Agency Disclosure in the Real Estate Transaction and the Impact of Related State Policies

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Abstract

Although agency disclosure is required by every state, recent national surveys of home buyers and sellers indicate that disclosure varies significantly across the United States. This study seeks to determine the causes of these disparities by examining states' educational standards, disclosure forms, regulatory environments, and buyer characteristics. The results identify several variables that have a deterministic impact on the probability of disclosure and suggest corrective actions and policies that states can implement to improve the effectiveness of agency disclosure in the real estate transaction.

In the past, it has generally been assumed that the passage of mandatory agency disclosure statutes by states solved many of the problems buyers encountered when they were unaware of the nature of the agency arrangement that existed between sellers and their brokers. The underlying rationale for the passage of disclosure statutes was that a better informed public would be better able to protect itself and make more informed choices regarding broker representation. However, a recent study by Wiley and Zumpano (2006) points out that compliance with agency disclosure rules is far from universal. In particular, the level of reported agency disclosure is found to vary significantly across homebuyer demographics, as well as from one state to the next, with buyers in some states reporting disclosure less than two-thirds of the time. The obvious question that must be asked then is why reported disclosure rates are so low despite the fact that agency disclosure is required by statute in every state in the United States. While part of the problem may be due to comprehension, rather than noncompliance—a large number of homebuyers surveyed did not know or were unsure that they received an agency disclosure document. Such uncertainty among prospective buyers is indicative of serious difficulties with the agency disclosure system.

The purpose of this research is to examine the factors that might be contributing to the low incidence of reported disclosure and, in the process, identify policies that states can employ to improve the incidence of agency disclosure within their respective jurisdictions. This study uses data from the National Association of Realtors® (NAR) Homebuyers and Sellers surveys and data from the Association of License Law Officials (ARELLO), as well as hand-collected data characterizing state disclosure policies. In addition to the demographic and experience characteristics of home buyers, we consider a number of factors that may explain the variation in disclosure rates from one state to the next. These include factors that are unique to each state such as the adoption of a standard disclosure form, the required timing and acknowledgement of disclosure, the size and organizational structure of the real estate regulatory board, as well as current professional education standards.

This paper is organized as follows. In the next section, we discuss related research and provide some historical perspective on agency disclosure problems within the context of a real estate purchase transaction. The model and methodology used in this research are described in Section 3, while variables that could have a systematic impact on the incidence of agency disclosure are identified and described in Section 4. The model is estimated and the empirical findings are analyzed in Section 5. The paper concludes with a summary of the conclusions of this study and the policy recommendations that follow from this research.

Background

In 1984, the Federal Trade Commission (FTC, 1984) published a landmark five-year study of the residential brokerage industry that provided evidence that buyers commonly misunderstand the legal nature of their relationship with real estate agents. Among its more notable findings, the report found that in multiple listing situations, which represent a majority of all residential real estate transactions, 74.2% of buyers believed that the agent they were working with represented them, when, in fact, the agent represented the seller.[1] In point of fact, this perception was inconsistent with what was then the conventional agency representation model advocated by the NAR and upheld by the courts where the listing and selling brokers represented the seller. Absent a written buyer agency agreement, real estate agents were legally considered fiduciaries of the seller, and agents working with buyers (selling agents) under multiple listings arrangements were deemed subagents of the listing broker. Obviously such misunderstandings concerning the role of the real estate broker could prove very damaging to consumers.

The FTC (1984) study found that many buyers acknowledged providing material information to the agent, such as the highest amount they would be willing to bid for the property. Yet, under the common law of agency, brokers were agents of the seller and were obligated to pass on any relevant information to their seller clients. Clearly this situation could compromise the negotiating position of interested buyers who commonly believed that the broker would keep this information confidential.

Following the release of the FTC study, there was a great deal of attention devoted to agency problems among consumer advocacy groups, academics, lawyers, and brokers within the real estate community. In 1985, a NAR taskforce looked into the problems and recommended that all states implement mandatory agency disclosure statutes. As a result, every state now requires some form of agency disclosure. As more buyers learned that they lacked representation when negotiating the purchase of home, states began passing laws allowing for alternative forms of representation, such as buyer representation, dual agency, and non-agency transaction brokerage.[2]

Many thought the problem solved, and until recently there was limited data available to determine the effectiveness of agency disclosure laws. In a recent study, Wiley and Zumpano (2006) used data from a 2004 survey to find that agency disclosure at the national level was reported by buyers less than 75% of the time. Their research provided evidence that first-time homebuyers, buyers aged 65 and older, Hispanics, and Asians were significantly less likely to report being provided with written disclosure compared to other segments of the home-buying population. In addition, Wiley and Zumpano (2006) documented substantial variation in the reported levels of agency disclosure from one state to the next. Thus far, however, no research has attempted to empirically model or explain this variation in disclosure rates across the U.S.[3]

The Model

In our research, binary logistic regression analysis is used to isolate factors that can have a deterministic impact on the probability of agency disclosure. A number of these factors have shown up in related research, while other variables are chosen for consideration based upon conceptual and a priori expectations about what might influence the probability of agency disclosure.

The dependent variable in the models estimated here is *Disclosure*, which is equal to 1 if a buyer acknowledges that they received written agency disclosure during a real estate purchase transaction, and zero otherwise. The independent variables contain vectors of buyer characteristics, licensee education requirements, exam content variables, characteristics of the disclosure forms used, as well as regulatory and enforcement considerations. The model to be estimated is:

$$\begin{aligned} Disclosure = {} & \beta_0 + \beta_1 \cdot Y2002 + \beta_2 \cdot Y2003 + \beta_3 \cdot Y2004 \\ & + \beta_4 \cdot Y2005 + \beta_5 \cdot Y2006 + \beta_6 \cdot Buyer\_Rep \\ & + \beta_7 \cdot First\_Home + \beta_8 \cdot 65\&Older \\ & + \beta_9 \cdot Asian + \beta_{10} \cdot Hispanic \\ & + \beta_{11} \cdot Standardized\_Form \\ & + \beta_{12} \cdot Early\_Disclosure + \beta_{13} \cdot Verbal\_Only \\ & + \beta_{14} \cdot (>60\ Hours) + \beta_{15} \cdot Disclosure\_Section \\ & + \beta_{16}\ Broker\_Dominated \\ & + \beta_{17} \cdot Regulatory\_Staff + \varepsilon. \qquad (1) \end{aligned}$$

Definitions of the variables used in the estimations are provided in Exhibit 1. Detailed descriptions of these regressors and justifications for their inclusion in the models are provided in the next section.

Description of the Variables

The primary source of data used in this study comes from the NAR's annual *Home Buyers and Selling Process* surveys for years 2001 to 2006, accounting for 32,624 total responses. The survey is administered annually and contains more than 100 questions, providing a detailed description of each transaction.[4] While the questions and numbering change somewhat from one year to the next, the responses considered in this study appear consistently throughout the sample period.

Each year the survey asks homebuyers if they received a written form of agency disclosure during the transaction. Possible responses include ''Yes, at first contact,'' ''Yes, when contract written,'' ''No,'' or ''Don't know/Not sure.'' The sample used in this paper considers only responses where the agency disclosure question is answered. Responses of ''Don't know/Not sure'' are indeterminate in nature and omitted as we are only concentrating on respondents who either acknowledged or denied receiving a written disclosure statement.[5]

For obvious reasons, only responses for buyers who reported purchasing their home ''through a real estate agent/broker'' are considered. Finally, the sample is limited to include only respondents who answered survey questions concerning their age, race, home buying experience, type of buyer representation (if any), as well as information about the state in which they purchased their home. Each model controls for the buyer characteristics found by Wiley and Zumpano (2006)

Exhibit 1 | Variable Legend

Variable	Description
Disclosure	Equals 1 if the buyer acknowledged receiving a written agency disclosure during the transaction.
Y2002	Equals 1 for responses from the 2002 NAR HBS survey data.
Y2003	Equals 1 for responses from the 2003 NAR HBS survey data.
Y2004	Equals 1 for responses from the 2004 NAR HBS survey data.
Y2005	Equals 1 for responses from the 2005 NAR HBS survey data.
Y2006	Equals 1 for responses from the 2006 NAR HBS survey data.
Buyer_Rep	Equals 1 if the buyer acknowledged some form of buyer representation.
First_Home	Equals 1 if the buyer is a first time homebuyer.
65&Older	Equals 1 if the buyer is at least 65 years old.
Asian	Equals 1 if the buyer reports their nationality as exclusively Asian/Pacific Islander.
Hispanic	Equals 1 if the buyer reports their nationality as exclusively Hispanic/Latino.
Standardized_Form	Equals 1 if the state-level real estate commission adopted an agency disclosure form.
Early_Disclosure	Equals 1 if the state requires agency disclosure at the earliest practical point.
Verbal_Only	Equals 1 if the state allows for a verbal presentation of agency disclosure only.
>60 Hours	Equals 1 if the state requires more than 60 hours of pre-license education for real estate salespersons.
Disclosure_Section	Equals 1 if there is some reference to agency disclosure in the content outline of the candidate exam handbook [from Pancak and Sirmans (2007)].
Broker_Dominated	Equals 1 if the state requires at least four-fifths of the commissioners to hold active real estate licenses.
Regulatory_Staff	Average annual employees of the regulatory authority per 1,000 active salespersons.

to have a significant relationship with the dependent variable. Categorical variables are included to account for different survey years, 2002 through 2006. The inclusion of these variables allows us to determine whether the incidence of disclosure changes over time. It is measured relative to the first year of survey data available (survey year 2001).

Additional data on the number of real estate transactions, by state, and the size of state real estate regulatory agencies was collected from annual issues of the *Digest of Real Estate License Laws and Current Issues* published by the

Association of License Law Officials (ARELLO). The remainder of the data needed to estimate the model had to be largely created from primary sources. Current disclosure practices were examined in detail for each state. This involved individually locating and examining agency disclosure statutes and regulations for each state. Although every state requires some type of agency disclosure, it does not always have to be written. The few states where disclosure may be presented verbally are identified by the *VerbalOnly* variable. Verbal disclosure may be less precise than written agency disclosure, easier for buyers to forget, and more difficult for regulators to verify; hence, its inclusion in the model.

Even when disclosure is written, it can take different forms. Our research revealed that there are three basic types of written disclosure documents currently in use. In some states an official form has been drafted and made publicly available on the website of the real estate regulatory authority (also commonly referred to as real estate commissions). Those states are identified by the variable *Standardized_Form*. Every broker in these states is recommended to use the same standardized form. It is worth mentioning that when mandatory forms are posted on the website of the real estate regulatory agency, they are easily accessible by prospective buyers and sellers and commonly included in the content of pre-license education courses.

Other states provide specific wording to be used in disclosure documents, however this language is written within the state code and may not be available as a separate form adopted by the real estate regulatory agency. In this case, individual brokerage offices must locate and extract the specific wording from the state code and draft a disclosure form that will be used by their employees. The remaining states simply mandate agency disclosure, but provide neither a standardized form nor mandatory wording. In almost every case, the regional or local associations of Realtors have developed disclosure forms that are available for use by their members. Our principal concern here is whether standardized disclosure documents that are widely available are more effective disclosure instruments than non-standardized, heterogeneous forms.

There can also be differences in the timing of disclosure. In some states it is commonly accepted to simply acknowledge within the purchase contract whether the real estate agent actually represented the buyer or the seller during the transaction.[6] In such cases, buyers may not find out whom, if anyone, the broker represented until virtually all the negotiations have ended. Most states, however, require that agency disclosure be provided at the earliest practical point. While the actual wording may vary, such as "at the initial contact" or "before any material information is provided," brokers in these states are clearly expected to provide disclosure before any confidential information is exchanged between the buyer and broker. The states where agency disclosure cannot be deferred to contract signing are identified by the *Early_Disclosure* variable.

Educational standards should also play a role in ensuring that real estate brokers and salespersons understand agency relationships and disclosure requirements.

To address this, we collected candidate handbooks and examined educational standards in detail for each state. The national median for the number of pre-license education hours required to take the real estate salesperson exam is currently 60 hours. The variable *>60Hours* identifies 20 states that require more than 60 hours of pre-license education.

Pancak and Sirmans (2007) point out that pre-license education is heavily focused on preparing students to successfully pass the license exam. Most candidate handbooks provide an outline of the exam content and weighting. As a result, pre-license education courses often dedicate more attention to topics that are the most likely to appear on the exam. Pancak and Sirmans identify 38 states where there is some reference to agency disclosure in the content outline. We include this information in our study as the *Disclosure_Section* variable.[7]

Even after laws have been passed, forms adopted, and brokers educated, agency disclosure policies may become ineffective absent proper enforcement. Regulation and enforcement efforts are very difficult to measure from one state to the next. Real estate regulatory authorities have a number of disciplinary tools at their disposal such as monetary fines, license suspensions, probation, and even license revocation. However, regulators also have wide latitude with respect to the severity of the penalties they levy for particular violations of license law and regulations so it can be quite difficult to measure enforcement effectively.[8] As one possible measure of enforcement effectiveness within a state, we consider the variable *Regulatory_Staff*. This variable calculates the total number of staff employed by the real estate regulatory authority per 1,000 actively-licensed salespersons. The data used to create this variable are collected from ARELLO's *Digest of Real Estate Licensing Laws and Current Issues* for years 2001 to 2006, corresponding with the sample period of our data. Since the number of employees and active licensees for each state changes during our sample period, we use the average annual staff size and average number of salespersons for each state. We would expect that the larger the staff relative to the number of active salespersons, the greater the resources that can be devoted to enforcement. The values for the *Regulatory_Staff* variable are only available for 36 states and range from 0.16 to 7.67 commission employees per 1,000 active salespersons.

Another possible enforcement proxy is the composition of a real estate regulatory board. Currently, there are 15 states where at least four-fifths of the board commissioners are required by statute to hold active real estate licenses. These states are identified by the *Broker_Dominated* variable. As Broback (2006) points out, this requirement makes real estate one of the few professions where the regulatory board is dominated by active industry participants. Could what is basically industry enforcement result in a more passive form of regulation and/or less rigorous enforcement compared to non-industry dominated regulatory environment?

The data for the different states are merged with the survey results to complete the sample used in this study. Exhibit 2 provides summary statistics for each of

Exhibit 2 | Summary Statistics

	Full Sample		% Reporting Disclosure		
Variable	Mean	Std. Dev.	If Variable = 1	If Variable = 0	*t*-test of Differences
Disclosure	0.755	0.430	100.0%	0.0%	
Y2002	0.020	0.140	70.1%	75.7%	−2.50**
Y2003	0.092	0.288	72.6%	75.8%	−3.07***
Y2004	0.245	0.430	74.5%	75.9%	−1.94*
Y2005	0.226	0.418	73.7%	76.1%	−3.39***
Y2006	0.244	0.429	77.0%	75.1%	2.90***
Buyer_Rep	0.720	0.449	82.5%	58.8%	30.94***
First_Home	0.392	0.488	71.8%	78.0%	−10.17***
65&Older	0.055	0.228	69.5%	75.9%	−4.67***
Asian	0.040	0.195	70.0%	75.8%	−3.62***
Hispanic	0.053	0.223	70.3%	75.8%	−3.95***
Standardized_Form	0.291	0.454	79.4%	74.0%	8.79***
Early_Disclosure	0.688	0.463	75.5%	75.7%	−0.32
Verbal_Only	0.094	0.292	70.1%	76.1%	−5.65***
>60 Hours	0.463	0.499	76.3%	74.9%	2.49**
Disclosure_Section	0.841	0.366	75.9%	74.9%	1.22
Broker_Dominated	0.598	0.550	74.2%	75.9%	−2.28**
Regulatory_Staff	1.987	1.494	n/a	n/a	n/a

Notes: For the full sample, $N = 21{,}755$.
*Significant at the 10% level.
**Significant at the 5% level.
***Significant at the 1% level.

these variables, including the percentage of respondents reporting having received agency disclosure and a *t*-test of the statistical significance of the difference. Exhibit 3 provides a ranking of the states according to the percentage of disclosure reported during the six-year period. North Dakota is at the top of the list with 100% disclosure reported, and Indiana is at the bottom with 59.9% of the respondents reporting disclosure.

Many of the variables that measure the impact of state-related policies are coded binary for each state. It is shown in Exhibit 4 that several of these variables are highly correlated. As a result, it presents serious multicollinearity problems if an all-inclusive equation were estimated. We observe significant swings in parameter estimates when any two variables with a correlation coefficient higher than 0.30 are included in the same model. Instead, the approach used here is to report the

Exhibit 3 | Ranking of Agency Disclosure Levels by State

Rank	State	% Reporting Agency Disclosure	# of Respondents	Rank	State	% Reporting Agency Disclosure	# of Respondents
1	North Dakota	100.0%	24	25	Utah	75.2%	129
2	Vermont	93.3%	15	26	Delaware	74.7%	75
3	New Hampshire	88.8%	249	27	New Jersey	74.6%	735
4	Connecticut	86.5%	423	28	Virginia	73.9%	1,283
5	North Carolina	86.1%	1,658	29	Tennessee	73.5%	820
6	Alaska	85.2%	27	30	Florida	73.4%	1,440
7	Maine	84.6%	221	31	Texas	72.5%	1,572
8	Idaho	84.5%	84	32	Georgia	72.3%	188
9	Minnesota	83.4%	673	33	California	72.2%	1,359
10	Mississippi	83.3%	72	34	Alabama	71.7%	99
11	Ohio	82.7%	729	35	Illinois	71.1%	906
12	Missouri	81.9%	647	36	Oregon	70.5%	515
13	South Carolina	80.8%	125	37	Nevada	70.4%	135
13	Massachusetts	80.8%	686	38	New Mexico	69.6%	69
15	Colorado	80.1%	708	39	Iowa	68.9%	251
16	West Virginia	80.0%	25	40	Louisiana	68.4%	76
16	Wyoming	80.0%	25	41	District of Columbia	67.7%	93
18	Kentucky	79.8%	84	42	Wisconsin	66.9%	860
19	Michigan	79.6%	871	43	New York	66.8%	298

Exhibit 3 | (continued)

Ranking of Agency Disclosure Levels by State

Rank	State	% Reporting Agency Disclosure	# of Respondents	Rank	State	% Reporting Agency Disclosure	# of Respondents
20	Nebraska	79.4%	68	44	Oklahoma	65.6%	119
21	Maryland	78.1%	823	45	Arizona	64.8%	327
21	Pennsylvania	78.1%	680	46	Hawaii	63.6%	11
23	Arkansas	77.5%	80	47	Washington	63.3%	698
24	Rhode Island	76.0%	179	48	Indiana	59.9%	521

Note: Due to data limitations, South Dakota, Montana, and Kansas are not included.

Exhibit 4 | Correlation Coefficient Matrix

	Standardized Form	*Early Disclosure*	*Verbal Only*	*>60 Hours*	*Disclosure Section*	*Broker Dominated*	*Regulatory Staff*
Standardized Form	1						
Early Disclosure	0.258	1					
Verbal Only	−0.210	−0.479	1				
>60 Hours	−0.124	0.014	−0.278	1			
Disclosure Section	0.079	−0.239	0.140	−0.123	1		
Broker Dominated	0.381	−0.138	0.146	0.057	0.133		
Regulatory Staff	0.029	−0.377	0.143	0.335	0.312	0.190	1

results of four unique models in Exhibit 5. The third and fourth models are presented as an alternative to an all-inclusive estimation. Each of the state-related policy variables in the fourth model are highly correlated with at least one variable from the third model. Together, the results of these estimations provide a consolidated analysis for the impact of each of the state-related policy variables.[9]

Empirical Results

The results of the binary logistic regressions are shown in Exhibit 5. The first model contains individual buyer characteristics, situational factors, and dummy variables to control for the timing of the annual surveys and changing economic conditions. The model includes indicator variables for each year, except 2001. It is interesting to note that for every model shown in Exhibit 5, the year coefficients are all negative and statistically significant at the 5% level (relative to 2001). This result indicates that the agency disclosure problems first noted by Wiley and Zumpano (2006) for 2004 were not unique, but appear chronic, with no evidence of improvement in the reported levels of disclosure over time. Similarly, the results from the expanded sample of NAR surveys from 2001 through 2006 continue to indicate that potentially disadvantaged groups such as first-time home buyers, buyers aged 65 and older, Hispanics, and Asian buyers are all significantly less likely to report having received a written agency disclosure form during the purchase transaction.[10]

The second model in Exhibit 5 examines the impact of a standardized disclosure form on the probability of disclosure. The results of this model provide evidence

Exhibit 5 | Results from Binary Logistic Regression

	Model 1		Model 2		Model 3		Model 4	
Variable	Coeff.	Z-Statistic	Coeff.	Z-Statistic	Coeff.	Z-Statistic	Coeff.	Z-Statistic
Intercept	0.785***	14.06	0.765***	13.67	0.657***	7.97	0.648***	9.64
Y2002	−0.405***	−3.16	−0.498***	−3.88	−0.520***	−3.86	−0.319***	−1.61
Y2003	−0.368***	−4.90	−0.455***	−6.00	−0.439***	−5.71	−0.511***	−5.95
Y2004	−0.324***	−5.08	−0.431***	−6.62	−0.434***	−6.61	−0.288***	−3.81
Y2005	−0.329***	−5.41	−0.396***	−6.45	−0.420***	−6.73	−0.370***	−5.14
Y2006	−0.142**	−2.33	−0.240***	−3.85	−0.225***	−3.54	−0.166***	−2.43
Buyer_Rep	1.232***	32.61	1.228***	32.42	1.234***	32.08	1.277***	27.92
First_Home	−0.413***	−10.80	−0.419***	−10.92	−0.415***	−10.66	−0.399***	−8.62
65&Older	−0.422***	−5.54	−0.414***	−5.43	−0.409***	−5.29	−0.415***	−4.56
Asian	−0.269***	−3.03	−0.238***	−2.67	−0.257***	−2.86	−0.286***	−2.76
Hispanic	−0.230***	−2.88	−0.191**	−2.38	−0.194**	−2.38	−0.226**	−2.49
Standardized_Form			0.351***	8.19	0.377***	8.24		
Early_Disclosure					−0.039	−0.88		
Verbal_Only							−0.716***	−6.38
>60 Hours					0.106***	2.72		
Disclosure_Section					0.094*	1.74		

Exhibit 5 | (continued)

Results from Binary Logistic Regression

	Model 1		Model 2		Model 3		Model 4	
Variable	Coeff.	Z-Statistic	Coeff.	Z-Statistic	Coeff.	Z-Statistic	Coeff.	Z-Statistic
Broker_Dominated							0.045	0.59
Regulatory_Staff							0.105***	4.56
Pearson goodness-of-fit:	189.106***		288.712***		1,033.813***		1,508.617***	
# of observations	17,496		17,496		17,133		12,214	

Notes: Disclosure is the dependent variable.
*Significant at the 10% level.
**Significant at the 5% level.
***Significant at the 1% level.

that in states where real estate regulators have adopted a standard form and made it publicly available on their website, the incidence of buyers reporting disclosure is significantly higher. *Standardized_Form* is positive and highly significant, and measured relative to the alternative scenarios where either specific wording is only written within the state code, or where the local board of Realtors has adopted a form for their members to use. Although every buyer, seller, and parcel of real estate is unique in one way or another, the nature of the paperwork that real estate agents provide to clients and customers during the transaction has become very regular. Virtually every brokerage office has a collection of forms that can be used in a majority of real estate transactions. When state regulators create a standard agency disclosure form and make it publicly available online, it is much more likely that this form will find its way into the collection of forms and training manuals commonly used by practicing agents. However, when the specific wording is only provided within the state code, there is no significant improvement compared to states that lack a mandatory disclosure format.

The third model in Exhibit 5 examines the impact of current educational standards on the reported levels of agency disclosure. This estimation shows that the likelihood of agency disclosure being reported is significantly higher in states that require more than 60 hours of pre-license education. The *>60Hours* variable is positive and statistically significant at the 1% level. One of the defining characteristics of the real estate sales profession is the low barriers to entry, in terms of both time and expense, relative to occupational income potential, with some states requiring only 20 hours of pre-license education. Obviously, states that demand more hours of pre-license education offer instructors a better opportunity to cover essential course material.

The third model in Exhibit 5 also provides support for the argument from Pancak and Sirmans (2007) that pre-license education may be heavily influenced by the questions expected to appear on the exams. It is shown here that states experience significantly higher levels of disclosure when the candidate exam handbook references agency disclosure in the exam content outline. Even though disclosure laws have been passed and agency relationships have been carefully redefined over the last 20 years, the exams in many states may have changed very little in recent years. The *Disclosure_Section* variable proxies for states that have recently updated their exam content on the topics of agency relationships and disclosure. The exam content may also act as a signal that agency disclosure is an important issue to regulators.

In addition, the third model in Exhibit 5 considers the timing of the legal requirement for agency disclosure. It has been argued that allowing agency disclosure late in the negotiating process may be equivalent to and no better than no disclosure at all (see Wiley and Zumpano, 2006). In model 3, the *Early_Disclosure* variable is insignificant from zero. It turns out that homebuyers in these states report disclosure at the same rate as buyers in states where early disclosure is required. However, late disclosure may still result in buyers inadvertently revealing material information to sellers that could adversely affect their negotiating position.

The fourth model in Exhibit 5 examines enforcement issues, along with the impact of allowing only a verbal form of agency disclosure. In states where agents are only required to provide a verbal presentation of the agency disclosure, buyers are significantly less likely to report having received a written form of agency disclosure. The wording of the NAR survey question regarding agency disclosure asks only whether a written agency disclosure form was received by the buyer; thus we cannot tell if buyers received verbal disclosure in those states that do not require the use of a written disclosure document. This result suggests that brokers in these states may be doing only the minimum required by law. It could be argued that buyers may be less likely to fully understand agency disclosure when it is not accompanied by a written explanation.

The fourth model in Exhibit 5 is also aimed at determining whether the structure of the state regulatory board has an impact on agency disclosure levels and includes the variable *Broker_Dominated*. This result indicates that agency disclosure levels are no different in states that require at least four-fifths of their license law officials (commissioners) to hold active real estate licenses. Some have argued that a regulatory board dominated by industry members may be more lenient in enforcing agency disclosure statutes (see Broback, 2006).[12] Our research provides no evidence to support this argument. Broker-dominated regulatory boards do not appear to have a significant impact on the reported levels of disclosure.

Finally, the fourth model in Exhibit 5 finds that *Regulatory_Staff* has a positive and significant impact on the estimated probability of disclosure. This suggests that as the amount of resources available to real estate regulatory authorities increase, so does the effectiveness of regulatory enforcement. Hence, understaffing can result in a lower incidence of agency disclosure.

Conclusions & Policy Recommendations

Despite the passage of agency disclosure statutes by every state, disclosure has yet to prove universally successful. Six years worth of data indicates that the non-disclosure problem shows no sign of mitigating and appears chronic. Certain disadvantaged and vulnerable groups, such as the elderly, first-time home buyers, and certain minorities, continue to report a lower incidence of disclosure than the general population. This research provides some insight into why this is the case by identifying factors that influence the probability of agency disclosure.

More demanding pre-license education requirements increase the probability of disclosure, as does increased emphasis on agency education and disclosure questions within license exams. When not legally required to do so, brokers and salespersons do not generally provide written disclosure documents to consumers. Competition among brokers does not appear, in and of itself, to create an incentive to use written disclosure forms. If real estate regulators want to encourage written disclosure they will have to mandate it. Interestingly, the composition of real estate commissions does not have a deterministic impact on disclosure. Agency disclosure is equally likely under a broker-dominated regulatory agency compared to their more independently-regulated neighbors. It is important to note, but also not surprising to find, that the greater the resources available to regulators, the greater the effectiveness of enforcement efforts.

The type of written disclosure is shown to also be a very important determinant of disclosure. In particular, when written disclosure forms are sanctioned by regulators and made publicly available on the website of the real estate regulator, the incidence of agency disclosure increases. The implications of this research are very straightforward. For states that have not already done so, real estate license law officials should consider adopting a standard agency disclosure form to be used by real estate brokers and make it publicly available on their website. Exhibit 6 provides a summary of the states where this practice has been adopted.

States should also closely examine their educational standards for real estate salespersons. In some states, the pre-license exams have not been updated for a number of years (see Pancak and Sirmans, 2007). Current exam content should reflect changes in agency and brokerage relationships that have taken place in recent years. Pre-license real estate courses should be quickly modified to explain such changes. In addition, instructors must have sufficient time to adequately cover all of the material expected for the course.

In combination with broker education, agency laws must be properly enforced in order for agency disclosure to become commonplace in the real estate transaction. Where non-compliance is the problem, state regulatory agencies need to evaluate the effectiveness of their enforcement efforts. Commission staff size relative to the salesperson population proved to have a highly significant influence on the probability of disclosure. As the real estate sales profession continues to grow and more inexperienced agents enter the market, each state should consider whether their real estate regulatory authority has enough resources to effectively regulate the profession.

Earlier research has shown that a large number of home buyers surveyed by NAR did not know whether they actually received a written disclosure form. It is also evident that certain homebuyers remain at a disadvantage as far as disclosure is concerned. It is likely that at least some of the survey respondents who indicated they did not receive a disclosure form actually did. Most states now recognize many different types of brokerage arrangements and, as a result, the concept of agency representation has become very complicated. Here the problem may not be compliance, but comprehension. It is likely that many agency disclosure forms are commonly perceived as “part of the paperwork,” making them much more difficult to identify when buyers are asked to recall this information once the transaction is complete. It may well be that some consumers did not know that what they signed was a disclosure form and responded accordingly in the surveys. Regulators should encourage earlier disclosure, along with making their disclosure forms more informative and easier to understand, thereby helping to ensure that

Exhibit 6 | Summary of Related State Policies

State	*Standardized Form*	*Early Disclosure*	*Verbal Only*	*>60 Hours*	*Disclosure Section*	*Broker Dominated*	*Regulatory Staff*
Alabama	X	X	0	0	0	0	2.91
Alaska	X	X	0	0	0	0	3.03
Arizona	0	0	0	X	X	0	2.08
Arkansas	X	X	0	0	X	0	2.89
California	0	X	0	0	X	0	1.28
Colorado	X	X	0	X	X	X	*
Connecticut	X	X	0	0	X	0	0.50
Delaware	X	X	0	X	X	0	0.40
District of Columbia	0	X	0	0	0	0	0.61
Florida	0	X	0	X	0	0	0.68
Georgia	0	0	0	X	0	X	0.89
Hawaii	0	0	0	0	X	0	*
Idaho	X	X	0	X	X	X	3.40
Illinois	0	0	0	0	X	0	0.80
Indiana	0	X	0	0	X	X	*
Iowa	X	X	0	0	X	0	0.42
Kansas	X	X	0	0	X	0	1.34
Kentucky	X	X	0	X	X	X	1.57
Louisiana	X	X	0	X	X	X	2.40
Maine	X	X	0	0	X	0	4.06
Maryland	X	X	0	0	X	0	0.51
Massachusetts	X	X	0	0	X	0	*
Michigan	0	X	0	0	0	0	0.16
Minnesota	0	X	0	X	X	0	*
Mississippi	X	X	0	0	0	X	3.48
Missouri	X	0	0	0	X	X	1.19
Montana	0	0	0	0	X	0	*
Nebraska	X	X	0	0	0	0	3.01
Nevada	X	X	0	X	X	X	3.21
New Hampshire	X	X	0	0	X	0	*
New Jersey	0	0	0	X	X	0	0.55
New Mexico	0	0	X	X	X	X	2.63
New York	0	X	0	0	*	0	*
North Carolina	0	0	0	X	X	0	3.43
North Dakota	0	0	0	0	0	0	*

Exhibit 6 | (continued)

Summary of Related State Policies

State	Standardized Form	Early Disclosure	Verbal Only	>60 Hours	Disclosure Section	Broker Dominated	Regulatory Staff
Ohio	X	X	0	X	X	X	*
Oklahoma	X	0	0	0	*	X	2.43
Oregon	X	X	0	X	0	0	*
Pennsylvania	0	X	0	0	X	0	0.25
Rhode Island	0	X	0	0	X	0	1.27
South Carolina	X	X	0	0	X	0	1.23
South Dakota	X	X	0	X	X	0	7.67
Tennessee	0	X	0	0	X	0	1.30
Texas	0	X	0	X	X	0	1.57
Utah	0	0	0	X	X	X	2.11
Vermont	X	X	0	0	X	0	2.06
Virginia	0	0	X	0	X	0	*
Washington	0	0	X	0	X	X	2.04
West Virginia	X	X	0	X	*	X	*
Wisconsin	0	X	0	X	X	0	*
Wyoming	0	X	0	0	X	0	3.94

all buyers fully comprehend the information given them during the home purchase process.

Endnotes

1 The FTC (1984) study also found that 74.4% of sellers listing through the MLS thought that selling brokers represented buyers.

2 This transition is documented in detail by several papers, including Olazabal (2003), Pancak and Sirmans (2006), and Pancak, Miceli, and Sirmans (1997), to name a few.

3 The survey data used by Wiley and Zumpano (2006) did not contain enough information to develop a formal model of agency disclosure.

4 The survey results for the 2002 survey are combined with the results of the 2003 survey, and the year in which the responses were reported is provided.

5 The ''Don't know/Not sure'' response is an important and informative category in its own right. In our sample, it made up 17.8% of the respondents who answered the disclosure question. Such a high number suggests that there is a serious problem with the agency disclosure delivery system. When combined with the number of respondents who reported no disclosure, these two categories made up 37.9% of the responses.

[6] For example, in Georgia and Hawaii the specific wording is provided within the state code to be incorporated as a clause within the contract for buyers to acknowledge the nature of agency representation by the broker. However, it appears that no standardized disclosure form has been adopted by the real estate commission for brokers to use prior to the contract being written.

[7] Due to a lack of information, this estimate was unavailable for Alabama, California, Mississippi, New York, North Carolina, Oklahoma, Oregon, and West Virginia.

[8] An alternative measure of enforcement effectiveness would be the number of disciplinary actions per state as a percentage of the number of residential sales per state. Pancak and Sirmans in a 2006 article in the *Journal of Housing Research* use this ratio as a measure of the quality of brokerage services. The inclusion of such a variable in the model presented here, however, could present endogeneity problems since it would be impacted by such things as state educational requirements, disclosure requirements, and pre-license exam questions.

[9] Each of the results for the state-related policy variables have been verified empirically by estimating the impact on *Disclosure* both individually and in combination with other independent variables.

[10] No significant difference in the incidence of disclosure was found between Black/African American and White/Caucasian homebuyers.

References

Association of Real Estate Licensing Law Officials (ARELLO). *Digest of Real Estate Licensing Laws and Current Issues*, 2001–2006.

Broback, S. Residential Real Estate Brokerage Services: A Cockamamie System that Restricts Competition and Consumer Choice. Hearing of the Housing and Community Opportunity Subcommittee of the House Financial Services Committee of the U.S. House of Representatives, July 25, 2006.

Federal Trade Commission. *The Residential Real Estate Brokerage Industry. Staff Report.* Vols. 1 and 2. Washington, DC: U.S. Government Printing Office, 1984.

National Association of Realtors. *The Home Buying and Selling Process*, 2001–2006.

Olazabal, A. Redefining Realtor Relationships and Responsibilities: The Failure of State Regulatory Responses. *Harvard Journal on Legislation*, 2003, 40:1, 65–132.

Pancak, K. and C.F. Sirmans. The Effect of Agency Reform on Real Estate Service Quality. *Journal of Housing Research*, 2006, 15:1, 41–53.

——. Agency Content on Licensing Exams: Assessing Professional Competency. Working Paper, 2007.

Pancak, K., T. Miceli, and C.F. Sirmans. Real Estate Agency Reform: Meeting the Needs of Buyers, Sellers, and Brokers. *Real Estate Law Journal*, 1997, 25:4, 345–77.

Wiley, J. and L. Zumpano. Questioning the Effectiveness of Mandatory Agency Disclosure Statutes. *Journal of Housing Research*, 2006, 15:2, 161–74.

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