



How is the Choice of Owning Life Insurance Related to Consumer Protection?

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ABSTRACT

In the United States, no two states are completely alike in how they govern their citizenry or regulate commerce within their borders. These differences may be used to examine the effects of various laws by contrasting the differences in the way each state attempts to resolve a perceived problem and the resulting outcome.

The following paper examines the relationship between consumer purchasing behavior and statutory solutions enacted to combat the perceived problems of unfair and deceptive acts. The statutory solutions are Unfair and Deceptive Acts and Practices (UDAP) statutes. This paper focuses on UDAP statutes and their relationship to life insurance ownership.

This paper finds that under some circumstances consumer ownership of life insurance is related to how a state chooses to protect its citizens from unscrupulous acts of persons or businesses. This article may serve as an opportunity for ethical professionals in financial services to understand how more significant levels of regulation can result in growth opportunities.

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Introduction

Everyone has heard stories about unscrupulous insurance salespeople. They have been rated consistently as one of the least trustworthy groups in Gallup’s Honesty and Ethics poll (2003, 2006, 2009, 2012, and 2016). Unfortunately, given the complexity of many insurance products, some bad actors can avoid detection until well after an unsuspecting consumer has purchased their product. Even then, it may take the trained eye of a financial professional to identify the offending product for what it is.

Various regulatory regimes and industry watchdogs exist to protect consumers from these bad actors. One such is consumer-protection legislation. Each state has its version of an Unfair and Deceptive Acts and Practices (UDAP) statute, which serves as consumer protection. These statutes describe how a consumer can bring a legal suit against bad actors and win that suit. This paper examines the effect of these UDAP statutes on the choice to own life insurance.

When a consumer purchases a life insurance policy but later finds out that it is completely unfit for the purpose for which they bought it, what can they do? Simply put, once the problem has been identified, the consumer has one of three courses of action that he or she can follow. First, the consumer can accept the loss, either canceling the policy or continuing to pay the premiums. Second, the consumer can try to get some kind of compensation for his or her loss by negotiating with his or her insurance company. Third, the consumer can try to get compensation for his or her loss by seeking aid from the legal system. This third course of action is made possible by consumer protection statutes.

Imagine a couple looking to buy life insurance. The couple searches for the best insurance broker they can find at a reasonable price. They select a broker who appears to know what she is doing, and they believe that she would recommend only an insurance policy that will suit their needs and situation. They engage the broker, select an insurance policy, and all parties are happy.

Years later, and after tens of thousands of dollars in premiums are paid, the couple finds out that the insurance policy is not only completely inappropriate for their situation, but that many of the promises made by the insurance broker have failed to come to fruition. As it turns out, the broker had used policy illustrations designed to mislead the couple. Unknown to the couple, these illustrations presented a highly unlikely scenario showing that the policy would perform much better than what was likely to occur in reality. After several attempts to get the broker and her insurance company to fix the damage, the couple decides to explore the third option, a lawsuit against the broker. Whether or not their lawsuit would be successful largely depends on the state in which they live and the consumer protection laws of that state.

This paper examines states’ consumer-protection statutes to determine how life insurance ownership varies with the breadth of protection offered by consumer-protection statutes. This paper examines consumer protection as applied to life insurance, one of the most infamous industries when it comes to the alleged use of unfair or deceptive practices. Using consumer participation in the life insurance market, this paper shows the relationship between the breadth of protection and consumer participation in this market. The breadth of protection refers to how broadly the statute protects against actions that put the consumer at risk of suffering a sub-optimal experience in purchasing and owning a life insurance policy.

Literature Review

This paper adds to the existing literature by establishing a basis for studying the relationship between life insurance ownership and consumer protection statutes. Unfortunately, relatively little research has been done regarding the effects that consumer-protection laws have on the consumption of goods. The vast majority of the existing papers focus on theoretical and legal arguments or are editorial pieces. This paper adds to the discussion by providing a statistical analysis of how state consumer protection laws are related to life insurance ownership. With this in mind, a summary of the literature on this subject is justified.

Legislative History

In the United States, UDAP statutes protect consumers from deceptive, predatory, or unfair practices (National Consumer Law Center, 2017). These laws are very different, depending on how the state legislature wrote them or how they are enforced (National Consumer Law Center, 2017). Due to these differences, some states’ UDAP statutes afford different levels of protection than others. Some states’ statutes provide broad protections, and others are narrower in the protections they offer (National Consumer Law Center, 2017).

Before the creation of UDAP statutes, individuals were able to fix bad behavior through legal action only by claiming that they had been defrauded (Carter, 2009). Unfortunately, as a general rule, fraud statutes require that a litigant show that the accused deceived the consumer intentionally, and the consumer was able to gain recourse from the business itself only in rare cases (Carter, 2009). This left consumers with few options, only allowing them to seek recourse from the individual who wronged them, thus insulating the business entity (Carter, 2009). This was a hole in protection that allowed many unethical and abusive business practices to persist (Carter, 2009). Beginning in the 1960s and continuing into the 1970s, states began to enact UDAP statutes (Carter, 2009). Today, UDAP statutes prohibit certain business practices and set out what is required of the consumer to win his or her suit (Carter, 2009).



Forms of Consumer Protection

Traditionally, economic theory regarded consumer protection as paternalistic behavior by the government (Leland, 1979). This is accurate where governments actively seek to limit consumer choice because they believe individuals are not able to act in their own best interest (Goodin, 1993). If a paternalistic government believes this to be true, it will enact legislation that is designed to limit consumer choice or increase the information that consumers have when making a choice (Goodin, 1993). Prohibition of specific goods or requiring specific disclosures by sellers are examples of paternalistic behavior by a government.

Paternalistic protections may be enacted in response to situations where informational asymmetry exists, like life insurance sales. (Akerlof, 1970). In markets where some sellers are willing to sell inferior goods and the quality of these goods is not easily evaluated, these protections can be impactful (Akerlof, 1970). The market for life insurance could be identified as such a market.

UDAP statutes are not paternalistic in their structure. They are not designed to impact choice or prohibit business practices. They instead create an avenue by which a consumer can be made whole if they are economically harmed by a bad actor (Carter, 2009). UDAP statutes serve as a deterrent to bad actors in that they create a stronger threat of lawsuits against bad actors.

Consumer Protection as Risk Mitigation

Traditionally, economic theory holds that consumers understand that, in some markets, the price and quality of goods change from seller to seller and will engage in a search to find the best product for the lowest price (Stigler, 1961). However, Stigler (1961) goes on to state that, where the goods are not homogenous from seller to seller, the efficiency of the search is diminished substantially. Akerlof (1970) holds that this problem is exacerbated in markets where information asymmetries exist between the consumer and the seller. Akerlof (1970) states that this informational asymmetry could be diminished by requiring licensing or enforcing minimum standards of conduct. Consumers may expect some kind of protection to prevent business entities from taking advantage of informational disparity by requiring the disclosure of specific information. Consumers also may expect some protection preventing business entities from actively trying to increase this disparity (e.g., false advertisement or misrepresentation) (Leland, 1979). These protections have a greater effect in markets with a low correlation between the quality of a good and its price (Leland, 1979).

In their simplest form, UDAP statutes allow consumers to punish bad actors for using practices that take advantage of, or increase, the informational asymmetry between a buyer and seller. This decreases the probability that consumers will have a negative ownership experience by either driving out bad actors or by making them whole after having a negative ownership experience.

One of the first academics to link consumer purchases with risk-taking was Bauer (1960). In the setting of consumer purchases, Bauer (1960) describes risk as perceived negative outcomes from a decision related to a purchase. These risks can include uncertainty about psychological, social, financial, and

physical well-being, as well as the risk associated with the performance of a good or service (Gabbot, 1991). Roselius (1971) sets out a range of means by which the risk of a negative outcome is reduced. Roselius (1971) lists brand loyalty, endorsements, major brand image, store image, private testing, free samples, government testing, and money-back guarantees as means by which consumers' risk of negative outcomes can be reduced. It may be recognized that several of these risk-reduction techniques can be weakened due to the influence that the firm or individual attempting to sell its goods or services has over the consumer. Darby and Karni (1973), recognize this and demonstrate the circumstances in which a business will pursue fraud as a business practice.

Arguments Against Consumer Protection

Consumer-protection legislation and its efficacy have been discussed in many forums (Holton, 1969). Cynics argue that the market pushes bad actors out naturally through competition (Holton, 1969). Advocates for consumer protection hold that individual consumers lack sufficient power to identify abusers and protect themselves (Holton, 1969). They contend that critical information is not available or that consumers often are not able to sift through all the information that is available before making a decision (Holton, 1969).

Economic theory holds that consumer choice becomes increasingly limited as governments intervene or regulate markets (Holton, 1969). In some instances, the increased costs of a good or service caused by regulation may make that good or service unattainable for some consumers (Holton, 1969). In other instances, the increase in cost associated with regulation could cause the good or service not to be offered at all. The regulation also can remove goods or services from the market completely by prohibiting specific goods or services directly (Holton, 1969).

In the late 1960s, economic theory suggested that competition is most likely sufficient protection from undesirable business practices. However, Holton (1969) shows that competition might serve only as sufficient protection for consumers from abuse in industries that have the three following attributes. First, these industries must provide products or services that are purchased by individuals often (Holton, 1969). Second, these industries must provide products or services for which the quality is clear before a purchase is made (Holton, 1969). Third, these industries must provide products or services that do not change rapidly due to technological improvements (Holton, 1969). Holton (1969) holds that competition becomes feeble protection for industries where all three of these attributes are not present. Fisk (1973) maintains that markets that do not have these attributes are less affected by competition and that the power of competition to push bad actors out of the market is diminished. Instead of using the information to assess the quality of the product, consumers participating in such markets evaluate information to reduce the risk of suffering a negative outcome from purchasing a product or service (Fisk, 1973).

Both papers acknowledge that the producer or seller of a good makes assurances of quality, but there is no guarantee of the truthfulness of these assurances. One of the few things that can force the seller or producer to back up these assurances may be

consumer protection statutes. There is little to make sellers accountable for the assurances of quality, which they make in the absence of consumer protection measures. Together, Holton (1969) and Fisk (1973) represent a more complete picture of how competition impacts consumer behavior. Instead of stating that competition is sufficient to force out bad actors, they recognize that competition may be only another piece of information that consumers use as part of their search in some markets. The life insurance industry has none of the three attributes set out in Holton (1969). Therefore, competition may not be adequate protection for consumers, who must instead depend on their ability to collect and interpret data.

Life Insurance Purchases

It is difficult to find any common ground in the literature as to which variables impact the decision to purchase life insurance (Zietz, 2003). Where the literature agrees on the significance, it does not come to a consensus on the direction of the relationship (Zietz, 2003). Additionally, those studies that agree on a variable's statistical significance disagree on the direction of the relationship (Zietz, 2003). Zietz (2003) speculates that many of the differences in results might be attributable to measurement limitations, such as limiting the race to white and other, or marital status as married and other. Papers, where these variables are given a broader range of categories, tend to find statistical significance.

Greene (1963) is one of the first to hypothesize that demand for insurance could be modeled using household characteristics. Before then, academics primarily had used aggregate approaches to estimate demand (Greene, 1963). Greene (1963) hypothesizes that consumer choice to purchase life insurance is impacted by consumer age, sex, and education level. Hammond et al. (1967) use income, net worth, age, education, race, and marital status as variables impacting the choice to purchase life insurance. Hammond et al. (1967) find that many of these variables, excluding race, age, and marital status, are related to the decision to buy life insurance. Hammond et al. (1967) suggest that this could be due to limitations of the data, specifically a lack of detail regarding different races and marital statuses.

Burnett and Palmer (1986) choose to examine household determinants of life insurance purchases with specific attention paid to differences in attitude (psychographics). To account for individual preferences and constraints, Burnett and Palmer (1986) use age, sex, marital status, number of children, occupation education, race, religious preference, and income. Burnett and Palmer (1986) find that education, income, sex, and the number of children are statistically significant. Additionally, Burnett and Palmer (1986) find that many of the psychographics are statistically significant.

Shock and Showers (1994) examine how household characteristics impact life insurance purchases with specific attention paid to the income elasticity of life insurance. Shotick and Showers (1994) use income, age, family size, and the number of earners in the household to control for consumer preferences and constraints. Ultimately Shotick and Showers (1994) find that all are statistically significant.

Carson et al. (2012) examine the effect of life events on different types of life insurance purchases using income, net worth, children, marital status, age, race, and education. Each of these variables is found to be statistically significant in purchasing either term or whole life insurance (Carson et al., 2012).

Data

To analyze the relationship between UDAP statutes and life insurance ownership, this paper uses the Consumer Expenditure Survey (CEX). The CEX is an annual study comprised of an interview survey and a diary survey and is created by the U.S. Bureau of the Census for the U.S. Bureau of Labor Statistics. The purchasing of large-ticket items such as vehicles, appliances, and construction projects is tracked by the CEX's interview survey. This covers the transactions in depth while giving only superficial attention to smaller, day-to-day consumption. These smaller day-to-day purchases are covered in depth by the diary survey, which gives almost no attention to larger purchases. These data are used by the U.S. Bureau of Labor Statistics to measure the relative changes in the importance of many goods and services. The CEX also tracks certain aspects of consumer life, such as wealth, income, housing, and employment. The CEX is intended to be a representative survey of households in the United States when weights are applied.

This paper uses pooled, cross-sectional data over ten years, beginning with the 2008 CEX Interview Survey and ending with the 2017 CEX Interview Survey. These data cover both recession and expansion economies. The full CEX sample includes 260,183 separate households. This initial sample is reduced to 214,284 households because some households failed to answer whether or not they currently owned a life insurance policy. Additionally, some state identifiers are suppressed by the CEX. Because of this, the sample does not include transactions from Arkansas, Montana, New Mexico, North Dakota, Rhode Island, South Dakota, or Wyoming. However, because there exist only minor differences between these states' UDAP statutes and those that are represented in the analysis sample, this should not impact the results of this paper.

Table I.a compares the CEX sample means with the analysis sample means using the weights provided by the CEX and illustrates the statistically significant differences between the two samples. However, in Tables I.a, I.b, and I.c, the CEX weights are used to make the analysis sample representative of households within the U.S.

This paper does not categorize or examine the efficacy of state UDAP statutes. It does not intend to identify which states have the worst, or the best, UDAP statutes. Instead, it inspects two specific features of each state's UDAP statute to identify how these measures are correlated with the ownership of life insurance by consumers. Therefore, the unit of observation of this paper is a household.

The dependent variable in this analysis is a dummy variable indicating whether any member of the household was covered by a life insurance policy. If the household does own a life insurance policy, the dummy variable is coded as a 1. If the household does not own a life insurance policy, the dummy variable is coded as a 0.



The key explanatory variables are derived from a dataset produced specifically for this paper. This dataset contains each of the 50 states and the District of Columbia and uses six dummy variables to describe each state's UDAP statute's protections, three for unfair practices and three for deceptive practices. The dummy variables describing protections for unfair practices are coded as narrow, neutral, or broad. These dummy variables are created so that if a statute has broad protections against unfair acts, the dummy for broad would appear as a one (1) and the narrow and neutral dummies would appear as zeros (0). Separately, the dummy variables describing deceptive acts are set up in the same manner.

Each state's UDAP statute consists of many components that decide how much protection a consumer will receive from unfair acts or deceptive acts. Each state's UDAP statute has been scrutinized with specific attention paid to two types of protection. Specifically, the statute is examined to determine the range of prohibited acts and practices that fall under the statute's definition of unfairness, or that fall under the statute's definition of deception, and any explicit instances to which the statute will not apply. Based on this examination, a state statute is determined to have narrow, neutral, or broad protections against each, unfair or deceptive practice. The information used to generate these variables and references to each state's UDAP statute can be found in Appendix I.

The analysis of this paper includes several control variables. These control variables are included to account for consumer preferences and constraints as well as state-specific economic circumstances in the year of the survey response. These control variables include dummy variables identifying a consumer's sex, marital status, education, race, age, survey year, state average premium price, and income before taxes. Dummy variables for each survey year are included (with 2017 being the omitted category), where one (1) represents "true" and zero (0) represents "false." The controls used in the analysis are further explained and justified in the following section.

Theory

Bauer (1960) posits that consumer-purchasing activities should be treated as risk-taking activities and that consumers act to maximize utility under uncertainty. Under this framework, activities or circumstances that reduce risk will increase the expected utility. This could increase the probability that a consumer will choose to purchase, and subsequently own life insurance. Roselius (1971) identifies government action also as having the potential to reduce consumer risk. This lends support to one of Holton's (1969) conclusions. Specifically, consumer protection is a form of risk reduction in markets where there is a disparity between the consumer's and seller's inability to gather and interpret information. Fisk (1973) and Holton (1969) recognize that, in markets where the consumer does not purchase the good often, where the quality of the good is not apparent at the time of purchase, or the quality of the good is rapidly changing due to technological advances, competition does not offer sufficient protection from bad actors. This is because the consumer cannot obtain sufficient information to determine the quality of a good or service (Holton, 1969; Fisk 1973).

The market for life insurance is particularly risky for consumers. Showers and Shottick (1994) note that consumers' need for life insurance is constantly changing. Burnett and Palmer (1984) note that the products on offer are constantly changing and that the complexity of these products is astounding. Several papers theorize that consumers do not have complete knowledge of how life insurance products function or how to calculate the price of life insurance (Campbell, 1980; Economides, 1982; Sinha, 1986; Ben-Arab et al., 1996). This lack of understanding creates situations in which bad actors can take advantage of consumers. UDAP statutes protect against this risk, raising the consumer's expected utility. Therefore, it is hypothesized that consumer protection increases the probability that consumers will choose to own life insurance.

Increased consumer protection may decrease the risk that a consumer will experience a negative ownership outcome. If this is the case, the probability that a consumer will choose to own life insurance will be higher for states with neutral and broad protections than states with narrow protections. This effect of consumer protection may be counteracted by other factors related to consumer protection. If consumers interpret the existence of consumer protection as a signal to avoid specific industries or products, then the risk-reducing effect will be diminished. Also, if consumers are unaware of the risk reduction caused by consumer protection then the risk-reducing effect would be diminished.

It is worth noting that consumer-protection measures not only impact the behavior of consumers but sellers as well. Sellers also take on risks when they engage in a transaction. They face the risk that consumers will have a negative ownership experience and use their state's UDAP statute to sue the seller. Sellers may address this risk by changing how they sell or market their product, or may shift company priorities away from the sale of products that pose a higher risk of negative ownership experiences.

Sellers can also choose to accept the risk in exchange for higher sales prices. It is commonly accepted that increased consumer protection increases producers' costs, and the increased costs may lead to increased prices for the consumer (Holton, 1969). Such a price increase would push some consumers out of the market for life insurance. This is most likely true in the market for term insurance, where a premium is fixed for a period and guarantees a payout if the insured dies during that period. The price is relatively easy to judge. However, in the case of more complex insurance products like whole life insurance or universal life insurance, it is much harder for the consumer to determine the true cost of the product. It is expected that, as far as they are discernable, higher prices will reduce the probability that consumers will choose to own life insurance. All else being equal, it is hypothesized that the probability of life insurance ownership will be higher for households living in states with neutral or broad levels of protection.

Sex is included in this analysis due to differences in preferences that generally exist between men and women regarding risk (Greene, 1963). The literature regularly shows sex to be a statistically significant determinant of choosing to own life

insurance (Zeitz, 2003). Sex is included as a dummy variable equal to one (1) for females and zero (0) for males (the male being the omitted category). It is expected here that females will have a higher probability than males of owning life insurance.

Marital status is included in this analysis due to the different preferences towards the risk of death between the different marital statuses (Shotick and Showers, 1994). The literature theorizes that households with certain marital statuses will be more likely to have dependents, which could cause them to place a higher value on life insurance coverage (Zeitz, 2003). Dummy variables for married, widowed, divorced, separated, and never married are included. Each dummy is represented by a one (1) for the household's marital status with the remainder being represented by a zero (0) for those marital statuses which do not identify the household. Married is the reference category. It is expected that all marital statuses outside of married will have a lower probability of owning life insurance than married.

Level of education often is found to be a statistically significant determinant of life insurance ownership (Zeitz, 2003). This often is explained in the literature as the result of more educated consumers being more aware of the risks of premature death (Hammond et al., 1967). Dummy variables are included for households that never attended school, only attended between grades 1st and 8th, attended between 9th and 12th grade, graduated high school, attended some college, received an associate's degree, and received a bachelor's degree. Post-graduate education is the reference category. It is expected that consumers with higher levels of education will have a higher probability of owning life insurance.

Race is expected to affect the probability of life insurance ownership (Hammond et al., 1967). Race reflects differences in culture and attitudes surrounding death, risk aversion, and other factors that are otherwise difficult to capture (Hammond et al., 1967). However, it is only rarely shown to be a statistically significant determinant (Zeitz, 2003). In many cases, this can be explained by limitations in the data around race (i.e. restricting race to "white" and "other"). In this paper, the race is represented by dummy categories for White, Black, Native American, Asian, Pacific Islander, and Mixed (White being the omitted category) where one (1) represents "true" and zero (0) represents "false." Given the specificity with which the CEX identifies race, it is expected that the series of race dummies will be statistically significant, but the results will depend on the category (reflecting the preferences of different races).

Age is a continuous variable. Age is included as a control variable because consumers of different ages have different preferences and circumstances than consumers of different ages (Zeitz, 2003). These circumstances include the amount of debt they hold, the number of dependents in the household, etc (Zeitz, 2003). Age is consistently shown to impact the decision to own life insurance in the literature. This paper hypothesizes that, as consumers age, the probability that a consumer will own life insurance will generally decrease.

Income before taxes is measured in 10,000s of 2017 constant dollars. Consumers generally consider insurance as a type of wage replacement if a member of the household were to

pass away (Showers & Shotick, 1994). As consumers' income increases, it becomes more and more difficult to replace the income of the deceased without insurance (Showers & Shotick, 1994). Therefore, it is hypothesized that, as a consumer's income increases, the probability that they will own life insurance will increase.

The consumer's state average price for life insurance is included as a continuous variable to account for economic factors in each state. Each state's average price for life insurance is transformed into 100s of 2017 constant dollars. This is the calculated average of each state and is assigned to each consumer based on the state in which he or she resides. The state average is used rather than the consumer's price paid, as it is exogenous to the consumer. It is expected that, as the state average price increases, the probability of a consumer owning life insurance will decrease, based on the law of demand.

Model

This paper uses a probit model to examine the relationship between the level of protection against unfair acts, as well as deceptive acts and life-insurance ownership. The probit model is given here

$$Y_i^* = X_i\beta + \varepsilon_i$$

where $y_i = 1$ if $y_i^* > 0$ indicating that the consumer owned a life insurance policy, and $y_i = 0$ if $y_i^* \leq 0$, indicating that the consumer did not own a life insurance policy.

In this model the subscript i represents a consumer, Y_i^* represents the unobserved net benefit of choosing a life insurance policy, y_i is the observed choice made by a consumer to either own (represented by a 1) or not own (represented by a 0) a life insurance policy, X_i is a vector of all explanatory variables relevant to the i^{th} consumer (including the UDAP statutes' dummies in the state in which the i^{th} transaction occurred, and control variables), β represents the vector of parameters to be estimated, and ε_i represents the error term which follows the standard normal distribution. The results are shown such that a positive marginal effect is indicative of an increase in the probability that a consumer will own a life insurance policy, while a negative marginal effect is indicative of a decrease in the probability that a household owns a life insurance policy. It is expected that statutes with either neutral or broad levels of protection will have a positive effect on life-insurance ownership in comparison to statutes with more narrow protections.

Results

Protection from Unfair Acts

The results of the analyses regarding protection against unfair acts are shown in Table I.b. Table I.b assumes a narrow level of protection as the base category and shows the differences in the probability to own life insurance for neutral and broad levels of protection against unfair acts. The analysis is performed so that a negative marginal effect represents a lower probability of a household owning life insurance compared to the base category. The results shown are the marginal effects of differences in consumer protection between narrow protections and neutral or broad protections.

The results displayed in Table I.b indicate that consumers in states with neutral or broad protections against unfair acts have

a higher probability of owning life insurance than a state with narrow protections. These results appear to agree with the hypothesis that consumers receiving higher levels of protection would have higher probabilities of life insurance ownership. This could be due to the risk-reducing effect of consumer protection. It may be that consumers understand the lack of information they have regarding life insurance and value the protection they receive rather than using the existence of protection as a signal to stay away. These results would also seem to indicate that the risk-reducing effect of consumer protection has a greater effect on consumer risk than any action taken by sellers of life insurance, the price being held equal.

Protection from Deceptive Acts

Table I.c assumes a narrow statute as the omitted category and shows the expected marginal effects of neutral and broad protections against deceptive acts compared to narrow protections. The analysis is performed so that a negative marginal effect represents a decrease in the probability of a consumer owning life insurance. The results shown are of differences in consumer protection between narrow protections and neutral or broad protections.

The results displayed in Table I.c indicate that households in states with a neutral definition of deception have a higher probability of owning life insurance than a state with narrow protections. These results appear to agree with the hypothesis that consumers receiving higher levels of protection would have higher probabilities of life insurance ownership. As such, the risk-reducing effect of consumer protection appears to be strong enough in the life insurance market to overcome its other effects for neutral levels of protection against deceptive acts. It may be that consumers understand the lack of information they have regarding life insurance and value the protection they receive rather than using the existence of protection as a signal to stay away. These results would also seem to indicate that the risk-reducing effect of consumer protection has a greater effect on consumer risk than any action taken by sellers of life insurance, the price being held equal.

Control Variables

Tables I.b and I.c also display the results of the analysis for the control variables used in this analysis. In general, the results agree with the hypotheses stated earlier. The results also show some of the dummies represented some levels of education and a few of the variables identifying race were not found to be statistically significant. This could be due to the low sample size of these categories.

The results in these tables indicate that consumers with less education than a bachelor's degree have a lower probability

of owning life insurance than a consumer with a graduate degree. This is likely due to differences in preference between categories. An alternative explanation is that more highly educated consumers are better able to mitigate the risks of owning life insurance and are therefore more willing to own life insurance.

The race also appears to be related to own choice. Table 3 indicates that Black and Pacific Islander households have a higher probability of owning life insurance than white households. Asian households appear to have a lower probability of owning life insurance than white households. These differences are most likely due to different cultural preferences and attitudes toward risk, death, and family composition.

Sex also appears to play a role in owning life insurance, with men having a lower probability of owning life insurance than women. This is likely explained by differences in preferences regarding dealing with risk or societal roles based on sex. Examining marital status, widowed, divorced, separated, and never-married households have lower probabilities of owning life insurance than married households. This could be explained by differences in the constitution of consumer households. Consumers who are married are more likely to have multiple dependents than the other categories.

Age also appears to impact the probability of owning life insurance. For every year added in age, the probability of life insurance being owned increases. This could be explained by a decreasing need for life insurance as the consumer ages. As consumers age, the amount of debt and dependents they have generally decrease, which in turn decreases the need for life insurance.

Finally, income before taxes is impactful in the decision as well. For every \$10,000 increase in income, the probability that the household owns life insurance increases. A possible explanation for this relationship could be that consumers with lower levels of income may be able to more easily replace lost income due to premature death than consumers with higher levels of income. This would lead more consumers with lower incomes to choose to forgo owning life insurance.

Conclusion

The choice to own life insurance is related to the level of consumer protection that a consumer receives. The independent variables examined in this paper are both statistically and economically significant in many cases. Neutral and broad levels of protection from unfair acts or deceptive acts are correlated with higher probabilities of consumers owning life insurance. Additionally, all control variables included in the analysis were found to be statistically significant.

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Tables

Table I.a: Descriptive Statistics of Dependent and Independent Variables					
Unit of Observation: Respondent		CEX Sample (260,183)		Analysis Sample (214,284)	
		Mean	Std. Err.	Mean	Std. Err.
Life Insurance Ownership		0.397	0.0010	0.375***	0.0010
Breadth of Deception	Narrow	0.042	0.0004	0.042	0.0004
	Neutral	0.133	0.0007	0.134	0.0007
	Broad	0.825	0.0008	0.824	0.0008
Breadth of Unfairness	Narrow	0.086	0.0006	0.086	0.0006
	Neutral	0.137	0.0007	0.137	0.0007
	Broad	0.777	0.0009	0.776	0.0009
Gender	Female	0.529	0.0010	0.527	0.0011
Marital Status	Married	0.511	0.0010	0.510	0.0011
	Widowed	0.096	0.0006	0.093***	0.0006
	Divorced	0.151	0.0007	0.152	0.0008
	Separated	0.028	0.0003	0.028	0.0004
	Never Married	0.213	0.0008	0.217***	0.0009
Education Received	Never Attended	0.003	0.0001	0.003	0.0001
	1st to 8th Grades	0.044	0.0004	0.040***	0.0004
	9th to 12th Grades	0.067	0.0004	0.066***	0.0007
	High School Graduate	0.243	0.0009	0.236***	0.0009
	Some College	0.212	0.0008	0.210	0.0009
	Associate's Degree	0.097	0.0006	0.095	0.0006
	Bachelor's Degree	0.202	0.0008	0.213***	0.0009
	Graduate Degree	0.103	0.0006	0.108***	0.0007
Race	White	0.810	0.0008	0.800***	0.0009
	Black	0.120	0.0006	0.125***	0.0007
	Native American	0.005	0.0001	0.005	0.0001
	Asian	0.049	0.0004	0.056***	0.0005
	Pacific Islander	0.004	0.0001	0.005***	0.0002
	Mixed	0.012	0.0002	0.013**	0.0002
Age		50.584	0.0358	50.460**	0.0381
Avg. State Purchase Price₁		\$ 2.2971	0.0010	\$ 2.448***	0.0123
Income Before Taxes₂		\$ 7.143	0.0145	\$ 7.429***	0.0160

- The analysis in this table incorporates the weights provided by the CEX

* represents a statistically significant difference across sample with a p-value of .1 to .05

** represents a statistically significant difference across sample with a p-value of .05 to .01

*** represents a statistically significant difference across sample with a p-value of less than .01

1 In 100s of 2017 dollars

2 In 10,000s of 2017 dollars

Table I.b: Marginal Effects - Breadth of Protections from Unfair Acts			
N=214,284		Life Insurance Ownership	
Breadth of Protection (Narrow Omitted)			
	Neutral	0.044***	0.0053
	Broad	0.019***	0.0041
Sex (Male Omitted)			
	Female	0.0021***	0.0024
Marital Status (Married Omitted)			
	Widowed	- 0.091***	0.0042
	Divorced	- 0.096***	0.0032
	Separated	- 0.123***	0.0061
	Never Married	- 0.172***	0.0030
Education (Post-Baccalaureate Omitted)			
	Never Attended	- 0.304***	0.0102
	Attended Grades 1-8	- 0.191***	0.0052
	Attended Grades 9-12	- 0.141***	0.0048
	High school Graduate	- 0.062***	0.0041
	Some College	- 0.038***	0.0042
	Associate's Degree	- 0.007	0.0050
	Bachelor's Degree	- 0.006	0.0041
Race (White Omitted)			
	Black	0.071***	0.0037
	Native American	- 0.004	0.0181
	Asian	- 0.088***	0.0051
	Pacific Islander	- 0.023	0.0194
	Mix	0.036***	0.0112
Age		0.003***	0.0001
State Avg. Purchase Price₁		- 0.087***	0.0024
Income Before Taxes₂		0.014***	0.0002

- The analysis in this table incorporates the weights provided by the CEX
 * represents a statistically significant result with a p-value of .1 to .05
 ** represents a statistically significant result with a p-value of .05 to .01
 *** represents a statistically significant result with a p-value of less than .01
 1 In 100s of 2017 dollars
 2 In 10,000s of 2017 dollars

Table I.c: Marginal Effects - Breadth of Protection from Deceptive Acts		
N=214,284	Life Insurance Ownership	
Breadth of Protection (Narrow Omitted)		
Neutral	0.046***	0.0066
Broad	- 0.006	0.0058
Sex (Male Omitted)		
Female	0.021***	0.0024
Marital Status (Married Omitted)		
Widowed	- 0.091***	0.0042
Divorced	- 0.096**	0.0032
Separated	- 0.123***	0.0061
Never Married	- 0.171***	0.0030
Education (Post-Baccalaureate Omitted)		
Never Attended	- 0.306***	0.0099
Attended Grades 1-8	- 0.194***	0.0052
Attended Grades 9-12	- 0.143***	0.0047
High school Graduate	- 0.063***	0.0041
Some College	- 0.040***	0.0042
Associate's Degree	- 0.008	0.0050
Bachelor's Degree	- 0.007	0.0042
Race (White Omitted)		
Black	0.073***	0.0037
Native American	- 0.003	0.0181
Asian	- 0.88***	0.0051
Pacific Islander	- 0.021	0.0112
Mix	0.037***	0.0112
Age	0.004***	0.0001
State Avg. Purchase Price¹	- 0.074***	0.0024
Income Before Taxes²	0.014***	0.0002

- The analysis in this table incorporates the weights provided by the CEX
 * represents a statistically significant result with a p-value of .1 to .05
 ** represents a statistically significant result with a p-value of .05 to .01
 *** represents a statistically significant result with a p-value of less than .01
 1 In 100s of 2017 dollars
 2 In 10,000s of 2017 dollars

Appendix I

Unfair Acts

Generally, unfair practices are defined as acts where a seller or provider makes use of an existing difference between the buyer's and seller's power to collect and assess information regarding a good or service. In the case of the couple in the introduction, this could be the difference in the ability of the couple and the broker in understanding how exactly the insurance policy functions. The broker may use this disparity to avoid discussion or downplay the importance of aspects of the policy. For purposes of life insurance, a salesperson could use this difference to conceal or downplay the importance of certain information. Essentially, in this context, unfairness can be defined as an omission. An example of this would be if the salesperson were to tell the consumer that an insurance policy could be canceled at any time, without mentioning any cancellation penalties. It is a true statement that the policy can be canceled at any time, but avoids discussion of the costs of cancellation.

Deceptive Acts

Generally, UDAP statutes define deceptive practices as actions that are more blatant deceptions. Instead of depending on any disparity of power between the buyer and seller, deception occurs where the seller party simply uses misinformation to complete the sale. In the case of the couple in the introduction, this could be a guarantee from the broker that if the couple cancels the policy, they will get all their premiums refunded. This is not true; they may get some of their premiums back, but not all of their premiums back. Simply put, deceptive can be defined as the use of misinformation. An example of this in life insurance would be to tell the consumer that they can cancel their policy at any time without losing any of the cash value of their policy when in reality, there would be a loss to the cash value of their policy.

Breadth of Protection

In this paper, the breadth of protection refers to the types of circumstances under which a consumer could bring a legitimate legal suit against a producer or seller for either an unfair or deceptive act. There are many aspects of UDAP statutes that can impact the breadth of protection against deceptive or unfair acts or practices. As an example, a statute with a large number of practices that qualify as either deceptive or unfair could only be pertinent when involved with a specific industry. As an example, a statute listing many acts as prohibited, but stipulating that those acts are not applicable to insurance sales. If the couple from the example in the introduction lived in such a state, they would be unable to recover their loss through a legal suit by using their state's UDAP statute. If the statute only protects against unfair or deceptive practices in specific industries, then the breadth of protection offered would be narrow even though the number of prohibited acts is large.

As indicated above, instead of treating each state as a respondent, this paper studies the UDAP statute of each state to categorize the level of protection provided in each state. Each statute is comprised of many components, which indicates how difficult it would be for a consumer to prevail in legal action against a bad actor. This paper simply examines the breadth of protection offered by each statute as a result of the limitations of applicability within the statute. Table 2 details the statistical breakdown of these statutory definitions. The questions used to determine whether a state provides narrow, neutral, or broad protections against unfair or deceptive acts are, "is there a list of acts or does the statute leave that to the trier of fact to determine" and "does the statute include a list of industries covered or is it open to all industries."

Legislation is qualitative in nature. As such, the explanatory variable indicating the breadth of protection allowed by the statutory definition of both unfairness and deception are divided into three separate levels: narrow, neutral, and broad. Broadly speaking, the way in which a statute defines unfairness or deception will decide which actions are permitted and which are prohibited. A statute containing a strict definition of deception or unfairness will be straightforwardly implemented by the courts but will provide narrow protection. Thus, statutes that provide narrow protections by giving strict definitions of unfairness or deception are recognized here as being narrow, statutes which offer more protection through looser definitions are recognized here as neutral, and statutes offering strong protections through wide definitions against unfairness and deception are identified here as broad.

Framework of Statute Evaluation

Due to the qualitative nature of legislation, there is no feasible way to assign continuous values to the protections provided by statutes. Instead, the author used a likert scale, and after reading the statute assigned it a value to designate that the statute was broad (2), neutral (1), or narrow (0). By examining the Statutes of Alabama, Iowa, and Colorado, the author's scoring of state statutes can be demonstrated.

Alabama – Broad

Alabama's statute combines both unfair and deceptive under the same framework. This means that there is no difference between unfair and deceptive acts. The list of prohibited acts is extensive and is finalized by the use of language that indicates that the list is not exclusive, meaning a judge or jury could find that a situation not listed in the statute is protected against. What raises this statute to being broad in its protection offered is the lack of knowledge by the business entity that it is in violation of the law. There were no substantive changes to Alabama's UDAP statute during the time period this paper examined.

Iowa – Neutral

The Iowa UDAP statute states that "'Unfair practice' means an act or practice which causes substantial, unavoidable injury to consumers..." This is a very general statement which could allow a judge or jury to conclude that a situation is protected under



the law. However, by including the terms “substantial” and “unavoidable” definition merely rises to the level of neutral protection. The statute defines deceptions “an act or practice which has the tendency or capacity to mislead a substantial number of consumers as to a material fact or facts.” Once again, a broad scope of circumstances could fall under this definition, but by adding the requirement that it “mislead a substantial number” limits its protective power to neutral. Iowa’s UDAP statute did not change substantively during the period examined in this paper.

Colorado – Narrow

Colorado’s UDAP statute uses a list of acts to designate which practices are deemed deceptive or unfair. This list is relatively short to other states’ lists. Additionally, Colorado’s UDAP statute does not include language which would allow a judge or jury to find a situation that is not described in the statute to be protected against by the statute (like Alabama). Finally, Colorado’s list of deceptive and unfair acts functions in many regards as a simple proscription of fraud because many of the practices listed also require that the perpetrator know that they are being deceptive or unfair. Almost all of the acts require that the perpetrator knowingly mislead or deceive.

Table I.d: State UDAP Statute Reference and Strength			
<i>State</i>	<i>State Statute</i>	<i>Protection against Unfair Acts</i>	<i>Protection Against Deceptive Acts</i>
Alabama	Ala. Code §§ 8-19-1 through 8-19-15	Broad	Broad
Alaska	Alaska Stat. §§ 45.50.471 through 45.50.561	Broad	Broad
Arizona	Ariz. Rev. Stat. Ann. §§ 44-1521 through 44-1534	Narrow	Broad
Arkansas	Ark. Code Ann. §§ 4-88-101 through 4-88-207	Broad	Broad
California	Cal. Bus. & Prof. Code §§ 17200 through 17594	Broad	Broad
Colorado	Colo. Rev. Stat. §§ 6-1-101 through 6-1-115	Narrow	Narrow
Connecticut	Conn. Gen. Stat. §§ 42-110a through 42-110q	Broad	Broad
Delaware	Del. Code Ann. tit. 6, §§ 2511 through 2527, 2580 through 2584	Narrow	Broad
District of Columbia	D.C. Code §§ 28-3901 through 28-3913	Broad	Broad
Florida	Fla. Stat. §§ 501.201 through 501.213	Broad	Broad
Georgia	Ga. Code Ann. §§ 10-1-390 through 10-1-407	Broad	Broad
Hawaii	Haw. Rev. Stat. §§ 480-1 through 480-24	Broad	Broad
Idaho	Idaho Code Ann. §§ 48-601 through 48-619	Broad	Broad
Illinois	815 Ill. Comp. Stat. 505/1 through 505/12	Broad	Broad
Indiana	Ind. Code §§ 24-5-0.5-1 through 24-5-0.5-12	Broad	Narrow
Iowa	Iowa Code §§ 714.16 through 714.16A	Neutral	Neutral
Kansas	Kan. Stat. Ann. §§ 50-623 through 50-640	Broad	Broad
Kentucky	Ky. Rev. Stat. Ann. §§ 367.110 through 367.990	Broad	Broad
Louisiana	La. Rev. Stat. Ann. §§ 51:1401 through 51:1420	Broad	Broad
Maine	Me. Rev. Stat. Ann. tit. 5, §§ 205A through 214	Broad	Broad
Maryland	Md. Code Ann., Com. Law §§ 13-101 through 13-501	Broad	Broad
Massachusetts	Mass. Gen. Laws Ann. ch. 93A, §§ 1 through 11	Broad	Broad
Michigan	Mich. Comp. Laws §§ 445.901 through 445.922	Broad	Broad
Minnesota	Minn. Stat. §§ 325F.68 through 325F.70	Narrow	Broad
Mississippi	Miss. Code Ann. §§ 75-24-1 through 75-24-27	Neutral	Neutral
Missouri	Mo. Rev. Stat. §§ 407.010 through 407.307	Broad	Broad
Montana	Mont. Code Ann. §§ 30-14-101 through 30-14-142	Broad	Broad
Nebraska	Neb. Rev. Stat. §§ 59-1601 through 59-1623	Broad	Broad
Nevada	Nev. Rev. Stat. §§ 598.0903 through 598.0999	Neutral	Broad
New Hampshire	N.H. Rev. Stat. Ann. §§ 358-A:1 through 358-A:13	Broad	Broad
New Jersey	N.J. Stat. Ann. §§ 56:8-1 through 56:8-91	Broad	Broad
New Mexico	N.M. Stat. §§ 57-12-1 through 57-12-22	Broad	Broad
New York	N.Y. Exec. Law § 63(12)	Neutral	Broad
North Carolina	N.C. Gen. Stat. §§ 75-1.1 through 75-35	Broad	Broad
North Dakota	N.D. Cent. Code §§ 51-15-01 through 51-15-11	Narrow	Broad
Ohio	Ohio Rev. Code Ann. §§ 1345.01 through 1345.13	Broad	Broad
Oklahoma	Okla. Stat. tit. 15, §§ 751 through 763	Broad	Broad
Oregon	Or. Rev. Stat. §§ 646.605 through 646.656	Broad	Narrow
Pennsylvania	73 Pa. Stat. Ann. §§ 201-1 through 201-9.3	Neutral	Neutral
Rhode Island	R.I. Gen. Laws §§ 6-13.1-1 through 6-13.1-27	Broad	Broad
South Carolina	S.C. Code Ann. §§ 39-5-10 through 39-5-160	Broad	Broad
South Dakota	S.D. Codified Laws §§ 37-24-1 through 37-24-35	Narrow	Neutral



Tennessee	Tenn. Code Ann. §§ 47-18-101 through 47-18-125	Broad	Broad
Texas	Tex. Bus. & Com. Code Ann. §§ 17.41 through 17.63	Broad	Neutral
Utah	Utah Code Ann. §§ 13-11-1 through 13-11-23	Broad	Broad
Vermont	Vt. Stat. Ann. tit. 9, §§ 2451 through 2480g	Broad	Broad
Virginia	Va. Code Ann. §§ 59.1-196 through 59.1-207	Narrow	Broad
Washington	Wash. Rev. Code §§ 19.86.010 through 19.86.920	Broad	Broad
West Virginia	W. Va. Code §§ 46A-6-101 through 46A-6-110	Broad	Broad
Wisconsin	Wis. Stat. § 100.18 through 100.264	Broad	Broad
Wyoming	Wyo. Stat. Ann. §§ 40-12-101 through 40-12-114	Broad	Broad