Information Disclosure and Consumers' Understanding: A Case Study of New Leasing Disclosures

Consumers' understanding of selected leasing disclosure terms was examined with data from the University of Michigan's Survey of Consumers. It provides a "before" snapshot of consumers' understanding of leasing terms and conditions prior to new Consumer Leasing Act disclosures; by replicating this study in a few more years, policy makers will be better able to assess its impacts. The current study reveals some issues for today's consumer educators.

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Introduction

Of the various means in policy makers' tool kits for protecting consumers, information disclosure has been among the most popular (see, for example, Durkin and Elliehausen's discussion of Truth in Lending, 1990). The theory holds that with key information disclosed, the marketplace becomes more transparent to consumers, who are then able to make efficient decisions; market effectiveness improves and society is better off. From a policy analysis perspective, the question is, "does this really work?" The purpose of this paper is to explore information disclosure as a consumer protection tool, using recent changes in Regulation M, which governs the Consumer Leasing Act, as a case study.

Background on Consumer Leasing

The incidence of automobile leasing has grown from 13% of new vehicle deliveries in 1990 to nearly 39% of new vehicles delivered during the first half of 1998 (CNW Marketing/Research, 1998). Concerns have also grown about some abuses emanating from automobile lessors, such as "disappearing" down payments and trade-ins (O'Loughlin and Desjardins, 1988). Regulation M, the consumer leasing component of the Truth in Lending Act, covers automobile leases, but it did not require lessors disclose to consumers many facets of the lease agreement. Comparison shopping was very difficult, and consumers rarely were able to judge whether they were receiving the best terms possible on their lease agreement.

This difficulty was compounded by the fact that automobile leases rank as one of the more complex financial transactions consumers can enter. Responding to the need to protect consumers, the Division of Consumer and Community Affairs of the Federal Reserve Board rewrote Regulation M to require that lessors disclosure several key terms and conditions of consumer leases.[4] These reforms became effective on January 1, 1998. In addition to standardizing the format of disclosures, the new rules require disclosure and itemization of amounts due at lease signing, disclosure of the payment schedule and how the payment was determined, disclosure of other charges not part of the monthly payment, and the total of payments. Any fees, warranties, or penalties must be disclosed, and the lessor must describe the lessee's responsibilities to maintain the vehicle.

Now that the regulations are in place, the question is, "will consumer understanding of leasing improve as a consequence of the new disclosures?" If consumer understanding can be augmented, the assumption is that consumers will make better decisions in the long run. Whether heightened awareness will increase or decrease the demand for automobile leases is uncertain, but the key issue is whether consumers are able to make better economic choices as a result of the new information provided by disclosures.

Previous Research

The Economics of Information

The rationale for disclosures becomes apparent when looking at economic theory. Traditional economics suggests that the price of a given good or service is a function of consumers' willingness to pay for the good (demand) and industry's production of that good (supply). Traditional economics assumes that consumers have perfect information about prices, products, and substitute goods, and the synthesis of this information allows consumers to engage in rational decision making where the outcome of an action is an optimal economic decision.

The economics of information challenges the assumption of perfect information by arguing there is a supply and demand for information (see, for example, Stigler, 1961; Ippolito, 1988; and Russo, 1988). That is, the level and quality of information acquired and used by a consumer depends on the availability of information and the costs (in time and resources) of acquiring it. As a consequence, a consumer is not perfectly informed because some information is costly to collect and utilize, and other information is not readily available to consumers. Also, all information is not equally reliable (see Feick, Hermann & Warland, 1986; Keller & Staelin, 1987; Bone, 1995).

A market with asymmetric information tends to suffer from inefficiencies and non-optimal behavior. Producers or sellers may have market power allowing them to keep prices at a higher level than under perfect competition. In certain cases, a market where there is wide occurrence of asymmetric information may require government intervention to restore balance (Mazis and Staelin, 1981; Mazis, Staelin, Beales, and Salop, 1981). Regulation M offers such an intervention by requiring lessors to provide lessees with certain standardized information before signing a lease agreement. These disclosures have the intent of reducing the cost of obtaining information specific to the lease agreement and of increasing the supply of information used by consumers in making their decision to lease an automobile.

Information Use, Theory of Understanding, and Role of Regulation

A policy goal such as achieving improved consumer understanding can be elusive without an agreement as to what understanding is. Mazis and Staelin (1981) discuss a broad model for characterizing the process by which a person gains understanding. The steps include exposure (disclosure of information), attention (consumer selects some information for further processing), comprehension (consumer assigns meaning to the message), retention/recollection (information is stored in memory) and decision making (consumer sorts out data and processes information to make decisions). Each step of the model represents a different stage in the process of understanding. Researchers have placed information and disclosure requirement provisions of public policy within the exposure and attention steps of this model (see Wilkie, 1975; Beales, Mazis, Salop & Staelin, 1981; Ratchford, 1982; McAlexander & Scammon, 1988). When discussing consumer policy, the primary concern is cases where the consumer is not exposed to the data or information to begin with and thus never has the opportunity to process the information necessary for making an optimal economic choice.

Evaluating the Impacts of the Intervention

Agencies that develop public policies have an interest in determining the effectiveness of such policies. This requires consideration of the users of the evaluation, a framework for the evaluation, and an assessment of the goals the program is intended to meet (Patton, 1997; Rossi and Freeman, 1993). Mohr (1995) offers a model of impact analysis, defined as "determining the extent to which one set of directed human activities (X) affected the state of some objects or phenomena ($Y_1, \ldots, Y_k$) and -- at least sometimes -- determining also why the effects were as small or as large as they turned out to be." The model typically looks like:

$$Y_1 \rightarrow X \rightarrow Y_k \qquad (1)$$

where X is a program or policy intervention, and Y denotes two sets of data collected by the evaluating agency. Phillips and Calder (1979) called this model a "before and after" design for program evaluation. Y_1 is from a period directly before the intervention, and Y_k is from a period or periods after the intervention has been implemented. The advantage of impact analysis is it allows evaluators to disentangle the effects of the program from other effects (e.g., economic, social) (Vedung, 1997).

Several other models of program evaluation have been posited (see Day & Brandt, 1974; Mazis, Staelin, Beales & Salop, 1981; Bloom, 1989). However, in this study, Mohr's model seems most appropriate. It is possible to obtain an appropriate baseline (Y_1) against which to measure changes in consumer behavior and conditions in the market. The impact of the new disclosures required under the Consumer Leasing Act's Regulation M will need to be measured at a future (Y_k) date.

Data, Methodology, and Analysis

To address the question of what consumers know and understand about leasing at time Y_1, we used the Surveys of Consumers, which are conducted on a monthly basis by the Survey Research Center of the Institute for Social Research at the University of Michigan. In March through June 1998 the Surveys of Consumers included questions on vehicle leasing commissioned by the Federal Reserve Board. The questions were specifically designed to determine households' reasons for leasing automobiles, their overall attitude towards and satisfaction with leasing, the types of information sources used when shopping for a car, their familiarity with the terminology of leasing, and their understanding of the vehicle leasing process. Following Mazis' model, specific questions covered exposure, attention, and comprehension of leasing terms and conditions.

Over the four months, a total of 2003 respondents participated in the Surveys. Three filters were used to establish which households were to be included in the analysis. The first filter eliminated all households who had no consumer leasing experience. The second filter eliminated respondents who were not involved in their household's leasing decision; respondents who read and/or signed a lease were included in the analysis. Third, we determined whether consumers received the "old" or the "new" Reg M disclosures. Leases signed prior to September 1997 were most likely the old disclosure format; those signed in December 1997 and after would have been in the new format. Eight respondents who signed their leases between September and November were excluded from the analyses since it was not possible to know which disclosures they received (McCathren, 1998). Of the 2003 respondents in the data, only 118 met our criteria. Due to the limited sample size (N = 118), only descriptive and bivariate statistics were generated.

The demographic variables included in analysis were race/ethnicity, gender, age, education, household income, marital status, household size and region. We also included measures of lease status, leasing experience, shopping for leasing information, and types of information sources used. A score variable was created to measure respondents understanding of vehicle leasing terms and conditions. The variable was formed by summing points from three questions that measured consumers' recall of receiving disclosures (exposure), their general understanding of specific lease terms (attention), and their comprehension of lease terms and conditions. Respondents received one point for each disclosure they recalled receiving, one-and-one-half points for claiming to know the general meaning of selected disclosures, and two points for each correct answer provided on a true/false comprehension quiz. Scores ranged between 0 and 49.5.

Results

Sample Description

The majority of the respondents in the sample were white (85%). Slightly over one-half (52%) of the respondents in the sample were female; however when divided by lease status, there was a higher proportion of males in the "currently leasing" category (53%) and a higher proportion of females in the "previously leased" category (67%). The majority of the respondents were between 25 and 54. Over 95% had completed high school and a substantial proportion (55%) had a post-high school degree. The majority of the respondents were married. The largest proportion of households (47%) fell into the $40,001 to $75,000 income category. These findings are consistent with industry market research data on lessees (CNW Marketing/Research, 1998). Most leasing households (73%) had two adults; some of these households had children living at home. The largest proportions of leasing respondents lived in the Midwest and South (28 % and 30%, respectively).

Information Sources

Point of sale (POS) sources were the most frequently cited sources of information when shopping for a leased vehicle. Over four-fifths (84%) of the sample reported asking questions at the dealership and nearly half (48%) reported using written information from the dealership or leasing company. Nearly one-third (31%) obtained information from ads; third party and personal information sources were cited less frequently. Among third-party sources, almost one-third (31%) cited using articles in magazines, newspapers, or on the Internet; over one-fifth (22%) cited using consumer publications; very few (4%) cited using government publications on leasing. The most-often cited personal source of information was family, friends and co-workers (36%); one out of ten (11%) cited using advice from a financial services professional.

Comprehension "Quiz" Results

Most respondents knew that there are mileage limits on a lease (98% correct, column 3 in Table 1), that when you lease you do not own the vehicle (97%), that you might face excess wear and tear charges at the end of a lease (86%), that most leases are for two to four years (83%), that you could face several thousand dollars in early termination charges if you end your lease early (79%), and that monthly lease payments are usually lower than monthly loan payments (74%). Fewer respondents knew that you may not have to make a down payment when you lease (65%), that it's generally less expensive to get a higher mileage lease than to pay for extra mileage at the end (57%), and that you may have to pay a disposition fee at the end of the lease (52%). Even fewer respondents understood some of the subtleties of leasing; only two out of five knew that a capitalized cost reduction is like pre-paid depreciation (42%) and that when leasing you have no risk for unexpected changes in the leased vehicle's value (40%).

Table 1. **Disclosures Received, Understanding of Terms, and Results of "Quiz" on Leasing**

	Received disclosure (exposure) %	Know general meaning (attention) %	Correct answer on "quiz" (compre-hension) %
Amount due at lease signing or delivery	97.4		
Capitalized cost reduction		38.8	
When you lease, you may not have to make a down payment			67.4
The capitalized cost reduction is like pre-paid depreciation			42.2
Amount of the monthly payment	100.0		
Difference between lease and loan payments		85.3	
Monthly lease payments are usually lower than loan payments for the same vehicle			73.9
Amount of any other charges	83.8		
Acquisition fees		61.7	
Mileage limits on the lease	97.4		
Mileage allowance		93.1	
There are mileage limits on most leases			98.3
Charge for mileage over the limit	90.6		
It's generally less expensive to get a lease with a higher mileage limit than to pay for extra miles at the end of the lease.			57.4
Number of months or years the leas would last	99.1		
Most leases are for two to four years			82.8
Early termination fees	69.0		
Early termination fee		89.6	
If you end your lease early, the early termination payoff and charges could be several thousand dollars			79.3
Disposition fee		61.7	
If you don't buy the vehicle at the end of the lease, you may have to pay a disposition fee			51.7
Excess wear standards		70.7	
You may face excess wear and tear charges at the end of the lease for dings, dents, faded or stained upholstery, or mismatched tires			86.2
Residual value		74.8	
When you lease, you have no risk from unexpected changes in the resale value			39.7
Total of all payments to be made by the end of the lease	89.7		
Responsibilities for care and maintenance	89.7		
Insurance requirements for the vehicle	87.2		
Purchase option price, if there was one	90.6		
Gross capitalized cost		48.3	
Adjusted capitalized cost		32.2	
Depreciation		93.1	
When you lease, you do not own the vehicle			96.6

Understanding Scores

There were no significant differences in understanding scores between whites and minorities, by age, by marital status, or by the form of the disclosure received. On average, males scored significantly higher than females (38.0 vs. 33.5, respectively). Respondents who completed at least some college scored almost six points higher, on average, than respondents who completed only high school or less (36.9 vs. 31.1). Respondents with household incomes above the median for the sample ($60,000) scored significantly higher than respondents from households with incomes below the median (38.8 vs. 32.1). Leasing experience seemed to make a difference in understanding scores. On average, respondents who were currently leasing scored significantly higher than respondents who had leased previously but were not currently leasing (36.6 vs. 32.6). Respondents who had leased more than once scored significantly high than first-time lessees (38.2 vs. 33.7).

Shopping and information gathering also seemed to influence understanding scores. Respondents who shopped around for leasing information prior to signing a lease scored significantly higher than respondents who had not shopped at all (38.1 vs. 32.3). On average, respondents who used third party sources the most scored six-and-one-half points higher than respondents who used dealer information sources and three-and-one-half points higher than those who used personal sources the most (41.2 vs. 34.7 and 41.2 vs. 37.7, respectively). In addition, respondents who used personal sources the most scored significantly higher than respondents who used dealer sources the most (37.7 vs. 34.7). Thus, even though point-of-sale information sources seem to be the most widely used, these sources do not necessarily lead to the best understanding of the information presented.

Summary and Conclusions

This study provides a "before" snapshot of consumers' understanding of leasing terms and conditions prior to the implementation of new disclosure requirements; by replicating this study in a few more years, policy makers will be better able to assess the impacts of their new information disclosures. However, this current study reveals some issues for today's consumer educators.

The most frequently cited source of information was POS, although consumers who relied on POS information had lower understanding scores than others. Almost all disclosures required in financial transactions (e.g. Truth-in-Lending and Real Estate Settlement Procedures Acts as well as Consumer Leasing Act) are made at the point-of-sale, as opposed to earlier in the shopping-decision making process. One of the reasons regulators rely on point-of-sale disclosures is that everyone will receive them. However, it is evident that if we can encourage consumers to obtain information from others (i.e. earlier in the shopping process), consumers can enter into transactions with more understanding.

One component of obtaining third party information is access to unbiased, research-based information. In an era of web-based information, consumers can find a wealth of information at their fingertips, reducing the costs of information search. However, information needs to be available in multiple formats for all income and education segments (note that lower income and less educated respondents scored lower than their higher income, more highly educated counterparts).

Another finding of this study is the importance of encouraging consumers to shop around. Over one-third (37%) did not shop for leasing information before going into a dealership; and they scored nearly six points lower than their counterparts who did shop. Making information easily available is one component; community-based consumer educators may also want to provide information on the pay-offs to shopping around via simple price surveys..

The results of the comprehension "quiz" provide some good news and some bad news. The good news is that large proportions of respondents knew about some of the key terms and features of vehicle leases. The bad news is that there are substantial proportions of lessees who don't understand several other key features and terms. While some of these "bad news" items are covered by the new leasing disclosures, others are not. Thus, it is likely that there will continue to be a need to educate consumers about the intricacies of leasing that are not part of the Regulation M disclosures.

Finally, these results demonstrate that information disclosures as part of consumer protection regulation can only go so far in helping consumers understand transactions in the financial marketplace. Consumer education and outreach efforts are as important as regulatory efforts in providing consumer protection. Thus, while we wait for the "after" snapshot of consumers' understanding of leasing terms and conditions, there is still plenty of work for consumer educators to do.

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Endnotes

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4 The Consumer Leasing Act defines a consumer lease as a lease of personal property to an individual to be used primarily for personal, family, or household purposes for a period of more than four months and with a total contractual obligation of no more than $25,000.

The analysis and conclusions set for the in this paper are those of the authors and do not necessarily indicate concurrence of the Board of Governors, the Federal Reserve Banks, or members of their staffs