FIG Position Paper:
Viewpoint on Transparency in Real Estate Markets

In the context of rapid change and urgent challenges, a new definition is required

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General Note

One of the principal objectives of FIG Commission 9 – Valuation and the Management of Real Estate during the 2022 to 2026 period is to enhance the understanding of transparency in real estate markets. This initial step necessitates the definition of the term 'transparency' in the context of various real estate markets. This topic has been discussed at length during numerous FIG conversations, as well as through academic and professional literature and at various events. This has led FIG Commission 9 to formulate a new approach to transparency that is based on multiple perspectives, which when put together are expected to help practitioners, researchers, regulators, and the wider public to grasp the complexity of the transparency issue in the real estate sector.

This paper represents the preliminary position of FIG Commission 9, as part of a project entitled 'Increasing Transparency in Real Estate Markets'. This position paper is intended to stimulate debate and discussion at an international level.

Researching real estate markets and transparency, the first step requires defining appropriate and relevant terms. In the context of this position paper, 'real estate' is used as per the RICS (2022) definition – 'Land and all things that are a natural part of the land (e.g. trees, minerals) and things that have been attached to the land (e.g. buildings and site improvements) and all permanent building attachments (e.g. mechanical and electrical plant providing services to a building), that are both below and above the ground'. Note that the rights relating to real estate including ownership, control, use or occupation of land and buildings are defined as a 'real property interest' and include real property interests such as 'informal tenure rights for communal/community and or collective or tribal land and urban/rural informal settlements or transition economies, which can take the form of possession, occupation and rights to use' (IVSC, 2024, IVS400, 20.02).

Approaches to this issue have recently been extensively discussed on international and national levels; these included findings from classical economics as well as observations from behavioural economics and other disciplines, research into the handling of large amounts of data, the interoperability of various data sources, and also legal frameworks, for example in connection with tax evasion, terrorist financing, money laundering, sanctions enforcement, and business monitoring.

Frequently, the term 'transparency' is used in the sense of high usability of data for the respective interests of companies, institutions, the state and the public. There is no generally applicable definition in relation to the real estate market. The term is often used in a quite random manner without providing context for its use which undermines any kind of constructive debate. One could be forgiven for thinking that society, politics, and the economy are 'avoiding' a debate about the meaning of this term.

The real estate market is an important part of the economy, and its operation has far-reaching effects on people's financial well-being and on the stability of other markets. However, despite its importance, the property market is not free from irrational behaviour and potentially undesirable developments that may be countered by social and economic nudging and governmental intervention. This phenomenon, often referred to as the 'misbehaving of the property market', can be better understood through the findings of behavioural economics, in particular the work of Kahneman and Tversky (1979).

Improved Evidence

Each day we generate huge amounts of data about every aspect of our lives. This data is sometimes analysed without express permission and is often used for commercial purposes by companies such as Google, Amazon, Facebook, etc. Real estate valuations are to some extent based on strong underlying data but with the addition of calculations heavily relying on theoretical economic approaches. This is a decidedly conservative and rather vulnerable approach, which is then balanced by the 'art' of the experts. However, his does overlook the fact that experts, like judges, teachers, police officers and managers ultimately express their own opinions, can rarely use the full data, and are subject to psychological biases. Today's availability of computing power should enable experts to utilise a much broader data set. The possibilities of using artificial intelligence and automated valuation models are immense to inform valuations that more comprehensively reflect the market.

It is, therefore, necessary to expand beyond theoretical traditional valuation models and embrace new sources of data and new approaches to using it. To understand real estate markets, data drawn from transaction evidence must go beyond the key characteristics such as purchase prices, property particulars, and information about sellers and buyers. This means including more detail on the circumstances of particular transactions and more nuanced property details. This should help to more precisely consider the effects of human behaviour. Therefore, a novel approach to valuation is required to address the challenges of our times. This, in turn, necessitates a revised conceptualisation and operationalisation of the term 'Transparency in the Real Estate Market'.

Transparency in Real Estate Markets – An approach to definition

1. General reflections

There is no doubt about the importance of the real estate sector. At the end of 2022, the total value of the world's property stood at $379.7 trillion (Savills, 2022). However, in the context of the national, social, and security policies for specific types of real estate (residential real estate, commercial real estate, agricultural, and forestry real estate), there is a need to improve transparency. Opportunities for new data uses are largely driven by advancements in computing power. Modern computational capabilities enable the processing of vast amounts of data at unprecedented speeds, facilitating deeper insights and more accurate predictions. Diverse industries, from healthcare to finance or retail, are leveraging these advancements to enhance decision-making, optimise operations, and gain competitive advantages. The ability to analyse large datasets quickly and efficiently is transforming how businesses operate, driving innovation, and providing new opportunities for growth and development. As technology continues to evolve, the role of data analysis will only become more critical in shaping the future.

It is certainly true that many policy and investment decisions are made on theoretical and political grounds and can be detached from reality or driven by what may be private agendas that do not reflect the interests of wider society. Today, in an age when data is available on almost every aspect of people's lives, people can still find themselves attached to ways of doing things that are increasingly becoming obsolete.

Data-driven analysis works with what is observed and is assumed to reflect reality. However, in order to collect data on the real estate market, work with it, and use the results, initial clarity is needed to define what data can be reasonably used to inform the market and how exactly this data should be sourced and coded.

A clear and unambiguous definition of the term 'transparency in the real estate market' is required precisely for this purpose.

2. A concrete approach to understanding real estate market transparency

A transparent real estate market is characterised by a free flow of information throughout the real estate market, enabling market participants to make informed and long-term investment decisions.

The term 'market participants' also encompasses the state as a legislative, judicial, and executive entity of public welfare. Additional perspectives include, for instance, the question of access to real estate-related information for other actor groups (including the 'public') and the quality of the information.

Consistency, objectivity and transparency are fundamental to building and sustaining public confidence and trust in valuation and the implications of the market observations and analytics. This relies on valuers and analysts having the appropriate skills, knowledge, experience and displaying ethical behaviours to form sound judgments and to report opinions of values and market trends clearly and unambiguously to clients, decision makers and other users, in accordance with globally recognised norms and standards. The role of professional institutions and member organisations is also key to maintaining professional expertise and competence alongside clarity in practice when communicating the scope of valuation and analysis, bases of value, and the ultimate discoverability of valuation information on whose transparent access market efficiency is based.

Real estate or property is all undeveloped and developed land, including undesignated/unregistered land/communally owned land and land used for all sorts of purposes be it e.g., agriculture, forestry, and natural habitats and more broadly also land that relates to water. It therefore includes public land, governmental land and unregistered land.

Real estate market transparency can be categorised according to:

- The type of **access** to real estate market information for all involved parties,
- the **availability** and
- the **quality** of real estate market information.

Real estate market information is data on the components of the real estate market and related markets as well as the whole economy and includes:

- Individual data for each property (e.g. purchase price, location, size, etc.) as a direct comparable evidence,

- Categorised individual data as statistical information on property classes in regional and functional submarkets as indirect comparable evidence or general market data,
- Appraisals, valuations and other expert opinions on individual properties, e.g. on market value, tax value, mortgage lending value, etc. and
- Other sources, e.g. assessed data based on professional judgement (IVSC, 2024)

Components of the real estate market are:

- Properties (real identifiable assets relating to land) and their spatial and material characteristics,
- Owners, buyers, and holders of rights to real estate, including but not limited to inheritable building rights, letting, leasing, mortgaging, rights at the expense of others, encumbrances,
- Type, origin, and intentions of buyers of the property and
- Transaction prices and income from properties.

The **quality** of real estate market information depends on its:

- Timeliness,
- Granularity in spatial and substantive submarkets,
- Reliability and
- Consistency.

The careful discussion of the term 'Transparency in the Real Estate Market' is a fundamental prerequisite for the advancement of investor decisions and regulatory actions. The same applies in the context of the ethical handling of data that concerns individuals. Transparency can be a double-edged sword. This may well mean that a high level of transparency would not always be in the public interest (e.g. the identification of land that may be acquired for infrastructure projects, transparency in this regard may lead to land speculation and potential profiteering) and may not necessarily lead to positive outcomes for social, economic and political reasons. The primary issue is to make the term measurable and to operationalise and embed it within the professional practice (Professional surveying institutions should include a recognition of 'transparency' within their codes of ethics and conduct). Only when these fundamental issues and understandings are outlined and clarified can technical developments, such as artificial intelligence for property valuation and decision making, be used successfully to meaningfully inform potential regulatory safeguards and governmental intervention and investment.

Prices, Values and the Climate Emergency

The effects of wars and crises have a global impact on real estate markets. On a global scale, we are witnessing climatic changes that are becoming more extreme and unpredictable (Ripple et al., 2023 and IPCC, 2023). As a result, today's models and algorithms are increasingly unable to make valid future predictions.

Migratory pressures resulting from climate change and related natural disasters represent a growing human tragedy and global challenge. Estimates of the number of climate change-related migrants can be by their very nature vague and inconsistent. While the World Bank still assumed in 2018 that there would be 143 million climate refugees by 2050 (Groundswell Report 1, Rigaud *et al.*, 2018), the forecast was already reaching 216 million just three years later (Groundswell Report 2, Clement *et al.*, 2021). The Institute for Economics and Peace (2020) even expects 1.2 billion people to be displaced by 2050 due to increasingly hostile climate change and resulting environments. It is emphasised within these reports that the majority of this human migration will remain 'internal', but that the proportion of global human migration will inevitably increase. In addition to the political issues of asylum and integration, the question for local real estate markets, which may be the destination countries or regions for climate displaced migration, is whether these markets are transparent enough to provide a quick answer as to where people can live. Do such statistics exist at the micro-level, and are they sufficiently valid, up-to-date, and accessible?

Another transparency issue concerns the assessment of energy use and climate resilience of real estate (including decarbonisation strategies). In many countries, there are national climate adaptation strategies and funding programs for the climate protection of buildings. But will they be sufficient in the long run? And how will these increased climate risks affect real estate values?

Issues are already starting to become apparent with the relatively new and evolving valuation sub-sector of natural capital and carbon credits, where a lack of transparency of the methodology of how there 'economically based' valuations are calculated is affecting the land market (there is a lack of data that makes the use of the more discoverable and evidence-based valuation method of comparable evidence difficult).

Land markets have been and are currently being affected by the inclusion of natural capital 'values', often leading to higher transfer or investment values. However, a recent study in Scotland (Scottish Land Commission, 2024) highlighted how uncertainty and a lack of transparency in natural capital value determination have led to a readjustment in land values during 2023 and 2024. Scotland has been an early adopter of natural capital and carbon valuation and its inclusion in land value determination. The global drive to enable carbon credits and natural capital will most probably experience these issues in due course.

Voluntary carbon markets allow private entities in industry and other sectors to buy carbon credits representing carbon dioxide either removed from the atmosphere or kept locked away, so it is never emitted in the first place. These carbon markets are meant to encourage entities to reduce their carbon footprint by offsetting unavoidable emissions, but in practice the markets are poorly regulated, opaque, and ultimately ineffective for what they have been established.

A report by the Climate Crisis Advisory Group (CCAG, 2024) has set out seven key recommendations that go beyond the previous Oxford Offsetting principles (University of Oxford, 2024), an established guide on the design and delivery of net zero commitments for governments, cities and companies. One of the key recommendations is focussed on transparency and access to data. The report emphasises financial transparency as a critical step towards building trust and confidence in the current absence of international and state regulation.

The recommendations of the German Sustainable Finance Advisory Committee point in a similar direction: 'In the short term, the demand for the immediate creation of fundamental transparency is central' to enable the financial system to achieve the climate goals in the building sector (Sustainable Finance-Beirat, 2024, p. 2). The German Sustainable Finance Strategy envisages that the financial sector will contribute to

financial market stability and finance the necessary real economic activities to achieve the sustainability goals of the United Nations. With real estate assets of around €16.9 trillion, Germany is currently faced with the problem of not being able to make a 'valid statement on the real energy status quo of the building stock [...] in a comprehensive and market-covering manner' (Sustainable Finance-Beirat, 2024, p. 3). It is pointed out that, in principle, several instruments already exist for this purpose, including in EU regulation and in particular in the Energy Performance of Buildings Directive (EPBD) (EUR-LEX, 2002). Two of the four key recommendations to the German government are to establish central database at the federal level as soon as possible to improve the coherence of data collection (instrument coherence), and to clarify data protection requirements to allow access by financial system actors and their auditors within the necessary framework. Similar plans are all across the European Union.

Call to action

It is time to define the term 'transparency in real estate markets' for the entire real estate industry. This applies not only to the real estate valuation but to all areas relating to managing real estate. This requires more than declaring good intentions - it requires coordinated action and collaboration.

1. To grasp transparency in the real estate markets there is a need to have the basic information on all land.
2. Transparency has to be measurable
3. Institutions and governments have to be made more accountable for concrete and measurable transparency
4. Institutions and governments have to be cognisant of the investment risks under opaque markets

Commission 9 members therefore take the following next steps:

1. Discuss this paper with other organisations, associations and governments
2. Take great care to ensure that the agreed definitions are clear, robust and universally comprehensible
3. Work on concepts to make 'transparency in real estate markets' measurable so that it is possible to distinguish across countries between 'high' and 'low' transparency.
4. The expertise of geodesy, cadastre, legislation, data science, economics, psychology and sociology have to be integrated and thus meet the current challenges of society and the Sustainable Development Goals of the United Nations.

Let's take up this challenge!

Let's work it out together!

Join us in the effort!

References

CCAG (2024) Voluntary Carbon Markets: Potential, Pitfalls, and the Path Forward. Available from: https://www.ccag.earth/reports/voluntary-carbon-markets-pitfalls-potential-and-the-path-forward

Clement, V., Rigaud, K.K. ., de Sherbinin, A., Jones, B., Adamo, S., Schewe, J., Sadiq, N., & Shabahat, E. (2021) Groundswell Part 2: Acting on Internal Climate Migration. World Bank, Washington, DC. Available from: http://hdl.handle.net/10986/36248

EUR LEX (2002) Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings. Available from: https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX:32002L0091

Kahneman, D., & Tversky, A. (1979) Prospect Theory: An Analysis of Decision under Risk. Econometrica, 42(2), pp. 263-291. https://doi.org/10.2307/1914185

Institute for Economics & Peace (2020) Ecological Threat Register 2020: Understanding Ecological Threats, Resilience and Peace. Available from: https://www.visionofhumanity.org/wp-content/uploads/2020/10/ETR_2020_web-1.pdf

IPCC (2023) Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC, Geneva, Switzerland. Available from: https://doi:10.59327/IPCC/AR6-9789291691647

IVSC (2024) International Valuation Standards, effective 31 January 2025. Available from: https://www.ivsc.org/new-edition-of-the-international-valuation-standards-ivs-published/

RICS (2022) RICS Valuation – Global Standards. Available from: https://www.rics.org/content/dam/ricsglobal/documents/standards/2021_11_25_rics_valuation_global_standards_effective_2022.pdf

Rigaud, K. K., Sherbinin, A. d., Jones, B., Bergmann, J., Clement, V., Ober, K., Schewe, J., Adamo, S., McCusker, B., Heuser, S., & Midgley, A. (2018) Groundswell: Preparing for Internal Climate Migration. Washington, DC: World Bank. Available from: http://hdl.handle.net/10986/29461

Savills (2022) Total Value of Global Real Estate: Property remains the world's biggest store of wealth. Available from: https://www.savills.com/impacts/market-trends/the-total-value-of-global-real-estate-property-remains-the-worlds-biggest-store-of-wealth.html

Scottish Land Commission (2024) Natural Capital Driven Land Sales Subside as Uncertainty Rises, Report Reveals. Available from: https://www.landcommission.gov.scot/news-events/news/natural-capital-driven-land-sales-subside-as-uncertainty-rises-report-reveals?p_slug=news

Sustainable Finance-Beirat (2024) Diskussionspapier Immobilien-Datenverfügbarkeit schnellstmöglich etablieren – als zentralen Baustein für das Finanzsystem in der Wärmewende, und für das Finanzsystem als zentralen Baustein der Wärmewende!. Available from: https://sustainable-finance-beirat.de/wp-content/uploads/2024/02/Diskussionspapier_SFB_Immobiliendaten.pdf

University of Oxford (2024) Oxford Principles for Net Zero Aligned Carbon Offsetting (revised 2024). Available from: https://www.smithschool.ox.ac.uk/sites/default/files/2024-02/Oxford-Principles-for-Net-Zero-Aligned-Carbon-Offsetting-revised-2024.pdf

Ripple, W.J, Wolf, Ch., Gregg, J.W., Rockström, J., Newsome, T.M., Law, B.E., Marques, L., Lenton, T.M., Xu, C., Huq, S., Simons, L., & King, D.A. (2023) The 2023 state of the climate report: Entering uncharted territory. BioScience, 73(12), pp. 841–850. https://doi.org/10.1093/biosci/biad080

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