulations (for example, products with flammable liquids, tires). Other products may

4. This is also the case with service providers, which often provide a menu of options, allowing consumers to purchase a high-price service with a free option to withdraw or a low-price service with no option or a costly option to withdraw (for example, airline tickets). See Scott and Triantis 2004.

only be returned by special shipping arrangements (for example, caskets, jewelry over \$300, oversize items), and so on. The return period is 90 days, except for certain items (computer components, 45 days; cameras, 30 days; cell phones, 15 days). Customers without receipts have 45 days to return goods and can return no more than three orders in that period. Walmart appears to absorb the shipping fee if the product is returned by carrier, with some exceptions (for example, furniture).<sup>5</sup>

Target has a similar policy. It permits nearly all items to be returned within 90 days, regardless of whether they are purchased from a store or over the Internet. Refunds are in the same form as the payment: if the buyer used cash, the refund is in cash; if the buyer used credit, the refund is in credit. Unlike Walmart, Target charges a restocking fee of 15 percent for certain portable electronics and does not cover the cost of shipping the returned good unless the return is the result of Target's fault.<sup>6</sup>

## 2. THE THEORETICAL BASIS OF THE RIGHT TO WITHDRAW

### 2.1. Summary of Model

A buyer and a seller enter a contract involving the sale of a good. At the time of contracting, the buyer is uncertain about how much he values the good. Consider a piece of furniture such as an office chair. The buyer can evaluate the chair's quality at the store but does not know how it will look and work in his house. After delivery, the buyer sees how the chair looks in his study and in this way gains information about how much he values the good. This information improves with the passage of time; for example, the buyer needs to actually use the chair to learn if it is comfortable. The chair, however, depreciates with the passage of time.

The optimal contract would balance the buyer's gain from the reduction of uncertainty and the seller's loss in terms of depreciation cost.<sup>7</sup> If the buyer gained a great deal of information from having the good

5. See "Returns Policy" on the Walmart Web site, <http://www.walmart.com/cp/Returns-Policy/538459> (accessed February 26, 2010).

6. See "Target Stores Refund Policy" on the Target Web site, <http://www.target.com/Return-Refund-Policy>Returns-Refunds/b?ie=UTF8&node=13685491> (accessed February 26, 2010).

7. For expository simplicity, we use the term "depreciation cost" to encompass all costs incurred by the seller as a result of the transfer of the good to the buyer, including opportunity cost (the seller cannot sell the good to another person), destruction of intellectual property (for example, if the buyer records the product and returns it), and so on.

in his house, and the good depreciated very little, the buyer would have the right to return the good. This right would benefit the seller *ex ante*, because buyers are more likely to buy a good if they have the right to return it if they do not like it. For example, buyers are more likely to purchase gifts—items that have uncertain value to their recipients—if the gifts can later be returned freely to the store. At some point, however, depreciation costs will exceed the information benefits; at this point, the right to free withdrawal should end.

Another version of the optimal contract would give the buyer, rather than a free withdrawal right, the option to return the good and pay the depreciation loss to the seller. This contract forces the buyer to internalize the cost that the decision to withdraw imposes on the seller and in this way gives the buyer the socially optimal incentive to keep or return the good. As long as the depreciation is priced accurately, this contract does not require an *ex ante* prediction of the point in time at which depreciation costs will exceed the information benefits.

Both of these contracts, however, may be impractical because they rely on accurate pricing of depreciation, either by the parties *ex ante* or by courts *ex post*. A third approach, one that overcomes this information problem, is to use time as a proxy for depreciation. If goods tend to depreciate slowly, while buyers can gain most of the information they need quickly, then the optimal right of withdrawal would extend for just a few days after the sale.

The model demonstrates that rules that mandate free withdrawal for a fixed period can lead to an inefficient outcome any time the depreciation cost exceeds the allocative value that more information affords the buyer. The longer the free withdrawal period, the greater the potential inefficiency. Further, the depreciation costs sellers expect to suffer as a result of free withdrawals translate into higher prices. This, in turn, leads to another source of inefficiency: some efficient transactions are not entered into *ex ante*.

Readers familiar with the economic theory of breach and damage measures will find close resemblance between the model of withdrawal and the model of breach. In both settings, some new information makes it desirable for the buyer to walk away from the deal, and in both settings this imposes some loss on the seller. Reexamining this trade-off in the withdrawal context provides useful insights both theoretically and doctrinally. Theoretically, a right of free withdrawal is equivalent to a breach with a damage measure of \$0. Our analysis shows that in some circumstances this rule can be optimal. Doctrinally, our analysis demonstrates

that the remedies-for-breach model sheds new light on an area that was previously overlooked, that of withdrawal rights.

## 2.2. Framework of Analysis

Two parties, a buyer and a seller, are contracting over the sale of one indivisible good. The value of the good to the buyer is uncertain at the time of the contract and will be revealed over time. We assume a very simple information structure, as follows.

*The Time of the Contract:*  $t = 0$ . It is known that the value of the good will be either high or low, denoted  $v_H$  and  $v_L$ , with respective probabilities  $q$  and  $1 - q$ .

*The Signal:*  $t = 1$ . The buyer receives a signal  $s$  regarding the value of the good:

If the true quality of the good is  $v_H$ , the signal will be  $s = v_H$ .

If the true quality of the good is  $v_L$ , the signal will be  $s = v_H$  with probability  $\theta$  and  $s = v_L$  with probability  $1 - \theta$ .

Namely, it is assumed that at  $t = 1$ , high quality is not likely to appear low, but low quality might appear high. There are only false positives, not false negatives—perhaps because the false negatives are not purchased in the first place (products are bought only if they appear to be of high quality)—and it takes time to identify the false positives.<sup>8</sup>

*Full Information:*  $t = 2$ . The buyer—if he didn't already know that the product was of low quality—receives additional information and can perfectly assess the quality of the good.

The seller's cost of performing the contract is  $c$ . We will interpret  $c$  to be the value that the seller can derive from the good outside the contract. It is assumed that  $v_L < c < v_H$ , namely, trade is efficient ex post only if  $v = v_H$ .

It is assumed that at  $t = 1$  and  $t = 2$  the buyer can “withdraw” from the contract—return the good to the seller. If the good is returned, the buyer gets 0 value (that is, there is no interim benefit that the buyer gets prior to return). However, the good may depreciate over time. Let  $d_t$  denote the total depreciation at  $t = 1, 2$ , and assume that  $0 < d_1 < d_2$ .

The contract between the parties sets a price  $P$ , to be paid by the buyer only if the good is not returned, and return fees  $R_1$  and  $R_2$ , to be

8. Thus, if the buyer receives a signal  $v_H$ , he can infer a probability  $q/[q + (1 - q)\theta]$  that the good is of high quality and a probability  $[(1 - q)\theta]/[q + (1 - q)\theta]$  that the good is of low quality. If, instead, the buyer receives a signal  $v_L$ , he can infer with probability 1 that the good is of low quality.

paid by the buyer if the good is returned at  $t = 1, 2$ , respectively. Finally, we assume risk neutrality, a zero discount rate, and symmetric information.

### 2.3. The Optimal Contract

The optimal contract needs to provide efficient incentives to withdraw at  $t = 1$  and  $t = 2$  and efficient incentives to trade at  $t = 0$ . Since the optimal actions at early periods depend on what would optimally happen at later periods, we characterize the “second best” outcome (the best decisions that parties with incomplete information can make) by backward induction. With that, we will be able to identify the contract terms that induce optimal actions.

**2.3.1. Efficient Withdrawal at  $t = 2$ .** The buyer should withdraw if the good’s value to the seller, after depreciation, exceeds the value to the buyer, which is assumed to be perfectly known to the buyer at  $t = 2$ . That is, the buyer should withdraw if and only if

$$v < c - d_2.$$

If the value is known to be  $v_H$ , this condition cannot hold, because we assume that  $v_H > c$ , which means that  $v_H > c - d_2$ . Intuitively, if it were efficient to withdraw even when the value of the good was high, it could never be efficient to purchase the good in the first place—withdrawal would be certain and the purchase would create depreciation without creating any value. Thus, conditional on the good having been purchased, the only situation in which it might be efficient to withdraw is when the quality is known to be  $v_L$ . Then, the buyer should withdraw if and only if  $v_L < v^{**}$ , where  $v^{**} \equiv c - d_2$  is the minimum value of  $v_L$  below which it would be efficient to withdraw at  $t = 2$ .

**2.3.2. Efficient Withdrawal at  $t = 1$ .** At  $t = 1$ , the buyer may not know with certainty the quality of the good. Thus, in deciding whether to withdraw, the buyer should evaluate the information signal he received and the “option value” embedded in holding on to the good and exercising withdrawal later.

If the buyer receives a signal  $s = v_H$ , the buyer knows that it is still possible that the good will be of low quality (since we assume that this signal is not conclusive—that at  $t = 1$  the low-quality indicators may not yet surface). However, if it were efficient for the buyer to purchase the good at  $t = 0$ , it could never be efficient for the buyer to withdraw

at  $t = 1$  when the signal is  $s = v_H$ . Otherwise, withdrawal would be certain and the purchase would create depreciation without creating any value.

If the buyer receives a signal  $s = v_L$ , the buyer should withdraw if  $v_L < v^*$ , where  $v^* \equiv c - d_1$  is the minimum value of  $v_L$  below which it would be efficient to withdraw at  $t = 1$ . Note that  $v^* > v^{**}$ ,<sup>9</sup> which means that we have three effective regions of  $v_L$ . (1) “Anytime” returns ( $v_L < v^{**}$ ): here, the buyer should withdraw at  $t = 1$  if the signal is  $s = v_L$  or at  $t = 2$  if the value is then known to be  $v_L$ . (2) “Immediate” returns only ( $v^{**} \leq v_L < v^*$ ): here the buyer should withdraw only at  $t = 1$ , if the signal is  $s = v_L$ , but at  $t = 2$  the buyer should not withdraw even if the good is then known to be of low quality, because depreciation by then is too costly. (3) No returns ( $v_L > v^*$ ): here the buyer should not withdraw at any time even if he knows the good to be of low quality.

**2.3.3. Efficient Trade at  $t = 0$ .** Whether the buyer should purchase the good at  $t = 0$  depends on what is expected to happen at the ensuing periods—whether or not the good will be returned.

Region 1: “Anytime” Returns. In this region, it is efficient to withdraw at both periods, as soon as the buyer learns that the good is of low quality. Holiday gifts usually fall within this region—it takes longer until the intended user receives the item and learns its value than when the buyer and the user are the same person, but depreciation during this period is negligible. Here, trade should occur if and only if

$$q \times v_H + (1 - q)[(1 - \theta)(c - d_1) + (c - d_2)] \geq c.$$

On the left-hand side, if trade occurs there is a probability  $q$  that the good will be of high quality and will be kept, and there is a probability  $1 - q$  that the good will be of low quality and will be returned, with the return occurring either at  $t = 1$  (if the signal at  $t = 1$  is  $v_L$ , which happens with probability  $1 - \theta$ ) or at  $t = 2$  (if the signal at  $t = 1$  is  $v_H$ , which happens with probability  $\theta$ ). When the good is returned at time  $t$ , its social value is  $c - d_t$ . On the right-hand side, if trade does not occur the value of the good in the hands of the seller is  $c$ . Thus, in this region, net welfare from trade is greater than that from no trade if

$$c < v_H - \frac{(1 - q)}{q}[(1 - \theta)d_1 + \theta d_2].$$

9.  $v^* - v^{**} = c - d_1 - (c - d_2) = d_2 - d_1 > 0$ .

Region 2: "Immediate" Returns Only. In this region, it is efficient to withdraw only if the buyer learns of low quality at  $t = 1$ , but not at  $t = 2$ . Some perishable goods fall within this region: there is only a short window of time before depreciation becomes substantial. Here, trade should occur if and only if

$$q \times v_H + (1 - q)[(1 - \theta)(c - d_1) + \theta v_L] > c.$$

Here, if the good turns out to be of low quality it is either returned (at  $t = 1$ , with probability  $1 - \theta$ ) or kept by the buyer (with probability  $\theta$ ). Thus, in this region, net welfare from trade is greater than 0 if

$$c < \frac{qv_H + (1 - q)[(1 - \theta)(-d_1) + \theta v_L]}{q + (1 - q)\theta}.$$

Region 3: No Returns. When  $v_L > v^*$ , it is never efficient to withdraw because the depreciation—as early as at  $t = 1$ —makes the allocation of the good to the buyer efficient even if he values it at  $v_L$ . An example of such a good is fresh-cut flowers. Expecting that the good will not be returned, the buyer should purchase it if and only if

$$c < q \times v_H + (1 - q)v_L.$$

#### 2.3.4. The Optimal Contract Terms.

Proposition 1. Optimal purchase and withdrawal would occur if

$$P = c, \quad R_1 = d_1, \quad \text{and} \quad R_2 = d_2.$$

*Proof.* At  $t = 2$ , the buyer will withdraw if  $v_L - P < R_2$ . Setting  $R_2 = d_2$  and  $P = c$  guarantees that the buyer will withdraw if and only if  $v_L < c - d_2$ , the socially efficient outcome. At  $t = 1$ , if the signal is  $v_H$ , the buyer will not want to withdraw, even though the value may still turn out to be  $v_L$ . If the buyer withdraws, his payoff is  $-R_1$ . Ex ante, his payoff is negative, because the other contingency, in which the signal is  $v_L$ , also results in a negative payoff. The buyer can do better by not entering the contract at  $t = 0$ , thereby securing a payoff of 0. If, instead, the signal at  $t = 1$  is  $v_L$ , the buyer will withdraw if  $v_L - P < R_1$ . Setting  $R_1 = d_1$  and  $P = c$  guarantees that the buyer will withdraw if and only if  $v_L < c - d_1$ , the socially efficient outcome.

Looking now at the buyer's incentives to trade, if  $v_L < v^{**}$  the buyer will trade if and only if

$$q \times (v_H - P) + (1 - q)[(1 - \theta)(-R_1) + \theta(-R_2)] \geq 0.$$

Setting  $R_1 = d_1$ ,  $R_2 = d_2$ , and  $P = c$ , this condition is equivalent to

the socially optimal condition. If instead  $v^* > v_L \geq v^{**}$ , the buyer will trade if and only if

$$q \times (v_H - P) + (1 - q)[(1 - \theta)(-R_1) + \theta(v_L - P)] > 0.$$

Setting  $R_1 = d_1$ ,  $R_2 = d_2$ , and  $P = c$ , this condition is again equivalent to the socially optimal condition. Finally, if  $v_L \geq v^*$ , it is never efficient to withdraw and the buyer will trade if and only if

$$q \times (v_H - P) + (1 - q)(v_L - P) \geq 0.$$

Setting  $R_1 = d_1$ ,  $R_2 = d_2$ , and  $P = c$ , this condition is again equivalent to the socially optimal condition. Q.E.D.

Remarks.

1. *Intuition.* The optimal contract terms cause the buyer to internalize the external cost of the decision to withdraw. That external cost is the depreciation loss. Because the buyer must pay that cost under the terms of the optimal contract, he will withdraw from the contract if and only if the joint benefits exceed the joint costs. Since there is no deadweight loss in the decision to withdraw, there is also no inefficiency in the decision to trade.

2. *Optimal Withdrawal Policy.* There are other contract terms that achieve the optimal result. For example, a contract that stipulates free withdrawals any time the cost of depreciation,  $d_i$ , satisfies  $d_i < c - v_L$ , and no withdrawals otherwise, would not distort the withdrawal decision. The benefit to the buyer of free withdrawal would be offset by a higher price, but not too high to block efficient trade. In contrast to the optimal contract described above, in which the return fee is defined ex ante in the contract, here the right to withdraw needs to be determined ex post. This usually requires more information (that is, information on depreciation and on valuation), but it might be superior because it does not require the added transaction cost of collecting a return fee.

## 2.4. Analysis of Legal Regimes

We now examine the withdrawal and purchase decisions under alternative legal rules that regulate the return fee paid by the buyer upon withdrawal. We compare the effects of each rule on the optimal contract—the one that would be negotiated by unconstrained parties to maximize the total gain from the transaction.

**2.4.1. Free Withdrawal at  $t = 1$  and  $t = 2$ .** Suppose the law mandates

the return fee at both periods to be zero:  $R_1 = 0$  and  $R_2 = 0$ . Let us examine the effect on the withdrawal decision, the price of the contract, and the decision to enter the transaction.

Since the buyer can return the good at no cost, the first thing to note, unambiguously, is that the buyer will withdraw from the contract as soon as he finds out for certain that  $v = v_L$ . By withdrawing, the buyer secures a payoff of 0. If he were to keep the good, the buyer's payoff would be  $v_L - P$ . Since we assume that  $v_L < c$ , and since it must be that  $P \geq c$ , or else the seller would not enter the transaction (indeed, we will show below that  $P > c$ ), we can be certain that  $v_L - c < 0$  and the buyer will withdraw.

Ex ante, expecting withdrawal with probability  $q$  (the odds that the value is  $v_L$ ), the parties' expected payoffs will be as follows:

$$\text{Seller's payoff: } q(P - c) + (1 - q)[(1 - \theta)(-d_1) + \theta(-d_2)],$$

$$\text{Buyer's payoff: } q(v_H - P).$$

A transaction that guarantees nonnegative expected payoffs to both parties will occur if and only if

$$c + \frac{(1 - q)}{q}[(1 - \theta)d_1 + \theta d_2] < v_H.$$

On the left-hand side is the minimum price the seller would demand. On the right-hand side is the maximum price the buyer would be willing to pay.

There are several things to note. First, if  $v_L > v^{**}$ , namely, if the value is in the region in which withdrawals are not always efficient, there is a distortion. We prove in the Appendix that there are some transactions that are efficient but will not be entered into. These are cases in which there is social surplus from the transaction but the parties will nevertheless fail to realize it because the minimum price charged by the seller, which takes into account the burden of (inefficient) withdrawals—will exceed the maximal price the buyer will be willing to pay. The effect of this inefficiency is the shrinking of the market. (We can, for example, assume that  $v_H$  is stochastic—that some buyers have a higher  $v_H$  parameter than others; then, the effect of free withdrawals is to push out some but not all buyers.)

The reason for the distortion is that the loss at the  $v_L$  contingency is not minimized. Socially, it would be better for the buyer to keep the good even though its value is low, rather than impose the cost of depreciation; but privately the buyer would prefer ex post to exercise the

right to free withdrawal. Further, as a result of the price increase that the seller charges to offset the costly withdrawals, the buyer is not made better off by the right to free withdrawal and is in fact made strictly worse off. The buyer pays more, up front, for the expected depreciation his withdrawals might impose on the seller than the cost he would have had to bear by keeping the good ex post when its value is  $v_L$ . Essentially, the buyer is forced to purchase insurance against low quality, and the “premium” is costlier than the “coverage.” Thus, there is a deadweight loss without any redistributive effect.

Second, the distortion is greater the higher  $v_L$  is. It is useful here to distinguish between the two regions of  $v_L > v^{**}$  that were characterized above: region 2, in which it is inefficient to return the good only at  $t = 2$  (when  $v^{**} < v_L \leq v^*$ ), and region 3, in which it is also inefficient to return the good at  $t = 1$  (when  $v_L > v^*$ ). The distortion in region 3 is greater than that in region 2. Formally, in region 2 the expected loss of surplus is measured by

$$\frac{(1-q)\theta}{q}[v_L - (c - d_2)],$$

which has an intuitive interpretation: the loss of surplus occurs with probability  $(1 - q)\theta$  (that is, the likelihood that the quality  $v_L$  is discovered only at  $t = 2$ ), and the magnitude of the loss is the difference between the efficient outcome,  $v_L$ , and the distorted outcome,  $c - d_2$ . (This expected loss is multiplied by  $1/q$  because the upside from the transaction,  $v_H$ , occurs only with probability  $q$ .) By contrast, in region 3 the expected loss of surplus is measured by

$$\frac{(1-q)}{q}\{v_L - [(1-\theta)(c - d_1) + \theta(c - d_2)]\},$$

which, too, has an intuitive interpretation: the loss of surplus occurs with probability  $1 - q$  (that is, the likelihood that the quality is  $v_L$ ), and the magnitude of the loss is the difference between the efficient outcome,  $v_L$ , and the distorted outcome—either  $c - d_1$  or  $c - d_2$ , with probabilities  $1 - \theta$  and  $\theta$ , respectively. The expected loss of surplus is greater in region 3 than in region 2,<sup>10</sup> because in region 3 there is an additional distortion from withdrawals at  $t = 1$ .

10. The expected loss of surplus is greater in region 3 than in region 2 by

$$\frac{(1-q)(1-\theta)}{q}[v_L - (c - d_1)],$$

which is the added distortion from inefficient returns at  $t = 0$ .

Last, if  $v_L \leq v^{**}$ , namely, if the value is in the region in which withdrawals are efficient both at  $t = 1$  and  $t = 2$ , there is no distortion.<sup>11</sup> Although the buyer does not pay any return fee and does not internalize the cost he is inflicting on the seller, the buyer's decision to withdraw is nevertheless efficient. In terms of distribution of surplus, the seller—anticipating the cost of depreciation that he will have to absorb—charges for it through the ex ante contract price, undoing any redistributive effect of the free-withdrawals policy.

**2.4.2. Free Withdrawal at  $t = 1$  Only.** Suppose now that the law mandates the withdrawal fee to be zero only at  $t = 1$ . That is,  $R_1 = 0$ , but  $R_2$  can be set at any level by the parties. Let us examine the effect of this more limited free-withdrawal right on the withdrawal decision, the price of the contract, and the decision to enter the transaction.

At  $t = 1$ , if the buyer learns that  $v = v_L$ , he will withdraw from the contract. At  $t = 2$ , the buyer will withdraw if and only if  $v_L < P - R_2$ . Let us first examine the situation in which  $v_L \geq P - R_2$ , namely, the buyer does not withdraw at  $t = 2$ . Ex ante, with the possibility of free withdrawal at  $t = 1$  but no withdrawal at  $t = 2$ , the parties' expected payoffs will be as follows:

$$\text{Seller's payoff: } q(P - c) + (1 - q)[(1 - \theta)(-d_1) + \theta(P - c)],$$

$$\text{Buyer's payoff: } q(v_H - P) + (1 - q)\theta(v_L - P).$$

A transaction that guarantees nonnegative expected payoffs to both parties will occur if and only if

$$c + \frac{(1 - q)(1 - \theta)d_1}{q + (1 - q)\theta} < \frac{qv_H + (1 - q)\theta v_L}{q + (1 - q)\theta}.$$

On the left-hand side is the minimum price that the seller would demand; on the right-hand side is the maximum price that the buyer would be willing to pay. A positive surplus will exist if and only if

$$c < \frac{qv_H + (1 - q)[(1 - \theta)(-d_1) + \theta v_L]}{q + (1 - q)\theta}.$$

There are several things worth noting. First, this condition is identical to the social optimum condition in what we denoted above as region 2—the region where  $v^* \geq v_L > v^{**}$  and where it is efficient to withdraw only at  $t = 1$ . Here there is no distortion, as long as  $R_2 \geq d_2$  and  $P$  is set within the bargaining range, when such a range exists.

11. That there is no distortion can be shown by comparing the condition for the occurrence of a transaction here with the socially optimal condition. They are identical.

Second, this condition identifies a distortion in region 3—the region where  $v_L > v^*$  and where it is inefficient to withdraw even at  $t = 1$ . The inefficiency here is twofold: first, the buyer might withdraw at  $t = 1$  even though he should not. Second, the purchase price set by the seller will have to account for the inefficient cost of depreciation imposed on him by time-1 withdrawals, which will lead to the loss of some efficient transactions.<sup>12</sup>

Third, the seller demands a price that is higher than cost because of the free time-1 returns. The price increase is greater the higher  $d_1$  is (because the inefficient return is more burdensome), the lower  $\theta$  is (because it is more likely that the time-1 signal will be  $v_L$ , which would lead to an inefficient withdrawal), and the lower  $q$  is (because it is more likely that the quality is  $v_L$  and a withdrawal will occur).

We now turn to the possibility that  $v_L < P - R_2$ , namely, that the buyer prefers to withdraw at  $t = 2$  and pay  $R_2$ . Ex ante, with the possibility of free withdrawal at  $t = 1$  and paid-for withdrawal at  $t = 2$ , the parties' expected payoffs will be as follows:

$$\text{Seller's payoff: } q(P - c) + (1 - q)[(1 - \theta)(-d_1) + \theta(R_2 - d_2)],$$

$$\text{Buyer's payoff: } q(v_H - P) + (1 - q)\theta(-R_2).$$

A transaction that guarantees nonnegative expected payoffs to both parties will occur if and only if

$$c + \frac{(1 - q)}{q}[(1 - \theta)d_1 + \theta(d_2 - R_2)] < v_H - \frac{(1 - q)}{q}\theta R_2.$$

On the left-hand side is the minimum price that the seller would demand; on the right-hand side is the maximum price that the buyer would be willing to pay. The condition can be simplified:

$$qc + (1 - q)[(1 - \theta)d_1 + \theta d_2] < qv_H.$$

There are several things worth noting. First, here, there is no inefficiency. This condition for the occurrence of the transaction is identical to the socially optimal purchase decision. Namely, the left-hand side is the social cost of the transaction; the right-hand side is the social benefit. The reason for the efficiency of the outcome is that there is no distortion at  $t = 1$  despite the free withdrawal, because it is efficient to return the

12. The distortion at region 3 can be demonstrated formally as follows. The maximal feasible social welfare is  $qv_H + (1 - q)v_L - c$ . The actual combined welfare of the parties, given time-1 withdrawal, is  $q(v_H - c) + (1 - q)(1 - \theta)[v_L - (c - d_1)]$ . Since in this region  $v_L > c - d_1$ , the actual welfare is less than the maximal feasible social welfare.

good at this time; and there is no distortion at  $t = 2$  despite the costly return fee, because the return fee will not deter withdrawals.

Second, the seller demands a price that is lower than that under the 2-period free-returns regime. The buyer is willing to pay a price that is lower than his full valuation  $v_H$ , because he expects that he might have to bear the return fee at  $t = 2$ . The reduction in the seller's asking price is exactly equal to the reduction in the buyer's offering price. This is a more efficient outcome than under 2-period free returns.

### 2.5. Extension: The Option to Wait

After receiving the initial signal, the buyer may suspect—but not know for sure—that the value of the good is  $v_L$ . So far, the model ruled out such suspicion because a signal of  $v_L$  meant unambiguously that the good is of low value. In reality, an initial signal of  $v_L$  could be inconclusive. In such situations, the option to wait and get better information is valuable. As we will see, however, a regime allowing free withdrawal only at  $t = 1$  distorts the exercise of this option.

Let us assume that a signal of  $v_L$  is inconclusive. Specifically, and to avoid excessive rigor, we will use the following numerical example:

$$v_H = 100, \quad v_L = 0;$$

$$c = P = 75, \quad q = \frac{2}{3},$$

$$R_1 = 10, \quad R_2 = 20.$$

Note that absent a right to withdraw, the good will not be purchased, because the expected value, 67, is less than the cost of 75. As before we assume that at  $t = 2$ , the buyer will know for certain the quality of the good. At  $t = 1$ , the buyer receives a signal that is informative but not accurate. Let us assume that the signal has a 20 percent chance of error. That is,

If the true quality of the good is  $v_H$ , the signal will be

$$s = v_H \quad \text{with probability } 0.8;$$

$$s = v_L \quad \text{with probability } 0.2.$$

If the true quality of the good is  $v_L$ , the signal will be

$$s = v_H \quad \text{with probability } 0.2;$$

$$s = v_L \quad \text{with probability } 0.8.$$

Thus, using Bayes's rule, when the buyer receives a signal of  $v_L$ , there

is a conditional probability of  $1/3$  that the value of the good is actually  $v_H$ ,<sup>13</sup> and a corresponding probability of  $2/3$  that the value is indeed  $v_L$ . Similarly, when the buyer receives a signal of  $v_H$ , there is a conditional probability of  $8/9$  that the value is  $v_H$  and of  $1/9$  that it is  $v_L$ .

At  $t = 1$ , the right to withdraw could be valuable only if the signal is  $v_L$ . For, as explained before, if it were efficient for the buyer to purchase the good at  $t = 0$ , it could never be efficient for the buyer to withdraw at  $t = 1$  when the signal is  $s = v_H$ . (Indeed, the buyer's assessment of the likelihood of high value would rise from  $2/3$  to  $8/9$ .) Thus, the only interesting case is when the signal is  $v_L$  and the probabilities of  $(v_H, v_L)$  are updated to  $(1/3, 2/3)$ .

If the buyer holds on to the good, the expected value is negative. There is a chance of  $1/3$  that the good will turn out to be of high value and the buyer will enjoy a net payoff of 25 (namely, the value of 100 minus the price of 75). But there is also a chance of  $2/3$  that the good will turn out to be of low value and the buyer will end up withdrawing, bearing the return fee of 20. The expected value of these two ex post payoffs is  $-6.67$ .

Compare this payoff from holding on to the good at  $t = 1$  to the payoff from immediate withdrawal. If withdrawal is free at  $t = 1$ , the buyer will prefer to withdraw immediately, with a payoff of 0, than to hold on and expect a negative payoff. If, on the other hand, withdrawal is costly at  $t = 1$  and entails a return fee of 10, the buyer will prefer to hold on to the good. An expected negative payoff of  $-6.67$  is better than an immediate negative payoff of  $-10$ .

The buyer's choice to withdraw immediately is socially undesirable. Given the posterior probabilities of  $(1/3, 2/3)$ , holding on to the good at  $t = 1$ , while creating a negative value of  $-6.67$ , is better than withdrawal with a negative net value of  $-10$ . Ideally, the buyer should wait another period, receive better information, and withdraw later if necessary. But the artificially low cost of withdrawal at  $t = 1$  distorts the buyer's decision in favor of excessive, early withdrawal.

The problem here is due to the fact that the free withdrawal period is shorter than optimal. The allure of free withdrawal supersedes the worthy patience that the buyer would otherwise want to practice. In the scenario depicted in the example, an optimal outcome could be attained if the buyer's right to freely withdraw extended also to  $t = 2$ . In general, however, a withdrawal period supplied by law or by contract cannot be

13.  $\text{prob}\{v_H | s = v_L\} = (2/3 \times 1/5) / (2/3 \times 1/5 + 1/3 \times 4/5) = 1/3$ .

fully sensitive to the parameters that determine its optimal duration. In a perfect world, the right to withdraw would exist indefinitely and the buyer would simply have an obligation to fully compensate the seller when he returns the good. If judicial decision costs are high, it makes sense to replace such a standard with a rule that chops time into intervals and provides for fixed remedies across those intervals. Decision costs are saved but behavior will be distorted at the margin.

## 2.6. Additional Factors

**2.6.1. Learning versus Insurance.** We assume that buyers learn about their valuation of a product over time and that the right to withdraw allows them to take advantage of this additional information. The right to withdraw can have value for other reasons as well. Suppose, for example, that after the buyer enters the contract he loses his job and hence his desire to have the expensive good that he has just purchased. In this case, the right to withdraw effectively gives the buyer insurance against adverse events that cause his valuation of the good to decline (compare Scott and Triantis 2004).

Insurance may therefore provide an additional justification for a right to withdraw (for risk-averse buyers). Indeed, many service providers such as airlines offer a menu of contracts. Consumers can purchase an expensive ticket with a free right to withdraw or a cheap ticket with a costly right to withdraw or none at all. However, we suspect that insurance provides a limited justification for the right to withdraw. The events that lead to the decline of valuation could occur any time after the purchase and are not concentrated in the initial period. Thus, the prevalence of short-term rights to withdraw cannot be explained by the insurance aspect. The reason probably is that buyers prefer to self-insure and keep the prices of products lower. Also, buyers are in a better position than sellers to estimate the probability of future adverse events and can purchase insurance from a third party.

**2.6.2. Learning versus Use.** As noted earlier, a withdrawal right confers on the buyer the right to use a good for free as long as the good does not depreciate (or if, legally or practically, the buyer does not have to pay for depreciation). This creates a potential inefficiency, for it permits buyers to enter contracts for the temporary “use value” of goods where the buyer values that use value less than the cost to the seller. This is an important reason to require the buyer to pay for depreciation costs or to limit the duration of the right to withdraw. Or, if the population

of such temporary buyers is large enough, it would be optimal to suspend the right to withdraw altogether.

**2.6.3. Precontractual Investigation.** Some products can be cheaply inspected prior to purchase—for example, flowers or perfume. For such products, a right to withdraw has little value. Interestingly, the growing availability of product reviews and consumer feedback on the Internet should therefore reduce the value of the right to withdraw. Moreover, some precontractual investigation is aimed at the right to withdraw itself—learning the seller’s policies, who pays for the cost of return shipping, and how refunds are processed. The availability of this sort of information increases the value of, and demand for, withdrawal rights.

**2.6.4. Asymmetric Information.** We assume that sellers are uniform, but in fact some sellers offer higher-quality products and services than other sellers do. In such a case, high-quality sellers (that is, sellers of higher-quality products) may use a right to withdraw as a signal of quality, just as sellers use warranties (indeed, the right to withdraw is just a type of warranty). As is familiar, signaling equilibria can be inefficient, justifying mandatory rules (Aghion and Hermalin 1990). However, the policy implications are ambiguous. Depending on the circumstances, mandatory rules that require or even ban the right to withdraw may improve social welfare.

Asymmetric information can go in the other direction. Suppose that buyers have private information about their propensity to withdraw. Stores that offer a right to withdraw will disproportionately attract buyers with a propensity to withdraw and will have to charge higher prices, driving buyers without a propensity to withdraw to stores that do not offer a right to withdraw.

**2.6.5. Secondary Markets.** The right to withdraw loses some of its value when secondary markets exist. If disappointed consumers can turn around and resell goods on eBay, they do not benefit from a right to return them to the original seller, leaving aside the shipping and other costs of the secondary transaction. Rules that make goods more tradable in secondary markets, such as assignable warranties, reduce the value of the right to withdraw.

**2.6.6. The Optimal Measure of Damages.** In the model, the first best outcome occurs if the buyer pays the seller’s depreciation costs—in other words, reliance damages. If the seller loses volume as a result of withdrawal—namely, the profit component from one transaction—it is not

necessary to compensate the seller for this expectation loss to guarantee that withdrawals are efficient. Instead, the optimal amount would make the seller indifferent between sale-plus-return and nonsale. However, this compensatory measure does have to include factors not normally associated with depreciation. For example, the damages should cover the portion of the seller's fixed costs attributable to the transaction—such as setting up a “returns desk” and building storage capacity to account for the volume of returns. Although these amounts are probably trivial on a transaction-by-transaction basis, they could add up, justifying a premium above depreciation costs. If so, the proper measure of damages would be akin to expectation rather than reliance damages.

**2.6.7. Bargaining Power.** Stremitzer (2010) defends a mandatory right to terminate for breach where the seller has bargaining power on the grounds that the right limits the ability of the seller to exploit its bargaining power to set a high price. A countervailing consideration is that a mandatory right to terminate may limit competition by preventing small discount stores from challenging retail behemoths by offering as-is sales. The right to withdraw favors large retailers that maintain large inventories. We have heard (but cannot document) that in some countries associations of large retailers have lobbied for a mandatory right to withdraw, and we fear that their purpose may be to erect entry barriers in this way.

## 2.7. Normative Implications

Our model has implications for the optimal scope for the right to withdraw. In a world of perfect enforcement—where courts could perfectly determinate depreciation costs—the optimal legal regime would grant the buyer a right to withdraw on condition that he pay the seller reliance damages equal to the depreciation cost. In the real world, it may well be difficult for courts to measure depreciation. To avoid this difficulty, the law can use time as a proxy for depreciation. If depreciation occurs slowly, let the buyer have a free right to withdraw for an initial period; after that period, prohibit the buyer from withdrawing from the contract. The approaches can be combined, as well. For example, in the first period let the buyer withdraw; the buyer must pay damages only if the seller can prove a depreciation loss. In the second period, prohibit withdrawal unless the buyer can prove that depreciation is zero.

One can also reserve the right to withdraw for certain types of transactions—those for which it is most likely to be valuable—and ban it for

others. The right to withdraw is most likely to be desirable under two conditions.

The first condition is met when the goods or services involved are difficult for buyers to evaluate or the optimal terms of the contract are difficult to read and understand. Goods and services can be difficult to evaluate for a number of reasons. The value of some goods depends on how they look in the buyer's home (for example, furniture), how they look with other items the buyer owns and keeps at home (for example, clothes), and how they function with other items the buyer owns (for example, electronic components). In these cases, buyers cannot evaluate the goods without taking them home. In the case of other goods, the buyer may have trouble evaluating them without using them over an extended period of days (for example, musical equipment).

Another set of problems arises because of the complexity of the terms of a contract. Consider life insurance contracts, credit contracts such as mortgages, and real estate time-share contracts—for all of which European law mandates a right to withdraw. Although in theory the buyer can read and understand the terms of these contracts at the time of contracting, in practice many buyers have trouble understanding complex terms. Extra time gives them the opportunity to ponder the contract and seek advice.

The second condition for the desirability of the right to withdraw is met when the goods do not depreciate or their depreciation can be easily measured. In the case of services, the right of withdrawal is likely to be desirable as long as it can be exercised only before the cost of providing the service is incurred by the seller or when only a small fraction of that cost has been incurred.

Some goods depreciate rapidly when they leave the store: automobiles are one example, apparently because of the lemons problem—bad cars are more likely to be returned. Other examples include food items and drugs that are removed from their packaging and can be contaminated. Musical recordings, software, databases, DVDs of movies, and other items that contain intellectual property that can be cheaply copied also belong to this category. For this reason, or perhaps because the marginal utility per use declines rapidly (as in the case of Halloween costumes), sellers seal such goods in packaging and permit return only if the packaging has not been broken—a practice that is validated in European law.

Many goods depreciate only if they are “used.” There is a delicate line here: stores expect consumers to try on clothes and return them if the clothes do not fit or do not suit the buyer's taste, but not to wear

a tuxedo or fancy dress for an evening and then return it. This practice of obtaining use value from a good rather than simply learning about it is sometimes called buyer opportunism. Walmart addresses this problem by permitting return only if labels are still attached: presumably, one does not mind trying on clothes with labels on them in the privacy of one's home, but one would not want to go to a party wearing such clothes unless the labels could be concealed. European law gives the seller a restitution remedy if items are used. The problem here is that the depreciation of clothes worn to a single party is probably close to zero, which means that a lawsuit would not be cost-justified, and, in effect, people could rent out clothes for free until they were reduced to threads. Stores probably protect themselves by ensuring that buyers bear some of the cost of return—an issue to which we will return shortly.<sup>14</sup>

Walmart forbids the return of caskets and urns. No doubt taboos are at work here. No one would want to buy a used casket, no matter how thoroughly it had been cleaned. Restrictions on the return of undergarments (unless still in their sealed package) probably have a similar rationale.

Finally, certain transactions involve goods or other things whose value fluctuates rapidly. These include financial instruments such as stocks, commodities futures, and the like. Obviously, the right to withdraw would defeat the purpose of these contracts. A similar point can be made about auctions. European law does not grant a right to withdraw in these cases.

We suspect that, in practice, the seller's right to recover depreciation costs—in European law, and in some American states—has little value. In most cases, depreciation will be less than the cost of litigation; in addition, in many if not most cases, depreciation will be impossible to estimate. If buyers do not have to pay depreciation costs, they will have a strong incentive to engage in excessive use and inspection of goods—for the simple reason that the costs are externalized on the seller.

In the United States, sellers limit this strategic incentive by allocating some of the risk of disappointment to the buyer. In some cases, they exploit natural barriers. If the buyer must transport the goods back to the store, then he bears some of the cost of return and accordingly will be deterred from excessive use and inspection of goods at the margin.

14. Retailers could also protect themselves by sharing information about consumers who repeatedly return goods. Merchants already use a Web site to share information about consumers who challenge charges on their credit cards (<http://www.badcustomer.com>).

In the case of distance contracts, sellers can produce the same effect by requiring the buyer to bear the cost of shipping the goods. Sellers also transfer some of the cost to buyers by charging restocking fees. European law permits sellers to charge the buyer for transportation costs, but does not appear to allow sellers to charge restocking or other fees.

This suggests that the optimal legal regime might give the buyer the right to withdraw for an initial period but also require the buyer to pay a small amount of money if depreciation cannot be calculated. Shipping costs (if any) or a low fee (say, 10 percent) may be justified. Such fees would, like deductibles in insurance policies, reduce the incentive to engage in strategic behavior.

### 3. IMPLICATIONS FOR AMERICAN LAW

As we noted earlier, the common law of contract in the United States does not recognize a right to withdraw. The right to withdraw cannot be understood as a variant of breach because it exists even after both sides have fully performed—the seller has delivered a conforming good and the buyer has paid in full. However, there are several related doctrines, in the common law and in statutes, suggesting that judges and legislators have recognized the problems that the right to withdraw addresses.

#### 3.1. Extended Right to Reject Offers

Offer-and-acceptance doctrines of contract law are typically understood to require an exchange of assent prior to the delivery of goods to the buyer. But they need not. In *ProCD v. Zeidenberg*, a buyer purchased a CD-ROM containing a database, which came along with license terms that restricted the buyer to noncommercial use of the database. These license terms were “shrink-wrapped”—they were packaged inside the box with the CD-ROM and thus were not available for the buyer to examine prior to the sale. When the buyer attempted to make commercial use of the database by selling access to it, the seller sued, arguing that the buyer had breached the license. The buyer responded that the non-commercial use restriction was not valid because it was not disclosed to him prior to his acceptance, which occurred when he paid for the product at the store.<sup>15</sup>

In an opinion written by Judge Frank Easterbrook, the Seventh Cir-

15. See *ProCD v. Zeidenberg*. See also *Hill v. Gateway 2000, Inc.*, which applied the *ProCD* theory to the purchase of a computer by telephone.

cuit Court of Appeals held that the buyer was given notice of the licensing restriction because acceptance took place, not when the buyer paid for the product, but only later—when the buyer opened the box, had an opportunity to read the license terms, and used the software rather than returning it. The buyer could not use the software until after he had opened the box and discovered the license, which he had a duty to read.

The opinion has been heavily criticized on two grounds. First, commentators complain that Judge Easterbrook misinterpreted offer-and-acceptance doctrine. Acceptance occurred at the time of purchase, they argue, and the terms in the box are merely offers for additional terms, which can be accepted only by an affirmative “I agree” from the buyer, not by silence or nonrejection (White 2004). Indeed, pursuant to this logic, some courts have concluded that the terms in the box are not binding on buyers, even if they fail to return the goods (*Klocek v. Gateway*, 104 F. Supp. 2d 1332 [D. Kan. 2000]; *Step Saver Data Systems, Inc. v. Wyse Technology*, 939 F.2d 91 [3rd Cir. 1991]). Second, commentators argue that *ProCD* made a mockery of consumer protection. It put an excessive burden on buyers, who will often have trouble reading the additional terms after purchase, who might be surprised by the substance of some of the terms, and who will have to bear additional costs in returning the goods to the seller (Macaulay 2004).

However, the case can also be read as proconsumer: it establishes, in partial form, a consumer right to withdraw. The crucial point, overlooked in the commentary, is that the buyer has the right to return goods merely because he changes his mind and no longer wants them. He is accorded an additional window of time to manifest his acceptance and can withdraw—reject the “offer”—for any reason. If there is no acceptance, there is no contract—and therefore, he has no legal obligation to pay for the goods as long as he returns them. Thus, *ProCD* establishes what might be called an extended right to reject offers that serves the same policy functions, and has nearly the same practical consequences, as the right to withdraw.

However, the two types of rights—the extended right to reject offers and the right to withdraw—differ in a significant way. Where the right to withdraw exists, the initial contract establishes the terms governing the parties’ relationship prior to the point at which the right to withdraw is exercised or extinguished. The *ProCD* approach implies that the contractual terms do not govern during this period—because the contract does not yet exist. Instead, either default terms invented by courts must govern or the terms of the offer must govern (Epstein 2007). Suppose,

for example, that the product is damaged during shipment from seller to buyer. Under the right-to-withdraw approach, the contract can allocate the loss. Under the *ProCD* approach, the contract cannot allocate the loss. It is possible that the seller could stipulate in the offer that the buyer is responsible for the loss, but it is not clear that the buyer would be bound by such a stipulation if he did not accept the offer. In addition, under the *ProCD* approach, the seller can withdraw the offer or unilaterally modify aspects of it such as the price after the buyer has taken the product home, as long as the buyer has not used it yet. This implication of *ProCD* goes against conventional understandings and makes little sense in economic terms. For these reasons, the right-to-withdraw approach is a cleaner response to the problem of consumer lack of information than *ProCD* is.

Another troubling aspect of *ProCD* is that it focuses on just one of the ways that buyers might learn about a product—by reading the fine-print legal terms tucked in the box. Although the case is not entirely clear in this respect, it could be read as giving the buyer the right to reject the offer only if he learns of hidden contractual terms that displease him. However, in our model the right to withdraw has a more general function: it should be available if the buyer learns anything about the physical or operational features of the product that do not match his desires. Indeed, buyers rarely read the terms, but they often identify physical and operational features that lead them to reevaluate the purchase. A right to withdraw that grants the buyer additional time to assess the value of the good reflects the reality of postpurchase information acquisition.

A final point is that, in one way, *ProCD* gives buyers greater protection than the right to withdraw does. The extended right to acceptance does not apply only to distance and off-premises contracts. Indeed, the transaction in *ProCD* took place in a store. Although buyers probably can obtain more information about goods when they purchase them in stores than when they purchase them from a distance, our theory of the right to withdraw suggests that this distinction is artificial, at best a crude proxy for the degree of information. As the *ProCD* case itself shows, buyers will often not obtain adequate information about goods at stores. If this is the case, the right to withdraw should be available for in-store transactions.

### 3.2. Right to Reject Nonconforming Goods

Under the Uniform Commercial Code, the buyer has a right to reject delivered goods (sec. 2-601) and a right to revoke acceptance of delivery (sec. 2-608). If the seller delivers nonconforming goods, and the buyer discovers the nonconformity at the time of delivery, the buyer may exercise his right to reject the goods. If the buyer accepts the goods and only later discovers the nonconformity, the buyer may exercise his right to revoke acceptance. Rejection or revocation of acceptance, if not followed by cure on the part of the seller, entitles the buyer to remedies for breach including reimbursement of any payments.

These two rights differ from the right to withdraw inasmuch as the goods must be nonconforming. Thus, unlike the right to withdraw, the right to rejection is essentially a self-help procedure, a “preremedy” for breach of contract. However, the right to revoke acceptance recognizes the two major factors that underlie our analysis of the right to withdraw: that buyers may not discover problems with goods until they have had sufficient time to inspect them through use and that goods depreciate over time and with use. Hence section 2-608 provides that “[r]evocation of acceptance must occur within a reasonable time after buyer discovers or should have discovered the ground for it and before any substantial change in condition of the goods which is not caused by their own defects.” Both sections 2-601 and 2-608 protect the seller by penalizing buyers who take too much time to inspect or damage goods while they are in their possession. Moreover, the rejection and revocation rules in the code are consistent with the trade-off between information and depreciation. The longer the buyer waits to “return” the goods (and thus, the greater the expected depreciation), the more substantial the nonconformity must be to justify such return. Rejection, which usually occurs earlier than revocation of acceptance, can be exercised for any nonconformity. Revocation, in contrast, can be only exercised for substantial nonconformity (sec. 2-607).

### 3.3. Conditions of Satisfaction

Some contracts, particularly service contracts, contain a provision that the seller’s performance must be to the satisfaction of the buyer. Courts distinguish contracts “relating to operative fitness, utility or marketability” and those involving “fancy, taste, sensibility, or judgment” (*Fur-smidt v. Hotel Abbey Holding Corp.*, 200 N.Y.S. 2d 256, 259 [1960]). Examples of the latter type include contracts for “the making of a gar-

ment, the giving of a course of instruction, the services of an orchestra, the making of recordings by a singer and the painting of a portrait” (*Fursmidt*). Buyers can escape contracts of the first type only if the performance would not satisfy a reasonable person. Buyers can escape contracts of the second type simply by being (honestly, but subjectively) dissatisfied with the product.

Here again we see judicial attention to the possibility that the buyer cannot learn about goods (or services) until they have been delivered (or performed). The right to avoid the contract because of an unsatisfactory performance verges on the right to withdraw in the second case—although presumably the buyer would not be permitted to reject the service merely because he can obtain it at lower cost elsewhere.

### 3.4. Consumer Protection Law

New York statutory law creates a right to withdraw that applies to on-premises sales, not just distance or off-premise sales (New York Code, General Business, sec. 218-a). However, unlike European law, sellers can opt out of the New York statute by conspicuously posting a sign with the store’s return policy—including a policy of not accepting returned items. California has a statute similar to New York’s (California Civil Code, sec. 1723). Other states recognize more limited rights to withdraw for transactions involving high-pressure tactics, such as telephone and door-to-door sales.

### 3.5. Discussion

Should a right to withdraw be more formally recognized in American law? We think that there are good reasons for creating a default version of that rule. First, many, perhaps most, contracts between merchants and consumers give the buyer a right to withdraw. A default rule ratifying this pattern would save transaction costs and bring incomplete contracts in line with consumers’ expectations. Second, a limited version of this right has already been recognized in various areas of contract law—offer and acceptance, acceptance of goods, and conditions. Thus, recognition of a right to withdraw would be an incremental rather than radical change in the law. Third, the right to withdraw, like these other doctrines, reflects important policy considerations. It allows buyers to learn about goods and services that they purchase and to reject them if they value these goods and services less than they thought; and if sellers are protected from depreciation losses, the doctrine should work a Pareto improvement.

The proper scope of the right to withdraw is a matter of debate. It would make sense to limit it, at least initially, to distance contracts involving goods that (1) are complex and (2) do not rapidly depreciate or do depreciate in a way that can be easily measured so that compensation can be calculated. A right to withdraw is most important for complex goods because these goods are the type that buyers need time to learn about. The right might also cover goods whose value can be ascertained only at home—for example, furniture that needs to match a house's interior decoration. And a right to withdraw does least harm when the goods do not rapidly depreciate or the depreciation loss can be easily compensated. In some settings, it might be impractical for the seller to recover depreciation costs (for example, in transactions over low-value goods) unless the seller demands a deposit and has proper market incentives to refund the entire deposit minus the depreciation cost.

Our argument does not imply that the right to withdraw should be a mandatory rule, as it is in Europe. If the reason that European jurisdictions make the right mandatory is the concern that vendors would otherwise routinely contract around it, this concern is misguided. Vendors usually opt into the withdrawal regime—as the examples of Walmart and Target suggest. A return policy is not the type of fine-print term that goes under the radar, hidden from consumers' plain sight. Buyers seek information about sellers' return policies, because most buyers anticipate returns as a nontrivial contingency. Indeed, return policies are regularly posted in a conspicuous manner. Auction items on eBay, for example, are displayed with information about the item, shipping, and the return policy. There are unique circumstances, few and far between, in which a mandatory right might be justified on the basis of asymmetric information or concerns about coercion. Door-to-door sales is perhaps one such context. But beyond these cases, the optimal contract containing a right to withdraw need not be mandatory. Parties should have the freedom to waive their right to withdraw for a discount, because there are situations—for example, when buyers can easily inspect the product and depreciation costs are high—in which the right to withdraw is not advisable. A default rule would also allow heterogeneous buyers to sort into the type of transaction desired. Some buyers value the right to withdraw less, either because they know they will not have an opportunity to return the goods or because they have better information about the goods. Other buyers value the discount associated with the no-return sale. As current practice demonstrates, deep-discount retailing

and clearance sales that are administered with “no returns” draw a substantial clientele. A mandatory policy would require these buyers to cross-subsidize the rights enjoyed disproportionately by other buyers.

## CONCLUSION

We have provided a model that shows that the right to withdraw makes economic sense when the buyer most efficiently learns of a product through use or inspection at home and the product either does not depreciate rapidly or does depreciate but in a fashion that can be easily measured and compensated for. The right to withdraw does not yet exist in American law, but recognition of a default version of such a right would be an incremental change, one that could be implemented by a legislature or developed by courts on the basis of extensions of precedent.

Our support for the right to withdraw rests on general features of commercial transactions, not on traditional notions of consumer protection, and this raises the question of whether commercial buyers should have a right to withdraw. Indeed, the argument could apply to the mergers of firms and other complex transactions.

We believe, however, that such an extension of the right to withdraw beyond consumer transactions would be unwise. Consider first the case of business-to-business sales—parties purchasing inventories and lots from suppliers and manufacturers. In these cases, buyers typically have a great deal of information about the products because they constantly buy, hold, and resell them. They sample and inspect the goods prior to completing the purchase and negotiate payments and setoffs according to *ex post* measures of quality. Accordingly, there is less reason, compared to the consumer setting, for believing that the buyers need a post-sale interval to learn about the products that they purchase. And, in the case of wholesalers and retailers, the buyers do not use the products; they simply stock them until the products are resold. So there is narrow scope for learning. Further, if buyers can return products, they have weakened incentives to handle them carefully while they hold them.

Mergers pose a complex case where the benefits and costs of withdrawal are both high. Buyers of businesses, especially large businesses, may not obtain a full understanding of them for months or years—as several spectacular merger fiascos in recent years illustrate. The reason is that much of the value of a business is a function of intangible or hard-to-value features of it such as the morale of employees and the corporate culture. But the “return” of a business would impose high

costs on the seller. If buyers know that they can withdraw from mergers, they can use the purchase of a business as an opportunity to learn trade secrets and sow turmoil in a competitor. Merger parties typically handle these problems on a case-by-case basis. The seller gives the buyer an opportunity to inspect its books and other aspects of the business prior to the closing of the deal, and contractual terms such as material adverse condition clauses allow the buyer to opt out under narrow conditions.

#### APPENDIX

The proof goes as follows. We showed earlier that a transaction should be entered into if and only if  $q \times v_H + (1 - q)[(1 - \theta)(c - d_1) + \theta v_L] > c$ . Namely, it should be entered into if and only if

$$v_H > \frac{1}{q}\{c - (1 - q)[(1 - \theta)(c - d_1) + \theta v_L]\}.$$

Compare the right-hand side of this social optimum condition to the right-hand side of the condition that determines the private incentives to enter the transaction. First, examine the case in which  $v^{**} > v_L > v^*$ , namely,  $c - d_1 > v_L > c - d_2$ . The right-hand side of the social optimum condition is less than that of the private incentives:

$$\begin{aligned} & c + \frac{1 - q}{q}[(1 - \theta)(c - d_1) + \theta d_2] - \left(\frac{1}{q}\{c - (1 - q)[(1 - \theta)(c - d_1) + \theta v_L]\}\right) \\ &= -\frac{1 - q}{q}c + \frac{1 - q}{q}[(1 - \theta)c + \theta(v_L + d_2)] \\ &> \frac{1 - q}{q}[-c + (1 - \theta)c + \theta(c - d_2 + d_2)] = 0. \end{aligned}$$

When  $v_L > v^{**}$ , the distortion is greater. Here, the transaction should be entered into whenever

$$v_H > \frac{1}{q}\{c - (1 - q)v_L\}.$$

Comparing the right-hand side of this condition with that of the private incentives, when  $v_L > c - d_1$ ,

$$\begin{aligned}
& c + \frac{1-q}{q}[(1-\theta)d_1 + \theta d_2] - \left\{ \frac{1}{q}[c - (1-q)v_L] \right\} \\
&= -\frac{1-q}{q}c + \frac{1-q}{q}[(1-\theta)d_1 + \theta d_2 + v_L] \\
&> \frac{1-q}{q}[-c + (1-\theta)d_1 + \theta d_2 + c - d_2] \\
&= \frac{1-q}{q}\theta(d_2 - d_1) > 0.
\end{aligned}$$

Q.E.D.

## REFERENCES

- Aghion, Philippe, and Benjamin Hermalin. 1990. Legal Restrictions on Private Contracts Can Enhance Efficiency. *Journal of Law, Economics, and Organization* 6:381–409.
- Beales, Howard, Richard Craswell, and Steven C. Salop. 1981. The Efficient Regulation of Consumer Information. *Journal of Law and Economics* 24: 491–539.
- Camerer, Colin, Samuel Issacharoff, George Loewenstein, Ted O’Donoghue, and Matthew Rabin. 2003. Regulation for Conservatives: Behavioral Economics and the Case for “Asymmetric Paternalism.” *University of Pennsylvania Law Review* 151:1211–54.
- CEC (Commission of the European Communities). 2008. *Proposal for a Directive of the European Parliament and of the Council on Consumer Rights*. COM (2008) 614 final. Brussels: CEC.
- Craswell, Richard. 1988. Precontractual Investigation as an Optimal Precaution Problem. *Journal of Legal Studies* 17:401–36.
- . 1993. Property Rules and Liability Rules in Unconscionability and Related Doctrines. *University of Chicago Law Review* 60:1–65.
- Epstein, Richard A. 2007. *ProCD v. Zeidenberg*: Do Doctrine and Function Mix? Pp. 100–13 in *Contracts Stories*, edited by Douglas G. Baird. Eagan, Minn.: Foundation Press.
- Hillman, Robert A., and Jeffrey J. Rachlinski. 2002. Standard-Form Contracting in the Electronic Age. *New York University Law Review* 77:429–95.
- Kapner, Suzanne. 2009. “Wal-Mart Celebrates Its Growing Market Share.” CNNMoney.com, June 8. <http://money.cnn.com/2009/06/05/news/companies/wal-mart.shareholders.meeting.fortune/>.
- Loos, Marco. 2009. Rights of Withdrawal. Pp. 237–78 in *Modernising and Harmonising Consumer Contract Law*, edited by Geraint Howells and Reiner Schulze. Munich: Sellier.

- Macaulay, Stewart. 2004. Freedom from Contract: Solutions in Search of a Problem? *Wisconsin Law Review* 2004:777–820.
- Matthews, Steven A., and Nicola Persico. 2005. Information Acquisition and the Excess Refund Puzzle. Working Paper No. 05-015. Penn Institute of Economic Research.
- Posner, Eric A. 2010. *ProCD v. Zeidenberg* and Cognitive Overload in Contractual Bargaining. *University of Chicago Law Review* 77:1181–94.
- Scott, Robert E., and George G. Triantis. 2004. Embedded Options and the Case against Compensation in Contract Law. *Columbia Law Review* 104:1428–91.
- Shavell, Steven. 1980. Damage Measures for Breach of Contract. *Bell Journal of Economics* 11:466–90.
- Stremitzer, Alexander. 2010. Opportunistic Termination. *Journal of Law, Economics, and Organization*, May 21. doi: 10.1093/jleo/ewq004.
- Sunstein, Cass R., and Richard H. Thaler. 2003. Libertarian Paternalism Is Not an Oxymoron. *University of Chicago Law Review* 70:1159–1202.
- Von Bar, Christian, et al. 2008. *Principles, Definitions and Model Rules of European Private Law: Draft Common Frame of Reference, Interim Outline Edition*. Munich: Sellier.
- White, James J. 2004. Contracting under Amended 2-207. *Wisconsin Law Review* 2004:723–52.