The Economic Role and Emergence of Professional Valuers in Real Estate Markets

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Abstract: Land is a scarce resource. It is usually traded as real estate, an economic good with a market value. Often, this market value is not negotiated simply between the seller and the potential buyer, but is based on an assessment performed by a professional valuer, known as a surveyor or appraiser. This article questions the economic role and the emergence of valuers in real estate markets. An institutionally embedded framework for valuation intermediation is developed that elucidates a multi-tiered imperfect information cascade. First, valuers are understood as middlemen, countering information uncertainties regarding product quality, namely real estate herein. An additional constraint is constituted by information asymmetries between the valuer and the contractor. The contribution presents a conceptual integration of theories of price formation (and regulation) and theories of intermediation. Investigating new institutional economics concepts considering the emergence of professional associations and the specific formal and informal regulation of nature-related transactions, the contribution then discusses how the valuation professional with regularizations evolves as a superior institutional response to this cascade of information imperfections.

Keywords: transaction costs; asymmetric information; real estate services; land value

1. Introduction

Land is a scarce resource with competing use interests. Internationally, land ownership is highly regulated. The global financial crisis and the turmoil wreaked by and on the real estate markets in 2008–2009 have brought about a renewed interest in the role of valuation and its regulation [1]. In economic terms, real estate can be defined as a ‘rivalrous’ and ‘excludable’ good. As such, it lends itself to private ownership and trade in free markets according to neoclassical orthodoxy in economic theory. Characteristically—assuming no market failure, its price reflects both the costs of production and provision as well as the willingness to pay for holding this ownership in expectation of the benefit that can be derived from it. If real estate was just such a private good, prices should be determined without (public regulatory) intervention on the simple basis of an ‘invisible matching’ of demand side preferences and supply side costs. However, far from being a result of direct negotiations between the demand and supply side, pricing in this market is often based on professional valuation. Over the last century, the profession of appraisers (or surveyors) has emerged worldwide within distinct organizational structures. The International Valuation Standards Council (IVSC) lists ‘Valuation Professional Organisations’ members from more than 60 countries on all continents [2]. For a fee, these valuers provide the service of determining the price of realty [3–6]. This contribution will refer to them in the following as ‘valuers’ or a male pronoun (whereas the contractors will be referred to with a female pronoun).

Real estate seems to have characteristics that go beyond those of a ‘private good’, making it beneficial for buyers and/or sellers to involve the valuer as an additional actor
in the transaction, even if this means paying a significant fee. The following contribution seeks to elucidate the economic role and emergence of professional valuers in real estate markets in order to answer questions such as: (1) Why do market participants pay for real estate valuation? (2) What is the role of the valuer in transacting real estate sales? (3) How are the activities of the valuer impacted by the professional, regularizing, and real estate specific settings?

The novelty of this paper and approach is in the conceptual integration of theories related to price formation (and regulation) on the one hand and theories of intermediation in real estate markets on the other while linking this analysis to the institutional context of regularization. Regularization refers to the self-organizational formal and informal institutionalization of practices. The paper begins with a characterization of (1) real estate as an economic good, (2) the realty market and its actors, and (3) the valuation profession. Based upon this, an outline of the conceptual framework of the valuer in his dual role as broker and agent of information is provided (Section 3.1). This dual role framework is used as a background to explore and discuss the potential of different economic concepts of imperfect information to support and augment the understanding of this contribution, including: information asymmetry, information acquisition, information brokerage and expert knowledge (credence) (Section 3.2). Section 3.3 expands the conceptual framework by investigating concepts on the emergence of professional associations and on the specific regularization of nature-related transactions. It also links back to the layer added to the good of land and the impacts it has on the community due to its intrinsic state, thus relating to the logic of the characterization of (1) real estate as an economic good above. The final section offers a general discussion and concluding remarks.

2. Materials and Methods

This paper is based on deductive reasoning. It considers, in broad terms, the premises underlying the economic theory of ‘third party intermediation’ in real estate markets: the specificities of the goods traded, the potential of ‘market failures’ due to a cascade of imperfect information, and the role of professional valuers in overcoming these complex informational problems.

The goal was not to provide a comprehensive literature review and content analysis. To support deductive reasoning, the method relied on a dual strategy of surveying the literature and identifying and considering the relevant existing theories and their premises. First, (grey) papers have been collected using English keywords (see Table 1) in scientific search engines (Web of Science/ISI Web of Knowledge, Scopus, JSTOR) and grey literature repositories (Google Scholar, professional association websites). Second, interim results were presented in three workshops with 5–15 experts conducted at the Helmholtz Centre for Environmental Research, Leipzig, and at the European University Viadrina, Frankfurt/Oder. The experts were economists with backgrounds in neo-classical, finance, information, new/institutional, environmental, and ecological economics. These experts discussed the interim findings and suggested further keywords, streams of literature or confirmed the selection.

Table 1. Keywords used to identify relevant literature.

| First Order Keywords | Second Order Keyword |
|----------------------|----------------------|
| One or more included in each search. | One or more included in addition to first order keyword in searches. |
| apprais*; middlem*; survey*; valu* | assess*; asset; contract; credenc*; expert*; evolution; imperfect*; information; institution*; intermedia*; land; market; price; principal agent; profession*; property; quality; real estate; regula*; rules; standard*; uncertain* |

Keywords for literature search have been selected based on the following considerations: Looking into the role of valuers in the real estate market entails studying how they assess market prices as well as the role they play as a third party in the realty market.
With regard to price formation, a rich body of literature exists looking at a variety of issues, ranging from price prediction methods (for an overview see [7]), hedonic pricing [8], through to the study of market cycles (e.g., [9]) and advice on how to monetize external effects (e.g., [10]). With regard to the role of third-party intermediation or of middlemen in markets, an extensive body of literature exists analyzing market frictions brought about due to a complex matching process between market actors (based especially on [11]) or imperfect information concerning product quality (e.g., [12]) and valuation impacts of sustainability (e.g., [13]), all of which are also applicable to the analysis of real estate markets.

Figure 1 summarizes the deductive approach and provides orientation for the results section.

![Deductive reasoning applied to in order to characterize and assess the valuation profession from information economics and new institutional economics approaches.](image)

3. Results

3.1. Characterization of Real Estate Good, Market and Valuation Profession

3.1.1. Real Estate as an Economic Good

Real estate trade is strictly regulated all over the world (for an overview see national supplements and jurisdiction guides [14]). There is practically no other good for which property rights are so well-defined and so strictly controlled, e.g., by zoning laws. Real estate is a specific economic good. Physically speaking, it is a particular piece of land on the Earth’s surface along with the things that are semi-permanently attached to it, such as buildings, trees, and soil. More precisely, one should speak of real property, which also includes all the interests which are attached to the real estate according to legislation. These interests may include future use rights, tenancy rights or easements. Notwithstanding, the spatial dimension of real estate is a given in any transaction. Real estate’s key characteristics concern its immobility and its uniqueness in relation to the specific social and natural attributes found in its unique location. Further, the exclusiveness and singularity of a piece of land determines its usability, which in turn affects its economic value. Although strictly speaking there cannot be two identical plots, real estates are to a limited extent (spatially and temporally) substitutable based on the competing use options they provide within their settings [15]. Each unit of a real estate is characterized by heterogeneity arising from at least three aspects: the two-dimensional extent of the plot, the vertical dimension unique to the location determining the plot’s potential utility (e.g., mineral resources beneath), and ‘time’ as related to imminent use restrictions or impacts from previous site uses impacting current and future value—sometimes known as ‘shadow
effects’. The assessment of all these heterogeneous aspects for a plot of land involves risks and uncertainties.

Holthaus [15] highlights the specificities of real estate as a good with regard to its lengthy development process, durable character as well as the high level of capital expenditure required for investment, with revenues being distributed over the long-term. In a theoretical production framework, ‘land’ is a factor of production (a resource) rather than an economic good (for an overview of the changing concepts of ‘land’ in orthodox and heterodox economics see [6,16]). Unlike most goods and resources, real estate is not consumed during its use. Instead, derelict land and so-called brownfield sites which emerge from the cessation of economic activities on the site are regarded as temporary within an estate’s circular life cycle [17]. Hence, the value of the realty is not determined in a cost of production approach and imputed profits. Instead, the value is determined by the current value of the revenues, which can be generated during the realty’s future lifetime, taking into account the best usability of the good given its unique social and natural settings (the impact upon this will be further considered in Section 3.2.2).

Given this persistent heterogeneity and complexity, it can be concluded that key characteristic of the quality and thereby value of real estate as an economic good are the risks and uncertainties related to the usability of a piece of land. It is assumed here that it is not market failures caused by environmental externalities that cause market frictions that in turn could explain the emergence of the valuation profession (following [13]). Instead, it is posited that the inherent characteristics of real estate entail profound information imperfections and asymmetries due to uncertainties resulting from the complexities described above, which in turn explain the valuer’s role. The role of externalities will be briefly explored in Section 3.3.2.

3.1.2. Real Estate Market

Real estate is an economic good, for which defined property rights exist and are enforced in most parts of the world. Hence, a stable ‘legal environment’ for the real estate market is a necessity for estate to be traded between individuals (or indirectly via real estate agents). The realty market can be divided into private, commercial, and public interests, according to its respective legal setting, and also into different submarkets (e.g., for housing or commercial uses). All these markets are mainly characterized by decentralized trading. Moreover, the purchase (sale) of real estate is transacted infrequently since this demands long-term and large-scale investments. Hence, the real estate market is characterized by comparatively irregular transactions.

As a result, neither rational expectations with individual buyers nor sellers can be found. Furthermore, a trade is characterized by complexities which must consider risks and persistent uncertainties. These inherent ‘market risks’ are often site-specific, as they are defined by the above-mentioned aspects of land (site extents, vertical dimensions plus temporal considerations). Even completely excluding external effects, ‘market risks’ can also cause market failure because their perception by trading partners may affect tradability to the point of market breakdown. Several instrument-based approaches could address these market risks in order to internalize them within a value assessment (liability, compensation, taxation). The focus of the contribution is the role of valuers as professional intermediary agents.

3.1.3. The Valuation Profession

The role publicly ascribed to the valuer is to deliver valuation reports, which “form the basis for mortgage loans, settling estates and divorces, taxation, and so on. Sometimes an appraisal report is used to establish a sale price for a property.” [18]. In practice, the valuation professional provides guidance to his contractor on the fair market price of land in a written report that describes in detail how the assessment of value has been undertaken. Contracting parties can have very specific objectives other than the buying and selling of land, for instance, if land is assessed as a security for a loan or as basis for taxation. In
the following, the market value is referred to as a basis for transacting the ownership of real estate.

Bird [19] pointed early on to the potential shortcomings of such assessments due either to a lack of effective ‘professional standards’ and objective ‘measurement devices’ or due to distorted concepts applied in lieu of personal interests. Hence, most normative approaches to appraisal state that valuation should be conducted ‘impartially’ and ‘independently’, irrespective of the valuation results a client would like to see. As West [20] puts it “I like to think of appraisers as warriors for the truth: the true client for the appraiser is the public trust”.

Professional standards and even laws reflect this role of valuers and of professional valuation. Valuation is the assessment of the ‘most likely value of a property’. According to the International Valuation Standards Council (IVSC), market value is defined as “the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm’s length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.” [21] (p. 18).

Valuers are regularly organized in professional organizations. The IVSC is a non-governmental organization member of the United Nations with membership that encompasses all the major national valuation standard-setters and professional associations from 150 different countries. Adopting the IVSC standard, the Royal Institution of Chartered Surveyors [22] requires its members “at all times act with integrity and avoid any actions or situations that are inconsistent with their professional obligations. They must bring the required levels of independence and objectivity to bear on individual assignments, applying professional scepticism to information and data where it is to be relied on as evidence.” [22] (p. 18). A valuer is usually required to develop his appraisal reports subject to the principles, guiding norms of good practice and appraisal methods codified in international and regional standards and under professional, statutory, international, national or local laws or regulations (see for example [21–24]). Despite ongoing debates over the differences between nationally recommended methods, they can be expected to lead to comparable results [25]. Hence, a valuer is not to be seen merely as an individual professional expert but rather as an actor operating in a regulated environment [6].

Valuers should be regarded as separate from real estate agents (brokers or dealers who sell and buy properties or procure them based on a consignment on behalf of a third party). Although both groups can potentially capitalize on a superior knowledge of the estate’s market to the disadvantage of their client, it is the agent who is expected to act in the sole interests of the party that commissioned the service. The valuer on the other hand is supposed to take an objective and neutral stance when conducting a valuation in order to determine a fair market value. The intermediating valuer’s role might be best described by objectively assessing the various market risks and uncertainties involved. In other words, valuation is a generic approach to objectifying the key dimensions of land quality.

3.1.4. A Simplified Real Estate Market Framework

In concluding this characterization, it should be noted that the valuer’s professional role provides a link between the economic good on the one hand and the characteristics of the land market on the other which is useful for third parties. The nature of this link essentially reflects the fact that most of the quality characteristics of a piece of real estate are related both to the specific product (i.e., site, plot of land) and to market risk and uncertainty, both of which are essential for consideration.

According to economic orthodoxy, market price is the single coordinating market mechanism needed to affect a transaction between buyers and sellers. However, as Coase [26] pointed out, institutions evolve next to the pure market mechanism in order to reduce transaction costs. The Coase’ian transaction cost approach enables us to establish an initial outline of the economic role of valuers as an ‘institution’ of structured information intermediation that reduces uncertainties and market risks for buyers or sellers,
thus reducing overall transaction costs (TCs). The understanding of TCs in this approach includes expenses related to searching, information gathering and bargaining which are incurred by using the market as vehicle in order to transact a good. As an experienced ‘market maven’, the valuer takes up an intermediate position as an expert on assessing the quality of land and, based on this expertise, assesses the potential benefits (based on the best usability) and, accordingly, the value of this economic good. As a result, land supply and demand are not negotiated directly between the seller and potential buyer but instead through the intermediating valuer. He provides a valuation report aimed at reducing the risks and uncertainties in the complex real estate market.

Taking this simple transaction cost framework (cf. Figure 2) as a starting point, different economic theories are explored to shed more light on this conceptualization.

3.2. Information Economic Approaches

Despite the prevalence of the valuation process and the existence of numerous legal analyses, economics-based concepts, theories and models are relatively sparse, let alone institutional economic enquiries. In order to substantiate the cascade conception of the valuer in an imperfect information environment as aimed for in this paper, four strands of literature from information economics and from research on the agency dilemma are of particular relevance: (1) the way prices are determined in markets under incomplete information [27,28]; (2) information acquisition strategies used by the demand side to mitigate informational disadvantage found to be reflected in corresponding market settings [29]; (3) information brokerage through intermediaries as one promising form of a market setting [12]; and (4) the credence problem, which, if the information broker is ascribed with the role of a trusted expert, can give rise to an additional agency dilemma.

3.2.1. Information Asymmetry and the Demon of the Principle and Agent Dilemma

To assess the quality of a good, it is essential to have sufficient information. Lack of information is characteristic of asymmetric information, that is, when one party of an economic relationship or transaction, e.g., the buyer of a plot of land, has less information about it than the other involved parties, e.g., the seller. This focuses on the time prior to a commitment to a binding contract. Such asymmetric information is given when the cost related to search and information processing is prohibitively high. Hence, the buyer/investor is not sufficiently informed about the quality of a product before the transaction.

The classic example from Akerlof [27] refers to the used cars market, in which potential buyers are unable to know for sure whether a car has been kept in good condition or not. The same situation characterizes the market for real estate, where uncertainties can occur
out of a long history of natural or anthropogenic use. Akerlof suggests that there is a relationship between product quality, price (as potential marketplace signal of quality), and the uncertainty related to ascertaining this information about quality. The market for real estate is arguably one in which the quality of the good concerned is difficult for buyers and sometimes for sellers themselves to assess. For the moment, assume that the supplier of a piece of land has comparatively more knowledge of its characteristics than the buyer.

Akerlof [27] demonstrates that market failure occurs because no high-quality objects are sold in the market due to the prevailing information uncertainty. If consumers cannot detect quality, low-quality goods will crowd out the high-quality items. Therefore, market price as information might not help achieve efficient market equilibrium under asymmetric information. In subsequent research, it has been shown that such markets may be characterized by multiple equilibria representing a distribution of prices with excess supply at some or all of the prices [28,30]. The solution to this situation is the provision of information and signals [27]. Signals work if costs to provide them are high for suppliers of bad qualities and low for good ones, e.g., a diploma in the labor market, product warranties, certification. However, what works in the real estate market?

The phenomenon of imperfect information also motivated research into the so-called ‘agency problem’ or problem of ‘principal and agent’ (PA) [31,32]. Several solutions to the PA problem (such as screening, signaling, pooling of risks, contracting) have been proposed as a way of providing incentives for the agent not to shirk the principal (e.g., between employer and employee, lecturer and student, voter and politician). Interpreting the relationship between the seller and the buyer from the viewpoint of the PA literature shows that the seller of a real estate, who is assumed to have more specific knowledge about a piece of land (at least regarding its recent and current use), effectively acts as the agent and that the potential buyer of that real estate acts as the principal, because she has to pay a price and trust that she is receiving the necessary information from the realty owner to be able to ascertain its quality prior to the transaction. The agency dilemma and the related literature [33,34] will not be discussed in detail here, but it is obvious from the previous discussion that institutional strategies need to be established to overcome the market frictions caused by asymmetric information. The PA problem defines the first tier of the imperfect information cascade in real estate valuation.

3.2.2. Strategies of Information Acquisition—The Buyer’s Perspective

A triad of methods consisting of screening, signaling, and pooling, together with various contracting mechanisms, is classically deployed to overcome the principal agent problem. The buyer has been identified as the weakest party in the real estate market. She suffers most from the shortage of information and therefore has an incentive to overcome this disadvantage. What are her potential strategies to improve the situation? This will be considered taking the general economics literature that discusses how information is obtained on the demand side as the point of departure.

Stigler [35] introduces the economics of information and the important role of search costs. Assuming decentralized markets with varying prices, he defines search costs as costs attached to identifying the market actor that agrees on the most favorable price. Given that the information gained from receiving different price quotations from sellers is worth more than the costs of the search, it will be worthwhile, on average, for buyers to undertake it.

In a related approach, Nelson [29] discusses the consumer’s quest for information, although here the focus is not on prices but on the quality of goods. He points out as well that information acquisition is costly while distinguishing between durable and nondurable goods related to the frequency of purchase. He identifies two distinct strategies for acquiring information. The first is considered adapting [35], under which Nelson [29] understands ‘search’ to mean careful consideration of the utility of randomly sampled purchase options prior to buying. Here, the consumer optimizes her number of searches until the marginal return of the expected best option is less than the marginal cost of the
search. This marginal cost is modelled as being dependent on frequency of purchase, search time and costs.

The second purchasing strategy is based on experience. An assessment of product quality is done by repeated purchasing—in other words by learning and updating experience from previous purchases. As Nelson [29] illustrates, this strategy is most efficient when search costs are high, e.g., in the case of appliances. The author distinguishes between ‘experience goods’ and ‘search goods’. In the model, the marginal cost of information acquisition by experiencing goods depends on the expected average utility distribution [29]. The marginal benefit equals the present value of purchases over time depending on the frequency of purchases and further on the buyer’s discount rate. Although the selection of goods needs to be done at random, prior information can be taken into account, not least of which includes the recommendations of others, i.e., the effect of ‘guidance’ (for the case of advertising cf. [36]). Notably, an expert’s opinion will also be considered to qualify as ‘guidance’ which a buyer will consider. He concludes from his model that (1) more ‘guidance’ will be used for durable than non-durable goods and (2) more ‘guidance’ will emerge in the case of ‘experience goods’.

As discussed in Section 3.1, real estate can arguably be classified as a durable, rarely transacted good, where high search costs and time have to be invested in order to ascertain the true quality of a piece of land. It can be classified according to Nelson [29] as a durable and an experience good and deduce from his analysis that expert guidance and decentralized structures are to be found in the real estate market. In evolutionary economics terms, it might even be concluded that the realty market is predestined to develop a third-party institution as an intermediary who provides ‘guidance’ for the buyer’s assessment of quality in order to overcome the latter’s information acquisition problem—thereby potentially solving the PA problem in the first tier of the imperfect information cascade. However, are new inefficiencies created if this third party enters the picture as a middleman? The next sub-section provides a review of the literature on intermediation to answer this question.

3.2.3. The Valuer as Intermediary in an Extended Principal Agent Setting and the Issue of Credency

The economic advantage of intermediation is often related to the higher return on investment gained by monitoring clustered risks instead of making an individual investment (exemplary is financial intermediation, cf. [37]). Rubinstein and Wolinsky [11] present a seminal general model of middlemen activity where the process of matching intermediaries to their clients is explicitly shown. Transaction costs that arise from time-consuming matching processes between buyers and sellers are endogenously obtained in the model. The authors show that transactions mediated by middlemen coexist alongside the direct transactions conducted between suppliers and consumers, as occurs in the realty market where many (though admittedly not all) transactions are mediated. This model helps to understand the extent to which middlemen evolve endogenously as an institution. Trade frictions are found to be the key drivers of the emergence of intermediation as they allow the middlemen to realize gains by enabling sellers and buyers to transact in a shorter amount of time. The authors show that middlemen are a contributory factor in stable market equilibria.

Notably, Rubinstein and Wolinsky [11] do not discuss the quality aspect of the goods transacted. They assume homogeneous quality and show how middlemen can reduce search costs related to matching. Wright and Wong [38] have reviewed the literature which develops theories of middlemen, or intermediaries, based on the Rubinstein and Wolinsky model. Another strand of literature has analyzed market settings in which product quality is scattered and cannot readily be observed. Here, intermediaries emerge and improve welfare in a market as they can invest in expertise empowering them to detect the quality of goods [12,39].

The Biglaiser model arguably represents the best conventional economic understanding of the role of the valuer. Biglaiser [12] shows that middlemen diminish the adverse
selection problem by becoming experts; after a significant sunk cost investment in product quality inspection skills or techniques, they are qualified to identify a good’s true product quality. Biglaiser compares a model with and without middlemen, showing that if transaction costs (for the middlemen) were low and considerable differences in the product qualities of goods existed, then a middleman would provide welfare gains, as “the gains from a middleman being an expert reduces the loss in surplus due to bargaining inefficiencies (signaling) and resolves the adverse selection problem” [12] (p. 220). Whether or not the existence of a middleman in the market increases welfare will depend on the magnitude of the transaction costs that the middleman faces for entering the market and conducting his investigations as well as on the average quality of a good being low. Biglaiser postulates that his “analysis […] can also be viewed as providing a justification for why there are professional appraisers […] An appraiser (referrer), like a middleman, is an expert in his field.” [12] (p. 213). To prevent fraud, a middleman in the Biglaiser model needs to be punishable by a disappointed buyer. For example, he may offer a warranty that a good will be exchanged if the buyer is not satisfied. “For [the middleman … ] not to cheat, his future profits must be high enough so that any bribe a low-quality seller is willing to offer him to misreport the true quality of the good is not high enough for him to want to cheat the buyer” [12] (p. 213).

However, the model rests on some debatable assumptions in addition to the one that middlemen must be punishable if they give misleading or false information on quality (in other words, institutions ensure that they are punishable). Moreover, to stay in the market, the middleman must make a positive profit. This is given in market equilibrium, when all sellers with high quality goods sell their goods to the middleman. Moreover, the model assumes that the identity of intermediaries and their ability to detect the true quality of a product at all times are common knowledge.

In his analysis, Biglaiser [12] demonstrates that a market with middlemen in equilibrium is (1) a segmented one, where all high-quality products are traded through middlemen, while nearly all low-quality goods are offered directly by the sellers; (2) middlemen have no reason to act fraudulently; and (3) the sunk costs in the product quality inspection skill or technique can be quite high. This would imply, among other things, that (1) intermediation will be more manifest in markets with considerable product quality dispersion and a large absolute share of low-quality products; (2) inspection costs for buyers are prohibitively high; (3) transaction costs for the meeting process are low. The examples given for such markets are those of fine art, jewellery, cars, coins, and stamps. All in all, the existence of middlemen is found to increase welfare under several plausible conditions. This is due to their ability to diminish transaction frictions by lowering search costs or by increasing purchasers’ confidence about the quality of goods. Intermediation arises endogenously whenever middlemen can utilize an informational advantage over other market participants. Quan and Quigley [40] also stressed this for the case of real estate markets. They modelled transaction prices as noisy signals, reflecting imperfect information. Their valuers are formalized as signal extractors that can build up proficiency by observing many transactions. Biglaiser and Li [12,39] stress that the prerequisite for becoming an intermediary is the sunk cost investment in the ability to detect quality and the ability to pay comparatively low investigation costs to get a high-quality product unit for resale.

Concluding, middlemen can be expected to be found in a specific market—such as the real estate market—subject to private information in that market and specific investment costs incurred by the intermediary to acquire the capacity to identify quality. Whether the intermediary improves overall welfare will be contingent on his relative efficiency and the costs of his activities to the economy. In real estate markets, there are not only severe information imperfections, but also valuer specific investment in education, training, and software to access and analyze relevant market data to assess the quality of land, all of which are considerable investments for the valuer in addition to per item inspection costs, which are lower than those an infrequent buyer would incur. This theoretically justifies the
valuer’s role in the market and answers most of our questions in economic terms, except the one regarding the regularization of the valuation profession.

Therefore, although valuers as middlemen solve one imperfect information problem, their existence creates another one. The mediating service of the intermediary defines two new internal relationships to the transaction—one involving the middleman with the seller and another with the middleman and the buyer—something shrugged off in the intermediation literature with the assumption that the middleman is effectively punishable by an unsatisfied client. The buyer’s strategy of information acquisition using a middleman is only efficient in Biglaiser-like models if there is a strategy for overcoming the agency dilemma in these inner relationships between clients and the middleman. When punishment by the client is not plausible, the new PA dilemma becomes evident—in our case, the valuer being the agent of his client who, as principal, pays a fee for the valuation report but cannot observe how much effort the valuer is putting into the surveying—an overview of the literature that applies adverse selection and moral hazard problems to such internal relationships between valuers and clients can be found in [23]. Moreover, it can be concluded that the existence of middlemen solves the information problem in the first-tier relationship between the buyer and the seller only if it is assumed that both these parties consider the valuer’s report to be a reliable source of information. Importantly, if the seller does so, the information advantage is lost to the middleman. For the seller to have an incentive to give up the information advantage, she must trust that by accepting the valuer’s price quotation report, her benefit will increase as compared to the costs incurred by her alternative option of searching for a buyer, who does not request to involve a middleman.

It can be concluded, then, that the valuer as intermediary is more than an information broker in the real estate market. In other words, the valuer needs to be reliably punishable or a trusted expert with commonly acknowledged credibility. This prompts us to also consider the credibility problem in the internal relationships of the valuer as agent with the market participants as principals. A welfare-improving role of an expert middleman in the economy depends on a solution of this PA problem within the internal relationship, particularly if the ‘expert’ and ‘credibility’ role were related to a potential credence good problem. This will be referred to as the second tier in the cascade of information imperfections.

3.2.4. The Valuer as Trusted Expert

Involving a middleman as a trusted expert whose job is to produce information for all interested parties creates another rather specific risk, especially if the valuer’s report is understood as a credence good which, according to [41], is a good purchasers want to obtain but whose quality they are unable to assess even after usage. These goods are said to invite fraudulent behavior by the supplier who is able to exploit an informational advantage vis-à-vis the client [42].

The credence good problem has been investigated from different perspectives, see for example [43,44]. Waibel [45] explains that experts who are able to effectively obscure the quality from customers can utilize this information advantage. He gives examples of markets with credence goods, e.g., medical services, where the doctor can assess the patient’s health status better than the patient himself; car maintenance, where the mechanic knows the repairs that are actually needed; or lawyers’ advice, where the lawyer is more knowledgeable about the likelihood of success in a lawsuit. A typical feature of credence goods is that buyers cannot evaluate whether the quality of their purchase is what they actually needed [44]. As Emons points out: “Sellers not only provide the credence good, but they also act as experts determining the customers’ requirements, simply because consumers are unfamiliar with good in question” [46] (p. 375). In the realty market, the clients cannot judge whether or not the valuer’s statement is correct, but if all parties agree to trust the valuer, they are likely to accept rather than to challenge the information he provides.
Notably, Dulleck and Kerschbamer [47] describe institutions as a solution to the credibility problem. They argue that “market institutions solve the fraudulent expert problem at no cost if (1) expert sellers face homogeneous customers, (2) large economies of scope exist between diagnosis and treatment so that expert and consumer are in effect committed to continue with a treatment once a diagnosis has been made, and (3) either the type of treatment is verifiable or a liability rule is in effect protecting consumers from obtaining an inappropriate inexpensive treatment.” [47] (p. 35). Comparing these requirements with the service provided by a valuer in the real estate market, the justification is given for the assumption (1) of homogeneous customers as they all are likely similarly interested in the estimation of the true product quality and report of the respective market value. Regarding (2), it can also be justified that there is no alternative to the consultation of the expert to ascertain the needed information. However, regarding (3), doubts persist that the results of the service, i.e., the valuation report, will be truly verifiable. Hence, there must be a reliable liability rule to protect the valuer’s client and solve her problem of non-observability of the quality of the valuer’s work.

3.2.5. Deduced Conclusion: Real Estate Valuation as a Cascade of Imperfect Information

The role of valuers is emerging from the multiple imperfections of information in the real estate market arising from the complexities of both the good and the market. Recalling Akerlof’s ‘lemons problem’ of adverse selection [27], the willing buyer needs to find a strategy to acquire information and that the heterogeneous, durable, and irregularly transacted good ‘land’ is prone to prompt expert intermediation as a promising means of resolving the ‘lemons problem’ in real estate markets. The intermediation literature has confirmed in theory the welfare improving properties of middlemen. The obvious advantage of a professional real estate valuation intermediary is his ability to compile and continuously update knowledge regarding the complexities of the real estate market and its manifold uncertainties in order to reduce the information gaps and establish the quality of the economic good ‘land’. The valuer provides market participants with information on the quality of the estate and its corresponding value, which increases their shared utility by reducing frictions and potentially also avoiding ‘market collapse’ due to imperfect information. The valuer is able to do this on account of having invested in a number of fundamental skills (e.g., real estate appraisal and economics) and having acquired an observation technique (accumulated market observations) which is far cheaper per unit for him to apply than for any of his clients. However, the costs of employing the valuer for each transaction in the market and, more importantly, the risks of fraud and of trusting the real estate valuer (credence) must also be considered. Table 2 summarizes our interim results in a comparison of the real estate market with and without valuation intermediaries.

| Market without Valuers as Intermediaries | Market with Valuers as Intermediaries |
|----------------------------------------|-------------------------------------|
| Imperfect information causes adverse selection and the ‘lemons’ problem | Mitigation of the ‘lemons’ problem by improving information on the quality of the land |
| Agency problem between buyer and seller | Agency cascade between buyer and seller and between valuer and client |
| Parties have different strategic options to overcome agency problem | Principal agent problem regarding the estimation of product quality, in particular market risks, between seller and buyer is solved by intermediation of the valuer |
| High information seeking and processing costs | Advantage due to economies of scale, education and experience which reduce costs of screening the product quality of land |
| Parties act in their own interest | Parties act in their own interest but put ‘trust’ in the expert valuer, who must be punishable |
| Long matchmaking time between buyers and sellers | Matchmaking time shortened due to intermediary |
| Low market size or even collapse | Increased market size |
By probing more deeply into the PA problem, it can be seen that the buyer is the weakest link in a cascade of imperfect information due to her complete lack of site and market specific information. In the first tier (buyer-seller), it can be assumed that the seller has at least some informational advantage because of the previous ownership of the land. A particular seller will have certain knowledge of the characteristics of the specific site as it evolved on the basis of the history as the land’s owner, and she might even know that there is a ‘market shadow’ from past activities on the land. The seller is certainly not aware of how the market will reflect this shadow economically, nor indeed any of the other determinants in the valuation that the valuer alone, as a professional intermediary, can detect.

The introduction of the valuer as an institution to overcome this shortcoming, however, gives rise to a new internal asymmetry that entails the valuer becoming an agent in the second tier of informational imperfections (buyer-intermediary and seller-intermediary). As a result, the buyer becomes ‘doubly-marginalized’ [48]. Since both seller and intermediary parties can extract information rents in the chain of supply, the end buyer has to pay a two-fold ‘mark-up’ price (in analogy to Lerner’s supply chain of monopolies). Hence, the buyer’s strategy of information collection via intermediation in the first tier is only efficient if the PA dilemma is also satisfactorily resolved in the second tier. Moreover, whereas at first sight it may seem that the valuer as a middleman may need to consult the seller to a certain extent, a full information rent on the part of the seller cannot be expected. The reason for this assumption is that land is a complex good; even if the seller possesses some site-specific information advantage, it has previously been shown that the seller cannot know everything about the good’s characteristics. In particular, the seller is most likely not knowledgeable about the market risks for land since they lack specific information. This puts the strong position of the seller in the first tier into a new perspective. To obtain sufficient information, the seller also has to enter into a relationship of some dependency with the valuer.

Can it be concluded that intermediation by the valuer improves welfare despite the imperfect information cascade that has now been illustrated? With the buyer and seller on the first tier and the valuer entering on a second tier, different agency constellations and potential dilemmas are identified. These dilemmas are resolved in orthodox economic models by stating that the work of the valuer must be punishable. The credence good literature further indicates that liability might not be sufficient, but that the valuer needs to have other incentives to report true quality and remain trustworthy as an expert.

This leads us to the institutional embedding of real estate markets and the evolution of the valuation profession (cf. Figure 3). It can be assumed that informal and formal rules are not only incidental to the market setup, but that they have evolved as a key to reducing the incentives of valuers to take advantage of their clients. The next section will therefore discuss the valuation profession as broader setting of regulations and standards that serve to regularize a valuer’s activities. In doing so, an understanding is sought after as to whether such associations and standards might have emerged as evolutionary institutional responses to (1) the credence good problem and/or (2) the specific characteristics of land as an economic good.
Figure 3. Simple estate market framework with valuation intermediation and regularizing institutions solving the principal-agent-dilemmas due to imperfect information in two tiers, namely first between buyer and seller of real estate, and second between valuer and client of a real estate valuation report.

3.3. New Institutional Economic Approaches

International standards, legal definitions of market value and guidance regulation on approaches to valuation or policies of education and certification regularize the valuer’s activities. In order to better understand if these might have emerged as institutional response to the cascade of information problems exposed in Section 3.2, concepts from new institutional economics (NIE) have been reviewed in order to present approaches which deepen our understanding for the evolution and the role of valuers and their regularizing institutions. Our understanding of ‘institutions’ follows Vatn, who, having revisited and discussed definitions by various researchers, concludes that “Institutions are the conventions, norms and formally sanctioned rules of a society. They provide expectations, stability and meaning essential to human existence and coordination. Institutions regularize life, support values and produce and protect interests.” [49] (p. 83). Vatn stresses that institutions are responses to problem situations, such as complexities in the world demanding coordination which in turn can be established by the institutional type of conventions. In this way, institutions are not merely constraints to behavior, but they also provide opportunities to find solutions for the problem situation.

The institutional perspective is not new. Stigler already noticed that “Some forms of economic organization may be explicable chiefly as devices for eliminating uncertainties in quality. The department store [. . . ] may be viewed as an institution which searches for the superior qualities of goods and guarantees that they are good quality” [35] (p. 224). Moreover, formal institutions such as laws and contracts have long been understood to affect economic performance [50].

Our discussion focuses on two strands of NIE literature: the evolution of profession networks, in particular as discussed by Jaffe [51] and Ramsey [6], and the asset specificity of natural, complex goods that determine the emergence of regularizing institutions (in particular referring to Hagedorn [52]).

3.3.1. The Evolution of the Valuation Profession Networks

Jaffe [51] offers a concept of the evolution of the profession of valuers in networks of experts which departs from a shared understanding that the role of valuers is to reduce imperfect information about trading options of real estate. His analysis is based on a comparative analysis through the last one and a half centuries of the emergence of other
professional networks, including U.S. associations of dentists, lawyers and accountants, and their respective rules for professionalism, ethics, standards of behavior and self-regulatory policies. He finds parallels of ‘critical stages’ in their professional development traceable along the conceptual life cycles stages of trade associations from an early preorganization stage (marked by the creation of first educational institutions for future cohorts of specialists) to the establishment of a nationwide association, its growth and adaptation ability by reorganization, to becoming acknowledged for generating tangible results all the way until the development of a stable structure which comprises high standards for ethic requirements and special training bodies.

Complementing our previous analysis, Jaffe’s discussion is based on rich anecdotal evidence of the phases of the emergence of the valuation profession. It indicates that alternative forms of organization might initially compete in the regularization of the profession of valuers.

In a similar yet unrelated conceptualization of professional practice of real estate valuation, Ramsey [6] ascribes valuers with the task to provide a market value assessment, which is seen as a standard and as such as a prerequisite to match the activities and interests of market agents. The standard is to give orientation where price signals do not operate due to the complexity in the market. This complexity is said to be linked also to the organization of the market. It is argued that, similar to health professions, a public/private network form of organization is best suited for the valuation profession in order to inform the other market agents, who are said to be too rarely involved in transactions for being able to interpret price signals on their own. Ramsey explains that a network is an organization type that can solve problems not handled by firms or the market. ‘In this account, a profession is a network of strategic alliances across ownership boundaries among practitioners who share a core competence [ . . . ] the network provided an enforcement agency that maintained members’ adherence to standards. Likewise, members of the network were protected against the ability of rival providers to ‘cheat’ against the standards and provide opinions of value that were ‘made as instructed’ for the interests of a specific client” [6] (p. 354).

Ramsey [6] defines two tiers of the professional valuer’s role, one of providing information between the seller and the buyer (imperfect information tier) and the other between market parties and public purposes (e.g., taxation or ethics) at the so-called ‘fiduciary’ tier. The latter can be seen as a response to the inherent problem of principle non-observability of the quality (and market risks) of the land good in our terminology. Ramsey’s findings in addition to Jaffe’s give a good illustration of the emergence of the valuation profession as an institutional response to the information imperfection in the first tier. They show that that professionalization in networks enforces certain self-control and facilitates the emergence of standards, which not only the professionals themselves adhere to, but which moreover contribute to an institution’s efficiency. Networks and standards have also been demonstrated to benefit the consumer side, as they reduce the transaction costs in selecting a proper expert (here a valuer) [53]. Ramsey [6] demonstrates how professions emerge as networks in order to tunnel competing methods (here that of real estate valuation).

3.3.2. Nature Related Transactions

New Institutional Economics theory on transactions has increasingly been promoted to deepen the understanding of socio-economic systems in the previous decades [54]. Moreover, the institutional analysis of decisions relating to environmental resources and nature have gained growing interest (for the case of land see in particular [52,55]). Having discussed the specificity of real estate as an economic good in Section 3.1, a final closer look at this literature is taken as it offers further insights into the role of the valuers’ accompanying organizations and rules. For example, Williamson [56] concluded that specific characteristics of good and transactions (such as asset specificity, uncertainty, or frequency) explain the extent of transaction costs and respective institutions which develop as mechanism to reduce these transaction costs.
Previously, it was simply assumed a transaction as the (repeated) process of buying or selling of a particular good of interest, including the actions needed to initiate and conduct this process, for example search, matching and negotiation. NIE scholars have expanded the understanding of economic transactions, in particular when they are ‘nature-based’, as in our case land-based. Williamson [56] (p. 18), Ostrom [57] (p. 22) and Hagedorn [52] (p. 358) stress the importance of the physical element of transactions comprising biophysical and technical specificities. Hagedorn in particular emphasizes the need to analyze the institutional context of transactions of nature-related goods.

Following Hagedorn [52], transactions can be defined as economic processes by which goods and services, resources and amenities, and damages and nuisances are allocated. They usually cause interdependencies between rationally deciding actors, but remarkably can and usually will also interact with the physical environment so that the social and the physical systems’ interaction is integral to transactions. Notably, transactions are understood to not merely affect the supply and demand side—or an intermediary agent’s actions—in an institutional arrangement, but they are assumed to have more far reaching impact on third parties and the ‘situation’ of the transaction itself including the location and its physical dimensions (cf. Ostrom [57]), so that transactions according to Hagedorn in particular in the case of nature-based transactions “comprise processes of self-organization in ecosystems not completely engineered by humans, but often influenced or even disturbed by them” [52] (p. 362). Referencing himself to Schmid [58], Hagedorn further clarifies that moving a physical object between actors is not a premise for a transaction: “Selling or leasing land does not mean that the land is physically moved. The only requirement for an action to be also called a transaction is that the actors involved are affected due to a physical implication” [52] (p. 362). As the author further states, governance structures, such as contracts, bureaucracy, cooperative societies, or markets, are organizational realizations or ‘institutional forms’ that support the efficacy of the transactions by securing privileges and liabilities and by coordinating transactions.

Hence according to Hagedorn, the set-up of transactions can show how institutions develop into actual governance structures for determining human (inter)actions at the individual and the level of professional organizations. As a result, distinct institutions and governance structures evolve in order to allow for the ‘regularization’ of the interdependencies between all actors who are affected by these transactions (including those external to the contract of selling and buying of land). This approach allows a deeper understanding of the valuers’ role and the role of professions in the real estate market.

Hagedorn shows how physical transactions become institutionalized in a process of stylized stages. “Institutionalised transactions represent transfers of entitlements or constraints on goods or resources which implies that they become regularised by institutions and governance structures” [52] (p. 363). Going beyond the good’s characteristics (e.g., credence goods), he considers all further transaction properties (‘externalities’), which can and usually are in miss-alignment with specific institutional arrangements to resolve the market actor’s needs (‘internalities’). In other words, the socio-ecologic-economic perspective forbids the exclusion of market externalities and claims that any assessment of a nature-based good, such as soil, is causing third party impacts—not only those ‘unpriced’ by the market, but also those ‘unseen’ by the market.

Hagedorn develops a concept that “establish[es] causal relationships between natural system attributes, transaction properties and social constructions for regulating and governing nature–human interactions and actor interdependencies” [52] (p. 371). He proposes a modular and decomposed analysis of the structures and interdependences. The analysis of social–ecological systems (a terms he takes from Ostrom [59]) detects the relevant interdependencies that incentivize and frame the actions of (e.g., market) actors who themselves are subjected to diverse governance systems. These again are interrelated with a resource system in terms of ‘situation’ which in turn provides implicit or explicit incentives (e.g., prices in the case of a market) and/or constraints for the activities of actors according to the set of rules found in diverse governance systems [59].
Concluding, Hagedorn [52] suggests the framework of the ‘transaction-interdependence cycle’ with the transaction as unit of analysis in physical and social contexts. The cycle consists of eight elements, which are described in Table 3 as in Hagedorn [52] (pp. 377–379) and applied to the case of a real estate transaction, where a valuer is consulted.

Table 3. Transaction-interdependence-cycle phases (based on [52]) and example of a real estate transaction involving a valuer.

| Phases of the Transaction-Interdependence Cycle ¹ | Real Estate Transaction Example with Valuer |
|-------------------------------------------------|------------------------------------------|
| Actors choose an action that entails transactions involving one or more actors | A site owner wants to sell a derelict piece of land to residential re-users. Potential buyers reduce willingness to pay due to uncertainties regarding uncertain former use of the site (soil pollution might be a problem). A valuer is to assess the price. |
| Such choices lead to a transfer of resource units or they affect ecosystem components by resource users | Transfer: Current (in-/formal) users have to find another plot of land/new residents transfer taxes to local municipality (away from older one) ¹ Impact: Soil sealing as foundations for new buildings (negative)/remediation of site (positive) |
| They may also impact on the wider context of the physical or natural system | Ecological succession process stops. Remediation improves land value—ecological and economic. New use will entail increased traffic to site and related emissions and noise. |
| Ecosystems or hydrological systems respond to the changes by adaptation processes | Change of micro climate; infrastructure connections impact subsoil and groundwater level; storm water treatment could be altered |
| The outcomes affect other actors: a physical transaction occurs | Neighbouring stakeholders experience change of view, will be impacted by increased traffic; community benefits from increased tax revenue and perhaps reduced crime related to the brownfield |
| The relationship between the actors participating in the transaction changes as they recognize their interdependence regarding the use of the natural system and respond to it | Stakeholders realise conflicts, e.g., due to increased traffic or dread of release of contaminants or due to (potentially) remaining pollution level after ‘remediation’—or options, such as new jobs or safer community. Stakeholders have different views on which impacts the real estate owner is to bear and which the society, which should be reflected accordingly in the market value |
| This stimulates interaction between actors directly and indirectly such as discussion, negotiation, consensus-building on rule-making | Discussion on suitable remediation technology and acceptable pollution level. Planning of traffic and transport. Discussion on fair market value of site and diminutions to value. Discussion in valuation profession on which impacts to include in market valuation: Considering consultation of environmental experts. |
| Adaptation processes in the social system result in institutional change and new governance structures | Rule established that a trusted expert is to estimate extent of the impacts and asserts the market value. Regulations in the society determine fiduciary role of the valuer and implement enforcement/sanctioning mechanisms to prevent malpractice (such as abuse of superior credence role). The professional associations mature in their efficacy to handle complex valuation questions. |

¹ Source of first row’s content: Hagedorn [52] (pp. 377–379).

3.3.3. Deduced Conclusion: The Valuer Profession as an Evolutionary Successful Form of Organization for Quality Detection in Land Transactions

A nature-based transaction can entail controversial outcomes. As in the real estate example, the current owner, investor, and possibly further stakeholders debate on the adequate remediation or traffic level and on its impact on the real estate’s value. Concluding from the discussion above, all stakeholders lack sufficient information to negotiate a fair market value and that a solution to this problem can be the consultation of a valuer as a trusted expert, which is reflected in his mandatory relation with a professional network. As Hagedorn [52] reasons, an institutionalized transaction context, such as in our case, the social credibility of the valuation profession, will guide actors in their selection of options. The consulting of a valuer to ascertain market value, who reflects the rules and enforcement mechanisms, can lead to a desired implausibility of being duped by the valuer.
“If the actors involved accept the outcomes of the public and private ordering achieved, the transaction-interdependence cycle will end, otherwise it may start afresh and lead to additional institutional and organisational change” summarizes Hagedorn [52] (p. 379). In this case of this paper, the emergence of the valuer as information intermediary in combination with the regulations and organizations that enforce the valuer’s reliable sanctioning of any miss-use of the superior expertise, in particular the maturing of professional networks, can be seen as the outcome of the transaction-interdependence-cycle solving the information imperfections in the first and second tiers.

Lorenz and colleagues [13] address the conflicts and future challenges posed by the ongoing sustainability revolution [60,61] of business and commerce for professional real estate valuation services. Recognizing that while sustainability in a holistic sense, i.e., incorporating environmental and social aspects, transcends the boundary of the individual property, it is inextricably linked to its future profitability. It is simply in the long-term financial interest of property owners and users to act sustainably. Therefore, as a real estate services industry, it will be the responsibility of the valuation profession to “clients as to the ‘direction of travel’ with regards to the impacts of sustainability” [62] (p. 43). Developing sustainability literacy, professionalism, and appropriate tools represents a task that, according to these authors, is best left to institutions such as the IVSC and RICS [63].

It can be derived from these NIE concepts that there has been an evolutionary competition between different forms of organizations of human interactions and the transaction of natural resources such as land.

As the valuers and the valuation profession can be found as an international, broadly established form of organization to resolve complex informational asymmetries and the sustainability transformation of the twenty-first century, it can be concluded that its superiority to other forms of organization for intermediation and property services is justified.

4. Discussion and Conclusions

Valuers as information intermediaries provide vital services to most ‘land-related’ sectors and stakeholders of the economy; but their services are regularized in terms of professional rules and regulations. It has been demonstrated that such regularization is a socio-ecological response to a cascade of principal–agent problems due to imperfect information settings.

Provided was a characterization of ‘real estate’ as an economic good with specific physical and economic properties, where transaction costs arise from the need for information in order to determine the product quality and the related market value. Our conceptual analysis confirms that information intermediaries can reduce such transaction costs, which in turn explains their existence and a positive willingness to pay for their services by clients. This indicates a potential of welfare improvements due to the existence of valuers. This also allows valuers as information intermediaries to invest in a specific ‘detection technique’ which allows for them to observe the ‘product quality’ of land and translate this into a market price. The market of real estate can be characterized as a durable experience goods’ market in terms of Nelson [29].

Departing from Nelson’s concept of experience good, the market of real estate can be economically improved (in terms of higher utility) by the existence of an institution that offers guidance (i.e., the valuer). The valuer reduces uncertainties for his client. For the client the benefits can be assumed to be larger than the costs, thus net beneficial. However, it entails a client–valuer internal relationship, which is evidently facing asymmetric information and needs trust, i.e., it has potential of developing into a credence good. The valuation assessment is accepted as a price by market participants only if they trust the valuer, as otherwise the credence problem would occur. Solving the problem of imperfect information in the first tier (land as durable experience good) creates another imperfect information problem (trust into the valuer) as a second-tier problem.

Understanding the valuer in terms of this cascade of imperfect information, it can be concluded that credence and fiduciary problems are key also to understand the evolution
of the valuation profession. ‘Land’ is as a nature-related transaction good in terms of Hagedorn [52], which tends to bring about expert intermediaries and their associated organizations as an institutional solution to the information complexities. The international emergence of a valuation profession can be understood as evolutionary response to ultimately limit the second-tier information problems between an individual valuer and his clients and further stakeholders. That valuation professions actually have internationally emerged demonstrates that they are a superior organizational form for the solving of market deficiencies as characterized in the second-tier issue.

In the end, the more orthodox economic approaches to real estate valuation do not become obsolete but integrate into a socio-ecological framework of transaction economics. Here the emergence of regularizing organizations as a first order condition to guide the behavior of the valuer for an effective functioning of the valuation process in the absence of punishments or incentives comes into the forefront. This again demonstrates that neo-classical and new institutional economic approaches are not mutually exclusive, but that there are bridging concepts, such as the ‘credence’ concept, to link these strands of economic theories.

This article could only discuss a limited set of aspects. Prominently the question remains, can the existence of the valuer as economically efficient entity be positively evaluated? So far, it has been proven that the market alone (without an expert intermediary) faces the risk of ‘collapse’ or at least of failure due to lacking information, specifically in the case of complex nature-related transactions.

The institutional understanding by Vatn [49] and Hagedorn [52]’s transaction-interdependence-circle emerges as a consequent step to further an understanding of the economic role of the valuer. It allows translating the existing ‘cascade of information imperfections’ into the evolutionary emergence of a regularizing setting of the valuation profession, its organizations, standards and regulations to address the quality assessment and the credence problems. In other words, it integrates the neo-classical approaches to real estate valuation into a holistic transaction economics’ approach rather than considering them mutually exclusive, thereby contributing to a convergence of the different elements in economics (cf. [64]) and, practically, explaining the co-evolution of valuation professions globally according to similar standards and regulations.

It needs to be observed whether future factors will substantially change this picture. Digitalization, block chain, and satellite remote sensing will improve the ability of all market actors to handle complex data. However, the amount of data will also increase, so that the valuer professions might remain important for efficient land markets.

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