Market-Making in the Real Estate Market: The Case of Real Estate Services

Éamonn D'Arcy
Centre for Spatial and Real Estate Economics, Department of Economics, The University of Reading Business School, PO Box 219, Reading RG6 6AW, England
e-mail: p.e.darcy@reading.ac.uk

Abstract

This paper builds on previous work by the author which examined the real estate market as an information system. Within this framework market institutions are viewed as a rational response to information costs both collection and communication and the potential for information asymmetries. Intermediation takes place through specialised market-makers who collect and communicate information and structure information flows. Such actives become an important source of value added and have the key objective of reducing information costs through the creation of an information synthesis. Within this framework the real estate market is examined and the role of real estate service providers as market-makers assessed.

Keywords: *Economics of information; real estate services; market-making*

Paper Presented at the 11th Annual Pacific Rim Real Estate Society Conference

Melbourne, Australia,

January 23 – 27, 2005

Parallel Session 1 Real Estate Service Sector

(*Conference draft. Please do not quote without the authors' permission)*

Market-Making in the Real Estate Market: The Case of Real Estate Services

1. Introduction

In a number of previous papers the author has considered aspects of what an institutional economics approach to the analysis of real estate markets might include (D'Arcy and Keogh, 1997; Keogh and D'Arcy 1994; 1999). In particular, this has highlighted the importance of issues such as market process in determining market outcomes and performance, the need to reassess efficiency concepts as conventionally applied to real estate markets and the importance of understanding processes of market evolution and institutional change in the market and its associated organisations. Within this analysis the issue of market information, its costs and consequences has inevitable arisen. Specifically such approaches have highlighted the need to understand the various institutional influences on the process of information generation itself, the attempts by market actors to control this process over time and the wider interpretative context in which market information is used by various market actors and organisations.

While the issue of information has rightly attracted much attention in the context of real estate markets, ranging from basic economic models of the market through to very complex financial models examining the markets information processing capacity, no serious attempt has been made to examine the markets organisation and outcomes from the starting point of information. Yet information is central to economic organisation and that its costs both collection and communication will influence the structure of market institutions and outcomes. This paper attempts to rectify this deficiency by considering the real estate market as an information system which structures information flow. It particular, it examines the role played by real estate service firms as market-making intermediaries.

The paper is structured as follows. Section two introduces the concept of markets as information systems, and discusses the importance of market-making as a key element of information coordination and the need to establish property rights over information for efficient market organisation. The real estate market as an information system is considered in section three and its key features examined from an information system perspective. In section four, the insights obtained from the previous section are used to examine the role played by professional real estate service firms as market makers in the real estate market. The paper concludes by assessing the contribution of such an approach to real estate market analysis and the relevance of the insights gained.

2. The Market as an Information System

2.1 Why is information important?

Despite a long-standing interest by economists in such issues (Hayek, 1937; Richardson, 1960; Marschak, 1974), the economics of information is still very much an evolving subject area. However, a number of guiding principles have been established. At a very fundamental level information is an asset but one which has an important paradox in that the value of information can only be revealed to another party by disclosing that information, while such disclosure destroys its value. Better information results in better decisions. However, problems arise in assessing the quality of information and in enforcing any property rights which exist over it.

If markets are perfect, full information will be reflected in prices and the price mechanism is sufficient to communicate all necessary information for transactions to take place and markets to function efficiently. Information in this situation is not a problem. However, as we know markets in the real world are far from perfect. As a result the availability of information and the property rights, which exit over that information, have market consequences.

Two common real world situations merit consideration. First, the problem of uncertainty over market outcomes and the information problems it generates. Markets can handle some uncertainty through for example contingent claims contracts but to cover all potential outcomes the contract complexity necessary would be impossible or at least very costly to implement and manage. Other solutions might involve both backward and forward integration but again all situations involving uncertainty have information costs relating both to its collection and communication. Secondly markets have to deal with the significant real world problem of information asymmetry, the situation where information is available but it is unevenly distributed between market actors. This gives rise to the potential for opportunistic behaviour by market actors and may require organisational coordination outside of markets and prices to transmit certain types of information necessary for particular transactions to take place.

Information asymmetries give rise to problems of hidden information or adverse selection and hidden actions or moral hazard. In the first case one party to the transaction is better informed about a relevant variable in the transaction than the other party. This is the classic problem of the provision and pricing of health insurance and is an *ex ante* information problem. One party has relevant private information which is unobservable to the other party. As will be discussed in section three transactions in the real estate market have significant potential for problems related to hidden private information. In the second case concern arises from the potential of hidden actions by one of the parties to a transaction after they have agreed to execute the transaction. This is an *ex post* phenomenon, with the hidden action unobservable to the other party in the transaction despite it having the potential to harm their interests. In certain situations the anticipation that such hidden action is possible may prevent the transaction altogether. Again the nature of the transactions environment in the real estate market has considerable potential to generate such problems.

2.2 Information and the coordination of economic activities

Having established the importance of information for economic and market organisation the next task lies in articulating this explicitly within a framework for market analysis. Following the approach of Casson (1990; 1995) the economy can be considered as an information system rather than the more conventional treatment of it as a system of materials or product flows. The focus is on handling information relating to goods and services rather than on the handling of final or intermediate products. Within this system, economic institutions, markets or firms evolve to allocate decision-making responsibilities and structure information flows (Casson, 1990; 1995).

The form of such institutions might reasonable reflect information costs both collection and communication and also the potential for information asymmetries. The structure of institutions themselves is a direct response to such information problems. As information costs change due for example to improvements in communications technology the structure of these institutions change to reflect this. For example, institutional change driven by falling communication costs might over time, increase the geographical scope of firms and markets. The rapid internationalisation of many business service activities in recent years provides strong empirical support for such an outcome.

Institutions might also evolve to reflect the degree of information costs encountered by specific groups of market actors in achieving their objectives. Dominant groups might seek to instigate processes of institutional change designed specifically to reduce their information costs or to protect any property rights they hold over market information. The resulting institutional form will be efficient for them but less efficient for other groups. By reducing costs for some groups inevitable costs may be increased for others. As a consequence it important to assess the extent to which existing institutional arrangements uniformly reduce information costs for all groups of market actors.

Actors in any economic system collect information and use it through some form of communication process to achieve their specific economic objectives. These functions raise issues of coordination. Information is essential for coordination but at the same time coordination may improve the quality of information and add value. The coordination function within any economic system might take place at a number of levels. In a centrally planned system, government through a central planning agency performs all coordination functions. In market economies, coordination functions are devolved from the centre to markets, firms and households but each coordinator may still be subject to significant regulatory input by the centre. All forms of coordination involve some degree of intermediation. A firm in essence performs a specialised type of intermediation, producing goods and services by intermediating between households as factor owners and households as consumers.

If economic systems and markets are viewed as primarily information systems then the function of coordination through intermediation becomes one of organisation for trading activities to take place. This necessitates a form of intermediation which structures information flows thereby reducing information costs for market participatents and adding value. Within this framework such intermediation activity becomes one of the most important sources of value added in the entire economy (Casson 1995). This type of intermediation requires firms whose principal function is to perform the role of 'market-making'.

2.3 Intermediation through 'Market-Making'

If markets are viewed as information systems the function of market making becomes one of reducing information costs. Information flows are mediated through a market process reflecting the markets institutional structure with market-making activities a key feature of that process. The evolution of market-making activities might be viewed as a rational institutional response to deal with the problem of information, reflecting both uncertainty and asymmetries and the costs of it's collection and communication. The form, design and scope of market-marking institutions will reflect the information intensity of the activity involved. Likewise the functional allocation of market-making activities will vary between market types.

The intermediation of information flows through market-making may take place between a variety of market actors. In a very simple market system the market-maker intermediates information flows between producers and households in order to coordinate the decisions made by each group. Unlike material flows in a conventional interpretation of market systems, information flows are by their very nature two ways. Information flows both to and from each group via the market-maker where intermediation takes place. Intermediation through market making is not costless because of the handling of the information involved. Therefore, there is a flow of factors services into intermediation but no associated physical output, just the value added of intermediation in terms of the structuring of information flows and the contribution of this to decisions about prices and quantities. Anywhere a market exists there is an opportunity for a market-making firm to reduce information costs for example between one producer and another where each is responsible for different stages of production or even in some circumstances between different intermediators in the same market.

The key objective of market making is the production of an information synthesis. The quality of this synthesis reflects the quality of the information inputs used. As a result all the elements in a synthesis of information may not be true. Assessments of quality are difficult because of the problems of hidden information and hidden action discussed previously. Market-markers do not know with certainty the extent to which the actors in the market they are attempting to coordinate are being fully truthful about the conditions they face. One solution to this problem involves the ownership of the information flows involved. For quality assurance purposes market-makers may seek to extend their ownership through strategies of backward or forward integration. This insures potential users of the information against the risk that the information may be wrong. But this may not be possible in all market circumstances. Alternative solutions to the quality problem might involve attempts to create reputation through branding or by accepting standards of conduct adopted by industry or professional associations.

Aside from the issues of information quality a further important consideration in the production of an information synthesis is the information processing efficiency of the market-maker. This reflects the organisation of the market-maker itself and its cumulative experience in information collection, processing and communication. It may also reflect the existence of proprietary methodologies for information processing and interpretation. As an illustration an important consideration which effects efficiency is the amount of information the firm decides to collect. Too little information increases the risk of a false synthesis with mistaken decisions, too much reduces efficiency and increases costs as a result of processing irrelevant information.

The cost of collecting information is equally important for efficient organisation. If information is very costly to collect then there will inevitably be a trade-off between the cost of collection and the quality of decision-making. If individual information is required, the costs of collection will be greater. As such information is likely to be highly subjective in its meaning and interpretation further costs and risks arise. In contrast the collection of systematic or generic information will imply lower costs.

Costs increase with the number of potential information sources in any given market circumstances both in terms of collection and communication as a result of the greater complexity involved in producing an information synthesis. A related issue will be the level of aggregation involved, with possibilities for increased aggregation resulting in reduced information requirements and as a consequence lower costs.

A further key element centres on the issues of specialisation and the division of labour within the organisational structure of the market-maker. Specifically how will the information collection be organised? Who will be involved? How will the synthesis integrate both external and internally generated information? What level of specialisation is optimal given the requirements of the information synthesis? Will the synthesis and information analysis be sequential? Many of these questions have significant implications in terms of communications costs, in particular internal communication costs. The greater the number of people involved in effecting a synthesis the higher the communication cost. If the market-maker organises internationally, the creation of a synthesis might involve not just distance related communication costs but ones related to differences in language and culture. In general overall information costs will be reduced if information is collected and analysed sequentially. An efficient organisation will select the optimal sequential procedure to suit its market-making requirements.

Over time the scope and organisation of market-making activities will change in response to changes in information costs. Such changes prompt innovations in market-making. A good example might be the fall in information costs which have resulted from improvements in information technology. On the one hand these have favoured the creation of more versatile goods which economise on information costs but on the other has favoured the production of a wider variety of more information intensive specific goods. It has also increased the potential geographical scope of market-making.

2.4 Summary

This section has examined the importance of information for economic and market organisation and outlined a framework for market analysis based on the idea of markets as information systems. This highlights the importance of information, its characteristics and costs, as drivers of institutional formation and evolution. Focus is placed on information intermediation through market making, with the market maker performing a key role in adding value and reducing information costs by structuring information flows and creating an information synthesis. The next section uses this broad framework to examine the real estate market as an information system.

3. The Real Estate Market as an Information System

The intrinsic characteristics of real estate in terms of its legal and physical attributes create significant problems of information on a number of levels ranging from comparable price information to product information. Real estate is both a spatial and a private market and as a result has no central market place. This directly generates extensive problems of both collecting and communicating price and product information. The real estate product is heterogeneous reflecting the fact that it has a unique physical location and as a result its value is unique, thus requiring individual valuation. The legal rights governing the ownership and the use of real estate are also heterogeneous, with the potential for multiple forms of property rights to exist within the same building. This factor increases the requirements for and the complexity of, the necessary information base to successfully transact in the real estate market.

Differences in the evolution of real estate markets, particularly between countries can also create information problems. For actors to transact successfully in real estate at the international level they have to overcome information problems generated by differences in the institutional evolution of individual markets. These differences reflect the diversity, which exists across countries in political, legal, social and economic institutions. These differences contribute to considerable variations in real estate market structures and practices between countries, and create further information problems (Keogh and D’Arcy, 1994; 1999).

As a result of these factors the potential in the real estate market for information problems to arise caused by both uncertainty and information asymmetries, both ex ante and ex post is immense. Information costs related to both information collection and communication are very high, especially as a result of the unique and spatially fragmented nature of the real estate product. This extreme fragmentation poses significant problems for the creation of an accurate information synthesis in the market and makes the intermediation task very difficult.

Considering the real estate market from the perspective of an information system a number of questions arise relating to how the market's institutions have evolved to support and structure an efficient information flow. Do real estate market institutions accurately reflect the level of information cost inherent in this market and its potential for information asymmetries? Do they alleviate information costs equally for all groups in the market or do they in fact create further information asymmetries? How have these institutions changed overtime to reflect changes in information costs and the information content of the real estate product? And finally, how does this uniquely complex market deal with problems of coordination and intermediation?

The institutional structure of the real estate market broadly reflects its information costs and potential problems of information asymmetries. This in particular, is reflected by the active market participation of a wide range of professional experts and service providers whose primary function is to reduce information cost. Experts in the real estate market collect information relevant to real estate involvements, interpret it and communicate it to various groups of market actors such as users, investors and developers, who in turn use this information to achieve their market objectives. Given the intrinsic physical and legal characteristics of real estate outlined previously, if professional experts were absent from the real estate market, the information costs for market actors would be prohibitive with consequent implications for risk. The issue of the potential for significant information asymmetries has been tackled through the creation overtime of professional and ethical codes of conduct and practice for the professional experts who participate in the real estate market. This is reflected in the existence of professional bodies in the sector, legally enforceable codes of conduct and more recently well defined notions of corporate culture in real estate service firms. However, given the nature of the market involved information asymmetries inevitable remain, with significant incentives for some market actors not to revel full information regarding their objectives for involvement in the real estate market.

While the existence of professional experts in the real estate market undoubtedly reduces information costs and helps to structure information flows, it is not clear whether they uniformly reduce information costs for all groups of market actors. Professional experts may favour the objectives of frequent or high remuneration clients over in-frequent or low remuneration ones. By facilitating one group of market actors to achieve their objectives they may inadvertently reduce the chances of other groups achieving theirs. For example, by securing very strong lease convents for investor groups they extinguish the possibility of flexible use rights for user groups. Therefore in certain circumstances professional experts may increase information costs for some groups and contribute to potential information asymmetries. Equally it is not clear to what extent they introduce professional biases into their structuring and interpretation of information flows. A professional bias may result in the automatic exclusion of relevant information and the production of a defective information synthesis. If a particular type of professional expert dominates one market, the potential for such professional biases to occur is significant, with consequent implications in terms of information distortions.

There is significant evidence of institutional change in the real estate market associated with changes in information costs and the information content of real estate involvements. In common with other business service markets falling communication costs have increased the geographical scope of professional experts, market actors and the market itself. Real estate activities because of their intrinsic characteristics were regarded traditionally as being locationaly bound, with local information flows paramount. Falls in information costs over time both in collection and in particular, in communication have resulted in the increased internationalisation of the market, with significant evidence available of the emergence of international professional expert and actor groups. Internationalisation itself has been a catalyst of product change, with the increased standardisation of proprietary methodologies, product innovations, new roles for professional experts and the emergence of new groups of professional experts in the market. Changing information costs have also directly impacted on product, changing the information content of the real estate service product, favouring simultaneously the creation of both more versatile products that economise on information costs and a wider variety of more information intensive specific products. Again these developments have implications for the professional mix of experts in the market and may prompt innovations in product and service concepts.

Considering the role of intermediation or ‘market-making’ in the real estate market, this is largely the function performed by the professional experts or service providers in the market. They collect information, synthesise information, and communicate information to market actors and in the process add value and reduce the information costs of real estate involvements. The existence of such market-making experts represents a rational institutional response to the information problems associated with the real estate market. Given that intermediation activity through market marking is the most important source of value added within a framework which examines market activity from the perspective of an information system the next section examines in detail market-making in the real estate market through an exploration of the role of real estate service providers.

4. Market-Making in the Real Estate Market: The Case of Real Estate Services

In the broadest sense real estate services (RES) can be defined as those services relating to the marketing, management and valuation/appraisal of real estate, together with the provision of professional advice regarding real estate use, investment or development. There is a range of professional skills involved. Some RESs are relatively low level and routine, as for example in the case of straightforward property agency, property management or appraisal services. Others involve high levels of professional skill, as in the provision of strategic management or investment advice customised to meet the needs of specific clients. RESs, by their very nature are intangible. RES activity typically involves the production, analysis and dissemination of diverse forms of information activites, which fit well with those, ascribed to market-making in section two.

The provision of expert knowledge is a key activity characteristic associated with RES provision. RESs are supplied by specialised high skill or knowledge intensive service providers to other organisations across a wide range of private and public sector activities. RESs can be defined as the application of knowledge and skills by experts to meet clients' needs, or as 'the provision of intellectual or specialised skills on a personal, direct basis, based on extensive educational training'. In some cases the expertise relates to a standardised professional service, applied to the specific circumstances of the client (for example, the supply of appraisal services). In others, expertise may be harnessed to the supply of a non-standard professional service designed to meet the particular needs of the client (for example, a bespoke portfolio management strategy). Irrespective of the degree of standardization such activity involves the production of an information synthesis.

The quality of this information synthesis will reflect the quality of the information inputs used. Quality assurance is difficult due to problems related to both hidden information and hidden action. Ultimately quality may only be assured though an extension of property rights over information sources and flows by service providers. In RES the recent rapid internationalisation of the sector and the creation of the first global delivery platforms in service provision may be viewed as evidence of such a trend. Problems related to quality intensify as the service in question becomes less standardised. Where RES provision involves examining and solving specific problems for a client, this dictates a high degree of customisation of the service. In these circumstances, there is inevitably an element of contractual uncertainty relating to the precise nature of the service to be delivered with significant potential information costs related to hidden actions.

RESs can be supplied either by external specialist RES firms or internally within the potential client organisation, or by some combination of the two. This raises a strategic institutional question about the organisation of information flows and information processing efficiencies. Transaction cost theory suggests that RES provision will be contracted out to specialist suppliers where this is cheaper than providing the same services internally (although some services may have to be provided externally irrespective of cost where there is a legal or strategic requirement for independence in the provision of RESs). There may be substantial transaction costs associated with the use of external RES firms, particularly linked to the quality issues already discussed. However, incurring these costs is more likely to be justified where the RES in question is highly specialised, and has extensive cumulative experience in constructing an information synthesis. The boundary between internal and external provision is fluid and pragmatic. Corporate growth is often associated with vertical integration and the creation of in-house service departments, but there is currently a move amongst even the largest corporations towards the ‘outsourcing’ of real estate services to reduce overheads and release management time to the core business with the expectation of reducing information costs and adding value.

The evolution of RESs has been characterized by the creation of some form of professional status. RESs fall into two categories. In some circumstances services became ‘professionalised’, through entry restriction, licensing or accreditation by a professional body. In others entry was relatively open and based on a looser code of ‘professionalism’. Where practice is restricted to members of a professional institution, that institution will normally take on an important role in overseeing and possibly enforcing the standards and quality of service provision and by implication the information synthesis provided. This is achieved through the establishment of appropriate education and training facilities, the specification of practice guidelines, and the promotion of an explicit code of professional ethics amongst its members. In the absence of a formal professional body, some of these roles may be performed by trade associations, voluntary codes of conduct, legal requirements or through well-defined notions of corporate culture within individual firms. Irrespective of the mode chosen professional status adds credibility to the information synthesis and in theory reduces the potential for information asymmetries to be caused by the market making service provider. Professional status or membership of a professional body can underwrite the quality of market-making, supporting the growth of market-making firms.

Closely related to the issue of professional status it that of reputation. Reputation is the key strategic asset of the RES firm and again is likely to underwrite quality and growth. RES firms are knowledge intensive and their main working resource is their highly skilled human capital. Reputation therefore depends on the continuing and demonstrable quality of the information synthesis provided by its workforce. However, it is not sufficient for firms merely to secure high calibre professional staff. They must also retain the loyalty and commitment of their workforce. This is essential to ensure the information processing efficiency of the market-making firm. Equally important is the inculcation of corporate culture amongst the firm's professional workforce. Recently RES firms have made significant investments in the development of well-defined notions of corporate culture. For example, RES firms often pay particular attention to ensuring, through the recruitment process and subsequent activities, that employees fit the 'style' of the organisation and share common values. This serves as a mechanism for retaining staff and as a way of encouraging consistency of product in a professional environment where staff work with a high degree of independence, often on the premises of their clients and sometimes seconded to them, in the provision of customised services.

As previously outlined RES have recently gone through a period of significant organisation change driven by a desire to create both regional and global delivery platforms. This maybe viewed as a direct response to falling information costs but it also has important implications for market-making activities. Firstly, the range of potential information inputs controlled by the firm increases, making the information synthesis potentially more complex and possibly less accurate. Secondly, if globalisation takes place without the complete integration of the newly created entity then the quality of the information inputs used maybe uneven with as a consequence an increased potential for an incorrect information synthesis to emerge. Finally distance related information costs might increase with new sources of information cost related to differences in language and business culture emerging.

5. Concluding Remarks

This paper has provided a first attempt at examining activity in the real estate market from the perspective of the market as an information system. Within this framework emphasis is placed on market making activities the goal of which is the creation of an information synthesis. Information cost considerations shape the potential for and characteristics of such activities. The current institutional structure of the real estate market appears to be a rational response to the potential for information problems in the market and the need to structure information flows. This has resulted in the emergence of professional experts in real estate as market makers.

The analysis has raised a number of questions about the role of market-making in real estate. Specifically what determines the information processing efficiency of market-making firms? How does efficiency vary with firm characteristics? What are the implications of internationalisation for the efficiency of market-makers? And finally how will the level of efficiency impact on the accuracy of information synthesis and the potential of the market-maker to reduce information costs for market actors? These questions provide an outline of the future research direction of this work.

References

Capar, N. and Kotabe, M. (2003) 'The relationship between international diversification and performance in service firms', *Journal of International Business Studies*, **34** 345-355

Casson, M.C. (1990) Enterprise and Competitiveness: A Systems view of International Business, Oxford, Clarendon Press

Casson, M.C. (1995) Information and Economic Organisation, University of Reading, Department of Economics, Discussion Papers in Economics Series A No.317

D'Arcy E, and Keogh G, (1997) "Towards a property market paradigm of urban change" *Environment and Planning A* **29** 685 – 706

Egelhoff, G. (1991) 'Information-processing theory and the multinational enterprise', Journal of International Business Studies, Third Quarter 341-368

Foss, N.J. and Pedersen, T. (2004) 'Organizing knowledge processes in the multinational corporation: an introduction', *Journal of International Business Studies* **35** 340-349

Hayek, F.A. (1937) Economics and Knowledge, Economica, New Series **4** 33-54

Keogh G and D'Arcy E, (1999) "Property market efficiency: an institutional economics perspective" *Urban Studies*, **36** 2401-2414

Keogh, G. and D'Arcy, E. (1994) 'Market maturity and property market behaviour: a European comparison of mature and emergent markets', *Journal of Property Research,* **11** 215-235

Marschak, J. (1974) Economic Information, Decision and Prediction, Dordrecht: D. Reidel

Richardson, G.B. (1960) Information and Investment, Oxford: Oxford University Press