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# *The Psychology of Manipulation and Fraud in the Housing Market*

**Keywords:** real estate market; behavioural economics; big data; AI; blockchain; manipulation

**JEL:** R3; R20; B50

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**Abstract**

**Theoretical background:** This article analyzes the psychological and economic mechanisms of manipulation and psychological games in the real estate market, focusing on information asymmetry, cognitive biases, and the impact of emotions on purchasing decisions. It discusses key manipulative techniques used by market entities, their effects, and their implications for the stability of the housing market. Particular attention is given to the role of behavioral economics in explaining consumer behavior and potential measures to counteract unethical practices.

**Purpose of the article:** The aim of this article is to identify and analyze the mechanisms of manipulation employed in the real estate market, assess their impact on consumer decision-making, and examine their consequences for market stability and functioning. Furthermore, the article seeks to formulate recommen-

dations for strategies to combat unethical practices, with a particular emphasis on the role of regulations, consumer education, and modern technologies such as blockchain and artificial intelligence – in enhancing market transparency.

**Research methods:** The study was conducted using an online survey (CAWI) among 96 respondents with diverse demographic profiles. The research focused on perceptions of manipulative techniques, sources of information, and consumer responses to manipulation

**Main findings:** The findings confirm the widespread presence of manipulation in the real estate market and its significant consequences for consumers and market stability. As many as 62.5% of respondents reported encountering unethical practices, yet only 10.5% took action to hold manipulative entities accountable, while 25.3% did not react at all. The most frequently cited consequences included rising property prices (67%), reduced access to housing (44%), and market destabilization (41%), which particularly affect lower-income social groups. An analysis of information sources revealed that consumers most often rely on the Internet and recommendations from acquaintances, while specialized publications are rarely consulted. Only 30.2% of respondents always verify the information they obtain, increasing their susceptibility to manipulation. Emotions play a key role in the decision-making process, making consumers vulnerable to time pressure, scarcity effects, and selective presentation of information. The article highlights the urgent need for more effective regulations and consumer education in recognizing manipulative techniques. In this context, new technologies present significant potential solutions. Blockchain can enhance market transparency by eliminating data falsification, while artificial intelligence can support the detection of market anomalies and pattern analysis to prevent fraudulent practices.

## Introduction

In the fast-paced housing market, aspirations of homeownership often collide with economic realities, creating a space for intense interactions between developers, real estate agents, investors, and households. In this context, psychological mechanisms play a crucial role in shaping the decision-making processes of market participants. These mechanisms range from heuristic thinking, rationalization, euphoria, and overoptimism to the illusion of control and the tendency to imitate the decisions of others. Some sales professionals employ psychological strategies or manipulative techniques to influence purchasing decisions.[1] For instance, they may selectively present information or exert subtle emotional pressure by creating a sense of scarcity. These mechanisms can have profound consequences for individuals and the economy as a whole,[2] leading to irrational decision-making and contributing to the formation of speculative price bubbles in housing markets, as exemplified by the

[1] Manipulation, according to the definition, is "the deliberate, dishonest steering of people's opinions or actions, leading them to pursue goals previously unfamiliar and unnecessary to them, yet aligned with the manipulator's will." Psychological games are a form of interpersonal interaction in which one person conveys a message to another. This message has a hidden motive that the participants are unaware of (Markowski & Pawelec, 2001).

[2] According to the report by the National Bank of Poland, *Report on the Situation in the Residential and Commercial Real Estate Market in Poland in 2023*, the estimated value of residential real estate assets in Poland at the end of 2023 amounted to approx. PLN 7.1 trillion, compared to PLN 6.5 trillion at the end of 2022. The estimated value of commercial real estate was around PLN 400 billion, up from PLN 380 billion in 2022. At the end of the analyzed period, the value of residential real estate corresponded to approx. 209% of GDP, while the value of commercial real estate accounted for about 12% of GDP.

2008 financial crisis. This study highlights not only an academic but also an applied dimension of research in this area.

Real estate is an asset that cannot be moved, lasts a long time, is not all the same, is not very liquid, and is naturally scarce (Kucharska-Stasiak, 2016). This makes decisions in the real estate market very hard. These characteristics make property valuation a highly complex and subjective process. During transactions, market participants assess and weigh various locational, technical, legal, and economic attributes. However, this process takes place within an opaque economic and institutional environment, further complicating rational decision-making. Homebuyers, often investing their life savings, do not merely select a building or a plot of land; they choose a home within a specific socio-economic and environmental context,[3] often with limited access to information and under significant external pressures. Under such conditions, cognitive limitations become particularly pronounced.

The literature has extensively discussed the challenges associated with the traditional *homo oeconomicus* model (Solek, 2010). These challenges have given rise to new research paradigms. Herbert Simon, the proponent of bounded rationality, argues that economic agents cannot maximise utility due to their limited access to information and finite cognitive processing capabilities. Instead, they make decisions that are "satisficing" rather than optimal. The next major development in alternative economic theories emerged from the work of Kahneman and Tversky, who integrated psychological insights into economic models. Their research introduced ideas like System 1 and System 2 thinking,[4] heuristics, cognitive biases, and prospect theory. These showed how emotions and mental shortcuts affect decision-making, often in ways that are not logical. The incorporation of psychological factors in economic analysis has led to the emergence of behavioural economics, experimental economics, and related fields. The significance of these contributions has been recognised by the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, which is awarded to scholars such as Akerlof, Kahneman, Smith, and Thaler.[5]

More recently, the relevance of behavioural economics in the real estate market has gained increasing attention (Brzezicka et al., 2015; Jarecki, 2020; Kucharska-Sta-

[3] The real estate market has distinctive characteristics. It combines high entry costs, low efficiency, a local nature, low transparency, a significant degree of state interventionism, and a complex supply-demand dynamic (Kucharska-Stasiak, 2016).

[4] According to Tversky and Kahneman, the human mind operates through two types of cognitive processes: fast thinking processes (*System I*), which are automatic, involuntary, and predominantly associative, slow thinking processes (*System II*), which are reflective and controlled (Kahneman, 2011).

[5] Behaviorists emphasize that this approach marks a return to the reflection on the psychological foundations of human behavior, which formed the basis of the work of the earliest economists. For instance, Smith, in *The Theory of Moral Sentiments*, wrote about loss aversion, the neglect of implicit costs, and the role of fairness in economic behavior. Similarly, Bentham, Jevons, and Keynes recognized that uncertainty, emotions, and imperfect knowledge can significantly influence economic decisions. Keynes, in particular, challenged the "ideal" functioning of the market, questioning the rationality of economic agents in the context of "uncertain knowledge" (Solek, 2010).

siak, 2016; Salzman & Zwinkels, 2013). However, most of the research that has been done so far has been on things like speculative price bubbles and how properties are valued. The psychological susceptibility of market participants to manipulation has not been studied as much. Addressing this gap, the present article examines the psychological and economic dimensions of manipulation and psychological games in the real estate market. Specifically, it analyses mechanisms such as information manipulation, emotional pressure, and herd behaviour, along with their long-term consequences. The objective is to identify these mechanisms, explore potential tools to counter fraudulent practices, and underscore the role of behavioural economics in addressing contemporary challenges in the housing market. The authors advocate for a systemic approach, incorporating regulatory and educational measures to enhance market transparency and stability. Furthermore, emerging technologies such as artificial intelligence, big data and blockchain[6] present new opportunities for increasing transparency and trust in real estate transactions, potentially mitigating manipulative practices and empowering consumers.

It is essential to distinguish between ethical persuasion – a transparent and legitimate way of informing and convincing consumers – and manipulation, which involves deception, coercion, and exploitation of cognitive and emotional vulnerabilities, undermining consumers' autonomy and interests (Boush et al., 2009; O'Shaughnessy & O'Shaughnessy, 2004). While persuasion relies on clear and complete information to support informed choices (Cialdini, 2001), manipulation distorts or withholds information to induce decisions contrary to the consumer's best interest (Buss, 2015; Packard, 1957). Clarifying this distinction is crucial for identifying unethical practices and fostering transparency and trust in real estate markets (Brenkert, 2008). To assist stakeholders in identifying and managing ethical challenges, we propose a practical framework based on three key principles: transparency of information, respect for consumer autonomy, and accountability of market actors (European Commission, 2021).

## Literature review

The housing market, a distinct segment of the economy characterized by specific structures and dynamics, has long attracted the interest of researchers across various disciplines (Bryx, 2006; Kucharska-Stasiak, 2016; Załęczna, 2010). The literature highlights that the traditional economic approach, which assumes rational decision-making and market efficiency, is not always applicable when analysing the behaviour of housing market participants (Brzezicka, 2017). As demonstrated by behavioural research (e.g. Case, Shiller, Thaler, Smith) and economic practice (Brzezicka et al., 2015), the unique characteristics of the real estate market and the

[6] Explanation in the following sections of the article.

properties themselves lead to deviations from the assumptions of classical price theory. Decision-makers operate in an environment of limited information, where various factors – such as emotions and trends – significantly influence their choices. Consumers perceive market stimuli in a highly subjective and instinctive manner, often shaped by factors beyond purely rational calculation. This subjective perception serves as the immediate foundation of the decision-making process.

For instance, if a seller perceives strong buyer interest in a property, they are less likely to offer discounts and may even increase the previously quoted price. Conversely, when buyers observe an upward trend in property prices, they may interpret it as a signal of further increases: if today's price is higher than yesterday's, and yesterday's was higher than the day before, then prices are expected to rise further (Seslen, 2004). This expectation accelerates their purchasing decisions. Case and Shiller (1988) found that historical trends influence property price movements. Their study revealed that as many as 80% of respondents cited high price appreciation as a motivating factor for purchasing property. This behaviour reflects "habit persistence," whereby individuals assume that current trends will continue into the future, failing to learn from either their own or the market's past experiences. Interestingly, the researchers also identified the opposite phenomenon: when nominal property prices decline, owners tend to delay selling, maintaining offer prices above market levels to avoid perceived losses (Case & Shiller, 1988). As a result, emotional factors contribute to the asymmetric nature of price movements – prices rise dynamically during a bull market but exhibit downward rigidity in a declining market. Farlow further examined buyer motivations, highlighting that the decision to enter an asset market during an upward phase may be driven by the fear of missing out on potential profits (Farlow, 2013). This phenomenon aligns with regret theory, which suggests that individuals are motivated to act to avoid future regret over foregone gains. The influence of behavioural factors on price formation has also been recognised by Genesove and Mayer (2001), who observed that owners with strong emotional attachments to their properties tend to set higher asking prices compared to investors. Similarly, Gallimore and Gray (2002) found that market participants operating in an information-constrained environment make decisions based not only on market data but also on sentiment, personal feelings, and third-party opinions.

The susceptibility of the human mind to the psychological mechanisms outlined above creates a vast scope for the application of manipulative techniques and psychological games in the real estate market. While these practices are not always illegal, they often mislead buyers, shaping their perception of a property's value in a way that may not align with its actual market worth.

One of the most widespread forms of influence in the real estate market is the selective manipulation of information. Developers and real estate agents frequently present data in a skewed manner, emphasizing upward price trends while omitting critical details about market volatility, maintenance costs, or investment risks. When combined with emotional pressure tactics – such as creating a sense of urgency by

suggesting that "this offer could disappear at any moment" – these strategies can significantly impact purchasing decisions. As Kahneman (2011) observes, emotions, particularly the fear of missing out on an opportunity, often override rational thought, leading to impulsive decision-making (Thaler & Sunstein, 2021).

Such techniques may include fostering an illusion of a property's uniqueness, presenting it as the last "ideal" option on the market, or subtly applying social pressure by implying that multiple buyers are interested in the same property. While these strategies may appear benign, their underlying objective is to manipulate buyers' emotions, encouraging them to make decisions that might otherwise be postponed or subjected to more thorough deliberation.

The lack of information transparency in the real estate market represents a significant challenge. Kucharska-Stasiak (2006) argues that the low quality of available information and the high costs associated with acquiring it impede rational decision-making. The asymmetry of information between buyers, sellers, and intermediaries creates opportunities for unethical practices, such as price inflation or the concealment of property defects. Levitt and Dubner (2005) highlight the prevalence of fraudulent practices among real estate agents, who often prioritise maximising their benefits at the expense of their clients.

An additional factor contributing to market inefficiencies is the generally low level of legal and economic awareness among consumers, making them more vulnerable to manipulation. As Kucharska-Stasiak (2006) points out, the complexity of real estate transactions and the high degree of expertise required to assess property value accurately lead many buyers to rely on intermediaries (Levitt & Dubner, 2005). However, this reliance does not always translate into more informed decisions, as intermediaries may have incentives that do not align with the buyer's best interests. The long-term consequences of manipulative psychological strategies in the real estate market can be profound, affecting not only individual buyers but also market stability and overall economic efficiency.

The consequences of such practices are particularly evident in the phenomenon of rapid price increases that are not justified by fundamental factors – commonly referred to as "price bubbles." At the end of the 1990s and the beginning of the 21st century, a widespread belief emerged in the United States that real estate, particularly residential properties, represented one of the most secure and profitable forms of investment. Several factors contributed to reinforcing this conviction, including the declining attractiveness of alternative investment options.[7] The bursting of the

[7] An equally important argument that has often fueled investor optimism in the real estate sector is the belief in the limited supply of land, combined with population growth and economic expansion, which were assumed to drive continuous increases in property prices. However, as history demonstrates, such reasoning is often misleading. Interestingly, this perspective is not always prevalent, particularly when the rate of real estate price growth aligns with economic growth or during periods when property prices remain stagnant for an extended time. For instance, in Japan, housing prices have not exhibited consistent long-term growth. Between 1991 and 2006, the real prices of undeveloped land fell by 68%. During the

dot-com bubble in 2000 eroded confidence in the stock market, while reductions in income tax rates and historically low interest rates – driven by the Federal Reserve's decision to lower rates to their lowest levels since World War II – further incentivized real estate investment. Additionally, demographic factors, particularly the high proportion of young people in the total population, supported increased demand for housing. These conditions collectively fueled a significant expansion of real estate investment not only in the United States but also in many other countries (Akerlof & Shiller, 2010).

Prices continued to rise until 2006, when they reached their peak. One hypothesis explaining the formation of real estate price bubbles is the prevalence of naïve expectations or intuitive beliefs regarding the benefits of property investment, shaped largely by recent price trends. Real estate is often perceived as an exceptionally profitable asset, even though this perception is not always supported by economic fundamentals. A key cognitive bias contributing to this misjudgment is the so-called *money illusion*. Observers of real estate price movements often assess investment attractiveness based on present value comparisons – contrasting property prices from two different periods – without adequately accounting for inflation and overall economic growth (Akerlof & Shiller, 2010). This approach disregards changes in the prices of other consumer goods over time, leading to an exaggerated perception of real estate as a uniquely rewarding investment. As a result, speculative demand intensifies, further inflating prices and increasing the risk of market instability.[8]

The media also play a crucial role in shaping public perceptions of the real estate market. During the 1990s and early 21st century, the prevailing belief in continuously rising property prices was widely promoted. Experts featured in journalistic programs frequently emphasized optimistic forecasts, thereby influencing public perceptions of transaction risks. This media-driven portrayal contributed to an illusion of investment security, ultimately leading to numerous impulsive and ill-informed investment decisions (Thaler & Sunstein, 2008). The above example illustrates several common cognitive biases in the real estate market, including the momentum effect, herd behavior, and excessive optimism (Czechowska, 2014). To mitigate the recurrence of such market distortions, regulatory initiatives aimed at enhancing consumer protection and reducing the risk of unfair practices have increasingly been introduced in Europe. One example is EU legislation on real estate market transparency. In Poland, the Polish Association of Developer Companies (PZFD, n.d.) has recommended that

1980s, Japan experienced a sharp real estate price surge, driven by expansionary monetary policy and yen appreciation. This eventually resulted in a severe market crash and prolonged economic stagnation (Jarecki, 2020).

[8] The mere stimulation of speculative demand does not, by itself, create an environment sufficient to trigger crises on the scale of the 2008 financial crisis. Among the many complex causes, one key factor identified is the loosening of lending standards by banks. Loans were granted to individuals who lacked sufficient financial capacity, under the assumption that even if the borrower became unable to repay, the bank would not incur losses – since real estate prices were expected to rise continuously (Akerlof & Shiller, 2010).

its members publish housing prices to increase transparency and enable consumers to make more informed purchasing decisions.

However, the authors argue that the greatest potential for addressing these issues lies in modern technologies such as blockchain, artificial intelligence (AI), and big data. Blockchain technology, in particular, enables the creation of a decentralized, immutable record of property transactions. Every transaction – whether involving the purchase, sale, rental, or mortgage of a property – can be transparently recorded, reducing the risks of document forgery and fraudulent double sales. An example of blockchain implementation in real estate is the Swedish land registry system (*Lantmäteriet*), which has been testing blockchain-based property transaction recording since 2016 to minimize legal ambiguities and accelerate transaction finalization (ICA, 2017). Additionally, smart contracts offer the potential to automate buying and selling processes, executing contractual terms only when both parties fulfill agreed-upon conditions. This reduces the risk of payment fraud and enables the immediate transfer of ownership rights, further enhancing market efficiency and security.

AI plays an increasingly important role in detecting price manipulation and fraud through the analysis of large transaction datasets. Machine learning algorithms can identify instances of artificial price inflation by developer groups in specific locations by comparing market listings with actual transaction prices. AI is also being used to detect practices such as *price pumping* – the deliberate inflation of a property's value through multiple resales among related parties. In some countries, such as the United States, AI systems analyze the credibility of property listings, verifying that images are not artificially generated and that descriptions do not contain suspicious phrases indicative of potential fraud. In the private sector, companies such as Zillow in the United States utilize AI and big data analytics to generate property valuations and market forecasts, demonstrating how these tools can enhance decision-making and reduce information asymmetry for consumers (Bokhari & Geltner, 2021).

Another technology enhancing transparency in the real estate market is big data analytics, which enables a more accurate assessment of property values based on actual transactions rather than inflated listing prices. Public transaction databases provide detailed information, reducing the potential for price manipulation by brokers and other market participants. Big data analytics also facilitates price comparisons with similar transactions, the identification of value surges or declines indicative of speculation, and the incorporation of macroeconomic and demographic factors into property valuations.

Beyond price analysis, media monitoring and market sentiment analysis are crucial tools in combating manipulation. Natural language processing (NLP) techniques can analyze content from social media, industry forums, and analyst reports, detecting the spread of false information designed to influence investor and consumer behavior. Such systems can identify media manipulation tactics, such as the deliberate dissemination of rumors regarding an alleged increase in property values in specific locations, which can drive unwarranted speculative purchases.

While regulatory frameworks and industry initiatives remain essential in addressing real estate market manipulation, modern technology provides the most effective tools for mitigating these risks. Blockchain technology enhances transaction transparency and prevents document forgery, AI enables the detection of pricing anomalies and fraudulent activities, and big data analytics facilitates accurate property valuations, reducing speculative behavior. The implementation of these technologies has the potential to significantly lower fraud risks and contribute to a more stable and predictable real estate market. However, despite their considerable potential, implementation of these solutions in the real estate market faces several limitations. These include the availability and quality of data, the risk of algorithmic bias, the high costs of development and maintenance, and the need for transparency and explainability in decision-making processes (Gretzel et al., 2020; Rzepka & Berger, 2022). Moreover, regulatory uncertainties and concerns about privacy and data protection may further hinder widespread adoption. Addressing these challenges requires not only technological advances but also appropriate legal, ethical, and organizational frameworks to ensure that AI solutions are effective, equitable, and trustworthy (Morley et al., 2021). In summary, the susceptibility of real estate market participants to manipulation arises from a combination of emotional, cognitive, and systemic factors, including information asymmetry and a lack of transparency. A multifaceted approach – incorporating educational initiatives, regulatory measures, and technological advancements – is essential to mitigating these vulnerabilities and fostering greater trust in the real estate market.

## Research methods

The study was conducted using a quantitative research approach, employing a computer-assisted web interview (CAWI) survey method. The survey targeted respondents with diverse demographic and professional backgrounds. It was conducted anonymously, with the primary objective of identifying manipulative techniques and psychological strategies used in the real estate market, as perceived by market participants. The survey questionnaire consisted of two main sections. The first part collected demographic and socio-economic information, including respondents' age, place of residence, level of education, marital status, and professional situation. These questions enabled the profiling of the research sample. A total of 96 individuals participated in the survey. The largest age group consisted of respondents aged 25–34 years (53%), while individuals aged 55 and above accounted for 20% of participants. The majority of respondents (48%) resided in large cities with populations exceeding 500,000, while 30% came from medium-sized cities (50,000–200,000), and only 12% were from rural areas. Higher education was reported by 68% of participants. The sample was predominantly composed of single-person households (70%). In terms of real estate market experience, respondents demonstrated varying

levels of familiarity. The largest group (35.8%) had no practical experience with real estate transactions, including purchases, sales, leases, or rentals. Conversely, 24.2% of respondents reported engaging in multiple real estate transactions, suggesting a higher level of investment activity. The second section of the questionnaire focused on real estate market perceptions. It included questions regarding sources of market information, verification of available data, trust in specific market entities, the phenomenon of manipulation, and its consequences for both individuals and the economy. This section aimed to assess the extent to which respondents recognize manipulative practices in the real estate sector and how these practices influence their decision-making processes.

**Results**

The analysis of survey results regarding real estate market manipulation reveals significant differences in how individuals obtain and verify information, as well as in their perceptions of mechanisms influencing market participants' decisions. The Internet remains the most frequently used source of information, with 64.58% of respondents indicating that they rely on it very frequently. This confirms its dominant role in shaping knowledge about the real estate market. The impact of informal networks is also highly evident – family and friends play a key role in the information-gathering process, with 14.58% of respondents identifying them as a very frequent source and 33.33% as a frequent source. This underscores the significant influence of social recommendations and shared opinions within personal networks. In contrast, traditional media (such as television and radio) play a more limited role. Only 5.2% of respondents identified them as a very frequent source of information, and 11.45% as frequent. However, 31.25% of respondents placed traditional media in the "on average" category, suggesting that while they are not a primary source, they serve as a supplementary means of acquiring market knowledge. Among formal sources, real estate agents were cited as a very frequent source of information by 9.37% of respondents and as a frequent source by 14.58%. Notably, trade and academic publications, despite their high credibility, remain relatively unpopular. Only 8.33% of respondents reported using them very frequently, while 16.66% considered them a frequent source of information. Similarly, industry training courses were rarely utilized as an information source – only 3.12% of respondents indicated them as very frequent, and 5.20% as frequent. This could reflect either limited access to such educational opportunities or a general lack of interest in expanding real estate knowledge through formal training (Figure 1).

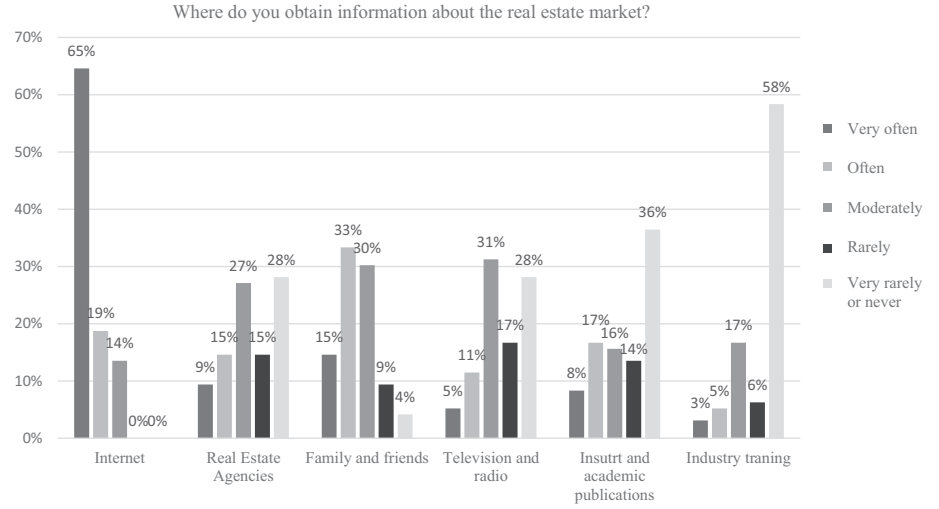


**Figure 1.** Sources of information on real estate

Source: Authors' own study.

The findings indicate that the real estate market is largely influenced by rapid access to information and informal sources, while professional expertise and specialized studies are not the primary choices in the decision-making process. This reliance on easily accessible yet potentially unverified sources increases the risk of susceptibility to manipulation, particularly in the context of online information, where reliability is not always ensured. The results reveal that only 30.2% of respondents always verify the information they receive. The most frequently selected response was "usually yes," chosen by 34.4% of participants, indicating that while most individuals engage in some form of verification, they do not consistently question the accuracy of the data they encounter. However, nearly 20% of respondents stated that they verify information only sometimes, and 13.5% reported that they rarely do so. The smallest group consisted of those who never verify information (2.1%), yet their presence confirms that a segment of market participants still relies entirely on unverified sources (Figure 2).

The results on trust in various real estate entities reveal significant differences in how they are perceived in terms of trustworthiness. Academic institutions, real estate appraisers, and individual property owners were ranked as the most trusted groups, with 18.75% and 17.70%, respectively, of respondents indicating that they *definitely trust* them. Additionally, 37.50% and 33.33%, respectively, reported *rather trusting* these entities, while 40.63% expressed similar trust in real estate appraisers. Property managers and financial institutions also received relatively high levels of trust, with a significant number of respondents expressing positive perceptions of their reliability. In contrast, property developers, the media, and real estate agents were met with greater skepticism. Although some respondents expressed a degree of trust in these entities, a substantial proportion viewed their activities as less trust-

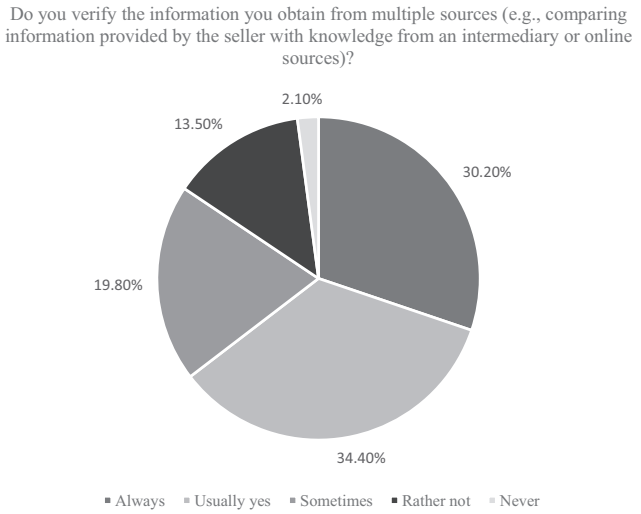


**Figure 2.** Verification of information sources

Source: Authors' own study.

worthy. Notably, training providers received low levels of trust, which may indicate a general skepticism toward paid real estate courses and workshops. This could reflect concerns about the quality, credibility, or commercial motives behind such training programs (Figure 3).

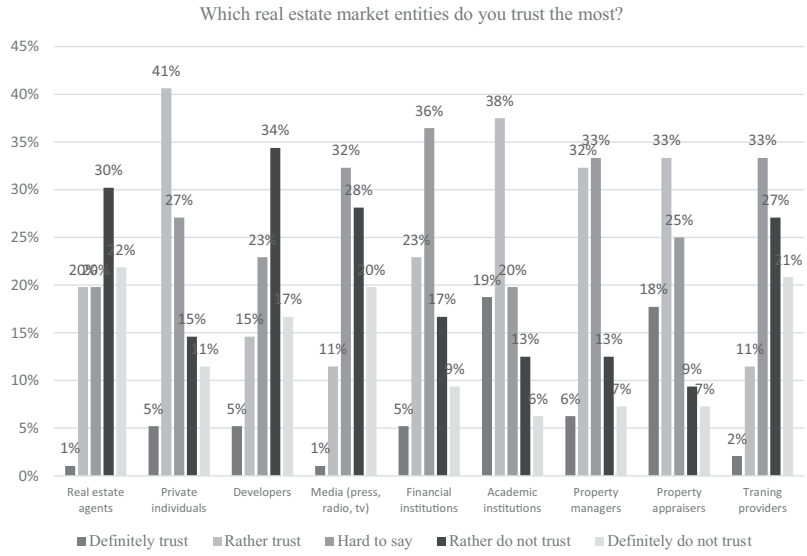


**Figure 3.** Trust in real estate market participants

Source: Authors' own study.

The survey also reveals that a significant proportion of respondents have encountered the phenomenon of real estate manipulation, with as many as 62.5% answering in the affirmative when asked about their statements with such practices. Only 19.8% declared that they had not encountered manipulation and 17.7% were not sure whether they had encountered such activities. This indicates the significant scale of the problem and its impact on market participants. In light of the responses regarding information sources and their verification, there is a clear need for both educational initiatives and systemic measures to protect consumers and counteract harmful practices in the real estate market, as highlighted in research on AI-based solutions aimed at enhancing transparency and safeguarding consumer interests (Figure 4).

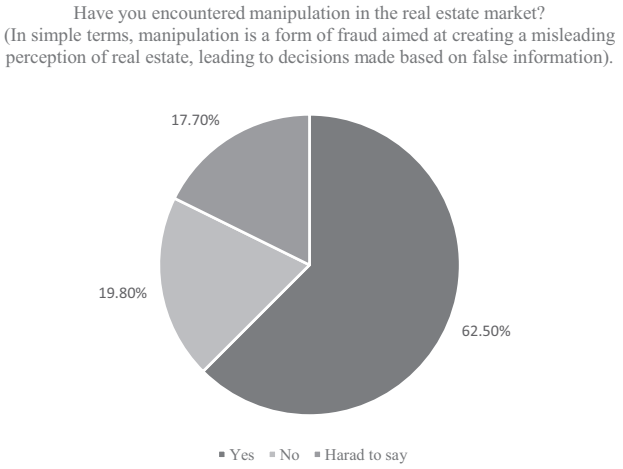


**Figure 4.** Experiences of respondents

Source: Authors' own study.

Among the most commonly recognized forms of manipulation, time and social pressure stand out, with 67.7% of respondents identifying this phenomenon. Such techniques may include suggestions that an offer is only available for a limited time or that there are multiple interested buyers, prompting clients to make rushed decisions. The second significant mechanism is the provision of false or incomplete information, observed by 42.7% of respondents. This highlights the need for thorough data verification before completing a transaction. Another frequently reported form of manipulation and fraud is the provision of misleading advice (38.5%) and emotional manipulation, recognized by 33.3% of respondents. These tactics may involve creating an atmosphere of exclusivity, exerting psychological pressure, or using persuasive narratives designed to increase emotional engagement in the purchase process. Further analysis of the survey results provides valuable insights into the perception of manipulation and its impact on decision-making in

the real estate market. One key issue examined was how quickly respondents could recognize manipulation. The largest group (37.5%) stated that they identify such tactics immediately, suggesting a high level of market awareness among some participants. Another 27.1% reported noticing manipulation after several hours, while 13.5% recognized it only after a few days, which may indicate delayed reflection or the need for consultation with others. A small group (5.2%) indicated that they require a longer period to detect manipulation. Meanwhile, 16.7% of respondents stated that this question did not apply to them, which may suggest either a lack of experience with such situations or difficulty in identifying manipulative practices (Figure 5).

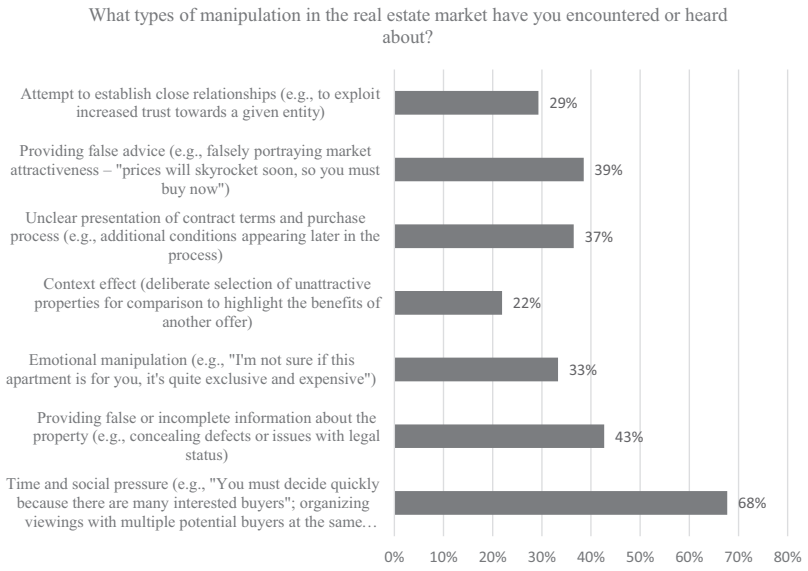


**Figure 5.** Types of manipulation

Source: Authors' own study.

When asked to rate the ethics of manipulative techniques, 54.2% of respondents considered them completely unethical, while 27.1% considered them somewhat unethical. This suggests that the majority of market participants consider manipulation to be an unethical practice. In contrast, only 5.2% of respondents considered such actions to be highly ethical, while 9.4% found it difficult to make a definitive judgement. This ambiguity may indicate that certain persuasive techniques are considered acceptable within the boundaries of market negotiations. Further analysis of the stage at which manipulation is most common shows that such practices are most common at the offer stage, particularly in the content of advertising, as indicated by 32.3% of respondents (Figure 6).

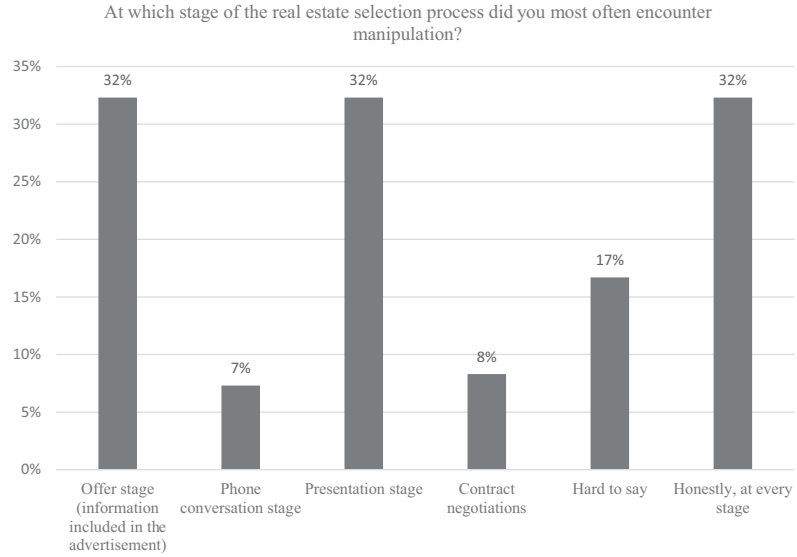


**Figure 6.** At which stage manipulations occur

Source: Authors' own study.

This suggests that misleading practices regarding price, property condition, or availability are widespread in the real estate market. An equally critical stage is the property presentation phase, identified by 32.3% of respondents, highlighting the importance of buyer awareness and the need for thorough verification of the terms of an offer. Contract negotiations were perceived as a less vulnerable stage for manipulation (8.3%), while telephone conversations were cited relatively infrequently in this context (7.3%). Notably, over 30% of respondents believed that manipulation could occur at any stage of the transaction process. In another survey question, respondents were asked to assess the susceptibility of the average consumer to manipulation in the context of real estate purchase or rental decisions. The results indicate a strong perception of consumer vulnerability to such tactics. The largest group of respondents (46.9%) considered the average consumer to be "susceptible" to manipulation. Another 24.0% found it difficult to make a definitive assessment. A smaller but notable group (19.8%) described consumers as "highly susceptible," suggesting that not all respondents perceive an extreme level of vulnerability to manipulation. Conversely, a minority assessed consumers as "slightly susceptible" (4.2%) or "not susceptible" (1.1%). When asked the same question about their own susceptibility, a significant 47.9% of respondents considered themselves "not susceptible" to manipulation. This indicates that respondents tend to perceive themselves as more resistant to manipulation compared to the average consumer (Figure 7).

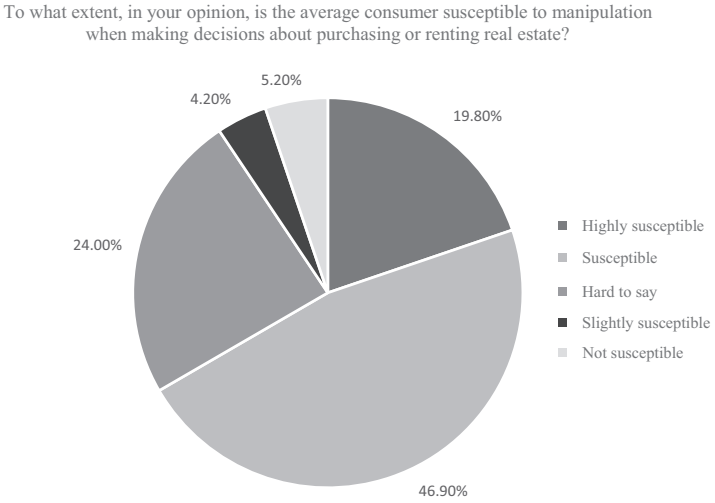


**Figure 7.** Susceptibility to manipulation

Source: Authors' own study.

An important aspect of the analysis was the question about responses to identifying manipulation. 11.5% of respondents said they had taken action to hold those responsible for manipulative practices to account. A larger group (32.3%) stopped working with the company immediately upon identifying manipulation, while 9.4% attempted to take action but were unsuccessful. A significant proportion of respondents (25%) took no action, while 21% admitted that they were unable to identify manipulation. Another question explored the main reasons why property market participants are susceptible to manipulation. The most frequently cited factor was the emotional aspect of buying property, cited by 74% of respondents. Buying a house or apartment often involves a high level of emotional involvement, which can affect the ability to critically analyse an offer. The second key factor was the uniqueness of the property, cited by 58.3% of respondents as an important element of manipulation. The fear of missing out on a unique offer can lead clients to make hasty decisions without sufficient analysis. Legal complexity and media pressure over rising property prices were also highlighted as significant factors, each cited by 35.4% of respondents. These elements can create a sense of urgency, leading buyers to act under time pressure rather than carry out thorough evaluations. Other factors influencing susceptibility to manipulation included family influence and social pressure (33.3%) and limited access to reliable information (43.8%) (Figure 8).

The final question focused on the potential socio-economic consequences of manipulation of the property market. The most commonly cited consequence was the creation of artificial demand that negatively affects property prices and availability – a concern highlighted by 71.3% of respondents. Another important consequence was reduced accessibility to housing, identified by 47.9% of respondents. In addition,

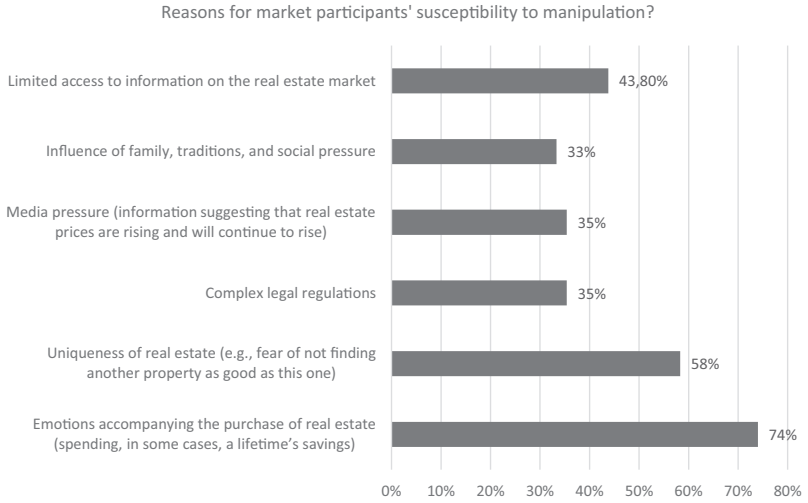


**Figure 8.** Causes of market participants' susceptibility to manipulation

Source: Authors' own study.

market destabilization was identified as a potential risk by 43.6% of respondents. A small proportion of respondents (2.2%) were unable to identify the potential consequences of tampering, indicating either a lack of awareness of the wider impact or uncertainty about the long-term implications (Figure 9).

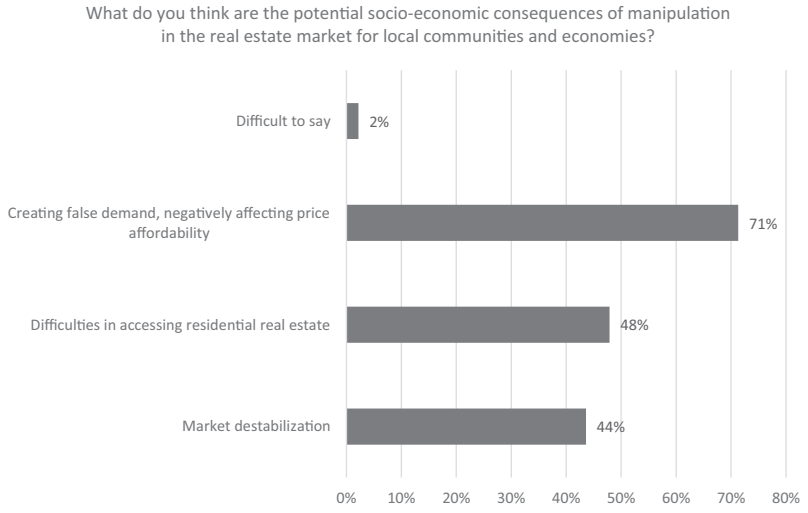


**Figure 9.** Socio-economic consequences of manipulation

Source: Authors' own study.

In summary, the emotional nature of decision-making, complex legal regulations, and limited access to reliable information make real estate market participants vulnerable to unethical practices. Although most respondents recognize the risks of manipulation, they do not always take action to counteract them. The survey results highlight how cognitive biases – such as the anchoring effect (Tversky & Kahneman, 1974), endowment effect (Genesove & Mayer, 2001; Thaler, 1980), scarcity heuristic (Cialdini, 2001), and herd behavior (Banerjee, 1992) – shape behavior and sustain manipulative tactics. These biases contribute to persistent market distortions, undermining stability, housing accessibility, and trust in real estate institutions.

## Discussion and conclusions

The conducted study provided a comprehensive perspective on the issue of manipulation in the real estate market, revealing both the mechanisms employed by market entities and the reactions of consumers to unethical practices. Three key aspects emerged as particularly significant from the survey results: the sources of information used by consumers, their level of trust in market participants, and their responses to identified manipulations.

An analysis of the sources of information utilized by respondents confirmed that the Internet plays a dominant role in real estate decision-making, with a significant portion of participants citing it as their primary source of data. This aligns with the findings of Oates and McGreal (2020), who observed that the increasing digitization of the real estate market has led to a situation where consumers rely heavily on online platforms and social media, often without verifying information through more reliable sources. However, a concerning trend emerged – many respondents do not take any steps to verify the information they receive. Only 12.6% of participants stated that they always cross-check information from multiple sources, meaning that the vast majority base their decisions on potentially incomplete or manipulated content. These findings are consistent with the research of Kahneman (2011), who emphasized that individuals tend to rely on the first available piece of information (anchoring effect), making purchasing decisions susceptible to strategic messaging and advertising techniques employed by market entities.

The second critical aspect of the study involved assessing the level of trust respondents have in various real estate market participants. The findings indicate that developers, real estate agents, and training providers are perceived with the highest level of distrust. Similar conclusions were drawn by Levitt and Dubner (2005), who argued that intermediary professions in the real estate market are often characterized by a high degree of information asymmetry, leading consumers to fear being exploited due to their lack of knowledge. These observations align with the work of Diaz and Hansz (2001), who demonstrated that real estate buyers often lack access to actual market data, forcing them to rely on information provided by sellers and

intermediaries. The lack of transparency regarding transaction prices and key property details reinforces the perception that these professional groups are particularly prone to manipulative practices.

Another key area of the study was how consumers react to manipulation. Although over 63% of respondents acknowledged encountering manipulative techniques in the real estate market, only 10.5% took any action to penalize those engaging in unethical practices. According to the literature, low willingness to take action often stems from the status quo effect and reluctance to engage in efforts that may involve additional costs or stress (Kahneman, 2011). Many individuals prefer to avoid confrontation, which contributes to a situation where unethical practices remain unchallenged. Another factor that may explain this lack of active consumer response is a lack of confidence in the effectiveness of consumer protection mechanisms.

In terms of the effects of market manipulation, respondents most frequently cited rising real estate prices (67%), reduced housing availability (47.3%), and market destabilization (44.1%). These findings are consistent with the analyses of Case and Shiller (1988), who demonstrated that irrational consumer decisions, driven by price manipulation and behavioral biases, contribute to the formation of speculative bubbles. Similarly, Kindleberger (2000) argued that when consumers begin making decisions based on expectations of continued price increases, the market becomes increasingly unstable and vulnerable to sudden collapses.

The study results also suggest that modern technologies could play a crucial role in reducing manipulation in the future. The authors recognize the potential of blockchain and big data technologies as tools for enhancing transaction transparency, preventing price and legal status manipulation. These findings align with the research of Muller and Davis (2022), who indicated that the use of decentralized databases could significantly reduce information asymmetry in the real estate market. AI can assist in identifying unethical practices by analyzing market data in real time and detecting unusual behavioral patterns.[9]

The findings[10] of this study confirm that manipulation in the real estate market remains a significant issue, affecting both individual consumers and the overall stability of the sector. The results demonstrate that consumers often make decisions based on incomplete or even manipulated information, leading to higher property prices and increased susceptibility to speculative bubbles. Additionally, the limited willingness to take action against unethical practices highlights the need for systemic

[9] To strengthen transparency and consumer protection, we recommend aligning national regulations with the EU's Unfair Commercial Practices Directive (Directive 2005/29/EC), which explicitly prohibits misleading and aggressive marketing in property transactions (European Commission, 2021). Moreover, introducing standardized disclosure forms and public property transaction databases, as practiced in the UK and Australia, could further reduce information asymmetry (OECD, 2021).

[10] Nevertheless, it should be noted that the relatively small sample size and the exclusive use of the CAWI method may limit the generalizability of the findings, which calls for further research on larger and more diverse populations.

solutions, including improved consumer education, stronger market regulations, and the application of modern technologies to increase transparency.

By implementing these measures, the real estate market can become more transparent and fair, reducing the prevalence of manipulative practices and fostering greater trust among market participants. These findings have important implications for policy and practice. Addressing the identified vulnerabilities requires a multifaceted regulatory response. Strengthening mandatory disclosure requirements, standardizing contracts, and enhancing oversight of market intermediaries would help mitigate information asymmetries and deceptive practices (European Commission, 2021; OECD, 2022). Consumer education programs aimed at increasing awareness of manipulation tactics and fostering critical evaluation of offers are equally vital (UN-Habitat, 2020). Finally, promoting the adoption of technology-driven solutions – such as AI-based monitoring and blockchain registries – within a clear legal and ethical framework could further improve transparency and trust (Piotrowski, 2022). Implementing such measures could contribute to a more resilient, equitable, and efficient real estate market.

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