Not My Brother's Keeper: The Inability of an Informed Minority to Correct for Imperfect Information

R. Ted Cruz
Jeffrey J. Hinck

Follow this and additional works at: https://repository.uchastings.edu/hastings_law_journal

Part of the Law Commons

Recommended Citation
Available at: https://repository.uchastings.edu/hastings_law_journal/vol47/iss3/3

This Article is brought to you for free and open access by the Law Journals at UC Hastings Scholarship Repository. It has been accepted for inclusion in Hastings Law Journal by an authorized editor of UC Hastings Scholarship Repository. For more information, please contact wangangela@uchastings.edu.
Not My Brother's Keeper: The Inability of an Informed Minority to Correct for Imperfect Information

by

R. TED CRUZ* and JEFFREY J. HINCK**

Introduction

In contract law, the defenders of the market champion freedom of contract and the rights of parties to be bound and to bind others by their consensual commitments. Critics of the market look instead to notions of justice and fairness, as determined by the courts. In tort law, market defenders advocate liability for fault, not merely for existence, and usually defend the right to contract for more or less tort liability. The critics, in turn, see ignorance and exploitation, so they urge risk distribution brought about by blanket liability imposed by law, regardless of attempts to contract otherwise.

As is no doubt clear, we are in sympathy with the defenders of the market; we have more faith in the autonomy and creativity of individuals than in the enlightened wisdom of the collective. Yet, in assessing the arguments used by both sides, we have encountered a tool of the defenders that is faulty. Because silence would be counter-productive, this article instead exposes that weakness.

The market defenders' faulty tool is the informed minority argument. It arises both in contract and in tort law as a response to the problem of imperfect information. In contract, there are often certain terms that are latent, particularly in standard form contracts. These typically fine-print terms are frequently not read by those that sign the
contracts. And so, the argument goes, the demands of those consumers—the discipline of the market—cannot constrain the terms. The problem arises in tort law as well. In times of old, product manufacturers routinely included disclaimers of liability with their products. These would be latent terms, arguably not read and hence not consented to or compensated for by reduced demand. The critics of the market have argued, and largely persuaded the courts, that, because of imperfect information, neither standard form contracts nor liability waivers should be enforced as written; instead, courts should imply the terms that they believe would be better.

The defenders of the market have responded with a barrage of arguments, minimizing the pervasiveness and the importance of imperfect information. Chief among those arguments has been the informed minority argument. The defenders argue that if a sufficient number of consumers read and understand latent terms and thereby become informed, then they will demand efficient terms, and the producers will in turn provide those terms to all consumers. While having some intuitive appeal and, indeed, some theoretical validity, this argument carries little practical force. The assumptions underlying its general application are largely wrong, and without those assumptions the informed minority argument collapses.

This paper will explain why the informed minority argument cannot in practice generally correct for imperfect information. Part I discusses the conditions of a perfect world, a purely efficient world without market failures. Part II recounts the debate over imperfect information, a debate that still rages. Part III.A addresses the informed minority argument in particular. Part III.A.2 provides a formal model of an informed minority to aid in explication and understanding. Part III.A.3 assesses the conditions that would allow the informed minority argument to prevail, Part III.B discusses other possible sources of efficient terms, and Part IV reveals the gross weaknesses in the theory of the informed minority.

The informed minority argument is a poor tool for the defenders of the market. If they are to prevail in the larger debate—and they should—they must first realize that the informed minority argument will not carry them to victory. Only then can they adapt and become stronger.
I. A Perfect World

A. Implications of a Perfect World Generally

In a perfect world, efficient markets are ubiquitous.¹ Microeconomics provides the foundation and the underlying assumptions for imagining such a world. One of these fundamental assumptions is that both buyers and sellers are perfectly informed.² When buyers have perfect information about the quality and price of a product, they will consume the optimal quantity of the good and it will be priced competitively. In such a world, the market equilibrium will be competitive in both price and quality; the efficient price and quality of every aspect of the good will be found in the market.

If information is imperfect, however, the market will not be characterized by complete efficiency. If consumers do not have perfect information, then producers will have an incentive to supply too much or too little of a particular product or product attribute.³ Consumers may buy too much or too little of a product—foregoing buying products that make them better off and purchasing products that make them worse off. Because our society is obviously imperfect, many wonder why one should ever study a model of perfect competition. The answer is threefold. First, knowing what happens if consumers are perfectly informed is necessary to an understanding of what occurs once this assumption is relaxed. Second, and perhaps more importantly, even though we live in an imperfect society, the assumptions of a perfect market may be close enough to reality that this model may more accurately describe the present state of affairs than any other model.⁴ And third, even with imperfect information, the market may

¹. “The better the society, the less law there will be. In heaven there will be no law, and the lion will lie down with the lamb. The worse the society, the more law there will be. In hell there will be nothing but law, and due process will be meticulously observed.” PETER W. HUBER, LIABILITY 232 (1988). As in heaven, so too in a perfect world.

². See Trade Regulation Rules, Labeling and Advertising of Home Insulation, 44 Fed. Reg. 50218, 50222 (1979) (to be codified at 16 C.F.R. pt. 460) (“It is a basic tenet of our economic system that information in the hands of consumers facilitates rational purchase decisions; and, moreover, is an absolute necessity for efficient functioning of the economy.”); Howard Beales et al., The Efficient Regulation of Consumer Information, 24 J.L. & ECON. 491, 492 (1981) (“The importance of information to the operation of efficient markets is, by now, fairly well accepted.”). Other assumptions include that consumers are rational, utility maximizing, and able to order their preferences, and that producers are numerous and profit maximizing.


⁴. “[A]bstract is of the essence of scientific inquiry, and economics aspires to be scientific. Newton’s law of falling bodies, for example, is unrealistic in its basic assumption that bodies fall in a vacuum, but it is still a useful theory because it predicts with reasonable
better achieve the benefits of perfect competition—allocative and productive efficiency, for example—than any other regime.

B. Implications of Information for Contract and Tort Law

If information is perfect, then contracts will be optimal; that is, they will contain only efficient terms. This will occur because all of the terms will, by definition, be fully understood and properly valued. The efficient terms will be included because, "[i]f one seller offers unattractive terms, a competing seller, wanting sales for himself, will offer more attractive terms. The process will continue until the terms are optimal." Or, "[q]uite simply, rational individuals would not enter into agreements unless they were better off after the transaction."7

This result will hold despite two factors that, among legal academics, are commonly thought to cause inefficient contract terms. First, the result will obtain even if the seller is a monopolist, because a perfectly informed consumer would accurately value all contract terms, and a rational monopolist would simply extract monopoly profits directly through price. Second, the presence of form contracts would not be a problem. This is because form contracts are not merely devices to rip off unwary consumers; they also save on the great transactions costs that would result if individualized bargaining were always necessary.

Concomitantly, if information is perfect, contracts will contain the optimal liability provisions for that particular market, i.e., for the product, seller, and buyers in question. This result follows from what is commonly referred to as the Coase theorem, that "[i]f there are zero transactions costs, the efficient outcome will occur regardless of


8. Shavell, supra note 5, at 142.11; Posner, supra note 4, at 115.
9. Posner, supra note 4, at 114 ("[T]here is an innocent explanation: The seller is just trying to avoid the costs of negotiating and drafting a separate agreement with each purchaser. These costs ... are likely to be very high ... Consistent with the innocent explanation, large and sophisticated buyers ... often make purchases pursuant to printed form contracts.").
the choice of [background] legal rule." The Coase theorem therefore predicts that contracting parties will choose the optimal liability regime for themselves, which will depend in part on things like risk aversion, optimal incentive structures, and ability to pay. Likewise, if customers do not misperceive risks, the warranty that is sold will be the one that results in the lowest true full price and therefore that is socially best. Thus, those who believe information is nearly perfect argue that liability disclaimers and all forms of warranty should be allowed.

Unfortunately, if information is imperfect, one would also expect to see form contracts, and there would be no obvious mechanism whereby one could be assured that no inefficient terms were included in the contract. One would expect both a "quality effect" and a "quantity effect." The quality effect would be the reduction in social surplus because the consumers would purchase sub-optimal quality goods. In other words, there is a transaction that would make the combined parties better off but is not occurring. The less efficient transaction occurs because the seller profits more by selling the inferior good, which the buyers cannot properly identify as such. One would also expect a "quantity effect" if the consumer mis-valued the good and therefore consumed too much or too little of it. Where imperfect information prevails, the standard warranty terms may well be undesirable, in which case the background form of liability will make a difference because the parties will not necessarily contract to the optimal liability regime. One would expect, in such a scenario, that

12. See Shavell, supra note 5, at 14.2.10.
13. See Session Three: Discussion of Paper by George L. Priest, 10 Cardozo L. Rev. 2329, 2339 (1989) (statement by Peter Huber) ("Any set of legal presumptions the courts want to prescribe on silence is okay with me, provided one has a real law of disclaimability to bring things back to a market optimum. Free contracting will then restore an optimal state of affairs ... ").
14. See Beales et al., supra note 2, at 492 ("Without such information, the incentive to compete on price and quality will be weakened, and consumer welfare will be reduced.").
15. This is not to say that no efficient terms would appear in the contract. One would expect to see mainly seller-favoring terms, which are not necessarily inefficient. In other words, the existence of seller-favoring terms hardly guarantees that the terms are inefficient or that imperfect information characterizes the market—other factors must be assessed to make those determinations.
17. Shavell, supra note 5, at 14.2.10.
most form contracts would contain complete liability disclaimers, assuming they would be enforced. Indeed, research has shown that such total disclaimers were quite common when they were widely enforced.\textsuperscript{18}

\section{The Debate over Imperfect Information}

Unfortunately, a perfect world is only a movie. Many market failures have been discovered and countless more alleged. One of the most prevalent sources of potential market failure is imperfect information. As explained above, efficient market pricing depends on accurate information; to the extent that parties are misinformed or uninformed, they are less likely to be able to behave in accord with their true preferences, and hence the market fails. The consequences of imperfect information have been given great weight in the establishment of legal rules of contract and tort. And yet those very consequences are hotly contested.

\subsection{Voices of Concern About Imperfect Information}

\subsubsection{W. David Slawson}

In an influential early article, David Slawson succinctly explained the problem of imperfect information for consumers signing standard form contracts:

\begin{quote}
[T]he overwhelming proportion of standard forms are not democratic because they are not, under any reasonable test, the agreement of the consumer or business recipient to whom they are delivered. Indeed, in the usual case, the consumer never even reads the form, or reads it only after he has become bound by its terms. Even the fastidious few who take the time to read the standard form may be helpless to vary it . . . .
\end{quote}

\begin{quote}
. . . . [Standard form contracts therefore] cannot reasonably be regarded as the manifested consent of their recipient because an issuer could not reasonably expect that a recipient would read and understand them.\textsuperscript{19}
\end{quote}

A decade later, Slawson elaborated further on the problem:

Under typical circumstances, the terms [of standard form contracts] d[o] not reflect what a reasonable person would conclude the contracting parties had agreed to. It seem[s] clear that sellers [are] intentionally designing their sales procedures so that a potential buyer

\begin{itemize}
\item \textsuperscript{19} W. David Slawson, \textit{Standard Form Contracts and Democratic Control of Lawmaking Power}, 84 Harv. L. Rev. 529, 530, 544 (1975).
\end{itemize}
would probably not read, let alone understand, their standard forms prior to the sale.

Insurance policies are typically not seen by a purchaser until he receive[s] them in the mail weeks after the purchase. Warranty forms on consumer products are typically included along with the product inside the box in which the product is packed, where the purchaser will not ordinarily see them until he open[s] the package at home.20

2. William Landes and Richard Posner

Two of the founding fathers of law and economics, William Landes and Richard Posner, consider imperfect information to be the answer to the "fundamental economic puzzle of products liability law": Why contracts that waive product liability should not always be enforced.21 They explain as follows:

[C]ontracts are costly to make and . . . costs may well exceed the benefits . . . when the contingencies that would be regulated by contract—death or personal injury from using a product— are extremely remote. . . . [When purchasing an expensive item like an automobile] the greatest [contracting] cost [is] not the direct cost of drafting [an express clause in the written purchase contract]; it [is] the cost of information. The inclusion of such a clause would not serve its intended purpose unless the consumer knew something about the costs of alternative safety measures that the producer might take and about the safety of competing products and brands. But the cost of generating that information, and particularly the cost to the consumer of absorbing it, may well be disproportionate to the benefit of a negotiated (as distinct from imposed-by-law) level of safety.

. . . .

. . . A manufacturer will reap little consumer ill will from fooling consumers with a disclaimer that they fail to read, because product accidents are so rare anyway; and for the same reason competing manufacturers will not find it profitable to try to compete by offering to disclaim disclaimers. High information costs relative to the benefits of the information may defeat voluntary contracting.22

Landes and Posner do argue that if a manufacturer “take[s] steps to make sure that the danger in his product is obvious to the consumer[s]” then consumers will be “deemed to have assumed the risk of an accident” and so “the manufacturer will not be liable.”23 Thus,

22. Id. at 280-82.
23. Id. at 283.
they consider imperfect information to be a significant barrier to efficient bargaining only when warnings are not "obvious," that is, when information costs are high.

3. W. Kip Viscusi

Likewise, Kip Viscusi considers "the chief inadequacy of the market [to be] inadequate risk information."24 He explains, "[t]he linchpin of the perfectly functioning market is that consumers and producers be fully cognizant of the risks their choices entail."25 Unfortunately, "information and transactions costs make complete internalization of the costs of risk impossible."26 The resultant uncertainty "complicates consumers' choices, [making] the possible difficulties created by imperfect information for how individuals assess risks and how they make choices . . . substantial."27

4. Todd Rakoff

Further commenting on the prevalence of consumer ignorance, Todd Rakoff explains as follows:

[F]or most consumer transactions, the close reading and comparison needed to make an intelligent choice among alternative forms seems grossly arduous. Moreover, many of the terms concern risks that in any individual transaction are unlikely to eventuate. It is notoriously difficult for most people, who lack legal advice and broad experience concerning the particular transaction type, to appraise these sorts of contingencies. And the standard forms—because they are drafted to cover many such contingencies—are likely to be long and complex, even if each term is plainly stated. . . . [I]t is clear that the near-universal failure of adherents to read and understand the documents they sign cannot be dismissed as mere laziness. In the circumstances, the rational course is to focus on the few terms that are generally well publicized and of immediate concern, and to ignore the rest. The ideal adherent who would read, understand, and compare several forms is unheard of in the legal literature and, I warrant, in life as well.28

5. Steven Croley and Jon Hanson

In a recent article, Steven Croley and Jon Hanson have reiterated the perils of imperfect information and its ubiquity:

[T]he efficiency of consumer product markets depends upon consumers' ability to overcome information costs, for without full information consumers are unable to make consumption and warranty decisions that reflect their true preferences. . . . Because consumers are not endowed with information about product risks, they must acquire it, and any means of obtaining such information requires investment. All else equal, the more information consumers seek, the more costs they must incur. . . . Rational consumers will invest only up to the point at which the marginal costs of additional information equal the marginal benefits.

. . . Reading product warranties or product warnings, where available, is one strategy consumers might adopt to obtain risk and insurance information. But even that relatively inexpensive strategy may not be worth its costs, especially where the probability of a product accident is small. . . . Consumers must do more than read the words in a warranty; they must know what the words mean and whether the words are credible. Among other things, consumers must know which liability standard applies in the relevant jurisdiction and whether, how, and to what extent manufacturers can contract around that standard through warnings or warranties. Additionally, . . . the consumer must have some information about the manufacturer's solvency or liability insurance coverage. In short, the fact that the costs of reading a warranty or warning are low does not necessarily mean that the costs of becoming well informed also will be low.29

B. Rejoinders in Support of Informed Consumers

1. Patricia Danzon

In response to the bleak characterization of consumer information presented by Landes and Posner, that, for example, no consumer would "minutely inspect each soda bottle on the one-in-a-million chance that it contains mouse parts,"30 Patricia Danzon countered as follows:

[I]t is not so obvious that the costs of obtaining information so clearly outweigh the benefits. For risks that are reasonably uniform for all consumers . . . the manufacturer or some consumer surrogate such as Consumer Reports could presumably reduce to trivial levels the costs of obtaining information about the probability of injury, simply by publishing warnings. The issue is then the incentive to read and assimilate such warnings. But this depends not only on the probability of an injury for a single bottle of coke, but on the total

29. Croley & Hanson, supra note 18, at 770-71 (footnote omitted).
30. LANDES & POSNER, supra note 21, at 293.
expected value of the information. Let us allow that the odds of an explosion are one in a million, that the damages if an injury occurs are (conservatively) $1 million, that the average coke consumer drinks one bottle daily, and that technology changes each year, such that information becomes obsolete after a year. With these parameters, the value of information (ignoring discounting) is $365, which is surely sufficient to outweigh the time costs required to read the warning on a coke bottle once.\textsuperscript{31}

Danzon therefore argues that "repeat purchase undermines the argument that it is not rational for consumers to process information about low-probability events."\textsuperscript{32} She then applies the same logic to consumer durables, "which are frequently used although less frequently purchased," and, \textit{a fortiori}, to producer goods, purchased repeatedly at high volume.\textsuperscript{33}

2. \textit{Richard Epstein}

Similarly, Richard Epstein attacks the heavy emphasis Landes and Posner give to information costs as "badly misguided."\textsuperscript{34} He questions the empirical basis for assuming a very low frequency and severity of product liability claims (and hence low incentive for consumers to become informed about warranties and liability disclaimers), and he echoes Danzon's point about repeat buyers.\textsuperscript{35} Moreover, he argues that the real battleground for tort liability is over products with "very different characteristics" than coke bottles and shaving brushes:

\begin{quote}
[\textbf{W}ith respect to the major aviation, automotive, drug, and machine tool cases, [the de minimis argument] is wholly misguided. The issue of liability for personal injuries and consequential damages is always on everyone's mind. In commercial contexts, the relevant clauses are often carefully tailored and explicitly negotiated.\textsuperscript{36}
\end{quote}

3. \textit{George Priest}

In a highly influential article, George Priest argued that the empirical data better support an investment theory of warranties than a

\begin{footnotes}
\textsuperscript{32} \textit{Id.} at 572.
\textsuperscript{33} \textit{Id.}
\textsuperscript{35} See \textit{id.}
\textsuperscript{36} \textit{Id.}
\end{footnotes}
theory of manufacturer exploitation of consumer ignorance. Priest defined his investment theory as follows:

A warranty is viewed as a contract that optimizes the productive services of goods by allocating responsibility between a manufacturer and consumer for investments to prolong the useful life of a product and to insure against product losses. According to the theory, the terms of warranty contracts are determined solely by the relative costs to the parties of these investments.

To make his case, Priest conducted an empirical examination of sixty-two consumer product warranties. Looking at subordinate terms in warranties (i.e., latent terms), he found a far greater correlation with the relative costs of the consumer and manufacturer for particular terms—the outcome predicted by his investment theory—than with a shifting of all major costs to the consumer via the latent terms—the outcome suggested by an exploitation theory coupled with consumer ignorance of the terms' content.

4. Alan Schwartz

Further attacking the likelihood that imperfect information causes significant market failures for consumers contracting out of tort protection, Alan Schwartz asserts that “[p]roduct-defect risks are among the most important risks that consumers face. Therefore, consumers probably are familiar with the aspects of contracts that relate to product failure.” Moreover, Schwartz differentiates between forms of consumer misperception, distinguishing those that are potentially harmful from those that are not. He argues that the problematic form of consumer misperception is consumer optimism, “a consumer’s belief that product-related risks are less serious than they really are.” Assessing the common assertion that consumer optimism is the ordinary true state of the market, Schwartz responds as follows:

38. Id. at 1298.
39. See id. at 1328-46.
41. Schwartz, supra note 16, at 374. Schwartz models a more technical definition of optimism as follows. He defines $p^*$ as the true probability of a defect and $C^*$ as the true cost of a defect. He then defines the true expected value of the harm as $R^*$, which equals $p^*C^*$. Then, labeling the consumers' subjective estimates of these parameters as $R$, $p$, and $C$, Schwartz defines a consumer as "optimistic" if $R < R^*$. This could occur in three possible scenarios: (1) when $p < p^*$ and $C < C^*$; or (2) when $C > C^*$ but $p < p^*$ “by enough to dominate any overestimation of defect costs;” or (3) when $p > p^*$ but $C < C^*$ “by enough to dominate any overestimation of loss probabilities.” See id.
Whether consumers routinely underestimate risk levels is a complex question because . . . consumer errors in probability and cost assessments can be uncorrelated, permitting "cross effects." A cross effect occurs when the consumer makes offsetting mistakes in $P$ [the probability of a product defect] and $C$ [the cost of a defect]. . . . Because pessimistic mistakes—"everything happens to me"—could dominate optimistic mistakes—"at least I'll never get seriously injured"—it seems impossible to say a priori that optimism in risk assessment is routine . . . . Whether consumers are systematically optimistic thus seems to pose a factual, not a theoretical, question.42

Schwartz then reviews a number of empirical studies of consumer attitudes towards risk and estimations of risk, and concludes that "[t]he evidence fails to show that consumers misperceive risk levels to the extent that undesirable equilibria exist."43 Moreover, "evidence drawn from surveys and actual market behavior more strongly supports the view that consumers are informed than the view that they are ignorant."44

III. Conditions for Efficient Terms Despite Imperfect Information

A. The Informed Minority Argument

Simply stated, the informed minority argument is that if a sufficient number of buyers are well-informed regarding the price and quality of a product, then it will behoove the seller to sell the efficient quality product at the competitive price to all buyers.45 This is because the seller's behavior is driven, to some extent, by the marginal consumer. As the marginal consumer becomes several consumers, the benefit to the seller of diverging from competitive conditions will be outweighed by the cost to the seller of losing those consumers. Stated differently, the cost of losing the marginal consumers will outweigh the benefits of gouging the infra-marginal consumers. If the conditions specified below are met, then the informed minority will successfully cure the problems caused by imperfect information—a

42. Id. at 375.
43. Id. at 379. But see Melvin Aron Eisenberg, The Limits of Cognition and the Limits of Contract, 47 Stan. L. Rev. 211, 216 (1995) (reviewing several empirical studies and concluding that the "evidence shows that as a systematic matter, people are unrealistically optimistic").
44. Schwartz, supra note 16 at 380. Schwartz also alludes to the research findings of George Priest, supra note 37, and observes that "[e]fficient contracts are unlikely to be exacted by persons ignorant of contract content." Schwartz, supra note 40, at 826.
45. See Goldman, supra note 7, at 716.
competitive equilibrium will obtain despite the presence of imperfect information.

I. Prevalence of the Informed Minority Argument

The informed minority argument is made throughout the academic literature on contract and tort law. In many instances it is used to defend the freedom of parties to contract, even when traditional indicia of contracting, bargaining and assent, are absent. Much of the criticism of the informed minority argument has taken the form of decrying it as a chimerical device used by those who would prefer to see us contracted into oblivion. Others have responded


47. See, e.g., Priest, supra note 37, at 1347 ("If a small group of consumers reads warranties and selects among products according to warranty content, manufacturers may be forced to draft warranties responsive to the group's preferences, even though the large majority of consumers generally neglect warranty terms."); LANDES & POSNER, supra note 21, at 281 ("It is true that a market can operate efficiently even if some consumers are poorly informed; they can take a free ride on the well informed . . . ."); Douglas G. Baird & Robert Weisberg, Rules, Standards, and the Battle of the Forms: A Reassessment of §2-207, 68 VA. L. REV. 1217, 1258 (1982); David B. Walrod, The Efficient Standardized Contract: An Economic Analysis (unpublished manuscript, on file with authors) (1994).

48. See, e.g., Eisenberg, supra note 43, at 240-44. More generally, the arguments take two forms. First, many assert that consumers simply can never be informed. See id. at 244 ("Most form takers will find it irrational to engage in search and deliberation on any given form."); Michael I. Meyerson, The Efficient Consumer Form Contract: Law and Economics Meets the Real World, 24 GA. L. REV. 583, 601 (1990) ("This protection-by-proxy, however, is not applicable to subordinate contract terms. While adventurous consumers may research to find the best price, the far greater costs of searching for . . . different sets of contract terms will overwhelm any benefit from doing so.").

Second, many argue that even informed consumers are helpless in the face of corporations. For example, Professor Rakoff argues:

Customers know well enough that they cannot alter any individual firm's standard document. They are largely members of the society that spawns business firms, and they understand the institutional arrangements behind the take-it-or-leave-it stance. . . .

. . . The internal rigidity of the firm will itself be likely to prevent a knowledgeable adherent's objection to any form term from generating bargaining behavior, even if the objection is coupled with a threat to take his trade
more dispassionately. Because so many influential scholars rely on the informed minority argument or, conversely, claim it can never obtain, this article attempts to set forth the conditions under which the argument can be pled successfully and the likelihood of those conditions being met.

2. The Model

The model developed by Schwartz and Wilde with respect to pricing under imperfect information can be easily adapted to the case of contract terms under imperfect information.

Interestingly, the proportion of comparison shoppers required to ensure a competitive equilibrium on price is not at all the same as the proportion of informed shoppers necessary to effectuate competitive terms. This is so not because of some bizarre condition inherent to form contract terms which prevents consumers from becoming informed, but rather because the term varied is different. Instead of elsewhere . . . . When contracts of adhesion become commonplace, even the individual who reads and understands is, and may well perceive himself to be, essentially helpless.

Rakoff, supra note 28, at 1225, 1228-29; see also Slawson, supra note 19, at 530-31. But see Posner, supra note 4, at 114 (“Where a transaction is between a large corporation and an ordinary individual, it is tempting to invoke the analogy of duress and compare the individual to the helpless fellow forced to sign a promissory note with a knife at his throat . . . . But there is an innocent explanation . . . .”).


50. See Schwartz & Wilde, supra note 46, at 650-53.

51. In their article, Schwartz and Wilde briefly indicated the methodology for determining when such terms would be monopolistic or competitive. *Id.* at 659-62. However, their assessment, which was not central to the rest of their argument, was in error. Schwartz and Wilde claimed: “[A] monopolistic outcome for any term should be presumed to occur if a substantial portion . . . of the comparison shoppers [equal to the proportion of comparison shoppers necessary for a competitive market] are not term conscious.” *Id.* at 661 (footnote omitted and emphasis added). For reasons not altogether clear, Schwartz and Wilde thus claim that only a fraction of the comparison shoppers need to be term-informed rather than a fraction of all shoppers. Therefore, in their model where one-third of the shoppers had to be comparison shoppers for a competitive equilibrium, Schwartz and Wilde would be claiming that, say, a mere one-ninth of all shoppers must be term conscious to rebut the presumption of monopolistic terms. See Trebilcock & Dewees, *supra* note 46, at 105 (stating that under the Schwartz & Wilde model, conceivably only 10% of consumers must be informed with respect to the contract terms). This, however, is incorrect, as we explain below.

52. This might have been all that Schwartz and Wilde were claiming in the passage quoted in footnote 51. See Croley & Hanson, *supra* note 18, at 717.

varying the price, holding quality and hence average marginal cost constant, now one is holding price constant, and varying the quality term (represented by the marginal cost term) of the equation. Thus, until now, the literature has been improperly assuming that the Schwartz and Wilde model carries over sans change. The proper equation, irrespective of the number of comparison price shoppers, is:

\[ I \geq 1 - \frac{P - C_m}{P - (C_m - X)} \]

where

\[ I = \frac{N_I}{N_I + N_U} \]

\( N_I \) is the number of informed shoppers, \( N_U \) is the number of uninformed shoppers, \( P \) is the price determined in the market (based, perhaps, on the Schwartz and Wilde equation), \( C_m \) is the average marginal cost of producing the good in question, and \( X \) is the average cost savings to the seller from including inefficient terms. There are two major assumptions behind this simplified formula. The first is that the average marginal cost of producing for the informed consumers, or the last \( N_I \) consumers, equals the average marginal cost of producing for the uninformed consumers, or the first \( N_U \) consumers. The second is that the uninformed consumers are completely uninformed; that is, they do not merely under- or over-value terms but they place no value on them whatsoever. Both assumptions are later relaxed.

54. Fixed costs are assumed not to change. This is a reasonable assumption as contractual terms usually involve probabilistic elements of loss that do not necessitate a capital investment, but rather require or excuse the manufacturer from paying cash to the consumer at a later date. Such terms are best represented as changes in marginal cost, which is essentially the actuarial value of these terms. A fixed cost parameter might change if one envisioned something akin to a repair warranty which required an investment in repair shops or equipment. In any event, although consideration of changing fixed costs is beyond the scope of this article, they likely would change little of our analysis because the numerator on the right side of equation (1) would get smaller as inefficient terms were included (e.g. no repair warranty) rather than the denominator getting larger when the effect is on marginal cost. Of course, both have a similar effect (directionally) on the equation.


56. For example, in the case of a liability disclaimer, this amount, absent transaction costs, would be equal to the expected loss to the consumer, i.e., the probability of harm to the consumer multiplied by the expected harm to the consumer.
The derivation is quite simple. The seller expects to gain the amount \( X \) for each uninformed purchaser. Thus, the seller expects to gain \( X \times N_U \) by including inefficient terms. Similarly, the seller expects to lose an amount equal to \( P - C_m \) for each informed purchaser who no longer buys his goods.\(^{57}\) Thus, the seller expects to lose \((P - C_m)N_t\). In terms of total profit, the seller reaps \( N_U(P - (C_m - X)) \) by having inefficient terms and \((N_t + N_U)(P - C_m)\) by having efficient terms. Thus, the seller will include the efficient terms if and only if:

\[
N_U(P - (C_m - X)) \leq (N_t + N_U)(P - C_m)
\]  

(3).

Rearranging, subtracting one from each side, and multiplying each side by negative one gives

\[
\frac{N_t}{N_t + N_U} \geq 1 - \frac{P - C_m}{P - (C_m - X)}
\]  

(4).

Substituting \( I \) for the left side of the inequality yields

\[
I \geq 1 - \frac{P - C_m}{P - (C_m - X)}
\]  

(1).

Now, reviewing the Schwartz and Wilde hypothetical, it becomes apparent why their formula does not explicitly address contract terms: it has no term to demonstrate the change in cost due to a change in contract terms. If one assumes, in addition to their other hypothetical numbers, that the cost savings of all seller-favorable terms is $50, the result using equation (1) is:

\[
I \geq 1 - \frac{400 - 200}{400 - 150} = 1 - \frac{200}{250} = 0.20
\]

\(^{57}\) In a perfectly competitive industry, this will be equal to

\[
\frac{C_f}{N_t}
\]

where \( C_f \) is the fixed cost and \( N_t \) is the efficient scale quantity. Later, when the assumption of constant marginal cost is relaxed, this will no longer hold over a distinct subset of consumers, but will hold in the aggregate. In all markets, except a natural monopoly, one would expect marginal costs to be rising and thus \( P - C_m \) will be less than

\[
\frac{C_f}{N_t}
\]

for the marginal consumers and greater than

\[
\frac{C_f}{N_t}
\]

for the infra-marginal consumers.
In other words, using this hypothetical, 20% of shoppers would have to be term-conscious, not 33% and not 11%. Of course, one can change the cost savings to achieve virtually an unlimited set of possible values for \( I \). However, this figure should not be given talismanic force. Like Schwartz and Wilde’s number, the result of our hypothetical is not empirical. Instead, rather than rely on empirical study, we have conducted a sensitivity analysis to demonstrate the wide array of possible results depending on the underlying market characteristics. This is presented in Table 1 on page 654.

One can also envision a more dynamic equilibrium where the price term can change to reflect an imperfect evaluation of terms rather than simple ignorance of their existence. This requires us to relax the assumption that uninformed consumers place no value on terms. The formula that would capture imperfect valuation would then be:

\[
I \geq 1 - \frac{P - C_m}{P' - (C_m - X)}
\]

(5),

where \( P \) is the market price of the good before inclusion of inefficient terms and \( P' \) is the market price after inclusion of inefficient terms. If people systematically undervalue the cost of inefficient terms, say a disclaimer, then one would expect \( P - C_m < P' - (C_m - X) \) because \( P' + X \) would exceed \( P \). Nevertheless, whenever consumers undervalue the inefficient terms, the denominator of equation (5) is by definition less than the denominator of equation (1), and so the number of informed consumers necessary for a competitive term equilibrium to obtain is less than if consumers place no value on inefficient terms at all.

It is also possible that there are terms for which consumers overvalue the benefits. For example, they may overvalue certain warranties. In this case \( P - C_m < P' - (C_m - X) \) as well, but for a

---

58. One of the more disturbing features of the legal literature regarding imperfect information is its insistence upon quoting Schwartz & Wilde’s figure as if it had some particular relevance when it does not. See, e.g., Goldman, supra note 7, at 719 (“Commentators positing this basis for the presumption of an efficient market acknowledge that at least one-third of consumers must be informed to protect the remaining consumers’ interests.”); Croley & Hanson, supra note 18, at 717. Instead, Schwartz & Wilde merely used the 33% figure as a possible result in the clothes dryer market. The numbers used to arrive at the 33%, however, had no empirical significance. More importantly, as observation of the market sensitivity table elucidates, the result from one market certainly cannot be extrapolated to all markets. Had Schwartz & Wilde used different hypothetical figures and come up with results of 2% or 98% instead, no doubt those too would have been deemed by some to be the necessary proportion in all markets.

59. See Schwartz, supra note 16, at 379 (noting that consumers “routinely purchase extended warrantee coverage when buying expensive items”).
fundamentally different reason. In this case both \( P' \) and \((C_m - X)\) are greater than, rather than less than, \( P \) and \( C_m \) because the seller has added a pro-buyer contractual term that costs him some positive amount, making \( X \), the cost savings, a negative number. Nevertheless, \( P' - (C_m - X) \) is greater than \( P - C_m \) because buyers overvalue the terms: \( P' \) increases more than \((C_m - X)\). This is the mirror image of what occurs with undervalued terms, where \((C_m - X)\) decreases more than \( P'\). But, even for overvalued terms (as with undervalued terms), unless a critical mass of consumers is aware of the terms’ existence, the efficient terms will not obtain.

The result for overvalued terms also explains, in part, why efficient terms are not more common. Regardless of the amount of competition, unless a significant number of consumers is well informed, it will be costly for the manufacturer to provide efficient terms because the consumers will not be willing to pay for efficient terms that they do not know exist or that they improperly value. Thus, unless one of the equilibrium equations holds, the only time the manufacturer would be induced to include the efficient terms for the informed consumers is if the ignorant consumers could be prevented from utilizing the latent contract terms. This might be plausible given their ignorance of the terms ex ante, particularly if the manufacturer can somehow differentiate the good.\(^{60}\) Regardless, the efficient terms would be included at most only for the informed consumer, leaving the uninformed consumer unprotected.

We can also relax the assumption that the average marginal cost is constant over the two groups.\(^ {61}\) Instead, marginal cost can be a function of quantity, which will necessarily be different if the seller decides to include only efficient terms. That is,

\[
C_m = f(q)
\]

Then

\[
\frac{\int_{0}^{N_u} f(q) \, dq}{N_u}
\]

is the total marginal cost for the uninformed consumers, and

\[
\frac{\int_{0}^{N_t} f(q) \, dq}{N_t}
\]

\( q = N_u \)

---

60. See infra Section IV.B.2.

61. This is especially fitting in cases where the number of informed consumers is very small. For example, it is unlikely that the marginal cost is the same for the first 95\% percent of buyers as it is for the last 5\%.
is the total marginal cost for the informed consumers. The seller will include the efficient terms if:

\[ N_U(P + \Delta P + X) \leq (N_I + N_U)P - \int_{q=0}^{N_U} f(q) - \int_{q=N_U}^{N_I} f(q) \]  

(7)

where \( \Delta P = P - P^1 \). Multiplying out and simplifying this formula gives:

\[ N_U(\Delta P + X) \leq N_I P - \int_{q=N_U}^{N_I} f(q) \]  

(8)

Multiplying each side by

\[ \frac{1}{N_I} \]

and

\[ \frac{1}{\Delta P + X} \]

yields

\[ \frac{N_U}{N_I} \leq \frac{P - C_{IM}}{\Delta P + X} \]  

(9),

where \( C_{IM} \) is the average marginal cost for the informed consumers, i.e.,

\[ C_{IM} = \frac{\int_{q=N_U}^{N_I} f(q)}{N_I} \]

Flipping the terms on both sides of the inequality gives,

\[ \frac{N_I}{N_U} \geq \frac{\Delta P + X}{P - C_{IM}} \]  

(10).

One can then substitute the results of the left side of inequality (10) into equation (2),

\[ I = \frac{N_I}{N_I + N_U} \]

to find the proportion of informed consumers necessary to obtain an equilibrium where all of the contracts contain the efficient terms. Assuming increasing marginal costs, the proportion of consumers that must be informed will be greater than they were under inequality (5), which was less than under inequality (1). Thus, the effect of relaxing the assumptions is indeterminate ex ante. The effect from undervaluation as opposed to no valuation is to decrease the proportion that
must be informed while the effect of increasing marginal costs is to increase the proportion that must be informed. Given the difficulty of measuring average marginal cost\textsuperscript{62} and consumer undervaluation, one may feel more comfortable relying on inequality (1) because these effects are offsetting.

Although the figures presented by inequality (10) are the most accurate, it is easier, for expositional purposes, to rely on inequality (1) to demonstrate the sensitivity of the informed minority argument to the prevailing market conditions.\textsuperscript{63} The range is as follows, with market price and cost savings presented as percentages of marginal cost so as to be applicable to any market.

<table>
<thead>
<tr>
<th>Table 1 - Sensitivity to Price and Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>( P = 1C_m )</td>
</tr>
<tr>
<td>( P = 1.25C_m )</td>
</tr>
<tr>
<td>( P = 1.5C_m )</td>
</tr>
<tr>
<td>( P = 2C_m )</td>
</tr>
<tr>
<td>( P = 5C_m )</td>
</tr>
</tbody>
</table>

As demonstrated by the above table, the underlying price and cost structure of the market in question makes an enormous difference in determining the proportion of shoppers that must be informed before competitive terms will presumptively exist.\textsuperscript{66} Generally speaking, one can assume that prices are fairly close to average marginal

\textsuperscript{62} Measuring average marginal cost over a defined subsection requires knowing the marginal cost function of the firm; whereas, just measuring average marginal cost over all sales only requires knowing the total marginal cost and quantity, which is simply the average variable cost.

\textsuperscript{63} "When the economic analyst seeks to make a very simple economic model more complex . . . he runs the risk of finding himself with too many degrees of freedom: that is, with a model so rich that no empirical observation can refute it—which means that no observation can support it, either." POSNER, \textit{supra} note 4, at 17.

\textsuperscript{64} If \( X = 0 \), then the seller gains nothing by including an inefficient term, and hence will never do so, which is represented by the letter I, for impossible.

\textsuperscript{65} If the market price is equal to the average marginal cost, which is less than the competitive price if there are fixed costs, then all of the buyers would have to be informed before it would no longer be profitable for the seller to insert such terms, i.e., even in the short run the seller is indifferent between staying in the market or exiting.

\textsuperscript{66} Thus, blanket proclamations that "competition will not have this effect unless a significant number of form takers participate in this search," are without merit. See Eisenberg, \textit{supra} note 43, at 243. Whether a significant number is needed cannot be determined without reference to the market.
costs, say between 1.25 and 2.0, while the cost savings from inefficient contract terms are likely to vary widely, depending on the term in question. For terms such as forum selection clauses and inefficient warranties, the cost savings is likely quite small, say around 1%. On the other hand, disclaimers of liability could produce fairly large cost savings, say 10%, and for some products the proportion of marginal cost may be far greater.\textsuperscript{67} Thus, an entire "package" of inefficient terms may, on average, result in a cost savings of 10% to the seller. If these assumptions prove correct, then the proportion of consumers that must be term-informed is somewhere between 10% and 30%, both of which are relatively large given the impediments to formation of an informed minority discussed below.\textsuperscript{68} However, it is entirely conceivable that there are markets in which less than 2% or more than 80% of the shoppers would have to be informed in order for contract terms to be competitive.\textsuperscript{69}

Because terms are separable, however, sellers can include any array of terms so as to reap some reward from inefficient terms. If a particular package of terms transfers enough value from consumers for an informed minority to be effective, sellers can always remove some terms from the package and decrease the incentive for buyers to become informed.\textsuperscript{70} Although less remunerative terms require a far smaller proportion of informed consumers, they also are less worth the cost of becoming informed. If the consumer's cost of becoming informed about each term is identical, then it will always be the case that fewer consumers will desire to become informed about the more inconsequential terms. If consumers as a group have some minimal

\textsuperscript{67} See, e.g., HUBER, supra note 1, at 3 (asserting that liability costs, and therefore the marginal cost savings of an enforceable disclaimer, are over 95% for children's vaccines, 33% for small airplanes, and 30% for stepladders).

\textsuperscript{68} Compare ARTHUR YOUNG & COMPANY, WARRANTIES RULES CONSUMER BASELINE STUDY (1979) (study finding that from one-fourth to one-third of all consumers purchasing goods read the warranty before purchase) (cited in Jeff Sovern, Toward a Theory of Warranties in Sales of New Homes: Housing the Implied Warranty Advocates, Law and Economics Mavens, and Consumer Psychologists Under One Roof, 1993 Wis. L. Rev. 13, 71 n.228 (1993)) with ALAN SCHWARTZ & ROBERT E. SCOTT, COMMERCIAL TRANSACTIONS: PRINCIPLES AND POLICIES 1142 (2d ed. 1991) (explaining how a bank required to send pamphlets delineating the regulations on electronic fund transfers included a statement in 100 randomly selected pamphlets that it would pay $10 to any customer who sent it in and not a single one did so).

\textsuperscript{69} But see LANDES & POSNER, supra note 21, at 281 ("[I]t may well be that only a trivial fraction of consumers have any feel for the very low risks associated with most products—too small a fraction to influence manufacturers' decisions on safety.").

\textsuperscript{70} Of course, the position of the buyers is complicated by the fact that they act second in the sequential game with the seller. Buyers cannot value the latent terms before they decide to invest the cost to become informed. \textit{See infra} Section IV.A.1.
cost of becoming informed that is positive, all terms that have an expected cost to the consumer of less than this amount will be included in the contract. Thus, even if one would not predict that every term in a contract would be inefficient, one would predict that virtually all standard contracts would contain some inefficient terms, unless there existed a sufficiently large group of consumers for whom the cost of becoming informed was zero.

Even if the number of informed consumers necessary to demand competitive terms is small, the ability of an informed minority to protect the uninformed majority still depends on the sellers being unable to discriminate between the informed and uninformed buyers. The ability to identify and segregate consumers, however, becomes much easier as the number of informed buyers becomes smaller. Under such conditions, the seller needs only to target a small proportion of his buyers to defeat the effect of an informed minority upon the terms offered to uninformed consumers. If it is shown that a particular market has characteristics so that only 5% of shoppers must be informed before competitive terms would obtain, it would likely be relatively easy for sellers to identify those 5%, or a portion of those 5%, and offer them different terms, thereby rendering it beneficial from the seller's perspective once again to include inefficient terms in equilibrium. Thus, as selling products with uniformly bad terms becomes more difficult, segregating consumers into uninformed and informed subsets becomes increasingly easier. When coupled with the ability to separate inefficient terms, it becomes exceedingly difficult to understand why so many people take comfort in the informed minority argument.

Interestingly, the model also predicts, counter to the occasional suggestions of others, that as a market becomes less competitive in terms of price, there is less chance that inefficient contract terms will obtain. This is because the further the market price is from average

71. This assumption seems very likely to be true. See Eisenberg, supra note 43, at 240-43 (describing the costs incurred in assessing latent terms found in most form contracts).

72. See infra Section IV.B.2.

73. "[I]t seems unlikely that markets that are competitive with respect to price will be monopolistic with respect to terms . . . ." Schwartz & Wilde, supra note 46, at 661-62.

74. Some scholars (including, on occasion, Schwartz and Wilde) have recognized this correlation, albeit indirectly, with respect to monopolies. See Alan Schwartz & Louis L. Wilde, Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests, 69 Va. L.Rev. 1387, 1402-20 (1983); Schwartz, supra note 16, at 373 ("There seems little reason to believe that firms also exploit insufficient consumer shopping by ‘degrading’ contract ‘quality’—by not selling insurance at all."); Schwartz, supra
marginal cost, i.e., the greater $P - C_m$ becomes, the smaller the number of informed consumers necessary to dissuade a seller from including inefficient terms. Nevertheless, if the price is artificially high because of imperfect information regarding prices (the Schwartz and Wilde model), one might expect monopoly terms more often because there are simply fewer informed consumers. Thus, the total effects of relative price competition are in fact indeterminate; competition requires more informed consumers to render inefficient terms unprofitable, but it may also indicate that more informed consumers actually exist in that market.

3. Conditions for Informed Consumers

a. Low Cost Information

The single most important determinant of the number of informed consumers is the cost of information. If becoming informed is relatively cheap, then one would expect that many consumers would become informed. The empirical debate about the cost of information is far from settled. However, it is clear at least that becoming informed does have some positive cost. Some have argued that once one becomes informed as to the general nature of contractual terms, the marginal cost of becoming informed with respect to any particular seller's terms is close to zero; that is, that the greatest single cost is learning what is meant by the legalese accompanying most products, and once this is done the marginal cost of becoming informed with respect to any particular product is quite low.

Note 40, at 826-27 (stating that "when firms have market power because of insufficient consumer search, firms seldom will offer consumers worse contracts than the consumers prefer, and seem unlikely to degrade the quality of important product attributes"); Priest, supra note 37, at 1321 ("A principal weakness of the exploitation theory is that it provides no theoretical link between market power and product warranty terms."); POSNER, supra note 4, at 115 ("[S]ince a monopolized product will be priced higher than it would be under competition, prospective buyers will invest more, rather than less, in search . . . .").

75. For those believing the cost of becoming informed is prohibitive, see, e.g., Eisenberg, supra note 43, at 240-43; Goldman, supra note 7, at 717; Meyerson, supra note 48, at 596-608. For those believing the cost of becoming informed is insignificant, see, e.g., Danzon, supra note 31, at 571-73; Schwartz, supra note 40, at 828 ("No specific studies establish that consumers have or lack sufficient information to make optimal decisions respecting product risks.").

76. See Beales, et al., supra note 2, at 500 ("Information is costly, and perfect information is neither feasible nor desirable."); LANDES & POSNER, supra note 21, at 280-83.

77. See Walrod, supra note 47, at 33.

78. See Eisenberg, supra note 43, at 240-42 (discussing problems raised by form contracts).

79. See Walrod, supra note 47, at 33.
Although it is undoubtedly true that the cost of learning the meaning of various terms in general is greater than the cost of reading any single seller's contract, this observation only goes so far. First, not only must one determine what the provisions mean, but one must also assess their impact on a case-by-case basis. Not every forum selection clause will have the same impact; a forum selection clause with Texas or New York as the forum will mean very different things if the product is likely to break but not to cause injury than if the reverse is true. Second, there is always the actual cost of reading the innumerable disclaimers, warnings, and warranty conditions that typically accompany each product. Although not usually large in absolute terms, this cost is frequently non-trivial relative to the cost of the product and, more importantly, to the expected loss from inefficient terms. For example, a simple device like a thermometer can have a multi-page booklet on safety instructions and warnings, despite a relatively minuscule expected harm. Thus, for many products, any cost whatsoever may be enough to induce consumers not to become informed.

b. Advertising

If it is relatively cheap for sellers to supply the information, sellers may do so because the buyers would be willing to pay for the efficient terms to be put in the contract if they knew about them. That is, the sellers will supply the information if the cost of their doing so plus the money they will lose from no longer having inefficient terms is less than the amount they would gain from including the efficient terms. Formally, this is represented as:

\[ C_a + N_u(P - (C_m - X)) \leq (N_i + N_u)((P + P_e) - C_m) \]  

or

80. Cf. Danzon, supra note 31, at 572. Professor Danzon makes the point that even if the expected harm is slight for one use, for goods which the consumer buys or uses often, the expected harm is much greater, and thus consumers may be induced to become informed after all. Id. Although Professor Danzon's argument is correct insofar as it suggests that one ought to look at the total expected harm from remaining uninformed with respect to a particular product over time, her analysis does not necessarily prove that such consumers would always become informed. First, if the consumer does not know the harm ex ante, then it is of no moment that the expected harm is great. Second, as Croley & Hanson point out, this argument "assumes that manufacturers cannot alter their warranties." Croley & Hanson, supra note 18, at 774.

Ca + NuX ≤ (N_I + Nu)P_c + N_I(P - C_m) \tag{12},

where \( P_c \) is the extra price paid for having the "competitive" terms put in the contract, and \( C_a \) is the cost of advertising. If inequality (12) holds, each seller has an incentive to advertise and include efficient terms because he will increase his profits by doing so.\(^{82}\)

However, this argument is fraught with problems as well. First, unless the seller is a monopolist, there is a very real concern of free riding.\(^{83}\) If one firm spends resources informing consumers about the value of certain terms in its contract, it may well be unable to recoup the costs of providing that information.\(^{84}\) As long as the products are homogenous, the non-advertising sellers will benefit equally with the advertising sellers, and thus no seller will have the proper incentive ex ante to provide the information. In other words, the first seller will have the burden of informing all consumers of the efficient contract terms, only to have the other sellers compete on price based on those same terms, robbing him of the ability to recoup the sunk cost of informing the consumers in the first place. That is, \( P_c \) will equal the marginal cost of providing the terms, but will not include

\[
\frac{C_a}{(N_I + Nu)}
\]

because the other producers will not have incurred \( C_a \). Of course, the seller could attempt to differentiate his otherwise homogenous product through advertising latent contractual terms, but this is a relatively rare phenomenon.\(^{85}\)

\(^{82}\) Duncan Kennedy suggests that sellers might also be motivated by honesty to do this if it were not for the fact that they could not recoup a fair return for providing the efficient terms in addition to the cost of advertising the terms. See Duncan Kennedy, Distributive and Paternalist Motives in Contract and Tort Law, with Special Reference to Compulsory Terms and Unequal Bargaining Power, 41 MD. L. REV. 563, 599-604 (1982). This analysis suffers in two respects. First, there is no reason to assume that sellers are altruistic, and to do so is at odds with his premise that they will then not provide information with respect to efficient terms because of the cost. Second, if it is really true that the sellers cannot achieve an adequate return from providing the information, then it is not efficient to provide the information, and it may also be inefficient to provide the term. For example, if the term in question is a service warranty that nobody knows about, then it cannot be efficient to include it because nobody will use it.

\(^{83}\) See Goldman, supra note 7, at 719.

\(^{84}\) Id.; see also George A. Akerlof, The Market for "Lemons": Quality Uncertainty and the Market Mechanism, 84 Q. J. OF ECON. 488 (1970). But see Beales et al., supra note 2, at 504 (explaining ways that sellers can attempt to eliminate free-rider problems).

\(^{85}\) See Meyerson, supra note 48, at 601-02.
Second, there are very few items for which it would be worth advertising contractual terms at all. Most contract terms likely provide less benefit to consumers than the cost of providing them plus the cost of advertising them. To be sure, automobile warranties are commonly cited as an example against this hypothesis, but they represent a relatively unique and possibly inapposite example. One might expect advertising for automobile warranties because the underlying product is so expensive that the warranties are themselves quite valuable. Nevertheless, if the only products for which contractual terms are advertised are worth thousands of dollars, then there is a far larger segment of the market for which no advertising will occur, i.e., automobile warranties are the exception, not the rule. In fact, the majority of contractual terms are simply never advertised.

In sum, it is quite likely that \( C_u \) is usually fairly large relative to \( P_c \) and that \( P_c \) will cover only the cost of the terms themselves and fairly little of the sunk advertising cost, \( C_a \). Therefore, one would rarely expect advertising to correct for imperfect information.

c. Disclosure Laws

Likewise, it is often argued that disclosure laws can remedy imperfect information by making information less costly. Indeed,

86. See Goldman, supra note 7, at 718 ("Competitor advertising cannot be relied upon to provide the information necessary to cure these market dysfunctions."); E. Patrick McGuire, INDUSTRIAL PRODUCT WARRANTIES: POLICIES AND PRACTICES 10 (1980) (conducting study of warranty practices of 369 manufacturers and finding that 57% did not advertise warranty terms). But see Ware, supra note 81, at 1480 (arguing that competitors may inform consumers of comparative contract terms).

87. See, e.g., Walrod, supra note 47, at 31.

88. Another example sometimes given, that of lifetime tool warranties, at first glance, appears to refute this hypothesis. However, because the relative replacement rate of tools is virtually zero, it cannot be the case that these warranties are actually efficient contract terms. Instead, they likely represent a signaling device regarding the quality of the tools. That is, in some markets sellers send buyers signals to convey information about their product's quality. See Gerner & Bryant, Appliance Warranties as a Market Signal?, 15 J. CONSUMER AFF. 75, 85-86 (studying 158 warranties and concluding that signaling theory explains most of the warranty terms encountered); Michael Spence, Job Market Signaling, Q. J. ECON. 355 (1974). But see Priest, supra note 37, at 1303-07 (arguing that signaling theory is inferior to investment theory as a predictor of warranty terms); Schwartz & Wilde, supra note 74, at 1397-98 (contending that the frequency of warranties in commercial contracts provides cogent evidence against the signaling theory).

89. See Meyerson, supra note 48, at 602 ("It is ludicrous to imagine a bank advertising, 'We have the only loan contract in town that doesn't require you to pay our attorney's fees if we successfully sue you for default'...'). Of course, it probably would not be so ludicrous if these terms were highly valued by consumers.

90. See, e.g., LANDES & POSNER, supra note 21, at 283-84 ("Therefore if the manufacturer wants to disclaim liability, he need only take steps to make sure that the danger in his
many laws have been enacted along these lines.\textsuperscript{91} Essentially, the argument is that if some government agency or the liability regime itself requires sellers to disclose certain terms and their effect, then the costs of obtaining this information will decrease and contract terms will therefore be efficient.\textsuperscript{92} The first part of the argument is true beyond peradventure: disclosure laws will definitely decrease the cost to consumers of becoming informed.\textsuperscript{93} However, far from obvious is whether the decrease in cost is sufficient to induce consumers to become informed;\textsuperscript{94} that is, whether the expected cost of reading the warnings is still greater than the expected loss from inefficient terms.\textsuperscript{95} Nor is it clear that disclosures will motivate the critical mass of people necessary to create an efficient term equilibrium.

A particularly salient problem with the disclosure argument is that people will generally not know ex ante whether the costs of inefficient terms are large enough to make reading and understanding all of the disclosed terms profitable.\textsuperscript{96} The best that they probably can do is to broadly categorize products and assume that a particular one has the average costs of inefficient terms for that product line.\textsuperscript{97} More-
over, the consumer will not even necessarily know what the inefficient
terms would look like. Thus, while it may be true that an average
consumer would consider prescription drugs to have higher expected
costs than cosmetics, it is still not clear that he could correctly differ-
entiate one medicine from another or even understand the terms for
which he should be looking.

In short, while it is definitely true that advertising and disclosure
laws could facilitate an informed minority in its quest to overcome
imperfect information, it is unlikely that either of these devices will
actually result in widespread efficient terms. It is also unlikely that
disclosure laws, especially administered by juries or bureaucrats,
would ever be worth the nickel. Indeed, there is evidence that these
bodies would only exacerbate the problem.

B. Other Conditions Under Which Efficient Terms May Occur

Even if the informed minority argument fails, there may be other
arguments that will save the case for efficient terms in standardized
contracts. Typically, two arguments are made: that people possess
generalized knowledge of product terms which prevents inefficient
terms even in the absence of a sizable contingent of perfectly in-
formed consumers, and that a seller’s reputational concerns will in-
duce him to include only efficient terms.

The first argument faces several obstacles. To see why, assume
that it is true that products will be assessed at the average rate of
quality prevailing in the market and that this assessment is perfect.
Sellers would then face a common moral hazard problem: each seller
would have an incentive to decrease the quality of its contractual

---

98. While it is possible that consumers can determine an average value of a personal
injury disclaimer term for a broad group of products, it is doubtful they can assess the
average value of a merchantability disclaimer, an arbitration clause, etc. More impor-
tantly, however, the consumer usually will not be able to determine the value of each term,
including the personal injury disclaimer, for that particular product. This in turn will still
lead to the Akerlof “lemons equilibrium” where top-flight products are seldom produced. 
See Sovern, supra note 68, at 53-63; Akerlof, supra note 84.

99. See Ayers & Miller, supra note 93, at 1076 (“Requiring . . . disclosure when the
costs of communicating are higher than the value of the information to consumers would
force retailers to provide a service whose value is less than its cost.”).

100. See Sovern, supra note 68, at 71-72 (discussing the potential for “information
overload”).

101. This argument is sometimes cast in an “average information” context, which con-
tends that people know the impact of the terms on average. Although somewhat different
than the generalized knowledge argument, the two share a common feature: they both
claim that something short of particularized information is all that is needed for the effi-
cient market hypothesis to hold.
terms because it would not bear the full decrease in the price that consumers are willing to pay for its products. An equilibrium will be reached only at the lowest quality possible before buyers will substitute for other goods altogether.\textsuperscript{102} Thus, even given perfect generalized knowledge, one would still expect to find inefficient terms.

The second argument, reputation, has more validity, but is only likely to hold when either the informed minority argument itself holds or when differentiation is already occurring and thus efficient terms are not an equilibrium but only part of a term dispersion. First, and most importantly, the probability of any single customer being affected by any given contract term is usually quite small.\textsuperscript{103} Many inefficient terms involve liability disclaimers, accelerated payments, repossession, forum selection clauses, or arbitration agreements, none of which are likely to be invoked against a particular consumer or even his acquaintances. In other words, consumers do not often get "burnt," and thus a manufacturer will not lose much repeat or referral business the few times it does occur.\textsuperscript{104}

Second, most people probably do not view the manufacturers' actions in these few cases as reprehensible even if they are inefficient. When people do not pay their bills, it is doubtful their neighbors decry the repo man's actions. Likewise, a manufacturer that is unwilling to pay for injuries caused by its products is the norm, not the exception.

On the other hand, one can think of parties for whom reputation would play a very significant role. One example would be sellers to large, repeat consumers, such as major commercial buyers. With such buyers, however, it is not at all difficult for sellers to differentiate between them and the uninformed consumers, particularly because sellers can just individually negotiate contracts with them and supply efficient terms from the outset.\textsuperscript{105} And, if all of the purchasers in a given market are large commercial entities, then the informed minority argument likely would have force because it would be in the buyers' interests to be informed. Likewise, reputation is also probably important in the luxury goods market, but this is a differentiated market by definition.

\begin{itemize}
\item \textsuperscript{102} See Akerlof, supra note 84; Croley & Hanson, supra note 18, at 776-78.
\item \textsuperscript{103} See Posner, supra note 4, at 181.
\item \textsuperscript{104} Nevertheless, it is still worth it for the manufacturer to include the term because the few times it is invoked, the value to the manufacturer is very high.
\item \textsuperscript{105} See infra Section IV.B.2.
\end{itemize}
IV. The General Failure of the Informed Minority Argument

Despite the great reliance upon it by the defenders of the market, and despite its theoretical plausibility detailed above, in the final analysis, the informed minority argument has serious failings. While it may hold in a few isolated cases, as a general matter it does not accurately describe what usually occurs in the market. This is so for two simple reasons. First, the existence of any sizable informed minority is highly doubtful. And second, even if such a minority did exist, it would only rarely solve the problem of imperfect information. Both reasons are elaborated upon below.

A. The Unlikely Existence of a Sizable Informed Minority

1. Game Theory

Avery Katz has presented a compelling argument that it is irrational for buyers to invest the cost into reading terms, so they cannot be expected to do so. Katz created a game theoretic contracting model with two parties, a buyer and a seller, and two contracting terms, price P (patent) and quality X (latent).

Before the sale, the seller makes a single offer to the buyer. The seller may first endeavor to make quality (representing all latent terms) costlessly accessible to the buyer, either by taking the time and effort to bring each of the terms to the buyer's attention or by offering to reimburse the buyer for all expenses incurred in evaluating the offer. The amount that the seller incurs to make quality evident to the buyer, which Katz denotes as S, is spent regardless of whether the buyer accepts the offer. Reading the contract (including researching terms and possibly consulting an attorney) exacts a cost R from the buyer. If the buyer does not read, he decides whether to accept the offer based upon price and his expectation about the quality of the product.

The seller's production cost (C(X)) and the buyer's reservation price (V(X)) are both directly related to quality; the seller, however, would like quality to be as low as possible and the buyer would like it to be as high as possible. The buyer's reservation price if he does not read the standard form contract is dependent upon his expectation of the likely quality of the product, and is denoted E[V(X)]. Both the buyer and the seller are subject to diminishing marginal returns, so that greater investments in quality cost the seller more and more and are valued by the buyer less and less. Therefore, the efficient level of

106. See Katz, supra note 49, at 272-93.
107. Id. at 282-90. The following discussion draws heavily from these pages.
quality \((X^*)\) is where \([V(X) - C(X)]\) is the greatest, thus maximizing the gross surplus from exchange. The valuation \((V^*)\) and cost \((C^*)\) at the efficient level of quality are such that the amount the buyer would be willing to pay for an incremental increase in quality is precisely equal to the amount that that increase would cost the seller.

Six scenarios are now possible. (1) The seller can make an individual offer, and the buyer can accept. Here, the seller's payoff is \([P - C(X) - S]\), and the buyer's payoff is \([V(X) - P]\). (2) The seller can make an individual offer, and the buyer can reject the offer. Here, the seller's payoff is \(-S\), and the buyer's payoff is 0. (3) The seller can make a standard form offer, the buyer can decide not to read, and the buyer can accept. Here, the seller's payoff is \([P - C(X)]\), and the buyer's payoff is \(\{E[V(X)] - P\}\). (4) The seller can make a standard form offer, the buyer can decide not to read, and the buyer can reject the offer. Here, both the seller's and the buyer's payoff is 0. (5) The seller can make a standard form offer, the buyer can decide to read, and the buyer can accept. Here, the seller's payoff is \([P - C(X)]\), and the buyer's payoff is \([V(X) - P - R]\). And, finally, (6) the seller can make a standard form offer, the buyer can decide to read, and the buyer can reject the offer. Here, the seller's payoff is 0, and the buyer's payoff is \(-R\).

Katz's analysis then turns to predicting the likely behavior of the parties under these payoffs. If the seller makes an individual offer, he will provide the efficient level of quality \((X^*)\). This is because the cost of the individual offer \((S)\) is a sunk cost, and so the seller simply wants to maximize the surplus from trade. Because the seller in this model makes a single take-it-or-leave-it offer, he captures the entire surplus, charging \(V^*\) and earning a payoff of \((V^* - C^* - S)\).

If the seller makes a standard form offer, Katz predicts that the buyer will chose not to read and the seller will provide the lowest possible quality level. For this proposition, he offers proof by contradiction. Assume \textit{arguendo} that some buyers choose to read. For any given price, an informed buyer has a reservation quality level \((X(P))\) such that he would be unwilling to accept any quality below that price. The maximizing seller would never provide more than \(X(P)\); if he did, he could reduce quality (saving production costs) without losing any sales. The buyer's payoff then is \([V(P) - P - R]\). But, since at the reservation quality \(X(P)\), \(V(P)\) is precisely equal to \(P\), \([V(P) - P] = 0\), and so the buyer's payoff reduces to \(-R\). Therefore, Katz explains, a condition in which buyers read cannot be an equilibrium.
Thus, buyers will not read. If buyers do not read, then sellers will provide the absolute lowest quality possible (constrained only by technological limits or by the minimum that judicial intervention will allow uninformed buyers to purchase) because there is no way for buyers to know the quality, and a reduction in quality simply decreases the seller's cost without affecting the buyers' perceptions. Katz denotes this quality level X0, and the corresponding seller's cost and buyers' valuation as C0 and V0. V0, he concludes, is the price that we can expect sellers to offer products for with standard form contracts.

Katz also predicts when sellers will make individual offers and when they will make standard form offers. With a standard form contract, the seller stands to make at most (V0 - C0); with an individual offer, the seller could earn at most (V* - C* - S). Therefore, a seller will make an individual offer only when the following condition holds:

\[(V* - C*) - (V0 - C0)] > S (13)\]

In structuring his model, Katz makes two important assumptions. First, he assumes that reputation is not a factor.108 Second, he assumes that all buyers value quality identically.109 What yields the outcome that Katz reaches is the particular sequential structure of the bargaining. Buyers cannot discover the benefits of reading until after they have already spent the resources doing so. Buyers are therefore vulnerable to losing that sunk cost,110 and so reading is not an equilibrium strategy.

Thus, when viewed strategically (with the above assumptions), it is irrational for buyers to read contracts to discover the latent

---

108. For the potential importance of this factor, see supra Section III.B.
109. Katz contends that his argument stands even when one relaxes this assumption. See Katz, supra note 49, at 289-90. The reason is that, within any group of heterogeneous buyers, there is one that is the most discriminating. Id. at 289. Sellers will set their quality no higher than the reservation level of that buyer, and that buyer will no longer find it profitable to read the offer (because his payoff is -R, as in the discussion above). Id. Therefore, that buyer will stop reading, and the next highest buyer will become the most discriminating buyer. Id. at 289-99. Sellers then will lower their quality to that buyer's reservation level, and then to that of the next, and the unraveling will continue until no buyer is left reading. Id. The only situation in which this unraveling would not occur is if there is a group of buyers for whom the cost of becoming informed is trivial. Id. at 290. Katz, however, does not consider it likely that such a group, if it were to exist at all, would be very large.
110. This point is not as powerful if information gained from reading one contract can be applied to later contract, i.e., if learning about default liability rules or forum selection clauses today makes reading about those clauses tomorrow far less costly. But see text accompanying notes 77-80, supra.
terms. They cannot threaten sellers that they will do so, because any such threat would not be credible. Sellers will therefore behave as if buyers are not going to read and will make the latent terms those minimally acceptable to the buyers. Buyers, anticipating this, will only be willing to pay the amount that they value the product with those minimum contractual terms. If the seller has more to gain from offering better terms, the seller will make an individual offer so that the terms are costlessly available to the buyer, and the buyer can then choose to pay a higher price to the degree that he values those terms.

Katz's argument is quite persuasive. It does, however, have some weaknesses. His analysis assumes (as do most game theory and, indeed, economic arguments in general) a very high level of rationality and forethought from the parties. This high level of rationality is somewhat belied by our everyday experiences that suggest that people do not always think through their own actions. Even more rarely do people take the analysis through multiple iterations to anticipate the behavior of others, their expected responses, and others' expected responses to their expected responses.

Moreover, Katz's assumption that reputation is not a factor may be a significant flaw in his predictions. To the extent that reputation is a factor, it may prevent sellers from including the worst terms. Buyers, realizing this, might anticipate terms roughly commensurate with a seller's reputation. Thus, they might not read terms for manufacturers that have excellent reputations because they would assume (a) that the reputation was earned, i.e., that the terms in the past have been good, and (b) that the manufacturer would not want to risk hurting that reputation, and so would not have replaced the terms with bad ones. Buyers, however, might read some terms from unknown sellers (particularly those from whom the buyers were considering making repeat purchases), not being certain whether those sellers were including high quality terms because they hoped to build a good reputation or whether they were including bad terms, hoping to take advantage of consumer ignorance.

Nonetheless, on the whole, Katz's model allows substantial insight. He correctly notes that consumers must choose whether to invest the cost into reading contractual terms before they know the

---

111. Landes and Posner have made this same argument: "[G]iven the high costs (relative to benefits) of information about an extremely low probability event, it may not pay the consumer to study a disclaimer of liability ...." Landes & Posner, supra note 21, at 281; see also Eisenberg, supra note 43, at 243-44. Producers, of course, will anticipate these buyers' incentives.
content of those terms. Thus, their estimations of expected cost of the terms must be made before reading them. Because they know that many other buyers do not read the terms, they can expect that the terms will be unfavorable. Therefore, they also can rationally not invest the cost in reading the terms because they already know that they are likely to be bad. Sellers can be expected to anticipate this and to follow through with putting in bad terms, particularly those that concern remote contingencies that are unlikely to affect their general reputation because of the rarity of the contingency occurring. If sellers determine that it would be more profitable to include better terms (and charge a higher price), they can be expected to incur the expense of informing the buyers of those terms (knowing that buyers will rationally expect bad terms unless they are informed otherwise). Of course, buyers will anticipate this and, in the absence of express information to the contrary (either in the form of an individualized offer or more generally through advertising), will assume that the latent terms are poor and will adjust the amount that they are willing to pay accordingly.

2. Free Riders

A related problem is that, assuming an informed minority will ensure that efficient terms are offered to all consumers, no individual consumer has an incentive to be part of that informed minority. Because the cost of being informed is borne only by the minority and the benefit is reaped equally by everyone, every consumer has a strong incentive to free ride on the efforts of the others. A good is nonrival if the marginal cost of providing it to another consumer is zero; it is nonexclusive if it is not possible to keep additional people from using it or to charge them for doing so.

In essence, the terms demanded by an informed minority (call them $T^*$ for convenience) are much like a public good. The two defining characteristics of a public good are that it is nonrival and that it is nonexclusive. A good is nonrival if the marginal cost of providing it to another consumer is zero; it is nonexclusive if it is not possible to keep additional people from using it or to charge them for doing so.

112. See Trebilcock & Dewees, supra note 46, at 115 ("When one asks why [consumers would not read even exceptionally clear contracts], many consumers probably rely in part on the constraints (real or illusory) imposed by other consumers at the margin (i.e., they let the market shop for them."); Katz, supra note 49, at 280 ("Baird and Weisberg [in arguing for the ability of an informed minority to demand efficient contracts for all] ignore the incentive for recipients to free ride. Since reading and understanding forms is costly, and since the benefits of efficient terms are enjoyed by the population as a whole, individual recipients might rationally sit back in the hope that others will keep the drafters honest.").

113. See Pindyck & Rubinfeld, supra note 3, at 661-62.
T* is not nonrival, because the marginal cost to the seller of including the terms for an additional buyer is positive. But, by assumption, T* is nonexclusive (because the seller cannot differentiate among consumers).

Thus, T* is a rival, nonexclusive good, much like a public road (without toll booths) or a crowded range of broadcast frequencies. Each additional user exacts a cost, but the users nonetheless cannot be prevented from using. Unfortunately, the problematic aspect of public goods is their nonexclusivity, the feature T* shares with them. Because T* is nonexclusive, buyers cannot keep other buyers from reaping the benefits of the terms, nor can they charge for them.

Thus, we are left with a situation where all buyers would prefer that an informed minority existed (so that T* would be provided), but none want to incur the cost of information necessary to be part of that minority. If nobody else does it, then the cost of becoming informed is simply a waste to the hapless buyer who does; and if enough other buyers do it, then it is more profitable not to read and to free ride off those who do. And if everyone free rides, then there will be no one to serve as an informed minority.

B. The Inability of Even a Large Informed Minority to Provide Efficient Terms

1. The Marginal Consumer Is Not the Average Consumer

All that is necessary for an informed minority to dictate the inclusion of certain terms in a standard form contract (under the theoretical assumptions) is for a sufficient number of consumers to be...
marginal, i.e., for them to be willing to leave the market—not buy—if they do not get their terms. If the cost to sellers of losing those buyers is greater than the cost of including the desired terms, the theory predicts that the sellers will include them. Frequently, this minority of marginal consumers is described as "informed," meaning that it has studied (or will study) the contractual terms offered and demands the terms most in line with its preferences. But it need not be informed. Indeed, any sufficient group of marginal consumers can demand a change in the product, and, if the conditions hold, its desires will be met. The only thing we can know about the demands of groups of marginal consumers is that they will demand according to their preferences.

But there is no reason to assume that marginal consumers are average consumers. Michael Spence has explained this problem as follows:

[Efficient, i.e., social welfare maximizing, terms will be provided] only if the marginal consumer is average or representative . . . [B]ut there is nothing at all intrinsic to the market that guarantees that the marginal purchaser is representative. On the contrary, in many cases, the marginal consumer is quite unlikely to be representative in his marginal valuation of quality.\(^{117}\)

The very fact that they are marginal may be enough for us to expect that marginal consumers are not typical.\(^{118}\) Croley and Hanson make this point as follows:

Implicit in [the theory of the informed minority] is the assumption that marginal consumers represent a random sample of the entire pool of a product's consumers. Otherwise, by satisfying the preference of marginal consumers, manufacturers would . . . fail to satisfy the preference of the average consumer. Also implicit, however, is the assumption that most marginal consumers, unlike inframarginal consumers, base their consumption choices on the content of warranties. Unfortunately, the [informed minority] theory fails to reconcile the positions that marginal consumers are similar to inframarginal consumers in their demand for warranty coverage but different from inframarginal consumers in their willingness to acquire information regarding warranty content.\(^{119}\)


\(^{118}\) That they invested the cost in becoming informed may at least suggest that marginal consumers are more risk averse than the average consumer. See Walrod, supra note 47, at 36.

\(^{119}\) Croley & Hanson, supra note 18, at 783-84.
Indeed, Croley and Hanson argue that the fact that marginal consumers are willing to leave the market if warranty terms are unsatisfactory to them may be a result of their having a lower demand for warranty terms than do average consumers. This claim—that marginal consumers have a lower demand for warranty coverage than average consumers—is the basis of Croley and Hanson’s proffered "new exploitation theory."

Regardless of whether the marginal consumers are demanding better or worse terms than would the average consumer, there is no reason to suppose that they are demanding the same. All that we can know is that they are particularly sensitive to some aspect of the contract—not that the average consumer (or even just one other consumer outside the marginal minority) necessarily shares their preferences. Thus, we cannot expect an informed minority—no matter how large—to demand efficient terms for all consumers. Instead, we must just expect them to demand their particular preferences, regardless of overall efficiency.

This problem becomes particularly salient if the market conditions are such that the informed minority can be relatively small. If the informed minority is only five percent or two percent of the market, then the likelihood of its preferences being typical decreases substantially. At that small a size, there is a far greater chance that the preferences of the minority are not average, and that they will skew the sellers’ output accordingly. This problem is lessened if the minority necessary to demand terms is larger, say 30%, but then, of course, the odds of such a large minority existing are correspondingly small.

The important point is that there is no reason to expect an informed minority to typify the demands of the other consumers. The sole unifying factor of the minority is that a sufficient number of them are willing not to buy a product if it does not conform to their wishes.

120. At first glance, this may seem to invert the informed minority argument. Rhetorically, it is often stated that the informed minority "protects" the buyers that do not read, so one might expect that the informed minority would be demanding greater warranty coverage or more favorable contractual terms, not less coverage and less favorable terms. Yet recall that the argument is usually advanced by proponents of the market and opponents of judicial intervention into contracting. Courts do not generally intervene into contracts that provide buyers too much protection; rather, they do the reverse. Therefore, the informed minority argument is usually marshaled to rebut the claim that consumers cannot have consented to limited warranty coverage or unfavorable terms because they did not read the terms.

121. But see note 118, supra.

122. See Croley & Hanson, supra note 18, at 784.

123. See supra Section III.A.2.
Those wishes could be for a different warranty, for a different forum selection clause, or even for the product to be colored avocado green. If differentiation is not possible, then that minority will get its way—and everyone will suffer the products dictated by the minority's preferences. Thus, there is no reason to assert that the results conform to the overall preferences of the market—are efficient—just because the minority demands them.

2. Sellers Can and Do Differentiate Among Buyers

A fundamental assumption of the informed minority argument is that sellers cannot differentiate among buyers. But, at the trumpet of differentiation, the walls of the argument crumble. And that trumpet is playing a more realistic tune than the alternative assumption that sellers cannot and do not differentiate.

In the real world, sellers regularly differentiate both ex ante and ex post. Ex ante, sellers differentiate continually both on product and on price. We do not live in a world of widgets, and once we relax the assumption of product homogeneity, the model faces even more problems. In fact, we live in a world of great product diversity. One can walk into any department store and see hundreds of television sets, all different sizes and all different prices. Even within the same size, one can find twenty-seven inch sets for $400 and for $1400. With heterogeneous products, each consumer must look through the many choices and find the one most suited to his needs.

Therefore, producers can allow buyers to self-differentiate. They can offer some products with efficient terms and some without. Informed consumers, in the process of selecting their goods from the diverse marketplace of products (from each seller) can select those goods that have the terms that they want. The remaining uninformed consumers will be left to purchase products regardless of their unknown terms.

Heterogeneous products may also aid differentiation if consumer preferences follow predictable patterns. For a good assumed to be homogenous, all buyers are clumped together, and differentiation is difficult. But, for example, "cars" are not homogenous. Hyundais are very different from Cadillacs; and their buyers likely are as well. As Richard Craswell has observed, "[i]t therefore would not be surprising

124. This heterogeneity of products also increases the likelihood that a large informed minority will not exist. If consumers must sift through not only price but also countless other features that differentiate products, then the cost of searching for products increases. Assuming decreasing marginal utility of searching, the more consumers spend searching for products, the less likely they are to spend even more learning about latent terms.
for the consumers of any particular brand and model to have roughly similar preferences concerning the value of a warranty or any other legal right."\textsuperscript{125} If that were so, then producers could sell some goods that consumers inclined to be informed preferred—with the terms that they prefer—and sell other goods to the remaining consumers without those terms.\textsuperscript{126}

Sellers can also differentiate directly, through sales conversations with prospective buyers. \textsuperscript{127} Or they can do so by proxy. Salesmen can look for features characteristic of poorly informed buyers, like being a tourist or new in town. Similarly, salesmen can begin by offering buyers a relatively poor offer—which the uninformed buyers may accept—and can be ready to dicker down to a more reasonable offer if an informed buyer counter-offers. Hence the haggling at many a local market.\textsuperscript{128}

Moreover, for many products there is clear differentiating on contractual terms. When renting a car, the agent will ask the consumer if he would like optional insurance. The informed consumer declines; the sucker subsidizes Avis. When selling a car, the salesman parades useless options before the buyer (like the ubiquitous "rust-proofing"). The informed consumer declines; the chump has a rust-free car like the rest of us. When dealing blackjack, the dealer offers insurance when the card count favors the player. The informed player declines; the patsy flees the terrible ace and finances Donald Trump. When selling appliances, the manufacturer offers a "guaranteed lowest price." The informed price consumer brings in a competitor’s offer

\textsuperscript{125} Craswell, \textit{supra} note 117, at 373.

\textsuperscript{126} It seems plausible, for example, that attorneys—facing lower information costs for interpreting contractual legalese—are more likely to be informed than non-attorneys. Since many attorneys tend to prefer higher priced automobiles, one might expect sellers of automobiles to offer better contractual terms for higher priced cars. Similarly, businessmen and others who deal regularly with the legal system or who may be more likely to have friends or relatives that are attorneys (who might tell them of particularly onerous or advantageous clauses) would also likely have similar demand characteristics and so could increase the probability that sellers could effectively differentiate informed consumers and segregate them in particular product markets.

\textsuperscript{127} Indeed, this differentiating is facilitated with heterogeneous goods because they more frequently require sales personnel assistance, have no fixed price, and allow for express negotiation. \textit{See} \textit{Trebilcock & Dewees, supra} note 46, at 111. \textit{But see} Eisenberg, \textit{supra} note 42, at 242 ("[M]ost form contracts are tendered by agents who have no authority to vary the preprinted terms, so that deliberating on those terms will often be pointless."). Of course, many of those agents to whom Eisenberg refers will have managers or supervisors who will have authority to vary terms, so the informed consumers simply have to be determined to see somebody with authority to satisfy them.

\textsuperscript{128} \textit{See} \textit{Trebilcock & Dewees, supra} note 46, at 110-11.
and gets a lower price, the lazy buyer pays the higher amount. Perhaps the most commonplace—and effective—means of ex ante differentiation are those little warranty cards that come with most household products. The informed consumer sends them in within thirty days; the rest of us toss them with the daily garbage.

Cases abound where parties—informed consumers—have simply changed standard form contracts to suit their preferences. In *International Milling Co. v. Hachmeister, Inc.*, for example, the buyer received from the seller a signed letter giving broader warranty coverage than did the standard form contract that the buyer had nonetheless signed. Likewise, in *Harlow & Jones, Inc. v. Advance Steel Co.*, the buyer circled the clauses in the standard form contract that he did not want and the seller simply waived them. And in *Construction Aggregates Corp. v. Hewitt-Robins, Inc.*, the buyer extracted a "substitute warranty clause" to replace the clause in the standard form contract. Sellers, when faced with informed consumers, can simply change their terms to accommodate those consumers, while keeping the terms in for those unaware.

Sellers also differentiate ex post. A contract may contain limited consumer protection, yet the consumer who complains and argues gets his way. A baby stroller may be not covered by warranty, yet the manufacturer may decide to replace its broken wheel when its owner complains loudly (the squeaky wheel . . . ). This ex post differentiation allows producers to include, for example, unfavorable latent warranty terms at the time of purchase. When the product breaks, the benefits of reading the terms increase substantially, and so most buyers likely go back and read their warranty. Most, upon finding that they are not covered, will lament their bad luck and foolishness for not checking earlier. Some, however, will no doubt complain. Since it is the complainers who are most likely to create bad will for sellers, the seller can just choose to replace or repair the product for the complainers. Thus, those that really value the warranty protection (or,

---

129. 380 Pa. 407 (1955). We are grateful to Slawson, *supra* note 20, at 43-44, for discovering and collecting these cases.
132. *See* Katz, *supra* note 49, at 281 ("Having the terms [unfavorable to the consumer] in the writing gives a seller the discretion to invest in goodwill in circumstances where it is most valuable to do so, while leaving him the option of enforcing the contract to the letter at other times . . . . [T]he goodwill that comes from waiver ex post may be a more valuable kind, because insisting on less than one's demonstrable legal rights has particular salience."); *Walrod, supra* note 47, at 35 ("By changing terms only for those buyers who com-
at least, those that are willing to make their displeasure known persistently\textsuperscript{133}) can receive it, while the manufacturer nonetheless can differentiate them from the uninformed masses who simply bear the loss.

\textbf{Conclusion}

The foregoing analysis has demonstrated the complexity of relaxing the assumption of perfect information for contract formation and tort liability disclaimers. Ultimately, both sides seem to be missing the mark. It is not true that one should always expect efficient terms or that one should never expect them. Instead, one must analyze the particular characteristics of the market and the term in question. As our formal model has shown, it may be possible for an informed minority of as little as 1% to cure imperfections in form contracts or it may be necessary that 90% of consumers be informed before a particular efficient term will be expected. In particular, two factors have great significance: the cost savings to the producer of the inefficient terms and the amount of profit that the producer makes on informed consumers given an efficient set of terms. The greater the cost savings to the manufacturer of including the inefficient term, the greater the percentage of consumers that must be informed to prevent the occurrence of the term. And, the greater the profit to the manufacturer given an efficient set of terms, the smaller the percentage of consumers that must be informed to prevent the manufacturer from including inefficient terms.

Once the number of informed consumers necessary to ensure an efficient term equilibrium is established, however, one must still determine whether that many consumers are likely to be informed and, if they are, whether differentiation is present. The preceding analysis has shown several reasons why it is very unlikely that a significant number of consumers will ever be informed and why, even if the requisite number of informed consumers were present, one should nevertheless be wary of concluding that an efficient term equilibrium will occur. First, particularly in the absence of express disclaimers, it is

\textsuperscript{133}. It is possible that different treatment ex post is not a result of differentiation segregating informed from uninformed buyers and attempting to saddle the latter with the costs of inefficient terms. It could be that complainers create a consumer externality, such that the seller may attempt to buy off their silence rather than risk losing widespread consumer goodwill. Thus, consumers that complain may find their demands met even though they are not typical of consumers and even though those demands—if provided universally—would not be efficient. See Trebilcock & Dewees, supra note 46, at 109.
seldom the case that there will be many consumers for whom the cost of becoming informed is less than the expected loss from the inefficient terms. Second, game theory suggests that the dominant strategy for consumers will be to remain uninformed, because they must choose whether to invest in information before they know the value of that information. Third, there is a very strong incentive for buyers to free ride on the information of others, and if everybody free rides, no informed minority will ever form.

Even if a sufficiently large informed minority did form (a doubtful proposition), that still would not guarantee efficient terms. First, there is no guarantee—indeed it seems unlikely—that the marginal consumer will be typical of other consumers. Therefore, the preferences of the marginal consumers should not be presumed to be efficient for the market as a whole. Second, it will often be easy for the manufacturer to employ product and price differentiation. This can occur both ex ante and ex post, even in the absence of a sales force or high-cost, individual negotiations.

In short, the informed minority argument, while theoretically plausible, faces substantial limitations. These limitations, when viewed together, largely vitiate any force the argument might have. Imperfect information is a common problem that should be considered and compensated for somehow. While the current legal responses in contract and tort law may not be the best responses, neither are the actions of informed minorities. The necessary assumptions just do not hold.