Is Dual Agency in Real Estate Transactions a Cause for Concern?

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Abstract

We study dual agency in residential real estate, where the same agent/agency represents both the buyer and seller. We assess the extent to which dual agency suffers from an inherent conflict of interest, where the dual agent furthers the interest of one client at the expense of the other client’s, as well as principal-agent incentive misalignment where the agent furthers her own interest at the expense of one or both clients. And, we examine how these incentive conflicts affect agent behavior and transaction outcomes. To do so, we analyze 10,891 residential real estate transactions in Long Island, NY, from 2004-2007. Specifically, we (i) identify how dual agency is correlated with house prices and time-to-sale, (ii) describe and assess agent behaviors that could generate these correlations, and (iii) provide some intuition as to the economic effects of prohibiting dual agency in real estate transactions. We find that the incidence of dual agency is uncorrelated with sale price and negatively correlated with time-to-sale. However, on very fast deals, list prices and sale prices are significantly higher on houses sold via dual agency. These findings are consistent with first-resort selling (agents first showing houses to in-house buyer clients) and strategic pricing (agents inducing their seller clients to set a higher list price in anticipation of an internal client agreeing to it) on some deals, in conjunction with agents leaning on sellers to accept a lower sale price on other deals. First-resort selling is indicative of incentive misalignment, while the latter two behaviors reflect a conflict of interest: strategic pricing transfers surplus from the buyer to the seller, and leaning on the seller transfers surplus from the seller to the buyer. Further, our results indicate little difference between dual-agent (same agent) and within-agency (same agency, but different agent) deals. Our findings provide some evidence of distorted outcomes associated with dual agency, mainly on fast deals, but the evidence indicates mild overall effects, suggesting that prohibiting the practice is not likely to substantially increase welfare.

JEL codes: K21 (antitrust law), L41 (horizontal anticompetitive practices), L42 - Vertical Restraints, L85 (industry studies of real estate services)

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1. Introduction

In this paper, we assess the consequences of allowing for dual agency in the residential real estate market. We compare two important transaction outcomes – the sale price and length of time-to-sale – across two different types of transaction outcomes, dual-agency and cross-agency deals. We analyze data from 10,891 completed residential real estate transactions in Long Island, New York, during the time period 2004-2007. New York state laws permit dual agency as long as the agent(cy) discloses its dual representation to both parties. We attempt to determine whether the welfare consequences of dual agency ultimately warrant prohibiting this practice. Importantly, we differentiate between the inherent conflict of interest that arises in dual agency, where the dual agent compromises the interest of one client for the other client's, and standard principal-agent incentive misalignment, where the agent compromises the interest of one or both clients to further her own interest\(^1\). While conflict of interest is, itself, a subclass of principal-agent issues (i.e. the dual agent does not serve the interest of one client), we differentiate between the two because legal and market responses to dual agency have focused on resolving the conflict of interest issues while ignoring the agent-client incentive misalignment.

Researchers have examined conditions under which conflicts of interest might arise, how much harm can result, whether there are conditions under which a conflict of interest is an acceptable trade-off, and whether regulation might prove useful. In some markets, this practice is prohibited or avoided by firms. Examples include mergers and acquisition advisory services of investment banks where these banks do not advise both the target and acquirer in any deal, and law firms who do not represent both sides of a lawsuit. The most obvious reason to prohibit dual agency in any industry is the apparent conflict of interest it creates for the dual agent (agency) where it appears that the zero-sum nature of transactions make it impossible for the dual agent to fulfill their duties to both clients impartially. However, Mehran and Stulz (2007) point out that the findings

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\(^1\) We prefer to use the longer term “principal-agent incentive misalignment” rather than agency issues to avoid confusion with the term “agency” used to refer to the real-estate firm or agent representing the buyer or seller client.
from the empirical literature on conflict of interest in the financial services industry “are more ambivalent and certainly more benign than the conclusions drawn by journalists and politicians from mostly anecdotal evidence.”

In the residential real estate market, at least in regard to the sale price, the interests of the buyer and seller appear diametrically opposed, making a conflict of interest seem obvious: If the agent helps the buyer obtain a lower price, this hurts the seller, and vice versa. In addition to the inherent conflict of interest, the incentives of agents and their clients may become misaligned in other ways when dual agency is allowed. For example, agents may steer their buyer clients to internal sellers to increase the chance of a dual-agency deal. The conflict of interest and principal-agent incentive misalignment issues in dual agency can result in economic harm to buyers and sellers, and even a net loss in welfare. However, despite the apparent conflict of interest and possible incentive misalignment, prohibiting the practice might not be desirable. Dual agency might provide transactional efficiencies and allow for quicker, more efficient matches, as well as expand the choices of houses and agents available for transactions. Therefore, it is important to understand the consequences of dual agency in this industry.

Consider existing research in the area of dual agency in real estate markets. Gardiner et al. (2007) examine the effect of a law change in Hawaii in 1984 requiring full disclosure of dual agency. The authors find that dual agency reduced the sale price, but the effect was much smaller after full disclosure of dual agency was required by legislation (8.0 versus 1.4%). In addition, dual agency reduced the time to sale by about 8.5% pre-legislation and 8.1% post-legislation. Evans and Kolbe (2005) look at the effect of dual agency on price appreciation (the ratio of the sale price to the purchase price) for houses that are first bought and then sold. They find that dual agency in the purchase transaction has no impact on price appreciation. They also find very limited evidence that dual agency in the sale transaction has a negative effect on price appreciation.

Our paper differs from these earlier papers on dual agency in several important ways. First, in addition to the inherent conflict of interest that arises in dual agency, we also argue that, independent of the conflict of interest associated with representing both
sides in the transaction, the incentives of agents and their clients may become misaligned when dual agency is allowed. In doing so, we view the occurrence of a dual-agency deal as the outcome of a search-and-negotiation game between buyers and sellers, and their agents. Dual agency distorts agent incentives in both stages of this game, by offering private benefits for agents, resulting in agent behaviors which increase the likelihood of dual agency and affect the price and speed of transactions.

Second, we try to empirically identify unobservable agent behaviors that both increase the likelihood that a house is sold via dual agency and that affect the price and speed of transactions. To do so, we compare transaction outcomes (sale price and time-to-sale) in dual-agency and cross-agency deals, using the incidence of dual agency as a proxy for the effect of these underlying, unobservable agent behaviors. Although dual agency is also a transaction outcome, like sale price and time-to-sale, we treat the incidence of dual agency differently in our empirical analysis. Specifically, we first try to understand whether there is any systematic correlation between the incidence of dual agency and the other two outcome variables (sale price and time-to-sale) and then ask what unobserved dual agency behaviors could explain the relationships we find. We conduct a series of additional analyses in an effort to parse out the effects of these behaviors. We then delineate the effects of these behaviors on both the search process for buyers and sellers, as well as for the negotiation process between buyers and sellers. By doing so, we can determine if and how conflict of interest and agent-client incentive misalignment are distorting agent behaviors and transaction outcomes in dual-agency deals. Therefore, we can assess whether prohibiting dual agency will have any meaningful impact on welfare. While the absence of a natural experiment (data from a state before and after dual agency was prohibited) prevents us from identifying the causal effect of dual agency, our approach allows us to assess the effects of the agent behaviors which affect the incidence of dual agency and transaction outcomes.

Third, to better compare transaction outcomes in dual-agency and cross-agency deals, we exploit detailed information about the houses sold, as well as information about the agents involved. We control for an extensive set of house characteristics, as well as
the list price of the house. In addition, we include fixed effects to control for unobserved agency, agent, and zip code-year effects. Prior studies of dual agency do not include these fixed effects, nor do they control for the list price or the extensive list of house characteristics that we include\(^2\). Including these controls is important to properly compare transaction outcomes in dual-agency and cross-agency deals.

Lastly, while other papers have not made this distinction, in our empirical models we distinguish two types of dual agency: Dual-agent deals, in which the same agent represents both buyer and seller; and within-agency deals, in which two separate agents working for the same agency represent the buyer and seller. This distinction is important because the incentives for being a dual agent might be different than those for doing within-agency deals. Moreover, this also has policy implications because some states allow within-agency deals but not dual-agent deals.

In our initial analysis, we find three main results: Sale prices are the same in dual-agency and in cross-agency deals (when we do not condition on list price); list prices are higher in dual-agency deals than in cross-agency deals (resulting in a negative correlation between dual agency and sale price, conditional on list price); and dual-agency deals close faster than cross-agency deals. Specifically, we find that list prices are about one percent higher on dual-agency deals, while houses sold via dual-agency deals sell about seven percent (six days) faster than houses sold via cross-agency deals.

We describe one type of agent behavior, first-resort selling, which is consistent with all three results. In first-resort selling, agents routinely show houses to internal clients before external clients. Because agents show houses to internal buyers first, the incidence of dual agency should be disproportionately high on very fast deals, where the house is sold before being shown to the external market. Therefore, we conduct additional analysis focusing on very fast deals (deals that close quickly), which provides additional evidence consistent with first-resort selling. This analysis also provides evidence consistent with two other agent behaviors that could jointly explain these

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\(^2\) Gardiner et al. (2007) control for the house’s assessed value, as well as year fixed effects and a dummy for fee-simple contracts. In time-to-sale regressions they also control for the difference between the list and sale price. Evans and Kolbe (2005) only include quarter fixed effects and a dummy for whether the same agent represented the buyer in the first transaction and the seller in the second.
results: Strategic pricing, where agents induce their clients to set high list prices in anticipation of an already-identified internal buyer with a high willingness-to-pay (WTP) making an offer; and leaning on the seller, where seller agents pressure their clients to reduce prices or accept lower bids in order to capture both sides of commission or to curry favor with colleagues, to exploit transactional efficiencies of dual agency, and to close deals faster.

Although we are unable to fully tease apart these alternative mechanisms, we cautiously conclude that agents do engage in some behaviors which increase the likelihood of dual agency and which affect both the price and the speed of transactions. However, similar to what Mehran and Stulz (2007) find for financial markets, our results suggest that the overall consequences of the conflicts of interest and other incentive misalignment issues that arise in dual-agency deals in residential real estate are small. In short, our results suggest that by altering agents' incentives and behavior, allowing dual agency may reduce time-to-sale, and has a negligible net effect on sale price. These findings provide little support for the prohibition of dual agency in any form (either within-agency or dual-agent deals). We discuss in section 5.5 how this might contrast with dual agency situations in other industries. The remainder of the paper is organized as follows.

In Section 2, we discuss agent incentives in cross-agency and dual-agency transactions. In Section 3, we briefly describe and assess legislative and market approaches for regulating dual agency in the housing market. In Section 4, we describe our data, and in Section 5, we present our empirical results. We conclude in section 6.

2. Agent Incentives in Cross-Agency and Dual-Agency Transactions

2.1: Cross agency incentive issues

Before exploring dual agency incentive issues, it is useful to first consider the incentives for agents in a standard, cross-agency transaction. There are several principal-agent issues in the real estate market (see Yinger 1981, Salant 1991, Bryant and Epley 1992, Wheaton 1990, Yavas et. Al. 2001, etc.). First, both agents are compensated as a
function of the final sale price. This misaligns incentives: buyers’ agents (as well as sellers’ agents) benefit from a higher sale price, even though this represents a loss to their clients. However, this misalignment of incentives is counterbalanced by the desire to develop and maintain a good reputation, as a means to attract more clients, which creates a strong incentive for buyers’ agents to bargain aggressively for a low price (resulting in a low commission) on behalf of their clients. For a seller’s agent, bargaining aggressively on behalf of her clients results in higher prices and higher commissions.

Second, the assumption that agents want to maximize their commission might oversimplify their incentives. Specifically, the seller’s agent must evaluate the additional commission earned from a higher price against the cost of waiting longer to conclude the deal. Levitt and Syverson (2005) show that real estate agents wait longer to sell, but obtain a higher price, when they sell their own houses compared to selling clients’ houses. Hendel, Nevo, and Ortalo-Magne (2007) find an interesting parallel – homeowners who sell their homes themselves (instead of using a broker) wait longer but also obtain a sale price premium over houses sold via agents. These results are driven by the fact that agents capture only a small fraction of the additional proceeds from each sale, while incurring much of the additional cost of marketing the houses (Levitt and Syverson, 2005, Rutherford et al. 2005). Therefore, existing research suggests that selling agents benefit from concluding transactions faster, rather than holding out longer for a possibly higher price. Consequently, misaligned incentives can have an impact on both the sale price and time-to-sale in standard, cross agency deals.

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3 An interesting question is why commission-based agency persists in real estate markets when there are known to be inefficiencies in this system. See Jares, Larsen, and Zorn (2000) for a discussion, and an alternative that has the seller’s agent buy the property and have the put option of returning the house back to the seller. See also Bernheim and Meer (2008) for whether brokers perform enough functions to justify their commissions.

4 Laws in some states have attempted to ensure that agents representing buyers clearly owe fiduciary responsibility to the buyer rather than be an agent for the seller or only loosely represent the buyer’s interest. As expected, such laws have led to a drop in the sale price (see Curran and Schrag, 2000).

5 A parallel situation is found in financial services markets where brokers are divided into agency and non-agency brokers. Agency brokers are precluded from buying for themselves, and are only allowed to buy on their client’s behalf. Non-agency brokers usually offer lower transactions fees but also offer lower prices to sellers because of their incentive to buy low from sellers and sell high to their buyer clients (Harris, 2003). When non-agency brokers are better informed than their own clients, they trade on the value of their information. This finding is parallel to Levitt and Syverson (2005).
2.2: Why and how does dual agency arise?

The process of buying and selling a house may be thought of as a two-stage, search and negotiation game between buyers, sellers, and their agents. When dual agency is permitted, the transaction can conclude either via dual-agency or as a standard, cross-agency transaction. We examine if there are any systematic correlations between this transaction outcome variable, dual agency, and two other key transaction outcome variables from this game, sale price and time-to-sale. Agents can engage in actions that affect the likelihood of a deal being done via dual agency and that ultimately affect the sale price and time-to-sale. In this subsection, we consider if and how an agent may wish to increase the likelihood of a dual-agency deal.

Agents can undertake actions to increase the probability of dual agency if the benefits of dual agency outweigh the cost of it. Dual agency offers several possible benefits to agents. First, it can speed up the search and/or negotiation process, allowing the agent to earn her commission(s) sooner. Second, it reduces the amount of time and effort agents must spend learning about and showing houses to clients. Third, buyer agents tend to have less exclusive and shorter contracts with their buyer clients. Therefore, the agent might not capture both commissions if the buyer does not buy the house where the same agent also represents the seller.

These benefits serve as incentives for agents to try and influence clients to buy (sell) from (to) internal clients. That is, agents have incentives to take actions that increase the incidence of dual-agency deals. These incentives are different for dual-agent versus within-agency deals. In within-agency deals, an agent may offer her listings to fellow-agents of the same agency, in the hopes that they will reciprocate in the future. In dual-agent deals, an agent can directly capture all the benefits herself rather than share with a colleague from her own agency.

Although there may be favor trading across agencies, it is easier to sustain such favor trading within an agency. Also, there do not appear to be any incentives provided by agencies to encourage more deals in-house than cross-agency.
There are also some disincentives for undertaking actions that increase the likelihood of a dual-agency deal. Should the agents hold out for the possibility of a dual-agency deal, they face a smaller pool of internal buyers than the market-wide pool of buyers. Similarly, the pool of internal listings is much smaller than the pool of external market listings.

If the above incentives outweigh the disincentives, agents can increase the probability of becoming a dual agent (agency) and conducting a dual-agency transaction by influencing clients’ actions in either stage of the game: (1) Manipulating the search process by steering the seller (buyer) clients to internal buyers (sellers), and (2) Manipulating the negotiation process by leaning on the seller (buyer) to accept the internal buyer’s (seller’s) offer. These manipulations of the search and negotiation process can affect the other two outcome variables of interest, the sale price and the time-to-sale.

In (1), agents use their influence on their clients’ search process to steer buyers and sellers toward dual-agency deals. Agents can do this by showing their listings to internal buyer clients before showing them to other agents’/agencies’ clients. Similarly, they might show their buyer clients their own listings before showing them listings of other agents/agencies.

In (2), an agent (or agency) is already a dual agent, representing both sides in a negotiation. The agent (agency) may have achieved dual status by steering clients toward each other (as in (1)), or the dual agency may have arisen spontaneously. For example, a buyer may see a for-sale sign on a property and call the seller agent whose name is listed on the sign. Similarly, an agency may become a dual agency if a buyer who is represented by an agent discovers a house where the seller agent works for the same agency as the buyer agent. Once the agent or agency has achieved dual agent/cy status in the negotiation process, they can help close the dual-agency deal by leaning on the seller or buyer to accept the other’s offer.
2.3: Conflict of interest and incentive misalignment in dual agency

Allowing for dual agency can create both conflicts of interest as well as incentive misalignment for agents. The incentive misalignment arises primarily in the client search stage, while the conflict of interest arises primarily in the client negotiation stage (but can also arise in the search stage; see section 5.3 for a discussion of this).

In the search stage, the agent’s incentive to find a dual-agency deal results in misaligned incentives with her client; the agent has an incentive to match the buyer (seller) with an internal seller (buyer), while the buyer (seller) only wants to find the best value (buyer with the highest WTP). In this case, the agent’s efforts to match the buyer (seller) with internal sellers (buyers) are not necessarily in the buyer’s (seller’s) best interests.

In the negotiation stage of a dual-agency transaction, agents face a clear conflict of interest due to the zero-sum nature of price negotiations. Agents face the impossible task of trying to simultaneously obtain the lowest possible price for the buyer and the highest possible price for the seller in the same transaction. In this case, the agent may either lean on the seller to accept a lower price from an internal buyer than what she could expect to obtain from an external buyer, or the agent can lean on the buyer to accept a higher price from an internal seller. The agent may further manipulate the negotiations by divulging confidential information to either client in an effort improve the other’s bargaining position. For example, the agent might share information about the buyer’s WTP with the seller, bolstering the seller’s willingness to hold out for a higher price. Such a tactic could enhance the agent’s ability to pressure the buyer to accept a higher price. Regardless, the agent is giving preferential treatment to one client at the expense of the other, with the intent of creating a dual-agency deal.

Given that agents can give preferential treatment to either buyers or sellers in the negotiation stage, the question arises: On whom will agents lean – the buyer or the seller? The vast majority of seller’s agreements are exclusive. In contrast, the relationship with buyers is looser and less formal, often even without signed agreements (see Brown and Yingling, 2007). Therefore, we might expect the dual agent(cy) to exploit this asymmetry...
by leaning on the seller to accept a lower price from an internal buyer. On the other hand, because commissions increase with sale price, the incentive to lean on a buyer to accept a higher price from an internal seller may be greater than the incentive to lean on a seller. Therefore, the direction and magnitude of agent leaning (if it occurs) is an empirical question.

2.4: Price and speed in dual-agency transactions

In both the search and the negotiation stage, the agent’s efforts to increase the probability of a dual-agency deal can also affect the price and speed of the transaction. For example, if agents routinely first show internal listings to buyer clients before showing them other listings, then steering may be correlated with, but will not cause, faster sales. On the other hand, because of the smaller pool of internal buyers and sellers, steering clients to internal buyers or sellers may delay the time-to-sale. Similarly, if agents lean on clients in the negotiation phase, then this will clearly affect the transaction price, with the direction depending on which client the agent chooses to pressure. If the agent leans on the buyer to accept the internal seller’s offer, then this should have a positive effect on price (and vice versa). However, regardless of which client the agent pressures to close the deal, leaning on a client should unambiguously reduce the time-to-sale, as the agent encourages the client to accept an offer rather than continue negotiations (or continue searching).

Beyond its effect on agent incentives and behavior, allowing dual agency may also affect transaction prices and speed by allowing for better information flows and transaction efficiencies. Agents know more about the preferences (house characteristics) of their own buyer (seller) clients, while agents in the same agency are likely to share information about available listings and client preferences. Conversations with real estate agents who have worked at multiple agencies indicate that agencies hold weekly meetings in which agents describe their available listings and search parameters of their buyer clients to see if any matches can be made internally. This internal information sharing can result in better and quicker matches between internal buyers and sellers. This
should have a positive effect on sale prices, since available houses are being better matched with buyers, who are likely to agree to these better preference matches. Additionally, this behavior will have a negative effect on time-to-sale, since the added information leads to quicker matches. Moreover, once a match is made, dual agency may offer efficiencies in processing and transferring documents, enabling a faster transaction.

3. Legislative and Market Responses to Dual Agency

There have been a wide range of public and private responses to the challenges posed by dual agency. As we discuss below, all of them have focused on the inherent conflict of interest that the dual agent/agency faces in the negotiation stage, and none have focused on the incentive misalignment.

3.1: Legislative responses to dual agency conflict of interest

Olazabal (2003) provides a thorough summary of various types of agency relationships in real estate. As she describes, for most of the twentieth century, sellers listed their property in multiple listing services with a “listing broker.” A “selling broker” would show the property to the buyer, but the selling broker did not represent the buyer. Both the listing and selling broker received their commission from the seller, and neither owed any fiduciary responsibility to the buyer. This left the seller open to legal liability due to agent misbehavior. While such situations, by definition, did not have dual agency conflicts, they were certainly subject to misaligned incentives as discussed in section 2.1.

Over time, legislation and market forces have resulted in more buyer representation, as well as a reduction in seller liability for actions of agents. Despite these changes, dual agency has persisted. However, responding to criticisms that the resulting system of dual agency was not transparent and created conflicts of interest, beginning in the early 1990s, many states passed laws that placed restrictions on dual agency. As a result of these changes in state laws, most states’ dual agency policies currently fall into
one of three categories: dual agency with disclosure, designated dual agency, and transactional brokerages.

New York is one of several states that allows for dual agency with disclosure. These states have chosen to allow the practice of dual agency to continue, even in the case where the same agent represents both the buyer and the seller in a transaction. However, all of these states now require agents to disclose their dual-agency status to both the buyer and the seller. It is not evident that disclosure alone will reduce the conflict of interest, given the manipulations of the search and negotiation processes might be subtle enough to go undetected by the harmed party (buyer, seller or both).

A smaller number of states (e.g., Colorado, Maryland) allow for designated dual agency. This allows the same agency to serve both parties in the transaction, but prohibits the same agent from doing so. In designated agency, a brokerage firm may designate one agent to represent the seller and a different agent to represent the buyer. As discussed in section 2.2 above, it is not evident that conflicts of interest are any less likely on within-agency deals, when favors are traded by agents of a single agency.

Finally, other states (e.g., Florida) do not allow the buyer and seller agent to be from the same agency, but allow a new type of entity, a transaction brokerage, to represent both the buyer and the seller in a transaction. A transaction brokerage provides many of the same services as a real estate agency, but does not legally represent either party in the transaction. The lack of legal representation for either party solves the conflict of interest because of the disinterestedness of the agent, but this does not prevent the agent from looking out for her own self-interest. Interestingly, the National Association for Realtors (NAR) refused to endorse such legislation, arguing that agents owe fiduciary responsibility to clients.

States also vary in their disclosure requirements for dual agents. For example, some states, including New York, require that agents disclose their dual status in writing, while other states only require a verbal disclosure. Similarly, states differ in their policies regarding when the dual agent/agency is obligated to inform the buyer of dual-agency status (Olazabal, 2003). The later the agent is obligated to reveal to the client that she
represents both sides of the transaction, the more likely it is that either the seller or the buyer will reveal information (e.g. minimum or maximum acceptable price, respectively) that the agent might use to favor the other party (and herself). In other words, the more lax the disclosure requirements, the more likely it is that agents can indulge in conflicted interest behavior (and other principal-agent behaviors). In New York, agents are required to disclose their dual-agency status when substantive contact with a client is made.

3.2: Market responses to dual agency conflict of interest

Real estate firms have responded variously to any possible conflict of interest that remains even after the law has attempted to clarify it. First, some real estate firms act as a “buyer’s broker,” with exclusive fiduciary duty to the buyer, receiving payment from the buyer (rather than the seller). While designed to protect buyers, this also helps to protect the seller from any conflict of interest for the seller’s own broker. Some agencies have even gone further, specializing in representing only buyers. But given the functioning of the real estate market (e.g. a buyer sees a property that she likes and calls the agent whose contact information is on the for-sale sign), exclusive buyer’s agents cannot be a complete solution.

A second response from agents/agencies has been the adoption of a self-imposed policy of providing referrals should a dual-agency transaction arise. These referrals are sometimes to other agents in the same firm (i.e., the equivalent of a designated broker), and sometimes to agents at other firms (see www.activerain.com/blogspot for examples).

A third response of some agents has been to go further than the law requires and draft their own contract for dual-agency situations (e.g., see discussion on www.bloodhound.com), arguing that it is unclear if consumers understand the complex implications of the dual agency laws (Olazabal, 2003). These contracts try to make clear

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7 A discussion on www.bloodhound.com is particularly succinct in its description of issues. One agent posted his objection to dual agency by likening it to the same attorney representing both parties in a divorce. To which another agent responded “Who do you think usually comes out ahead in a divorce, the divorcing couple or the attorneys? If the divorce is amicable, or the couple doesn’t really have any assets or children, do they really need the additional expense (attorney)? Isn’t divorce, by definition, costly enough?”
the conflict of interest in dual-agency contracts and urge both buyers and sellers to understand their rights. For example, consider these two clauses (from an agent Greg Swann of Arizona): “The duties of the Licensee(s) in this transaction do not relieve the Seller or the Buyer from the responsibility to protect their own interests” and “If you are not completely comfortable with this disclosure of Dual Representation, you are encouraged to obtain separate representation in this transaction.”

Despite these responses by agents/agencies, it is unclear if agencies can protect buyers and sellers from the deficiencies of these dual agency laws and the resulting incentive conflicts. While these contracts provide additional disclosure and discussion of dual agency and the resultant conflict of interest, they do not offer any legal protections to either buyer or seller. This is because the agent behaviors that might harm buyers and sellers (e.g., disclosure of private information to the other party) are difficult to observe. Moreover, as noted above, none of these responses attempts to address the misalignment of incentives in the search (and possibly negotiation) stage created by permitting dual agency. Therefore, in the following sections we attempt to empirically assess the impact of permitting dual-agency transactions, and to examine whether the emphasis, in the public and private responses, on reducing conflict of interest alone is appropriate. To do so, we compare the price and speed of dual-agency and cross-agency transactions.

4. Data

Our dataset comprises 10,891 randomly-selected, single-family, residential home sales in Long Island, New York, spanning the years 2004-2007. The data come from the Long Island Board of Realtors, which owns the Multiple Listing Service (MLS) of Long Island, Inc. The MLS is a clearinghouse where realtors list properties for sale.

This dataset has several advantages. First, the data contain a wealth of information on house location and house characteristics. Among many other specifics, the data indicate the number of bedrooms, bathrooms, and other rooms in the house, the number of fireplaces, the capacity of the garage(s), the presence and type of driveway, the presence of a basement and whether it is finished, and much more. Transactions also list
the names of the seller and buyer agent, the name of the agency for which each works, the number of days the house was on the market, the price at which the seller listed the house for sale, and the final sale price. MLS requires all sellers’ agents to enter the property within 24-48 hours of reaching an agreement to list the house. Also, if a property is already under agreement for sale, MLS rules prohibit listing it in MLS as available. This gives us confidence in the measure of time-to-sale in our data.

It is important to note that the MLS data have some flaws, as noted by Levitt and Syverson, 2005):

“The information in the database is entered by the real estate agents themselves. There is no independent check on the accuracy of the description of the home’s attributes. Also, there are few restrictions on what agents can type into a field in the database and no requirement that all fields be completed. As a consequence, there are substantial amounts of missing data for some variables..., some evidence of obvious errors, and a lack of uniformity in the way fields are coded.”

To deal with these issues, we drop observations that appear to reflect erroneous data. For example, we exclude observations where the list price or sale price is less than $50,000 and where the sale price is either less than one third of the list price or more than three times the list price. Similarly, we exclude houses with no bathrooms or no bedrooms.

There are two additional issues relating to the measure of time-to-sale. First, it is possible that some houses are never listed on MLS because there is already a buyer for the house. It seems likely that such cases would occur more often via dual agency, because agents have greater knowledge about internal buyers. If this is the case, then our estimates of the relationship between dual agency and time-to-sale will be biased upwards. Second, as discussed by Levitt and Syverson (2005), houses sitting on the market for a long time are sometimes withdrawn and then re-listed on MLS, re-setting the

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8 Merlo and Ortalo-Magné (2004) have a unique dataset from England that includes all offers made on a house before the final sale and any changes in list price during this period. This allows them to analyze seller and buyer behavior within a transaction (rather than across). Our dataset only has the original list price and the final sales price, and the identity of the seller agent and the buyer agent. This suffices for the purposes of our study.
days on market to zero. This will not affect our estimates for role of dual agency unless there is a systematic correlation between dual agency and re-listing, which seems unlikely. Nonetheless, if dual agency is more likely for re-listed houses, this would cause a negative bias in our measure of the relationship between list price and dual agency, because the second list price is likely to be lower than the first. In our results below, we find a positive relationship between list price and dual agency. Therefore, we are confident that re-listings are not driving our results.

To measure dual agency we create three indicator variables: \textit{AllDualAgency} indicates that the same \textit{agency} represents both the buyer and the seller in the transaction. \textit{DualAgent} indicates that the same \textit{agent} represents both the buyer and the seller. \textit{WithinAgency} indicates that the buyer and seller are represented by different agents who work for the same agency.

Table 1 reports descriptive statistics for all of our variables. We see that nearly half (47\%) of all transactions occur via dual agency, with the majority of these cases comprising dual-agent deals (26\% vs. 21\%)\textsuperscript{9}. Table 2 provides sample means by agency type (dual-agency or cross-agency) for our three key variables: sale price, list price, and time-to-sale. There are no substantial differences between the dual-agency and the cross-agency deals, although we do see that sale price and time-to-sale are slightly lower for dual-agency deals.

---Insert tables 1 and 2 here---

\textsuperscript{9} This proportion of dual agency cases may seem high. A possible explanation is that some of the dual agency deals are instances of subagency. In subagency, the agent listed as the buyer’s agent is actually a subagent of the seller, with fiduciary responsibilities to the seller only (note that cross-agency deals could also have instances of subagency). Previous papers on dual agency also face the same issue of misclassification, because MLS data do not indicate whether the buyer is represented by a buyer’s agent or a subagent of the seller. Subagency is likely to increase the sale price and increase the time-to-sale relative to transactions where the buyer is represented by a buyer’s agent (Curran and Schrag, 2000). We find that dual agency has the opposite effect on time-to-sale, and we find that the effect of dual agency on price varies with the speed of transaction. These findings cannot be explained by the misclassification of subagency.
Table 3 provides information about the Long Island real estate market. The market is highly competitive. There are 1010 real estate agencies in our sample\(^\text{10}\). They range in size from single-agent firms, to agencies with more than 200 agents. In almost 4200 (more than 38%) of the transactions, the selling agency has fewer than five agents, while in more than 1900 transactions (almost 18%) the selling agency has more than fifty agents. Only a small number of agencies (27) have multiple branches; but these agencies tend to be very large, comprising slightly more than one third of all the transactions in our sample.

---Insert Table 3 here---

Before assessing how dual agency relates to the price and speed of transactions, we first examine whether the incidence of dual agency varies with agency size. In particular, we assess whether there is a greater incidence of within-agency transactions in larger firms, where agents have a larger network of colleagues with whom to share transactions. The results of our probit analysis, which we report in Table 4, confirm our intuition: selling agents in larger agencies are more likely to sell to buyers represented by agents in the same agency. The estimated marginal effects indicate that a doubling of the number of agents in an agency increases the probability of a dual-agency deal by approximately 0.8 percentage points (this effect is statistically significant at 0.101).

---Insert Table 4 here---

5. Empirical Analysis

Our goal in this section is to empirically assess how the incidence of dual agency relates to the price and speed of transactions, and to understand if these relationships

\(^{10}\) Our data are only a random sample of the completed transactions during this time period. We could not obtain all transactions because of limits on downloads from the MLS website. This limits our ability to accurately measure the distribution of firm size, and especially its variation over time, since some of the variation that we observe results from the sampling.
reveal underlying agent behaviors driven by conflict of interest and/or misaligned incentives associated with dual agency. In our analysis, we treat the incidence of dual agency as a proxy for unobservable agent behaviors that increase the likelihood of a dual-agency deal and may affect transaction outcomes (rather than treating dual agency as an explanatory variable). We try to identify underlying agent behaviors that both increase the likelihood that a house is sold via dual agency and that influence the price and speed of transactions in a manner consistent with our results. Using our results, we then examine whether prohibiting dual agency might reduce or eliminate these behaviors, and how this might affect welfare of buyers and sellers.

5.1. Observable Variables Affecting Sale Price and Time-to-sale

We consider many observable factors that are likely to affect final sale price and time-to-sale for residential houses. These factors can be broadly grouped as: property-specific, agency-specific, agent-specific, time-specific, and market-specific. Consider first property-specific variables. In our regressions, we include various hedonic descriptors of the property including number of bedrooms, number of bathrooms, number of other rooms, fireplaces, capacity of the garage(s), etc. We also include dummies for various amenities, including an eat-in kitchen, pool, finished basement, etc. In addition, we include dummies for house style (e.g. Colonial, Cape Cod, etc.), type of fuel (e.g. gas, oil, etc.), age of the house, seller agent’s assessment of the house’s condition (e.g. excellent, mint, good, etc.), and other characteristics (see Table 1 for a complete list of house characteristics for which we control). In some cases, we also include the list price of the house to control for features of house quality like southern exposure of the house, new countertops, etc., that are not observable in the data.

11 The data also contain a variable measuring square footage; however, lot size, instead of actual square footage, was entered in some cases. Moreover, this variable is missing in many cases. Nonetheless, our results are generally robust to inclusion of this variable.  
12 Taylor (1999) suggests that a house with a low list price sitting on the market for a long time can be viewed as a lemon. Genesove and Mayer (1997) show that sellers with lower equity positions built in the house set higher list prices and receive higher sale prices. Our inclusion of list price captures these effects too.
Next, agencies might differ systematically in price setting and time-to-sale. For example, ReMax agents keep 100% of the commission of the transaction and pay the agency fixed fees for office usage and other overheads. In most other agencies, agents give half of their commission to the agency to cover “desk costs” (Munneke and Yavas, 2001). These compensation differences might alter price-setting behavior and time-to-sale. Agencies also might differ in their market power. These differences in market power and size might cause systematic differences in dual agency. For example, a larger agency might expect to be able to set a higher list price and obtain a higher sale price, and at the same time have a higher incidence of dual agency because of more agents working for the firm. In addition, because of differences in inventories of unsold houses, agencies might face varying pressure to sell houses. We control for such agency differences by including seller agency fixed effects in our models.

Agents’ differences might also affect price and time-to-sale. For example, agents might differ in their reputation, ability to bargain, expertise, discount factors (e.g. as a function of the inventory of unsold houses and number of buyers they serve), etc. These differences might be systematically correlated with dual agency. For example, a seller who hires a reputed agent might set a high list price with the expectation of getting a higher sale price. This reputed agent might have a longer list of buyer clients than other agents and therefore end up being a dual agent more often. To control for the influence of these factors on sale price and time-to-sale, we include seller agent-specific fixed effects in our models.

Finally, time-varying and time-invariant market-specific variables are also likely to influence our key variables. Some of these market-specific variables include school district quality, tax rates, current interest rates, expected future interest rates, employment rate, inventory of unsold houses and new home construction, trends in the industry (e.g., internet penetration, which gives buyers information beyond that provided by agents),

13 Note that agency and agent fixed effects are not collinear because agents change agencies within the sample.
and concentration of real estate agents\(^{14}\). We include zip code-year fixed effects to account for these variations.

### 5.2. Relating Dual Agency to Sale Price and Time-to-Sale

We begin our analysis by comparing outcomes between dual and cross agency deals, controlling for a wide range of exogenous variables. By doing so, we effectively “difference out” any spurious correlation between our outcome variables (sale price and time-to-sale) and dual agency that is due to selection on these variables. This allows us to better identify the net effect of underlying behaviors that both increase the likelihood that a house will be sold via dual agency and affect the price and speed of transactions. To do so, we use dual agency as a proxy for the unobservable agent behaviors. The estimated coefficient on dual agency provides an estimate of the net effect of these behaviors.

We first estimate the following equations for the sale price for house \(i\) listed in year \(t\):

\[
\begin{align*}
\ln \text{Sale Price}_it &= \alpha_1 X_{1it} + \alpha_2 X_{2it} + \beta_1 \text{DualAgency}_it + \epsilon_{it} \\
\ln \text{Sale Price}_it &= \alpha_1 X_{1it} + \alpha_2 X_{2it} + \alpha_3 \text{ListPrice}_it + \beta_1 \text{DualAgency}_it + \epsilon_{it}
\end{align*}
\]

In these equations, \(X_1\) contains house characteristics, and \(X_2\) contains fixed effects for zip code-years, agencies, and agents, as described in Section 5.1. We estimate these equations (and all succeeding equations that include dual agency as a covariate) two different ways: (a) including the \textit{DualAgent} and \textit{WithinAgency} variables, and (b) using the \textit{AllDualAgency} variable, which combines the two categories of dual agency. In equation (1b), we also include the list price. The list price controls for house characteristics that are unavailable to us in the data but are observable to buyers and sellers and therefore affect list price and sale price. The list price might also capture

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\(^{14}\) Hsieh and Moretti (2003) show that the low cost of entry into the residential real estate agent market causes the number of agents to be positively related to the cost of land (and hence the size of the commission in any transaction) in the market. Our zip code-year fixed effects control for both market-specific land price differences, and competitive structure differences.
house characteristics that are observable to sellers but less perfectly observable to buyers (e.g. a quiet neighborhood, or year-round weather-readiness of the house). In addition, it might be systematically correlated with behavior(s) of selling agents. As we will discuss below, the difference in the two regressions can aid us in assessing the underlying behavior(s) generating the results we find.

The results for both equations are in Table 5. The estimates for equation (1a) (columns 1 and 2) indicate that, holding our control variables fixed, sale prices are not different in dual-agency deals. However, the estimates for equation (1b) (columns 3 and 4) indicate that, after controlling for the list price, sale price is lower for dual-agency deals than for cross-agency deals. Moreover, the difference is greater for dual-agent deals than for within-agency deals.\textsuperscript{15}

These results imply that the list price is higher on dual-agency deals. To confirm this, we estimate the following model:

\begin{equation}
\ln \text{List Price}_{it} = \alpha_1 X_{1it} + \alpha_2 X_{2it} + \beta_1 \text{DualAgency}_{it} + \epsilon_i
\end{equation}

We report the results in the final two columns in Table 5. Taken together, the results in Table 5 indicate that while list prices are higher on dual-agency deals, sale prices are not. Below, we discuss agent behaviors that might generate these results.

---Insert Table 5 here---

Next, we estimate the following equations for time-to-sale, which are symmetric to equations (1a) and (1b):

\begin{equation}
\ln \text{TimeToSale}_{it} = \alpha_1 X_{1it} + \alpha_2 X_{2it} + \beta_1 \text{DualAgency}_{it} + \epsilon_{it}
\end{equation}

\begin{equation}
\ln \text{TimeToSale}_{it} = \alpha_1 X_{1it} + \alpha_2 X_{2it} + \alpha_3 \text{List Price}_{it} + \beta_1 \text{DualAgency}_{it} + \epsilon_{it}
\end{equation}

\textsuperscript{15} This difference is statistically significant at .022.
The results for these equations are in Table 6. These results indicate that dual-agency deals close about seven percent (on average, about six days) faster than cross-agency deals\textsuperscript{16}. Moreover, we see that the difference is about the same for within-agency deals and dual-agent deals. In contrast to the sale price results (Table 3), the timing results are essentially unchanged by the inclusion of the list price as an explanatory variable (columns 3 and 4). We now turn to examining possible mechanisms for these results.

---Insert Table 6 here---

5.3. Explaining Three Results

In this subsection, we assess what types of agent behaviors might explain the results we report in Tables 5 and 6. Specifically, we want to identify agent behaviors that can explain the three key results: (1) there is no difference in sale price between dual and cross agency deals; (2) list price is higher on dual-agency deals than on cross-agency deals; and (3) houses sell faster in dual-agency deals than in cross-agency deals (even when we control for list price). We propose agent behaviors that can individually or jointly generate these results. We then discuss welfare implications from these behaviors.

5.3.1. First-resort Selling

The first behavior we propose is first-resort selling. As part of this behavior, agents routinely show houses to internal clients before external clients. By doing so, the agent is altering the search process for both buyers and sellers; there is no assumption that the agent leans on the seller or the buyer in the negotiation process, should a potential match be found. This behavior reflects the incentive misalignment in the search

\textsuperscript{16} Note that the marginal effects that we report are approximations. The marginal effect in a semilog specification, like ours, equals \( \exp(\beta) - 1 \) (Thornton and Innes, 1989). Nonetheless, in our results, the estimated coefficients and the marginal effects on the dual agency variables never differ by more than 0.006. Therefore, we simply report the estimated coefficients.
stage of the home purchase, as agents are responding to the private incentives associated with dual-agency transactions.

First-resort selling is consistent with all three results we find above. It is consistent with dual-agency deals closing faster (result 3) simply because, if a house sells fast, it likely was sold to one of the first buyers to view it, and this early viewer was likely an internal client if first-resort selling is taking place. Next, if we assume that a high list price increases the probability of the deal concluding via dual agency, then first-resort selling can also explain why list prices are higher in dual-agency deals (result 2).

To see why this assumption might hold, consider a seller of a house that has features that are more experience-good in nature, and cannot be captured by the house descriptors in our data. For example, this house might be in a quiet neighborhood, have uniform heating in the winter, or trees protecting the house from overheating in the summer, etc. In setting the list price for such a house, the seller might not be confident of setting a price high enough to capture all of these house qualities, given the difficulty in credibly explaining them to a buyer. However, the seller might still set a price higher than the expected price based on pure observables. Therefore, while the list price might seem high relative to observables, the house is still a good deal after factoring in the good unobservables. If agents routinely show houses to internal clients before showing them to external clients, some of these internal clients will recognize a good deal and close the deal fast. And these same buyers might trust their own (dual) agent explaining these house features more than they would trust an independent seller’s agent. Therefore, the dual agent can use her central position in the deal to aid the search/match process. This mechanism then can explain the higher list prices on dual-agency deals, and is also consistent with faster sales in dual agency. However, this mechanism would seemingly predict higher sale prices in dual agency.\(^\text{17}\).

\(^\text{17}\) Alternatively, in the case of a house with negative unobservables, the seller might choose to partially discount the list price, but not low enough to fully reflect the negative unobservables. In this case, these houses would be underpriced relative to observables, but overpriced relative to the unobservables. If agents routinely show houses to internal clients first, these clients would be less likely to buy these houses. Therefore, these houses would take longer to sell, again yielding faster dual agency sales, and higher list prices in dual agency. However, here again, this would predict higher sale prices in dual agency.
First-resort selling can also generate similar sale prices for dual and cross agency deals (1). To see this, consider that first-resort selling has opposing effects on sale price: Although the houses with positive unobservables are likely to be snatched up by internal buyers at high sale prices (relative to observables), the misalignment of incentives between the agent and client, resulting from the agent pursuing a dual-agency deal, is likely to have a negative effect on price. Specifically, the agent’s attempts to show houses to internal clients first may result in inferior matches, as compared to the agent looking for the most interested buyers, regardless of their representation. Inferior matching will put downward pressure on sale prices, which can offset the positive effect of internal buyers buying the houses with good unobservables, resulting in a null overall correlation between dual agency and sale price.

Agents might also influence buyers’ search by trying to steer buyer clients to specific internal listings that the agents believe are good deals, i.e. where the list price is low, or where the agent believes the seller would be willing to accept a low sale price, relative to the observable and unobservable characteristics of the house. The agent would have an incentive to do so in order to avoid losing the buyer client to another agent or agency.

Consistent with our results, such behavior would yield faster sales in dual agency, as internal buyers would snap up the good deals. Moreover, this behavior should also yield lower sale prices in dual agency, after controlling for unobservables, which is also consistent with our results (when we include the list price to control for unobservable quality). In fact, this behavior is a type of targeted first-resort selling, where agents don’t necessarily show all internal sellers’ houses to internal buyer clients first, just the ones that are good deals\(^\text{18}\).

If first-resort selling is occurring, its empirical implications should be most pronounced on very fast deals. That is, because agents show houses to internal buyers first, the incidence of dual agency should be disproportionately high on very fast deals,\(^\text{18}\)

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\(^{18}\) We also consider a different type of cherry picking, in which agents try to steer internal buyers to houses with higher expected sale prices. However, we find no evidence that the probability of dual agency increases with expected sale price.
where the house never gets shown to the external market. To assess this possibility, we examine whether the incidence of dual-agency deals is greater for very fast deals. The first three columns of Table 7 provide evidence that this is the case. Using different thresholds of time-to-sale, we see that unusually fast deals are more likely to be done via dual agency (consistent with correlation (3)). This is consistent with first-resort selling.

---Insert Table 7 here---

To further examine this mechanism, we rerun the list price regression (equation (2)), including only those houses that sell in 21 days or fewer. We report the results of this analysis in the first two columns of Table 8.

---Insert Table 8 here---

The relationship with dual agency remains positive and statistically significant. More importantly, the magnitude is much larger than it is in Table 5, where we include the entire sample. Among deals closing within 21 days, sellers set list prices about ten percent higher for dual-agency deals than for cross-agency deals. This result is consistent with agents first showing all houses to internal buyers, who quickly buy those houses that have good unobservables that are not fully reflected in the list price, driving result (2).

Next, we re-estimate equation (1a), again including only those deals that close within 21 days. The results, which we report in columns 3 and 4 of Table 8, reveal that dual-agency deals yield sale prices about five percent higher than cross agency deals. This is consistent with inferior matches resulting from agents manipulating the search process partially offsetting the effects from internal clients snapping up good deal houses. The effects of inferior matching are likely to be present well beyond these very fast sales, which could then generate result (1) (i.e., no overall difference in sale price between dual and cross agency deals).
Taken together, the results in Tables 5-8 are notably consistent with empirical predictions of first-resort selling behavior. However, there are other possible agent behaviors that could also help explain these results. We discuss these below.

5.3.2. Strategic Pricing

Consider now a situation where a seller’s agent advises her client to set a high list price for a house because she believes that there is a prospective internal buyer (either her own or one of her colleagues’) with a high WTP for the house (or a house of the same type). For example, an agent representing a client with a three-bedroom, two-bath house with cathedral ceilings, an eat-in kitchen, and a large back yard, might set a list price at $475,000 rather than $450,000, because she is aware that a colleague (or she, herself) has a client that is interested in finding a house with these particular features, who is willing to pay as much as $475,000. In this case, the agent influences the buyer’s search process (by guiding the buyer to this house). Within-agency match-making of high-WTP buyer clients and internal listings is enabled by weekly meetings in agencies where agents describe their available listings and search parameters of their buyers.

We label this behavior as strategic pricing. Here, the conflict of interest arises in the search phase, as the agent clearly favors the interests of the seller in attempting to match him with the buyer whose information they are exploiting. Although this behavior occurs before a match is made, it nonetheless reflects the conflict of interest in dual agency. Effectively, the agent anticipates the negotiation phase between internal seller and buyer, using private information about the internal buyer to inform the seller’s pricing strategy.

Like first-resort selling, strategic pricing is quite consistent with our results for very fast deals. Because strategic pricing implies that the selling agent has already identified a likely buyer when the house first goes on the market, we should expect to see a disproportionate number of very fast deals done via dual agency, as we see in Table 7\(^{19}\).

\(^{19}\) Recall that research has suggested that realtors are willing trade off a lower price for a faster deal. Strategic pricing suggests that dual agents do not have to make this tradeoff because of their unique position in the deal.
Further, the pricing effects of strategic pricing should manifest almost exclusively on fast deals, and this is consistent with the results in Table 8. Strategic pricing would predict higher list prices, particularly on fast deals, and this is what we find. Further, the results show that even after bargaining, in deals closing in three weeks or less, sellers still capture five percent more on dual-agency deals than on cross-agency deals. This suggests that strategic pricing helps sellers’ agents capture bigger commissions.

While strategic pricing may be occurring, we make two notes of caution. First, these deals are a small fraction of the total deals in the data. Of the 10,891 transactions in the data, 1165 (11%) deals conclude in under 21 days, and of these, 627 (54% of these fast deals, or 5.8% of all deals) are dual-agency deals. Therefore, strategic pricing, if it is occurring, appears to affect sale prices quite rarely. Second, strategic pricing cannot explain result (1), i.e. it fails to explain why we find no difference between the sale prices for dual-agency and cross-agency deals in the full sample. Therefore, strategic pricing alone cannot explain our three main findings.

5.3.3. Leaning on the Seller

In this subsection, we consider an additional agent behavior that can explain why sale prices are not higher on dual-agency deals, despite the fact that they have higher list prices. This behavior - leaning on seller to accept a lower sale price - in conjunction with strategic pricing, can offer an alternative explanation to first-resort selling for our three main findings. While strategic pricing yields higher sale prices on very fast deals, these gains may be offset by price-cutting on other deals, as agents lean on sellers to reduce prices, in order to capture both sides of the commission or to curry favor with colleagues, and to close deals faster. As noted above, buyer contracts are generally looser than seller contracts, so leaning on the seller may be seen as a less risky means of actively pursuing a dual-agency deal. Because the agent cannot fully represent both sides’ interests, these incentives lead her to side more with the buyer in the negotiation stage, at the expense of the seller. This explanation is consistent with the results for equation (1b), reported in columns 3 and 4 of Table 5, which show that conditional on the list price, sale prices are
lower on dual-agency deals. It is also consistent with our finding that homes sell faster in
dual agency, as agents lean on the seller to close dual-agency deals more quickly.

5.4. Economic Harm from Dual Agency

Our results provide little evidence that permitting dual agency has a substantial
negative impact on the welfare of either buyers or sellers in the residential real estate
market. Although our results are consistent with agents engaging in behaviors which are
driven by the conflict of interest and incentive misalignment that arises in dual agency, in
total these actions do not appear to substantially harm buyers or sellers. We find no
overall difference in the sale price of dual-agency transactions compared to cross-agency
transactions. Moreover, we find that dual-agency transactions close more quickly than
cross agency transactions. These results are consistent with agents engaging in first-resort
selling, which can harm both buyers and sellers by less efficiently matching buyers and
sellers. However, it does not appear that either buyers or sellers are being substantially
negatively affected.

Although our main results provide little evidence of substantial harm to either
buyers or sellers, these benign overall effects might mask more pernicious effects. When
we analyze very fast deals, we find that homes sold via dual agency sell for about five
percent more than comparable houses sold via standard, cross-agency transactions. In
other words, on very fast deals, it appears that buyers pay a substantial premium in dual
agency. Although these results, like the full-sample results, may be consistent with first-
resort selling, these results for very fast deals are also consistent with agents engaging in
strategic pricing on some deals, while leaning on the sellers to reduce prices for internal
buyers in other deals. Unfortunately, we cannot econometrically isolate which of these
behaviors is taking place. Nevertheless, it appears that these behaviors are occurring in
such a way that the net harm to buyers and sellers, across all deals, is small. Further, any
negative effects on the transaction price may be at least partially offset by the greater
speed of dual-agency transactions which can favor both buyers and sellers.
Dual agency’s negative relationship with time-to-sale could reflect a welfare gain or loss, depending on the underlying agent behavior driving this result. For example, this may reflect a loss if agents are engaging in first-resort selling, or if they are learning on sellers to accept reduced prices from internal buyers, yielding worse matches than would result if dual agency were prohibited. Both of these behaviors, steering buyers to internal clients and/or leaning on sellers to accept a lower offer from an internal buyer, could lead to these clients settling for an inferior deal than one they would have found if dual agency were prohibited. Further, buyers could face a net loss if strategic pricing is taking place – they get the house faster, but at a substantially higher price. However, faster sales can represent a welfare gain if the benefits from buying/selling a house more quickly outweigh these potential losses.

Beyond these agent behaviors, buyers and sellers benefit if faster transactions come from improved transactional or information efficiencies of dual agency. There is no way for us to fully determine from the data if the faster transactions reflect welfare-improving transaction/information efficiencies or potentially welfare-reducing steering/pressuring. However, given dual agency’s mild relationship with prices, it seems unlikely that a single welfare-reducing (to buyers or sellers) behavior is driving the negative correlation with time-to-sale. Hence, we cautiously conclude that faster time-to-sale for dual-agency transactions represent no net welfare loss in our data.

### 5.5. Policy Implications

Our results are consistent with three different agent behaviors: first-resort selling, as well as strategic pricing and leaning on the seller. Importantly, these behaviors reflect different underlying incentive issues. First-resort selling results from agent-client incentive misalignment (where the agent is favoring her own interest over the client’s), whereas strategic pricing and leaning on the seller arises from the conflict-of-interest inherent in dual agency (where the agent is favoring the interests of one client over those of another client).
As mentioned previously, much of the legal and market debate on dual agency has focused on the conflict of interest in dual agency. None of the regulatory responses has tried to address the incentive misalignment that underlies first-resort selling, a behavior that is consistent with our results, and which increases the incidence of dual agency. If regulatory or contractual interventions could address the incentive misalignment in the search stage, this might be an effective way to substantially reduce the incidence of dual agency. Consequently, our results, indicating first-resort selling as a potential driver of dual agency, suggest the need to broaden the discussion of dual agency to focus on the agent’s enhanced ability to further her own interests in these transactions. In that sense, the policy issues surrounding dual agency are not so dissimilar to those in standard, cross-agency deals (see section 2.1 for a discussion of single-agency issues). Similarly, discussions of real estate agent behavior, usually viewed in a standard, cross-agency context, (e.g. FTC’s October 2006 ruling against MLS services as limiting consumer choice) must recognize that dual agency also suffers from similar issues.

Although dual agency misaligns agent incentives and creates conflicts of interest for agents, consistent with arguments made by Agrawal and Chen (2007), several factors may explain why these conflicts of interest cause little economic harm in the Long Island real estate market. This can be for two broad reasons: the efficacy of laws in the New York state, or the efficacy of the residential real estate market-place in solving the conflict-of-interest problem.

Among the possible industry features that might cause mild welfare effects are that there might be some market place responses in Long Island, along the lines discussed in section 3.2. In addition, several industry features might have helped as well. These include due diligence by buyers and sellers becoming easier due to the internet, especially in the time period we are studying (2004-2007). In addition, barriers to entry in the real estate industry are low, with very few educational requirements for becoming a realtor, and therefore the industry is likely to be quite competitive (as seen in table 1, our market has a large number of agents and firms).
So what is gained from prohibiting dual agency? Prohibiting dual agency would reduce or eliminate certain agent behaviors. Specifically, first-resort selling would no longer be possible and the ability to strategically price would be greatly reduced, since agents are less likely to have good inside information on buyers from other agencies. Further, agents would have no incentive to lean on sellers since the prospect of capturing both sides of the commission (in particular, guaranteeing they get the buyer’s commission) would no longer exist. Prohibiting dual agency would also eliminate any transaction and informational efficiencies and also shrink the number of potential matches for buyers and sellers. However, as noted above, in our data these behaviors and efficiencies appear to have little effect on overall welfare. Consequently, we conclude that prohibiting dual agency in real estate likely represents no welfare gain, and could actually result in a welfare loss.

Comparing the results for the Long Island housing market to other industries, the features of this industry that keep welfare effects small might not be present in other markets. For example, consider the market for merger and acquisition advisory services, where dual agency is prohibited. In this industry, the market for targets is thin (especially in hostile take-over situations). Therefore, in the absence of “comps” or comparable targets, it might be harder for both parties to independently assess a fair transaction price. Also the investment banking industry is significantly more concentrated than the real estate agency markets; there are higher barriers to entry for new firms. This might make buyers and sellers (and legislators) more skittish about trusting a dual agent. The Chinese Wall provisions in financial institutions are driven by similar rationales. However, if the industry were to become more competitive, then dual agency would likely pose less of a problem. Similarly, if it were easier to accurately assess the value of a target to an acquirer, then a dual agent could not influence sale (and asking or list price), and therefore negative welfare effects of dual agency would be unlikely.

In legal transactions, law firms do not represent both sides of a lawsuit, likely because of the obvious need for protecting the privacy of communication between lawyer and client. Also lawyers are more likely to be acutely aware of possible legal
repercussions should either party to the lawsuit detect lack of good representation. Most critically, parties to a lawsuit might have only a single chance of achieving their goal. For example, a divorcing party might find it very expensive or impossible to appeal a divorce settlement should the parties (or only one of them) fear a dual agent compromised their interests. Similarly, double jeopardy might apply to criminal cases, making it impossible to go judge-shopping till a favorable outcome is reached. This is unlike house buying or merger advisory services where parties may walk away from a prospective deal if they fear a dual agent is not serving their interest.

Summarizing, competition can help mitigate harmful effects of dual agency in several markets, yet some markets (like legal transactions) might have unique features that make it impossible to allow dual agency.

6. Concluding Remarks

We find that houses sold via dual agency sell at about the same sale price as similar houses that are sold in cross-agency transactions, but houses sold via dual agency have higher list prices and sell about seven percent faster. To understand these results, we consider a variety of agent behaviors that might both increase the likelihood of dual agency and also affect the price and speed of transactions. These actions highlight the conflict of interest and/or misaligned incentives agents face in dual-agency deals. We argue that first-resort selling and/or strategic pricing in conjunction with seller leaning are consistent with our empirical results. Each of these behaviors has welfare ramifications; however, the net effect appears to be small.

Overall, our results suggest that there are relatively benign welfare implications for both price and time-to-sale. This is in line with Mehran and Stulz’s assessment of the finance literature on conflicts of interest. Therefore, prohibiting dual agency is likely an overreaction, especially as prohibition reduces choices for both buyers and sellers. Additionally, it is not clear that legal requirements for practices like Chinese Wall provisions for dual-agency transactions are required, given the benign effects we find in our data. Finally, the similarity of our results for dual-agent and within-agency deals are
also important from a policy perspective, because in some states, like Colorado and Maryland only within-agency deals are permitted. Our findings suggest that this distinction between types of dual agency might not be effective for policy.

Certain features of the real estate market might explain the mildness of our welfare results, and these features might not be present in other industries or the same industry in other locations. A useful avenue for further research is to examine whether our results from the Long Island, NY market generalize to other markets and industries where dual agency is permitted.
Bibliography


Harris, L. (2003), Trading & Exchanges: Market Microstructure for Practitioners, Oxford University Press


Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (Std Deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale price ($)</td>
<td>568,805 (361,462)</td>
</tr>
<tr>
<td>List price ($)</td>
<td>596,960 (400,070)</td>
</tr>
<tr>
<td>Time-to-sale (days)</td>
<td>83.11 (69.67)</td>
</tr>
<tr>
<td>All dual agency (% of all transactions)</td>
<td>0.47 (0.50)</td>
</tr>
<tr>
<td>Dual agent (% of all transactions)</td>
<td>0.26 (0.44)</td>
</tr>
<tr>
<td>Within-agency (% of all transactions)</td>
<td>0.21 (0.41)</td>
</tr>
<tr>
<td>House characteristics ($X_1$)*</td>
<td></td>
</tr>
<tr>
<td>Number of rooms</td>
<td>7.37 (1.62)</td>
</tr>
<tr>
<td>Number of bedrooms</td>
<td>3.54 (0.89)</td>
</tr>
<tr>
<td>Number of bathrooms</td>
<td>2.05 (0.81)</td>
</tr>
<tr>
<td>Family room</td>
<td>0.52 (0.50)</td>
</tr>
<tr>
<td>Dining room</td>
<td>0.90 (0.31)</td>
</tr>
<tr>
<td>Eat-in kitchen</td>
<td>0.87 (0.34)</td>
</tr>
<tr>
<td>Number of fireplaces</td>
<td>0.42 (0.61)</td>
</tr>
<tr>
<td>Dryer</td>
<td>0.76 (0.43)</td>
</tr>
<tr>
<td>Basement</td>
<td>0.87 (0.33)</td>
</tr>
<tr>
<td>Finished basement</td>
<td>0.67 (0.47)</td>
</tr>
<tr>
<td>Garages</td>
<td>1.08 (0.70)</td>
</tr>
<tr>
<td>Driveway</td>
<td>0.97 (0.17)</td>
</tr>
<tr>
<td>Pool</td>
<td>0.09 (0.28)</td>
</tr>
<tr>
<td>Year built</td>
<td>1945 (19)</td>
</tr>
<tr>
<td>New construction (1 = yes)</td>
<td>0.03 (0.16)</td>
</tr>
<tr>
<td>Other controls ($X_2$)</td>
<td></td>
</tr>
<tr>
<td>Zip code-years</td>
<td>429</td>
</tr>
<tr>
<td>Agencies</td>
<td>1,010</td>
</tr>
<tr>
<td>Agents</td>
<td>4,375</td>
</tr>
<tr>
<td>N</td>
<td>10,891</td>
</tr>
</tbody>
</table>

* In addition to these variables, we also include dummy variables for different categories of house style, type of construction (14 categories), type of fuel used (4 categories), type of heating system (6 categories) and general condition/appearance (17 categories).
Table 2: Comparing Means for Dual-Agency and Cross-Agency Deals

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dual Agency</th>
<th>Cross Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale price ($)</td>
<td>565,185</td>
<td>572,030</td>
</tr>
<tr>
<td>List price ($)</td>
<td>596,669</td>
<td>597,219</td>
</tr>
<tr>
<td>Time-to-sale (days)</td>
<td>81.5</td>
<td>84.5</td>
</tr>
<tr>
<td>N</td>
<td>5,132</td>
<td>5,759</td>
</tr>
</tbody>
</table>

Table 3: Agency Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (Median)</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency size (agents)</td>
<td>34.73 (9)</td>
<td>1</td>
<td>209</td>
</tr>
<tr>
<td>Branches</td>
<td>4.64 (1)</td>
<td>1</td>
<td>31</td>
</tr>
</tbody>
</table>

N=1010 agencies

Table 4: The Relationship Between Within-Agency Deals and Agency Size

Dependent variable: Within-Agency Transaction Indicator Variable  
Estimation method: Probit

<table>
<thead>
<tr>
<th>Variable</th>
<th>Marginal Effect (std error)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln(Agency size)</td>
<td>0.011 (0.008)</td>
</tr>
<tr>
<td>N</td>
<td>10891</td>
</tr>
</tbody>
</table>
Table 5: The Relationship Between Sale and List Price and Dual Agency

Dependent variable: Ln(Sale Price) for columns 1-4, Ln(List Price) for columns 5&6
Estimation method: OLS

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual-agent deals</td>
<td>0.002</td>
<td>-0.008**</td>
<td></td>
<td></td>
<td>0.011*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.001)</td>
<td></td>
<td></td>
<td>(0.004)</td>
<td></td>
</tr>
<tr>
<td>Within-agency deals</td>
<td>0.004</td>
<td>-0.004**</td>
<td></td>
<td></td>
<td>0.009+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.001)</td>
<td></td>
<td></td>
<td>(0.005)</td>
<td></td>
</tr>
<tr>
<td>All dual agency</td>
<td>0.003</td>
<td>-0.007**</td>
<td></td>
<td></td>
<td>0.010**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.001)</td>
<td></td>
<td></td>
<td>(0.004)</td>
<td></td>
</tr>
<tr>
<td>Ln(List price)</td>
<td></td>
<td>0.945**</td>
<td>0.945**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within R-square</td>
<td>0.73</td>
<td>0.73</td>
<td>0.98</td>
<td>0.98</td>
<td>0.73</td>
<td>0.73</td>
</tr>
<tr>
<td>N</td>
<td>10,891</td>
<td>10,891</td>
<td>10,891</td>
<td>10,891</td>
<td>10,891</td>
<td>10,891</td>
</tr>
</tbody>
</table>

+ Significant at 0.10; * Significant at 0.05; ** Significant at 0.01.
Standard errors, clustered by agent, are in parentheses.
All regressions include all house characteristics (X₁) and seller agent, seller agency, and
zip code-year fixed effects (X₂), as described in section 5.1.
Table 6: The Relationship Between Time-to-Sale and Dual Agency

Dependent variable: ln(Time-to-sale)  
Estimation method: OLS

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual-agent deals</td>
<td>-0.071**</td>
<td></td>
<td>-0.070**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.027)</td>
<td></td>
<td>(0.027)</td>
<td></td>
</tr>
<tr>
<td>Within-agency deals</td>
<td>-0.085**</td>
<td></td>
<td>-0.084**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.028)</td>
<td></td>
<td>(0.028)</td>
<td></td>
</tr>
<tr>
<td>All dual agency</td>
<td></td>
<td>-0.077**</td>
<td></td>
<td>-0.076**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.022)</td>
<td></td>
<td>(0.022)</td>
</tr>
<tr>
<td>Ln(List Price)</td>
<td></td>
<td></td>
<td>-0.131**</td>
<td>-0.131**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.078)</td>
<td>(0.078)</td>
</tr>
<tr>
<td>Within R-square</td>
<td>0.18</td>
<td>0.18</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>N</td>
<td>10,891</td>
<td>10,891</td>
<td>10,891</td>
<td>10,891</td>
</tr>
</tbody>
</table>

Significant at 0.10; * Significant at 0.05; ** Significant at 0.01.  
Standard errors, clustered by agent, are in parentheses.  
All regressions include all house characteristics ($X_1$) and seller agent, seller agency, and zip code-year fixed effects ($X_2$), as described in section 5.1.

Table 7: Assessing The Likelihood of Dual Agency in Short And Long Deals

<table>
<thead>
<tr>
<th>Time-to-sale (in days) (overall mean = 83.11)</th>
<th>&lt;=14</th>
<th>&lt;=21</th>
<th>&lt;=30</th>
<th>&gt;=120</th>
<th>&gt;=180</th>
<th>&gt;=240</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of dual agency deals (Overall mean=0.47)</td>
<td>0.62</td>
<td>0.55</td>
<td>0.51</td>
<td>0.46</td>
<td>0.45</td>
<td>0.44</td>
</tr>
<tr>
<td>N</td>
<td>438</td>
<td>1,044</td>
<td>2,102</td>
<td>2,372</td>
<td>948</td>
<td>403</td>
</tr>
</tbody>
</table>
Table 8: The Relationship Between Sale Price, List Price And Dual Agency On Fast-Closing Deals (A Test of Strategic Pricing)

Estimation method: OLS

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dependent variable: List Price</td>
<td>Dependent variable: List Price</td>
<td>Dependent variable: Sale Price</td>
<td>Dependent variable: Sale Price</td>
</tr>
<tr>
<td>Dual-agent deals</td>
<td>0.097** (0.031)</td>
<td></td>
<td>0.054+ (0.028)</td>
<td></td>
</tr>
<tr>
<td>Within-agency deals</td>
<td>0.103** (0.037)</td>
<td></td>
<td>0.049 (0.039)</td>
<td></td>
</tr>
<tr>
<td>All dual agency</td>
<td></td>
<td>0.101** (0.030)</td>
<td></td>
<td>0.051+ (0.030)</td>
</tr>
<tr>
<td>Within R-square</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
</tr>
<tr>
<td>N</td>
<td>1165</td>
<td>1165</td>
<td>1165</td>
<td>1165</td>
</tr>
</tbody>
</table>

+ Significant at 0.10; * Significant at 0.05; ** Significant at 0.01.

Standard errors, clustered by agent, are in parentheses.

All regressions include all house characteristics ($X_1$) and seller agent, seller agency, and zip code-year fixed effects ($X_2$), as described in section 5.1. All regressions only include houses that sold in 21 days or less.