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What added value of Estate Agents compared to FSBO transaction? Explanation from a perceived advantages model

DRM ó Working paper

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What added value of Estate Agents compared to FSBO transaction? Explanation from a perceived advantages based model

Abstract:

This paper aims at explaining the determinants of using an estate agent vs. conducting a private sale on the French housing market. From a survey that collected 4,142 responses relating to effective completed transactions, the results show that the decision of whether to use an estate agent is not explained by the physical or spatial features of the property or socio-demographic variables. But by buyersøand sellersøheterogeneous perceptions of whether it is worthwhile to use estate agents, of how far they feel themselves having market expertise, and their wish to complete quickly. Five perceived transaction costs explain why buyers and sellers use brokerage intermediation, in a consumerøs standpoint.

Key-words: residential property market, intermediation, market expertise, time pressure

1. INTRODUCTION

Understanding the reasons why consumers decide, or not, to use services from a broker to process a real estate transaction is crucial. The knowledge of expected advantages are important to implement a relevant communication strategy and to get success. The intense competition between brokers requires them to be able to positively differentiate from the others. Today, their competitors are not only other professionals but also individuals, i.e. buyers and sellers that choose a private sell.

In France, the actual context is specified by a few platforms providing individuals and professionals with means and tools specifically dedicated to achieve the real estate transaction. For instance, local information, market prices, legal statements and home ads are easily available on different websites. In the French market, achieving a real estate transaction directly via sale by owner is not a "horror movie". However Violand et al. (2007) showed that intermediaries manage about 80% of the total amount of real estate transactions. From the professionalsøpoint of view, brokers appear to be still useful because of their expertise (Black et al. 2003). But, what does this vague notion of "expertise" really means in a context of free and large information available? Why people pay broker to assist them? It raises the issue of the "added value" broker services offer to buyers and sellers compared to individuals. This study aims to gain a better understanding of the benefits perceived as being useful and relevant by the buyers and sellers.

This research proposes to explore the underlying dimensions of the current added value of brokers beyond the usual rent provided by the information asymmetry. While the literature provides relatively in-depth explorations of the influence of agents on sale prices (Violand et al. 2007; Bajtelsmit and Worzola, 1997) or the time taken to find a suitable property or a buyer (Elder et al. 2000), there is little research that takes the consumerøs standpoint to understand the determinants of opting for a costly broker, that could offer differentiated services, or even for a non-intermediated transaction. Echoing the call by Crozier and McLean in 1997, this study aims to fill that gap by proposing some explanations, arguing that the modulations in the decision to use a real estate agent is explained not directly by physical or spatial features of the properties,

¹ For Sale by Owner is a 2009 horror film

or socio-demographic features of the individuals involved, but rather by the perceived advantages. This research deliberately adopts the decision-maker¢s position rather than taking a macro sector-level view, in order to examine the expectations of the intermediation services. A conceptual framework has emerged from qualitative interviews and is empirically tested on two different groups, buyers and sellers, both who already experienced a real estate transaction. Five major advantages are identified and put in relation first with the decision to use agents¢ services or C2C websites and second with the commercial statements used by the brokers. This study shows that the perceived advantages mediate the effect of commercials on the decision to use agents services. Finally results are discussed and avenues for future researches are proposed.

2. LITERATURE REVIEW, FRENCH MARKET

a. Intermediation or not? The two distinct markets

The presence or absence of intermediaries relates to two distinct market logics. In the first case, one or more agents are supposed to operate as market intermediaries between sellers and buyers efficiently in centralised markets (Bailey, 1996; Hacket, 1992), such as in retail sales networks, networks of financial brokers or auction houses. In such markets, intermediaries are supposed to provide consumers with information about the opposite market side and offer services like the categorization and evaluation of goods, thus assuring quality (Hänchen and Ungern-Sternberg 1985) and establishing confidence between the parties. They select optimal interactions improve coordination between sellers and buyers (Baligh and Richartz, 1967) and sometimes support and execute transactions (Hacket 1992). Though they work for themselves and on behalf of the seller, intermediaries establish themselves often as a neutral third party (Buxmann et Gebauer, 1998).

In the second case, buyers and sellers meet directly on dedicated marketplaces. Like small local markets or Middle Eastern bazaars, there can be a large number of interactions between parties with no õmiddle menö to organise them. This type of market structure appears broadly facilitated by the diffusion of information, and sometimes presented as a threat to real estate agents (Tucillo, 1997, Briody, 1997). Today, the õMake it yourselfö trend competes with the perceived added value of real estate intermediaries (Williams, 2004). Owners' network's

websites such as *owners.com* and *forsalebyowner.com* in the United States or *pap.fr* and *leboncoin.fr* in France, are consumer-to-consumer internet platforms where sellers have the opportunity to market themselves their homes. These sites promote properties in a well-organised way, similar to professionals. In addition, sellers and buyers can find out all relevant information easily such as average prices, interest rate calculations, legal documents or technical diagnostics providers (compulsory in France), etc. Nowadays, processing the search and achieving the transaction without a broker appears definitely feasible. From an economic perspective, the seller expects to enjoy a larger share of the profit, and the buyer to benefit from wider choice and lower prices. However, according to Hendel *et al.* (2007), a low effectiveness of FSBO platforms in terms of time to sell and probability of a sale can be observed and it is mainly explained by the small network size.

b. The French real estate brokerage industry

The real estate agent is an intermediary involved in the transactions of purchase, sale, exchange, subletting or rent of properties. He represents one of the parties which can be the buyer, the seller, the owner or the tenant. In France, the ethics of real estate activities is defined by the Hoguet act.. For transactions, the real estate agent is most part of the time appointed by the seller but he has the obligation to inform and advice also all the prospective buyers. He also has to facilitate the bargaining process and complete the transaction. The agent has to give a fair estimation of the house to the seller. Since January 2006, three types of professional ID cards exist: transactions on buildings and business, real estate management, and listing agents. To obtain the professional ID card, the applicant has to satisfy several conditions² but it is fairly easy to obtain it. It is even easier to obtain a salesperson license (grey card). The only requirement is to never have been condemned for the same offences than those required for real estate agents. The salesperson generally employed by a real estate agency is in charge of matching buyers and sellers. His job also consists of routine tasks such as placing signs on

² Conditions are:

⁻ In terms of education he must hold either a two year degree after high school in the field of real estate or, a three year degree in the areas of legal, economic or commercial studies. If the applicant does not hold any of these diplomas, he must attest of a professional experience in the real estate sector either of at least three years if he has the high school diploma or an equivalent diploma, or of at least ten years if he has none of these diplomas (reduced to four years in the case of an executive position);

⁻ Having a financial guarantee which must be at least equal to the maximum amount of funds he will hold;

⁻ Obtaining a certificate from the register of the Chamber of Commerce;

⁻ Subscribing to civil liability insurance.

⁻ Having an attestation delivered by his bank specifying the account number on which the client α s money will be deposited

⁻ Never having been condemned for an offence quoted in the Hoguet law.

properties, posting advertisement in newspapers, on the Internet, or in the agency, and updating the clientsø files.

When a property seller seeks the assistance of a residential real estate agent—a brokerage contract is signed between both parties and it is compulsory in order to give mandate to the real estate agent to start searching for a buyer. The contract indicates the mission of the agent, the description of the house to be sold, the expiration date of the contract, the price wished by the seller for his house, the amount of the financial fees due to the agent. The fees can be flat or a percentage on the selling price generally set from 4 to 9%. The percentage of the commission varies according to the price of the house and generally the percentage decreases when the selling price increases. In practice, for tax reasons, these fees are added to the selling price of the house and therefore paid by the buyer once the transaction is signed.

c. The benefits of real estate intermediaries

What are the intermediaries for buyers and sellers? Real estate agents usually perform a variety of tasks and help buyers and sellers throughout all phases of the transaction. Real estate agents used to highlight their õknowledgeö and õexpertiseö to justify their fees, even though Lewitt and Syverson (2004) focused on their (mis)use of an informational advantage and Bernheim and Meer (2008) did not find evidence sellers benefit from their services.. The real estate literature has mainly focused on the impact estate agents have on economic outcome, such as selling price and time-on-the-market. Yet, the findings do not allow to conclude that a specific and single agent effect exists in real: agentsø features have no clear and univocal impact on housing prices, nor on the average time properties spend on the market until they are sold (Yang and Yavas, 1995; Zumpano et al. 1996; Jud and Winkler, 1994; Jud et al. 1996; Munneke and Yavas, 2001; Turnbull and Dombrow, 2007). More specifically, certain studies explore the reasons for choosing one real estate agent rather than another: the most important factors appear to be the agent acquaity to be on the same wavelength as the seller, the agency are reputation, the agent knowledge and skills (Johnson et al. 1988; Nelson and Nelson, 1991). Brokers are therefore supposed to provide consumers with expertise, which means basically precise information, much of which concerns the valuation of the property (Sass, 1984; Hänchen and Ungern-Sternberg, 1985), and organisation of the transaction on behalf of clients (Bailey, 1996; Hacket, 1992). Researchers assert that in the context of total accessibility of information, agents have no intrinsic value: they ultimately drive up artificial costs (Tuccillo, 1997; Baen and

Guttery, 1997). In a study of the role of real estate brokers, Mantrala and Zabel (2000) propose that the competitive pressure of direct negotiations between sellers and buyers and relative free entry of brokers cast serious doubt about a general consensus of opinion that the brokerage system is characterized by price fixing, excessive commissions and excessive marketing costs.

Curiously, no research has really explored the reasons that still drive an individual to pay for estate agent services rather than handling the transaction himself. In line with Williamson works (1981), the existence of coordination of actors outside the market turns out to be a fruitful theoretical perspective. Intermediate and centralized markets are explained by market deficiencies and transaction costs. In real estate sector, the commercial process is based on an idiosyncratic and non standardised dwelling, each transaction appears, in a way, as specific. As a result, it involves high uncertainty between individuals who may be tempted to withhold information or distort it for their own profit (Coase, 1937). Since a real estate transaction requires skills and knowledge of information, the high cost of the associated work was traditionally considered to explain the existence of agents (Zumpano, Johnson and Anderson, 2003). Their existence was founded on information asymmetry and became established in the form of specific õinstitutional arrangementsö as defined by Williamson (1981). The real estate market being local and complex, with a strict legislation and many stakeholders, estate agents structured their business into networks of agencies organising contacts between buyers and sellers.

d. Make or buy?

Hence, going through an intermediary may be preferred over direct access to the market because it reduces transaction costs: those costs are defined as the sum of the *ex ante* and the *ex post* costs of the contract (Williamson, 1981). In the real estate sector, *ex ante* transaction costs are the most relevant and correspond to the first stage of the transaction: prospecting, negotiating, establishing the pre-contract, etc. Our analysis focuses not really on the objective transaction costs but rather on *perceived* transaction costs, i.e. the costs buyers or sellers think they have to face. This research undermines the level of the economic agent, buyer or seller, for whom the *make vs. buy* alternative (Rangan et al. 1992) echoes Williamsonøs *market vs. hierarchy* alternative: either he decides to deal directly with the market and bears all non-monetary costs himself (*market*), or he decides to purchase intermediation services and includes the transaction costs in an õinternalö contract with an agent (*hierarchy*). The transaction cost is thus objectified,

in monetary terms, by the agent himself for a bundle of different costs; this represents the opportunity cost of not going through the market. In their economic calculation, buyers and sellers should theoretically refuse the services of a real estate agent when the financial cost is perceived as excessive in view of its benefits. These heterogeneous perceptions, likely to influence the use of brokersø services, might lead to explain the duality in transaction modes.

This perspective of perceived transaction costs proposes that individuals take the õmake or buyö decision by comparing their perceptions of each option¢s transaction costs (Walker and Weber, 1984). In response to these monetary costs, estate agents offer services that have the specificity of being intangible, inseparable, heterogeneous and perishable, and thus very difficult to quantify until they have actually been supplied (Mc Daniel and Louargand, 1994). Since individuals cannot know the true level of such costs, they have to assess how valuable the benefits are to them. We therefore focus on perceptions of estate agents¢capacity to respond to the perceived transaction costs.. But what are really these perceived costs and therefore the related potential advantages of brokers in the eyes of buyers and sellers?

3. BEYOND THE INFORMATIONAL ADVANTAGES: THE PERCEIVED ADVANTAGES BASED MODEL

a. The three dimensions of real estate transaction costs

Contrary to everyday purchases of consumer goods, buying or selling a home is a financially, materially, and symbolically risky transaction for consumers (Nasar, 1989; Gibler and Nelson, 2003). It is the biggest commitment an individual will make in his whole life, to a place that is very meaningful to him³. In addition to the legal periods, the time it takes to find a suitable property or a solvent buyer, and to negotiate and sign the final contract, is generally estimated at more than three months (between 12 and 15 weeks according to Baryla, Zumpano and Elder, 1995). Real estate transactions are thus very specific because they are perceived much riskier, more complex and time consuming than other types of transaction, therefore transaction costs are specific and need to be well identified.

³ In France, financing the home purchase takes up around 23% of the family budget (Accardo and Bugeja, 2009) or 25% according to France national institute of statistics.

To bring out the perceived transaction costs of a real estate transaction, fifteen qualitative interviews were conducted with potential consumers, buyers and sellers. The first part of the interview guide assessed the perceived difficulties of the process leading to completion of a final sale contract, and a second part concerned the ways agents can help to reduce these difficulties. Analysis of the interviews reveals three main dimensions of transaction costs, and different risks ó thereby expected benefits - associated to each dimension. So, in addition to the informational advantage (Levitt, Syverson, 2004), compared to a direct transaction, advantages of an intermediary appear according the following dimensions:

- the *information search* dimension includes the "matching" benefit, answering the risk of not finding a suitable property or buyer, and the "saving time" benefit, answering the risk of not finding one fast; The expected advantages of an intermediary consists indeed in filling the goal of matching in effective way in terms of matching requirements, i.e. providing a *relevant outcome*, and achieving the transaction within an *efficient process*. The expected added value is therefore expressed in terms of otime consuming of services.
- the *transaction management* dimension, which includes the "reassurance" benefit, encompassing the risk that the transaction may not run smoothly and the "easier negotiation" benefit, answering the risk of not being able to conclude the negotiations unassisted (arguing with highlights, negotiating the price, etc.). The expected advantages therefore consists in *psychological security* advantage and *social facilitation* advantage in terms of facing someone to convince. The expected added value is here expressed in terms of õhuman expertö services.
- the *value for money* dimension, i.e. the risk that the final deal will not be financially beneficial (overvaluation of the property in a private sale, or the perceived costliness of the agent sees). This dimension refers the perception of the charges as or not a good deal to pay.

b. The consumersøperceived advantages of brokerage services

The proposed model consists in comparing perceived advantages of intermediaries to a situation of doing transaction by the individual own. Each of these five previous benefits is supposed to have a significant influence on the mode of transaction from the consumer perspective. The hypotheses associated to these are as follows.

- A relevant outcome: Striking the right balance between the buyer¢s budget and his õwish listö is the most difficult aspect of looking for a new home⁴. In the early phase of marketing and contract drafting, the real estate agent engaged by the seller finds the buyer a property that potentially meets his requirements, and finds the seller a solvent buyer (Baryla and Zumpano 1995). Finding a solution that matches requirements is one of the areas where an agent is expected to be more efficient than a direct home-buying website (Jud and Frew 1986; Hendel *et al.* 2007). This leads to the following hypothesis:

H1 ó The more consumers (buyers and sellers) think that using a real estate agent (vs. a private C2C transaction) will enable them to find a solution that **matches their requirements**, the more they conduct their transaction through a real estate agent (vs. privately).

- An efficient process: The time devoted to buying a new home, or the time it takes for a property to sell (õtime on marketö) is a variable often explored in the real estate literature; Miceli (1989) notes that sellers consider minimizing the amount of time it takes to obtain a pre agreed price. It is an objective item that can arguably be significantly reduced by using a real estate agent (Rubinstein and Wolinsky, 1987, Yavas, 1994). For a buyer, going through an estate agent provides access to a greater number of potentially suitable properties (Baryla and Zumpano, 1995; Elder et al. 1998), and it is in the agent¢s interest to sell properties fast. For sellers, brokers allow them to process more quickly the transaction, including achieving legal obligations. The perceived benefit for both the buyer and the seller lies in the idea that they can complete a sale more quickly through an estate agent than privately. This gives rise to the following hypothesis:

H2 ó The more consumers (buyers and sellers) think that using a real estate agent (vs. a private C2C transaction) means save time, the more they conduct their transaction through a real estate agent (vs. privately).

- The psychological security: McKenzie and Betts (2010) have shown that consumers use intermediaries when the situation is perceived as too complex. Here again, the estate agent reassures them by his capacity to handle this complexity, along with his knowledge of the very latest legal obligations. The perceived benefit is the greater psychological support and comfort estate agents can provide about all the risks inherent to the transaction (Hiscock and al. 2001),

⁴ Survey by the French real estate website PAP, 2012.

compared to using direct-contact C2C websites. This perceived psychological reassurance also covers the anticipated *ex post* transaction costs as defined by Williamson, i.e. the costs resulting from any problems or conflicts arising subsequently.

H3 ó The more consumers (buyers and sellers) think that using a real estate agent (vs. a private C2C transaction) is a **reassuring option**, the more they conduct their transaction through a real estate agent (vs. privately).

- The social facilitation: property sales involve interpersonal negotiations between two parties who have divergent interests: the buyer wants to purchase for as little as possible and the seller to sell for as much as possible (Baryla and Zumpano 2009). The occupier® emotional attachment to the property can also be an obstacle to proper valuation. The involvement of an intermediary, who is supposed to be an expert and work in the interests of both parties, should prevent these divergences turning into a conflict. The perceived benefit lies in the idea that the estate agent acts as negotiator in the final phase of the transaction, and it is not easier to negotiate directly with the seller or buyer than through the estate agent. In the negotiation phase agents provide help including houses visits management, support in defining the deal, writing offers, and setting up contracts with help for property loans (McKenzie, Bets 2010). The estate agent should make it easier for negotiations between the parties to reach agreement.

H 4 ó The more consumers (buyers and sellers) think that using a real estate agent (vs. a private C2C transaction) facilitates negotiation, the more they conduct their transaction through a real estate agent (vs. privately).

- The fees perception: In an intermediated relationship, the consumers ask a broker to work on their behalf in return for a monetary fee that is supposed to reflect the value of the work done. There is thus a cost/benefit analysis that leads the buyer or seller to explore how far it appears relevant to choose an intermediated transaction rather than a private sale. In France, agency fees are criticised as the highest in Europe. The perceived cost reflects the idea that it is not financially worthwhile to use an estate agent. Looking at the transaction as a whole, the financial cost represented by agency fees can be a hindrance to using an estate agent. This leads to the following hypothesis:
- H 5 The more consumers (buyers and sellers) think that using a real estate agent (vs. a C2C transaction) is financially worthwhile, the more they conduct their transaction through a real estate agent (vs. privately).

c. Competitive explanations : consumer self-expertise and time pressure

The decision to use an estate agent can be driven by factors other than buyersø and sellersø subjective perceptions. These other factors are the traditional objective variables studied in the research on real estate economics, such as the features of the property (type of property, number of rooms, location) or the features of the individual (relationship status, age, income). Two other factors relating to the individual may also influence the decision: the individualøs own perceived expertise, and his perception of the time available to complete the transaction.

Indeed, differentiating buyers according to their level of knowledge of the specificities of property transactions is important to understand the use of agents (Case and Shiller, 1988). A seller or buyer with low self-expertise to complete the transaction unassisted prefers to delegate the transaction to an external agent. Buyers with a high search cost and a low knowledge of the local market have a greater tendency to use the services of an estate agent (Zumpano et al. 1996). As qualitative analyses have confirmed, perceived self-expertise in real estate can thus be a powerful driver of the decision not to use an estate agents.

Also, many home sales and purchases are constrained by personal or work-related factors (Clark and Onaka, 1983; Hempel and Jain, 1978) which make it necessary to find a suitable property or solvent buyer as quickly as possible. Time pressure is often considered a situational variable, i.e. an external factor that influences property search behaviour (Gibler, 2003). When they are under significant constraints, individuals tend to look for solutions that will make matters easier for them, require less effort (Edland and Svenson, 1993) and save them negotiating time (DeDreu, 2003). People feeling under very high time pressure also use strategies (heuristics) to significantly simplify their task (Kaplan et al. 1993). This is particularly true when this time pressure creates additional sources of anxiety (Eysenck and Calvo 1992) that can be substantially reduced by using an intermediary: individuals under high time pressure should have a greater tendency to go through estate agents.

d. The perceived advantages as mediators of the influence of commercial statements

From a practical point of view, real estate brokers promote their activities via commercial statements in order to foster owners to sign a contract with them. The way sellersøbenefits are

conceptualized previously is not the one used by French brokers to promote their work. Instead, they use more precise and direct propositions reflecting their daily activities.

To bring out some classical commercial statements, we ran interviews with five French real estate professionals in France. Three statements appear to be used by brokers on a regular basis. These statements are used to value their activities in a concrete manner and encourage sellers to pay for them. Using broker services would allow sellers to (1) *highlight the strengths of the property* (2) *receive updated legal pieces of advice* and (3) *have more serious buyers available*.

We propose to assess how these commercials influence the use of brokersøservices. We propose that they would improve the benefits perceived by the sellers which, in turn, influence the decision. That is, from a theoretical point of view, we think the previously identified perceived advantages are considered mediators of the impact of commercials on the decision to use a broker (Baron and Kenny, 1984; Preacher and Hayes, 2008). Thus the following hypothesis is proposed:

H6: The perceived advantages mediate the impact of commercials statements on the decision to use a broker

The final conceptual framework incorporates all these factors in order to understand the choice of a transaction mode (see Figure 2).

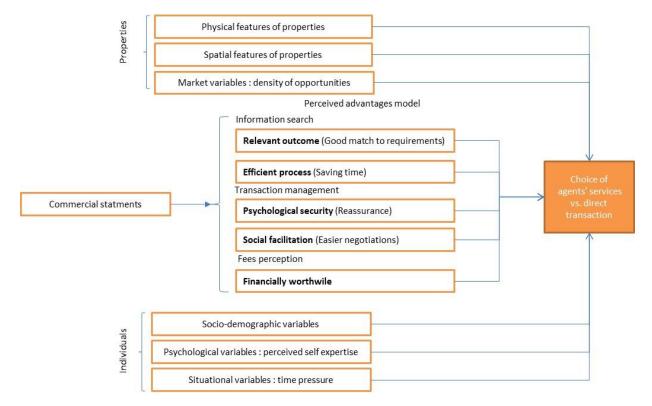


Figure 2 : Conceptual framework of the perceived advantages model explaining the intermediation decision

4. METHODOLOGY AND PRELIMINARY RESULTS

a. Data

To test our hypotheses, data were collected directly from buyers and sellers. A questionnaire was sent out to 180,248 individuals who searched online for real estate property information on the French website meilleursagents.com, which publishes updated information on housing prices. 4,768 individuals (2.6%) completed the questionnaire in full. 4,142 of them eventually signed a transaction either between a direct relation via a website (926) or via a agent (3,216) to buy or sell their house in the last two years. Therefore, the respondents include identifiable groups comprising (group 1) people with real-life experience of buying, or selling a home privately without intermediation, and (2) people who bought or sold a home through an estate agent. The 626 remaining results from transactions processed through notaries or between relatives).

	Private transactions (via a C2C website) Group 1	Intermediated transactions (via an estate agent) Group 2	Sub total	Other transactions (via Notaries or relatives)	Total
Purchase	433	1637	2070	332	2402
Sale	467	1455	1922	294	2216
Total	900	3092	3092	626	4618

Table 1. Number of transactions and individuals interviewed

In addition to identification of the transaction as a purchase or a sale (home sales and home purchases are analyzed separately), the model incorporates the following variables:

- variables related to the property: type of property (apartment or house), number of rooms (studio or 2 rooms, 3 rooms, 4 rooms, 5 rooms and more), location (central Paris, inner Paris area, outer Paris area, rest of France) and location type (city centre, suburbs, rural area).
- individual variables concerning the traditional socio-demographic variables (respondent age group, monthly income of the household, whether single or a couple, with or without children)

and perception variables such as having felt under time pressure during the process, or considering oneself as an expert in the real estate market (or not) (measured on 7- point Likert scales).

b. Model

To test our theoretical hypotheses, regression model based on the following equation should be estimated

$$2 = 2 + 2 (1)$$

With:

- Z: the dummies representing the fact of having (or not having) completed a real estate purchase/sale using an estate agent
- Y: Representing the control and perceived benefits variables

The explained dependent variable concerns the probability of completing a private sale using an estate agent (group 2) rather than no intermediary (group 1), according to the explanatory variables identified. Discriminant analysis is relevant here, and the following logit model is applied

$$\mathbb{P}\mathbb{Z} = 1 \mid X) = \frac{\exp(cX)}{1 + \exp(cX)} (2)$$

c. <u>Preliminary outcomes</u>

As preliminary results, accordingly to the literature on the French market, we found that a high proportion of transactions is operated via a agent (77%). Moreover, this proportion is similar within the major part of goods and individuals characteristics. Tables 2 and 3 present proportions and means for each group, transactions signed via C2C websites and transactions signed via estate agents.

	Transactions	Transactions
	via C2C	via estate agents
Property characteristics		
Apartment	670 (23%)	2223 (77%)
House		
Studio/2rooms	281 (23%)	946 (77%)
3 rooms	239 (23%)	816 (77%)

More than 4 rooms	380 (22%)	1330 (78%)
Paris	295 (24%)	959 (76%)
Close suburb	255 (24%)	799 (76%)
Far suburb	155 (23%)	519 (77%)
Other	195 (19%)	815 (81%)
Downtown	537 (23%)	1821 (77%)
Suburb	309 (22%)	1065 (78%)
Countryyard	54 (21%)	206 (79%)
Individual characteristics		
Less than 40 yo	474 (24%)	1479 (76%)
Between 40 and 60 yo	329 (22%)	1157 (78%)
More than 60 yo	97 (18%)	456 (82%)
Couple	442 (24%)	1378 (76%)
Couple with children	147 (18%)	656 (82%)
Single	311 (23%)	1058 (77%)
Income less than 3000 þ	140 (20%)	569 (80%)
Income between 3000 and 6000 þ	304 (23%)	999 (77%)
Income more than 6000b	456 (23%)	1524 (77%)

Table 2 - Number (and proportion) for the two groups

Only perceived benefits seem to appear significantly different in the two groups, as shown in table 3.

Perceived advantages	Transactions	Transactions	t value
	via C2C	via estate agents	
(1) Good matching	3,3 (1,7)	4,5 (1,7)	19,0 ***
(2) Time saving	2,9 (1,7)	4,5 (1,7)	23,7 ***
(3) Reassurance	3,3 (1,7)	4,7 (1,7)	21,9 ***
(4) Négociation	3,4 (1,7)	4,3 (1,7)	13,8 ***
(5) Financially worthwhile	5,3 (1,9)	4,7 (1,8)	- 8,7 ***

^{***} p<.001ssss

Table 3 - Means (and standard deviation) of perceived advantages on the two groups

5. RESULTS

The first test of our model comes from analysis of the 2,078 properties purchased (Logit model 1; see Table 2). Consistent with our hypotheses, a buyer who considers using estate agent services reassuring (z=4.3, p<0.001) and believes that the agent is likely to save him time (z=4.5, p<0.001) will have the greatest tendency to use broker services, significantly higher than the FSBO solution. These two expected benefits turn out to be the most significant, and

emerge as the principal reasons for engaging the services of an estate agent. To a lesser but still significant extent, a buyer who considers that an estate agent will be able to facilitate negotiations with the seller (z=2.1, p<.05) or that the agent has all the skills required to find a property that matches his requirement (z=2.4, p<.05), will make significantly more use of agency services. This latter hypothesis shows that buyers take supply and availability effects into consideration (using an estate agent gives them access to the larger number of properties on the agent α books), but that they are not the primary drivers of the decision to use an estate agent. As a result, the model based on the perceived benefit turns out empirically relevant on the buyers α perceptions. Furthermore, as expected, a buyer who considers that the estate agent α services are not financially profitable will tend to opt for a private sale (z=-3.5, p<.005).

Similarly, a second analysis is run on the 2,064 home sales (Logit model 2; see Table 3). Interestingly, the results are replicated overall, supporting the view that using the services of an estate agent rather than completing a private sale is largely explained by the perception of the benefits. A seller who chooses to sell through an estate agent considers that the agent will save him time (z=8.1; p<0.00), can negotiate more easily with the buyer (z=6.25; p<0.00), will reassure him as regards the transaction process (z=5.0; p<0.00) and has significantly higher chances of finding him a solvent buyer (z=4.3; p<.000). Alike the results regarding buyers, all the perceived benefits are explanatory factors, and our hypotheses are validated. However, the financial dimension does not appear to be explanatory for sellers (z=-0.8; z=0.8; z=0.8. The outcome makes sense as, in France, the buyers pay the total amount of the agents fees by their own. Sellers are apparently not particularly interested in cutting out the estate agent for a financial reason.

Variable	Coefficient	Standard Error	Z value	Pr(> z)
(Constant)	-1,434	0,481	-2,978	0,003
House				
Apartment	-0,155	0,202	-0,767	0,443
Studio / 2 rooms	-0,128	0,157	-0,815	0,415
3 rooms				
4 rooms and more	-0,060	0,174	-0,344	0,731
Paris	0,049	0,204	0,239	0,811
Inner Paris area	-0,098	0,191	-0,513	0,608
Outer Paris area				
Rest of France	0,360	0,216	1,668	0,095

City centre	-0,018	0,150	-0,121	0,903
Suburbs	0,010	0,130	0,121	0,703
	0.400	0.004	4 400	0.450
Rural	-0,433	0,301	-1,439	0,150
Good Matching	0,114	0,041	2,787	0,005
Saving Time	0,200	0,045	4,483	0,000
Reassurance	0,184	0,043	4,300	0,000
Easier negotiation	0,080	0,038	2,093	0,036
Financially worthwhile	-0,116	0,034	-3,378	0,001
Couple with children	0,290	0,199	1,458	0,145
Couple without children				
Single person	-0,066	0,140	-0,474	0,635
Age: under 40	0,292	0,138	2,115	0,034
40 ó 60				
Over 60	0,217	0,280	0,777	0,437
Monthly income:				
Less than \$3000	0,134	0,187	0,714	0,475
þ3000 - þ6000				
More than \$6000	-0,044	0,142	-0,312	0,755
Perceived time pressure	0.593	0.075	7.79/	0,000
(high vs. low)	0,582	0,075	7,786	0,000
Perceived self-expertise				
(high vs. low)	-0,044	0,041	-1,065	0,287

Reference categories: house, 3 rooms, outer Paris area, suburban location, couple without children, aged 40 - 60, monthly income \$\phi^3\$-6,000, low time pressure, low expertise

Table 4 - Logit model for real estate purchases

Variable	Coefficient	Standard Error	Z value	Pr(> z)
(Constant)	-2,18	0,51	-4,29	0,00
House				
Apartment	-0,07	0,18	-0,37	0,71
Studio / 2 rooms	-0,01	0,19	-0,04	0,97
3 rooms				
4 rooms and more	-0,04	0,18	-0,24	0,81
Paris	-0,09	0,22	-0,42	0,67
Inner Paris area	-0,03	0,20	-0,15	0,88
Outer Paris area				
Rest of France	0,19	0,19	0,97	0,33
City centre	0,09	0,15	0,57	0,57
Suburbs				
Rural	0,21	0,28	0,76	0,45
Good matching	0,19	0,04	4,31	0,00
Saving Time	0,36	0,04	8,10	0,00
Reassurance	0,22	0,04	5,02	0,00

Easier negotiation	0,25	0,04	6,25	0,00
Financially worthwhile	-0,03	0,03	-0,83	0,41
Couple with children	0,19	0,21	0,91	0,36
Couple without children				
Single person	-0,13	0,16	-0,79	0,43
Age: under 40	-0,33	0,15	-2,20	0,03
40 ó 60				
Over 60	0,53	0,19	2,73	0,01
Monthly income:				
Less than \$3000	0,25	0,21	1,22	0,22
<i>þ3000 - þ6000</i>				
More than \$6000	0,20	0,15	1,33	0,18
Perceived time pressure	-0,03	0,08	-0,41	0,68
(high vs. low)	-0,03	0,00	-0,71	-,
Perceived self-expertise				
(high vs. low)	-0,12	0,05	-2,61	0,01

Reference categories: house, 3 rooms, outer Paris area, suburban location, couple without children, aged 40 - 60, monthly income \$\partial{b}{3}\$-6,000, low time pressure, low expertise

Table 5 - Logit model for real estate sales

Three additional results deserve to be noted. The first is fairly surprising and concerns the physical and spatial features of the properties. This level of analysis does not appear to be relevant, because estate agents are not more prevalent for any particular type of property, location, or location type: houses are not purchased though estate agents more frequently than apartments (z=-0.8; ns); studio apartments (z=-0.8; ns) and 4-room homes (z=-0.3; ns) are not purchased more frequently than 3-room homes; and homes in central Paris (z=0.2; ns) or the inner Paris area (z=-0.5; ns) are not purchased more frequently than homes in the outer Paris area. The results are similar for sales. The type of home and its size thus have no effect on the chosen transaction mode.

Regarding location, home buyers in the rest of France (outside the Paris area) are not more likely to use estate agents (z=1.7; ns) than home buyers in the Paris area. Similar results are observed for sellers in the Paris area and the rest of France. The density of supply or demand has no impact, as city centre properties (z=-0.1; ns) are not purchased through private sales more frequently than properties in suburban or rural locations (z=-1.5; ns). These results are similar for buyers and sellers and suggest that the traditional variables used in the real estate literature are not what determines the individual choice of transaction mode.

Secondly, the socio-demographic variables are also shown to have little influence. Having a relatively higher income does not make a buyer less sensitive to agency fees, and does not explain the decision to use an estate agent (z=0.7; ns). Similarly, having children (z=1.5; ns) or living as a couple has no influence on the decision by buyers to use an estate agent. This lack of influence is also noted for sellers. Relationship status and income thus have no effect on individual@ decisions. However, age does have an inverse effect on the choice of transaction mode. The younger the buyer (under 40), the greater his tendency to buy through an estate agent (z=2.1; p<0.05) compared to buyers aged over 40. This effect presumably relates to first-time buyers who have no experience of the real estate market. Conversely (and curiously), the younger the seller (under 40), the greater the desire to sell privately (z=-2.2; p<0.05). And this trend seems to intensify with age: sellers aged over 60 make significantly more use of the services of estate agencies than sellers aged 40-60 (z=2.7, p<0.01). These results are consistent previous literature (Violand et al., 2007).

Thirdly, the results of the perception of time and expertise also yields interesting findings. First, the potential time pressure on the buyer drives him to engage the services of an estate agent: the greater the pressure on a buyer to find a property quickly, the more likely he is to buy through an estate agent (z=7.8; p<0.00). However, time pressure does not explain the transaction mode chosen by a seller: a homeowner in a hurry to sell does not show a clear preference for private sales over agency sales (z=-0.4; ns).

Second, perceived self-expertise has an influence on sellers but not buyers: the more a seller considers himself to have expert knowledge of real estate, the greater his tendency to sign privately with a buyer (z=-1.0; ns). However, a buyer with high perceived self-expertise is not more likely to opt for private transactions (z=-2.6; p<0.01). All in all, estate agents are used more by buyers in a hurry and sellers with low expertise. Conversely, private sales are more popular with expert sellers and buyers who are not in a hurry to buy.

1. PERCEIVED ADVANTAGES AS A MEDIATION MODEL

a. Methodology

Commercial statements have been included within the questionnaire and the extent interviewed are convinced is assessed via a 7 points scale. To test for mediation propositions, we estimate the size and the significance of an indirect effect (Mi) of these commercial statements (Ci) on the decision to use or not a broker (Zi) as showed in the figure 3.

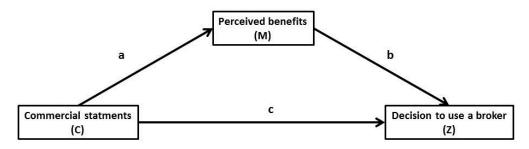


Figure 3: Mediation Model

Following the Preacher and Hayes (2008) procedure, a second series of regression analysis based on this model equations should be estimated:

With:

- Mi: the four perceived benefits (supposed mediator). Four because as reported earlier, the financial dimension does not appear to be explanatory for sellers, consequently it has been removed.
- Zi: the dummies representing the fact of having (or not having) completed a real estate sale using an estate agent
- Ci: the level of agreement of respondents with commercials statements

The demonstration of the mediation model is run as follow. First we test the effect of commercial statements on the perceived benefits (path a, equation 3). Second, we examine the total effect (controlling by the perceived benefits) of the commercial statements on the decision to use or not a broker (path c, equation 4). Theses equations will be estimated with logistic model. Third, we estimate the indirect effect of Ci on Z, that is a*b. Analyses of the indirect effect will be conducted through Preacher and Hayes (2008) macro with bootstrapped samples

(1 000). If all these three effects are significant, we conclude that M mediates the impact of C on Z.

b. Results

Firstly, the effect of commercials on the use of estate agents is tested. Surprisingly, the path (c) show no direct impact of 2 out of 3 commercial statements on the decision to use a broker: only the item õ*brokers allow more serious buyers available*ö has a significant link with the decision to use a broker (c=0.11, p<0.01). These commercials appear not relevant for the commercial communication.

Secondly, however, the commercial statement *õhighlight strengths of the property*ö is significantly linked with the four perceived benefits, i.e. good matching (a= 0.53, t=27, p<.001), saving time (a=.52, t=23.5, p<.001), reassurance (a=.48, t=21.5, p<.001) and easier negotiation (a=.24, t=10.5, p<.001) as shown by the equation (3), associated to path (a), in Table 6,7 and 8. Results are significant with the two others statements as well. Beliefs in commercial statements used by agents is significantly correlated with the advantages sellers perceived for themselves. Thirdly, as previously shown, controlling for the commercial *õhighlight the strengths of the property*ö, the four perceived benefits, i.e. matching (b= 0.17, z=3.6, p<.001), saving time (a=.35, z=7.7, p<.001), reassurance (a=.22, z=4.9, p<.001), negotiation (a=.25, z=6.7, p<.001), have a significant and positive influence on the decision to use a broker. Results are similar with the two others statements.

Fourthly, and more importantly, the õindirect pathö of the effects of the commercial õ*highlight* the strengths of the propertyö on the decision to use a broker turns out to be positive and significant via the four perceived benefits with the ninety five percent confidence interval excluding zero, i.e. matching (a*b= 0.09, .06-0.14), saving time (a*b=.18, .13-.23), reassurance (a*b= 0.10, .05-0.15), negotiation (a*b= 0.06, .04-0.08). These results indicate a significant indirect mediation for this commercial (Zhao and al. 2010) meaning that this commercial might influence via the previous model based on the perceived advantages. Results is similar for the commercial õreceive legal adviceö. Regarding the commercial õmore serious buyers are availableö, there is a significant direct effect (c) so it is called a complementary mediation.

	C	M	(M , C)	Z	Indir	ect Effect	(M	, C) 2	Z
	A	T	b	z	a*b	Int	c	z	
Matching	0.53***	27	0.17***	3.6	0.09**	[0.06; 0.14]	ns	1.5	

Saving time	0.52***	23.5	0.35***	7.7	0.18**	[0.13; 0.23]
Reassurance	0.48***	21.5	0.22***	4.9	0.10**	[0.05; 0.15]
Negotiations	0.24***	10.5	0.25***	6.7	0.06**	[0.04; 0.08]

^{***} p<.001, **p<.005

Table 6 - Mediation effect of õHighlight the strengths of propertyö on the decision to use a broker

	C	C M		(M, C) Z Indir		ect Effect	(M	I, C) Z
	A	T	b	z	a*b	Int	c	z
Matching	0,38***	19.7	0,18***	4.1	0,07**	[0.03; 0.10]		
Saving time	0,39***	18.6	0,36***	8.0	0,14**	[0.10; 0.18]		1.0
Reassurance	0,48***	24.5	0,21***	4.6	0,10**	[0.06; 0.14]	ns	1.0
Negotiations	0,22***	10.8	0,25***	6.2	0,06**	[0.04; 0.08]		

^{***} p<.001, **p<.005

Table 7 - Mediation effect of õReceive legal adviceö on the decision to use a broker

	C M		(M , C)	(M, C) Z Indir		ect Effect	(\mathbf{M},\mathbf{C})	Z
	A	T	b	z	a*b	Int	c z	
Matching	0,45***	23.2	0,16***	3.5	0,07**	[0.03; 0.12]		
Saving time	0,48***	22.5	0,34***	7.4	0,16**	[0.10; 0.21]	0.11** 2.7	
Reassurance	0,41***	18.7	0,22***	4.9	0,09**	[0.05; 0.13]	0.11** 2.7	2.7
Negotiations	0,24***	11.0	0,25***	6.2	0,06**	[0.03; 0.08]		

^{***} p<.001, **p<.005

Table 8 - Mediation effect of õMore serious buyers availableö on the decision to use a broker

The four perceived advantages turn out to be correlated with the three following statements, which, in turn, influence the final decision to use a broker. As a result, our mediation model proposes an explanation of the reasons why consumers are sensitive to commercials.

2. DISCUSSION

The objective of this research was to figure out the reasons why individual decide to use services provided by estate agents or not. A large database was collected in order to better understand buyers and sellers behaviours in terms of real estate transaction modes. The first finding of this

research is that in our sample of French buyers and sellers, both opt for private transactions in 19% of cases, leaving 68% of the market to the intermediaries that are estate agents (the remaining 13%, not included in this sample, are handled by French notaries, or take place directly friends or relatives). A centralised market thus exists alongside a decentralised market. While the neo-institutionalist analysis inspired by Williamson proposes the existence of an optimal transaction mode based on objective specificities (specifications of assets, level of uncertainty, etc) to organise transactions in a sector, this study explores an extension of this perspective. Indeed, the real estate market structure appears determined by economic decision-makersø perceptions of those costs and their assessment of the utility of agency services. The individualøs õmake or buyö decision is part of the explanation of the sectorøs market or hierarchy type structure. The important heterogeneity in the perceived costs, and the perceived capacity agents are able to response, of the decision-makers, with their bounded rationality, helps to explain the hybrid transaction forms observed on the markets.

This study has attempted to show that transaction costs could be perceived in differentiated ways: the value of intermediated transactions depends on consumersø perception of the competitive advantage that estate agents can offer. Starting by analysing the features of real estate transactions, we proposed to group the perceived costs into three major dimensions: the information search dimension, the transaction management dimension and the financial dimension. The various perceived risks, which were identified through qualitative interviews, are considered as non-monetary costs by consumers, who hope that using an estate agent will reduce those costs; it is an arbitrage procedure. Transaction costs are thus both an expense to reduce for consumers, and a source of potential value for intermediaries (Zajac and Olsen, 1993).

In this context, beyond the informational advantage (Levitt and Syverson, 2005) we draw a explaining model based on five perceived advantages identified within a qualitative phase supposed to explain the consumersø decisions. Consumersø brokerage services do expect an *effective objective* advantage in terms of matching requirements, an *efficient process* advantage in terms of time saving, a *psychological* advantage in terms of reassurance and confort, and a *social* advantage in terms of facing someone to convince. This model is tested on 4618 questionnaires both on sellers and buyers. The model shows that these perceived advantages are the most significant exploratory variables, over socio-demographics, individuals and property characteristics which all remain surprisingly not relevant to explain the transaction

mode. These consumer-oriented benefits help significantly people to differentiate brokers from the C2C platforms. These results are replicated both on sellers and buyers, showing the robustness of the consumer oriented model.

Complementary, we confirmed the relevance of the model when controlled by three commercial arguments often used in France to foster sellers to mandate the agents: the commercials tested enhance the perceived benefits which in turn explain a higher tendency to use a broker. More precisely, the expected advantages mediate the effect of commercials on the use of broker services. These results may be useful to brokers in order to improve their communication toward consumers both mentioning the four perceived benefits and illustrating them with concrete commercial statements linked with them. Our consumer-oriented model might therefore be used to draw a framework in which communication strategies might be set up and linked with an expected benefit, that is to draw new business models based on different services they could propose. Indeed, estate agents get new opportunities to transform their economic model, no longer building their business solely on the informational advantage, but on a more general proposal of agency services that certain decision-makers perceive as useful.

3. LIMITATIONS AND AVENUES FOR FURTHER RESEARCH

A first limitation concerns the fact that this survey was conducted online, through a website providing information on real estate prices. This made it possible to send out 180,000 questionnaires in a simplified process, with fairly speedy collection of information for a limited financial cost. But this type of survey has a small disadvantage as regards respondent representativeness. Only individuals with an internet connection who are interested in the information available on the website left an email address, and our survey was based on this imperfect representation of French real estate transactions. However, 75% of the French population had an internet connection at home in 2011 (based on the lifestyle survey *Conditions de vie et Aspirations*, 2011). The bias would lie in the varying probability of having an internet connection: a person aged over 70 is on average 5 times less likely to be connected as a person aged 40-59. Nevertheless, our control variable mitigates this potential bias and we can even assume that this difference is a little lower for this important and serious task to realize, that is the transaction.

A second limitation concerns the timing of this survey. Individuals were asked about their perceptions of estate agents after they had concluded a purchase or sale. As a result, respondents

will have been tempted to rationalise their decision with the benefit of hindsight, thus reducing their cognitive dissonance (Festinger, 1957). This necessarily ex post data collection method could thus introduce biases into consumersøperceptions of estate agentsøservices. One avenue for further research would be would be to carry out a longitudinal study in which the researcher would interview individuals planning to buy or sell a home, monitor their progress and changes in perceptions, and finally relate the information collected to the transaction mode ultimately chosen.

This study has sought to understand, among others things, why the French real estate market with its specificities is not structured as globally non-intermediated. But for others countries the way this market is organized can sometimes strongly differ. Thus, one can ask whether the perceived advantages would be the same and if their magnitude, their ranking, would be constant. The answer is probably negative but this would require confirmation. Regarding the commercial statements the same kind of questions could also be raised.

This study also supplies more explanations and guidelines for the appearance of õhybridö actors: neither FSBO platforms nor traditional estate agents. Indeed, given the multiplicity of the determinants for such a market, it would be relevant to develop new activities based on a subset of the perceived advantages and/or to invent new commercial statements that would better reflect them (we previously saw that some of them presented a low level of mediation; better arguments could be tested). Traditionally, the first to emerge are benefiting from a õpioneerö effect and positive network externalities: for example, new advertising platforms (such as seloger.com) give consumers access to substantial volumes of properties that make it easier to find a good match to requirements. Another example consists in the online agencies that are beginning to adopt a positioning based on the benefits demanded by consumers. This new philosophy is that the consumer should be able to pick and choose which services he wants, given their heterogeneous perceived estimations of the dissociated services. In this approach the estate agents of ees depend directly on the services rendered: they are no longer only payable ex post when a transaction is completed in a whole, but increasingly ex ante, on the basis of the services to be provided. Under this service provider approach, new business models are emerging offering omenuso of services; this is facilitated by the lack of overheads borne by the new type of online agents (no high street offices, employees, etc). They position themselves on service quality and offer various services, from online property valuation to legal and administrative assistance. For example, todayøs C2C websites make several documents

available (for a fee) that can facilitate the transaction and reassure the consumer: legal guides, standard contracts, etc. This brings them into the traditional agenciesø õservice marketö. The new actors can also, for instance, propose to õminimise the constraintsö for a reduced fee, (around 2%, which is low in France). i.e. provide the full range of services except for viewings, which the consumer organises himself.

A new intermediation structure is thus taking shape, through new service offerings and new actors positioning themselves on a continuum between the *market* and the *hierarchy*, i.e. between simple platforms for direct contact and traditional agencies. In front of heterogeneity in the perceived benefits one has to find variety and dissociation in the proposed services. The traditional estate agenciesøcapacity to occupy these new markets will certainly be a key factor in the future.

Bibliography

- Accardo J, Bugeja F. Le poids des dépenses de logement depuis 20 ans. INSEE 2009.
- Baen JS, Guttery RS. The Coming Downsizing of Real Estate: The Implication of Technology. Journal of Real Estate Portfolio Managements 1997;3;1; 1-18.
- Bailey J. The Emergence of Electronic Market Intermediaries. Proceedings of the 17th International Conference on Information Systems, Cleveland 1996; 391-399.
- Bajtelsmit VL, Worzola E. Adversarial Brokerage in Residential Real Estate Transactions: The Impact of Separate Buyer Representation. Journal of Real Estate Research 1997; 14; 1/2; 65-74.
- Baligh H, Richartz L. Vertical Market Structures. Boston / Mass: Allyn and Bacon 1967.
- Baryla E, Zumpano L. Buyer Search Duration in the Residential Real Estate Market: The Role of the Real Estate Agent. The journal of Real Estate Research 1995; 10-1; 1-14.
- Baryla E, Zumpano L., H.W. Elder. An investigation of buyer search in the Residential Real Estate Market Under Different conditions. The Journal of Real Estate Research 2000;20;1/2; 75-91.
- Bernheim D. J. Meer, Do Real Estate Brokers Add Value When Listing Services Are Unbundled? Journal of the Western Economic Association International. 2013. 51., 2, 1166-1182
- Briody, D. (1997). Dell follows industry standards, but its direct-sales model leads. InfoWorld 19 (34) 29-30.
- Brousseau E. L'approche néoinstitutionnelle des coûts de transaction. Revue française d'économie 1989;4;4; 123-166.
- Case K, Shiller R. The Efficiency of the Market for Single Family Homes. American Review 1989;79; 125-137.
- Coase R. The nature of firm. Economica 1937;4; 396-405.
- Clark WAV, Onaka JL. Life Cycle and Housing Adjustment as Explanations of Residential Mobility. Urban Studies 1983;20; 47-57.
- Crozier DA, McLean F. Consumer Decision-Making in the Purchase of Estate Agency Services. The Services Industries Journal 1997.
- De Dreu CKW. Time pressure and closing of the mind in negotiation. Organizational Behavior and Human Decision Processes 2003;91; 280-295.
- Edland A, Svenson O. Judgment and Decision Making Under Time Pressure. In: Svenson O, Maule AJ, Time Pressure and Stress in Human Judgment and Decision Making: Springer; 1993.
- Elder HW, Zumpano LV, Baryla EA. Buyer Brokers: Do they make a Difference, Their Influence on Selling Price and Search Duration. Real Estate Economics 2000;28;2; 337-362.
- Eysenck MW, Calvo MG. Anxiety and Performance: The Processing Efficiency Theory. Cognition & Emotion 1991;6; 409-434.
- Festinger, L. A Theory of Cognitive Dissonance. Stanford, CA: Stanford University Press 1957.
- Fishbein M & Ajzen I. Attitude-behavior relations: A theoretical analysis and review of empirical research. Psychological Bulletin 1977;84;5; 888-918.
- Gibler KM, Nelson SL. Consumer behavior applications to real estate education. Journal of Real Estate Practice and Education 2003;6;1; 63-83.

- Hacket S . A comparative analysis of merchant and broker intermediation. Journal of Economic Behavior and Organization 1992;18; 299-315.
- Hänchen T, Ungern-Sternberg T. Information costs, Intermediation and Equilibrium Price. Economica 1985;52; 407-419.
- Hempel DJ, Jain SC. House Buying Behavior: An Empirical Study in Cross-Cultural Buyer Behavior. Real Estate Economics 1978;6; 1-21.
- Hendel, Igal, Aviv Nevo, and François Ortalo-Magné. "The Relative Performance of Real Estate Marketing Platforms: MLS versus FSBOMadison.com." American Economic Review 99, 5 (2009): 1878-1898.
- Hiscock, R Kearns A, Macintyre S, Ellaway A. *Ontological security and psychosocial benefits from the home: qualitative evidence on issues of tenure*. Housing, Theory and Society 2001;18; 1-2; 50-66.
- Johnson JM, Nourse HO, Day E. Factors Related to the Selection of a Real Estate Agency or Agent. Journal of Real Estate Research 1988; 3; 109-118.
- Jud GD, Frew J. Real Estate Brokers, Housing Prices, and the Demand for Housing. Urban Studies 1986; 23:1; 21-31.
- Jud GD. Real Estate Brokers and the Market for Residential Housing. American Real Estate and Urban Economics Association Journal 1983; 11:1; 69-82.
- Jud GD, Seaks GT, Winkler TD. Time on the Market: The Impact of Residential Brokerage. Journal of Real Estate Research 1996; 12: 447-458.
- Jud GD, Winkler DT. What Do Real Estate Brokers Do: An Examination of Excess Returns in the Housing Market. Journal of Housing Economics 1994; 3:4; 289-295.
- Kaplan MF, Wanshula LT, Zanna MP. Time Pressure and Information Integration in Social Judgment. In: Svenson O, Maule AJ, Time Pressure and Stress in Human Judgment and Decision Making: Springer; 1993.
- Krosnick JA. Attitude importance and attitude accessibility. Personality and Social Psychology Bulletin 1989;15; 297-308.
- Levitt S. & Chad Syverson, 2008. "Market Distortions When Agents Are Better Informed: The Value of Information in Real Estate Transactions," The Review of Economics and Statistics, MIT Press, vol. 90(4), pages 599-611, 08.
- Mantrala, S. and Zabel, E., The Housing Market and Real Estate Brokers. REAL ESTATE ECONOMICS.
- J.R. McDaniel & Marc A. Louargand, 1994. "Real Estate Brokerage Service Quality: An Examination," Journal of Real Estate Research, American Real Estate Society, vol. 9(3), pages 339-352.
- McKenzie D, Betts R. Essentials of Real Estate Economics. 6th Edition, Upper Saddle River: Prentice Hall; 2010.
- Munneke HJ, Yavas A. Incentives and Performance in Real Estate Brokerage. Journal of Real Estate Finance and Economics 2001;22; 5:21.
- Nasar J. Symbolic meaning of housing styles. Environment and behavior 1989;21;3; 235-257.
- Nelson TR, Nelson S.L. A model for real estate brokerage form selection, REAA Journal, 64.
- Rangan KV, Menezes MAJ, Maier EP. Channel selection for new industrial products: A framework, method and application. Journal of Marketing 1992;56; 69-82.

- Rubinstein A, Wolinsky A. Middlemen. The Quarterly Journal of Economics 1987;102; 581-593.
- Sass T. The Economics of Information Intermediaries. Dissertation, University of Washington, Seattle / Wash. 1984.
- Simon H. Bounded Rationality and Organizational Learning. Organization Science 1991;2; 1256134.
- Tuccillo JA. Technology and the Housing Markets. Business Economics 1997;32;3; 17-20.
- UFC Que choisir. Des agences sans toit ni loi 2011;495; 16-23.
- Turnbull G.K., Dombrow J. Individual agents, firms, and the real estate brokerage process. Journal of Real Estate Finance and Economics. 2007;35; 1.
- Violand W, Simon A, Kasbi S. Real Estate Brokers: Do They Inflate Housing Prices The case of France. Banque & Marchés 2007;111; 27-41.
- Walker G, Weber D. A Transaction Cost Approach to Make-or-Buy Decisions. Administrative Science Quaterly 1984;29; 373-391.
- Williams C. A lifestyle choice? Evaluating the motives of do-it-yourself (DIY) consumers. International Journal of Retail & Distribution Management. 2004;32;5; 270-278.
- Williamson OE. Markets and hierarchies: analysis and antitrust implications. New-York Free Press 1975.
- Williamson OE. The Modern Corporation: Origins, Evolution, Attributes. Journal of Economic Literature 1981.
- Yang S, Yavas A. Bigger is Not Better. Brokerage and Time on the Market. The journal of Real Estate Research, 1995;10; 23-33.
- Yavas A. Can Brokerage have an Equilibrium Selection Role? Journal of Urban Economics 1995;37; 17-37.
- Zajac E., Olsen C. From transaction costs to transactional value analysis: implications for the study of interorganizational strategies. Journal of management studies 1993;30;1; 131-146.
- Zumpano LV, Elder HW, Baryla EA. Buying a House and the Decision to Use a Real Estate Broker. Journal of Real Estate Finance and Economics 1996;13;169-161.
- Zumpano LV, Johnson KH, Anderson RL. Internet use and real estate brokerage market intermediation. Journal of Housing Economics 2003;12; 134-151.

Urbanavi iene V., A. Kaklauskas, E.K. Zavadskas (2009), The conceptual model of construction and real estate negotiation, *International Journal of Strategic Property Management*, 13, 1, 53-70.

ANNEXE

The situation is therefore a complex one, with transintermediation and reintermediation becoming commonplace in real estate markets. The Internet does, however, offer a number of advantages to the agency/brokerage industry because the real estate value chain is founded on the exchange of commodity goods and services. These include (Dixon & Marston 2001):

- reduced transaction costs through reduced property search costs; a reduction in co-ordination costs; and faster and more efficient negotiating; and
- closer customer contact through improved customer service and customer loyalty as well as new customer relationships.

The real estate agency industry therefore offers a large potential for eCommerce because of its nature (i.e. people intensive; paper intensive; time intensive; information intensive; work intensive and fragmented). Essentially by listing properties on the Internet, a broker is transferring the cost of the property search to the buyer [Gwin 2004], although a broker can risk disintermediation if too much information is provided, which is why almost no real estate websites provide full address details. Before the Internet, the business model for agency was very much a 'gateway'

Table 8.5 Intermediaries (adapted from Birch et al. 2000).

Disintermediation	Transintermediation	Reintermediation
Middlemen disappear	Middlemen migrate to the Internet	New types of middlemen set up on the Internet
Digital products	Brokerage business	Virtual markets
Software Information Music Travel	Discount brokers Employment agencies Dating agencies Real estate agents/brokers	Industry specific (autos) Auctions Internet services Search engines Marketing Payment services