

ILLUSION OF TRANSPARENCY: SHORT-TERM EFFECTS OF PRICE DISCLOSURE REGULATIONS ON THE POLISH PRIMARY RESIDENTIAL MARKET

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ARTICLE INFO	ABSTRACT
Keywords: price transparency, residential market, market regulation, short-term effects	The study investigates short-term market adjustments following the introduction of price transparency requirements in Poland's primary housing sector. Using a dataset of 57,041 dwellings across 23 cities and focusing on six major agglomerations, it analyzes how developers modified list prices and reporting practices during the 2025 rollout period. Results indicate that developers visibly repriced a large share of their inventories around key implementation dates, with the most pronounced activity in September 2025. In large urban markets, the adjustments were predominantly downward, reflecting strategic repositioning in anticipation of easier cross-project comparisons rather than shifts in demand fundamentals. These repricing waves temporarily reduced average list prices, creating misleading signals for less experienced market participants. The analysis also highlights the persistence of data inconsistencies and definitional ambiguities that limit comparability across projects. Despite greater public access to pricing information, uneven data quality continues to constrain accurate monitoring and interpretation of market dynamics. Consumers benefited from faster access to headline prices, yet analysts and smaller developers remained exposed to information gaps. Overall, the findings suggest that while transparency can promote more informed market behaviour, its effectiveness depends on robust data standards, auditability mechanisms, and the integration of verified transaction-level evidence.
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1. Introduction

The residential property market plays a significant role in the economy, both in terms of the amount of capital involved and the socio-economic importance of housing as a consumer and investment good. It is linked to fundamental financial decisions made by households and businesses, affecting their savings and expenditure - real estate transactions can determine the possibility of investing in other areas of the economy and shape capital structures (Lindqvist, 2012). Investments in real estate are characterized by high capital intensity (Jurek-Maciak, 2007), and access to information is a key element of investing (Sadayuki et al., 2019; Jurek-Maciak, 2007). One of the serious problems in this market is limited transparency - particularly the lack of clear and widely available

information on offers and transaction prices; this can lead to information asymmetry between buyers and developers, reduce market efficiency, make it difficult to compare offers, distort expectations and price negotiations, and even encourage manipulative practices. Limited transparency of information in the housing market means that most buyers and sellers lack sufficient data on property prices when deciding to buy or sell, as obtaining such data is labour-intensive and requires professional expertise (Cellmer & Trojanek, 2019).

In response to these challenges, on 21 May 2025, Poland passed an amendment to the Development Act (Act on the Protection of the Rights of Purchasers of Residential Premises or Single-Family Houses and the Development Guarantee Fund), commonly known as

“The Act on the Transparency of Flat Prices” or “The Act of Transparency”, hereinafter referred to as “The Transparency Act” (Journal of Laws 2021, item 1177; Journal of Laws 2025, item 758). The act imposes an obligation on developers to publish the prices of flats and houses (and additional data, such as parking spaces and storage rooms) on their websites, to send this data daily to the dane.gov.pl portal, and to update prices in the event of any changes.

The act entered into force on 11 July; however, for investments whose sale began before the new regulations took effect, a transitional period was introduced. The obligation of complete transparency for all offers takes effect on 11 September 2025.

This article aims to examine the impact of this regulation on the housing market, specifically comparing prices before and after the act came into force, and assessing whether price transparency contributes to greater transparency and, potentially, changes in prices, market behavior, or negotiating conditions.

Prior to the regulatory change, the common practice of withholding prices on developers’ websites institutionalized significant information asymmetry. Prospective buyers were burdened with high search and transaction costs, as obtaining pricing required active engagement through inquiry forms or direct telephonic contact with sales departments. This lack of immediate transparency hindered the efficient comparison of available inventory, particularly regarding the hedonic valuation of dwelling characteristics – such as layout, floor level, and orientation – relative to the asking price. Consequently, the absence of centralized, comparable data likely led to suboptimal consumer choices, as buyers could not evaluate the full spectrum of market offerings during the initial decision-making phase. The prevalence of these practices – where non-disclosure was the market norm – further suggests a strategic use of information scarcity by developers.

Furthermore, the lack of mandatory disclosure provided developers with significant discretionary pricing power, allowing for unrecorded and instantaneous price adjustments. The introduction of the transparency regulation shifts the market towards informational efficiency by requiring not only the publication of current prices but also the disclosure of historical price movements. Previously, the absence of a public price trail facilitated potential price discrimination, where identical units could be quoted at varying rates to different clients within the same period, a practice now mitigated by the new transparency

requirements.

The study is based on an empirical analysis of data obtained from a popular online platform monitoring housing prices in Poland, which collects information on developers’ offers, price changes, and unit status. The dataset spans several months preceding and following the introduction of the price transparency regulations, enabling the observation of market reactions across different phases of the legislative process – from initial unofficial reports about the planned changes, through confirmation of the bill and its signing, to its entry into force. The analysis focused on changes in the structure of listing prices over time, taking into account both aggregated data for the entire Polish developer market and detailed data for the largest urban centres. The aim was to identify the short-term effects of the regulation and its impact on developers’ pricing strategies as well as on the overall informational transparency of the market.

2. Literature review

Transparency is a qualitative concept that refers to the degree to which information is accessible and clear to stakeholders, enabling informed decision-making and fostering accountability. The nature of transparency can vary depending on the context and is closely tied to openness, accountability, and effective communication. Transparency in the property market refers to the extent to which information is available to market participants, encompassing the availability, completeness, and reliability of information on offers, transactions, values, location factors, and regulatory and economic factors that influence market participants’ decisions (Lindqvist, 2012). Lack of transparency refers to the asymmetry of information, where one side of the market has more information than the other (Ionaşcu, 2018; Wiejak-Roy et al., 2024). According to Lindqvist (2012), transparency in the real estate market can be analyzed in five dimensions: transparency in transaction procedure, including access to information and assistance in the process; transparency in legal information, including national legislation on ownership forms, permissions and land registry; transparency in financing; transparency in taxation; and transparency in transaction costs.

Transparency plays a fundamental role in the functioning of real estate markets, influencing their efficiency, stability, and accessibility for a wide range of stakeholders, including households, developers, investors, and public institutions. The literature emphasizes that transparency plays a key role in reducing information asymmetry between transaction

parties, affecting allocative efficiency, risk levels and transaction costs (Gholipour et al., 2020). The research reveals that greater market transparency, associated with better access to information and the credibility of institutions, improves market liquidity and efficiency, which in turn moderates price increases. In addition, Zhang et al. (2016) emphasize that a higher level of information disclosure leads to reduced price volatility and lowers the likelihood of a price bubble in the property market. Transparency also enhances market liquidity and efficiency, thereby moderating price increases, reducing investment risk, and limiting transaction costs associated with investors obtaining market information (Ionaşcu et al., 2021; Gárate et al., 2025; Zhang et al., 2016). The level of information efficiency in the real estate market largely depends on the quality and availability of data, which determine the possibility of accurate asset valuation, trend detection, and risk assessment. The results of this analysis indicate that markets with greater data transparency are characterized by lower price volatility and higher investor confidence. Cvijanovic et al. (2019) emphasize that in an environment with greater transparency, both sellers and buyers are more willing to conduct transactions, and prices are more stable. The research by Gholipour et al. (2020) shows that countries with higher levels of real estate market transparency have lower levels of mortgage payment delays, confirming the importance of information for the financial stability of the housing sector. Bian et al. (2023) demonstrated that the disclosure of information has a positive effect on both the seller and the buyer; however, there are circumstances when concealment of information is beneficial to the seller. Generally, more information is connected with higher prices and quicker sales, but exceptions exist, particularly in luxury transactions (homes from the top quartile of prices), where less information is linked to higher prices and quicker sales (Bian et al., 2023). Nevertheless, a lack of transparency leads to increased information asymmetry and exacerbates tensions in the client-agent relationship (Gholipour et al., 2023; Gárate et al., 2025). Studies indicate that when the agent is the owner, properties sell at a higher price (Agarwal et al., 2019; Bian et al., 2023), and research by Ionaşcu et al. (2019) suggests that a decrease in price transparency is linked to an increase in housing prices. The opacity obviously contributes to difficulties in comparing and analyzing real estate markets (RICS, 2019; Wijek-Roy et al., 2024). Moreover, the lack of market transparency can have far more serious implications – it facilitates grey market

activities and money laundering, as significant amounts of dirty money are introduced into the legal circulation through investments in real estate (Marinoni et al., 2025). For example, according to a report by Transparency International, in 2015-2016, in Australia, criminals associated with China laundered over 1 billion USD through real estate. The transparent system fosters public confidence in governments and is crucial for ensuring the quality and efficiency of land tenure rights administration, as well as the prevention of corruption (Newell, 2016; Avramov et al., 2017).

Therefore, several institutions analyze and monitor transparency in real estate markets, using comparative indicators to assess data availability, regulatory clarity, and market practices across countries. Among these, one of the most widely recognized and frequently cited benchmarks is the Global Real Estate Transparency Index (GRETl) developed by JLL in cooperation with LaSalle Investment Management (JLL, 2024). The index has been published on a regular basis for more than two decades and provides a comprehensive, internationally comparable assessment of real estate market transparency. The most recent edition was released in 2024 and covers 89 countries and 151 city markets, evaluating transparency based on 256 indicators. These indicators span multiple dimensions, including the availability and quality of market data, transaction processes, legal and regulatory frameworks, governance standards, and sustainability and ESG-related disclosure. The 2024 edition shows that transparency continues to improve globally, although progress remains uneven across regions. Highly transparent markets – primarily in Western Europe, North America, and parts of the Asia-Pacific region – benefit from well-developed public registers, frequent and reliable transaction data, and advanced digital reporting systems. In contrast, less transparent markets still face challenges related to limited data accessibility, fragmented information systems, and weaker institutional enforcement.

Technological advances and the ability to collect, process and analyze large amounts of data have led to greater access to information (Cellmer & Trojanek, 2019). The Global Real Estate Transparency Index report (JLL, 2024) shows that the largest European markets, such as the United Kingdom, France, Germany and the Scandinavian countries, are characterized by a very high level of transparency. They are characterized by the availability of detailed transaction data, systematic reporting, access to public registers, and regulations that support market transparency. The specification of

time-varying location characteristics indicates that investors in more professional markets are more willing to pay higher prices for real estate compared to investors in less developed markets (Cvijanovic et al., 2019). The Polish residential property market is characterized by high price dynamics and significant information asymmetry, especially in relation to the primary market. Access to transaction data, although gradually increasing, remains limited, making it difficult for consumers and investors to make rational decisions (NBP, 2023), however, in accordance with European Union regulations, since 2013, Member States have been required to publish property price indices (OJ EU L/33/14). The National Bank of Poland (NBP) has been conducting regular analyses of the housing market situation for years, taking into account asking and transaction prices, the number of contracts concluded, and supply and demand factors. These reports point to substantial regional differences and an upward price trend, emphasizing the impact of government programs and macroeconomic conditions (NBP, 2023; NBP, 2024). In response to calls for greater transparency, an amendment to the Development Act was passed in May 2025, which requires developers to publish daily asking prices for flats on their websites and to submit this data to a public database (Journal of Laws 2025, item 758). This change aims to reduce information asymmetry and enable buyers to compare offers in a more informed manner. This reform is considered a significant step towards enhancing market transparency, but its effects require empirical verification. Initiatives such as the launch of the DOM public portal, which offers access to average price data at the local level, are part of the strategy to build a housing market information system. This system is planned to become operational within 20 months of the announcement of the act (MRiT, 2025).

3. Data and methods

The empirical study employs a Longitudinal Property-Level Price Adjustment Analysis (Panel Analysis) to meticulously track the short-term behavioral response of property developers to the regulatory process surrounding the Polish Price Disclosure Regulations (so-called The Transparency Act). The study's primary objective was not to assess the final, long-term impact of the Transparency Act on the market, but rather to isolate and measure the immediate shifts in developer pricing strategies throughout the legislative lifecycle, highlighting how market participants react not only to mandatory compliance but also to the anticipation and announcement of forthcoming regulations.

The analysis is confined to a relatively short time frame, as changes induced by the Transparency Act on the broader market will require long-term observation. Focusing on this narrow window allows for a direct assessment of how developers managed their publicly disclosed offering prices in the face of increased transparency requirements. Any observed changes in these advertised prices suggest that the initial listing prices may have served as starting points for negotiation rather than strict, finalized valuations, thereby indicating the potential influence of the Transparency Act on previous negotiation practices.

To achieve the necessary analytical precision, the methodology required tracking the percentage price change of identical, unique housing units that remained continuously available for sale throughout the observation intervals. This strict selection criterion – the tracking of the same property over time – was essential for mitigating confounding compositional effects that typically impact aggregate average price indices. Specifically, it controlled for:

- the influence of new, differently priced supply entering the market,
- distortion caused by the selective sale of units with specific price tags (e.g., the quickest sales of the cheapest or most expensive units).

The analysis was based exclusively on offering prices as they directly reflect the developer's public pricing decision and immediate reaction to the transparency mandate.

The study periods were strategically defined to align with key political and legislative milestones of the Transparency Act, enabling an analysis of price adjustments linked to specific stages of regulatory certainty (Table 1).

To validate that the observed price adjustments were indeed attributable to the regulatory process and not to typical market seasonality or volatility, a critical Year-over-Year (YoY) control mechanism was employed. This involved a parallel analysis of the share of properties subject to price changes during the corresponding calendar periods in the previous year (2024), a period preceding any legislative work on the Transparency Act.

The data utilized for this study were sourced from Otodom Analytics, a specialized analytical database focusing on the Polish primary residential market. The Otodom Analytics database is designed to comprehensively capture the primary housing market, recording both available and sold units on a daily basis. Critically, this source is not an advertising portal database (like an online classifieds website), which

often contains incomplete data and duplicates. Instead, it represents a clean, analytical dataset covering an estimated 90% to 95% of the entire primary residential market supply in Poland and is free of duplicates. Following the implementation of the Price Transparency Act, the data was cross-referenced and verified against the dane.gov.pl database, where developers are legally obligated to report their sales on

a daily basis. This ensured high data accuracy, particularly concerning compliance periods. The analysis strictly pertained to the primary housing market (newly built flats).

This core sample focused on the largest and most dynamic urban markets in Poland: Trójmiasto (Gdańsk, Gdynia, Sopot), Kraków, Łódź, Poznań, Warszawa, and Wrocław (Table 2).

Table 1

Summary of observation intervals and policy context

Observation Interval	Comparison Dates	Legislative Context and Expected Market Reaction
Baseline	01.04 to 01.05 of 2025	Pre-regulation period; preceding public discourse or formal legislative action.
Anticipation	01.05 to 01.06 of 2025	Public announcement and commencement of legislative work; developers begin to anticipate future requirements.
Draft Release	01.06 to 01.07 of 2025	Period covering the official publication of the legislative draft, leading to a higher degree of certainty regarding future obligations.
Initial Compliance	01.07 to 01.08 of 2025	Initial stage of regulation implementation (e.g., application to new investments).
Extended Compliance	01.08 to 01.09 of 2025	Broader implementation, extending the obligation to units already offered for sale.
Full Enforcement	01.09 to 27.09 of 2025	Period of full regulatory enforcement, requiring maximum transparency.

Source: own study.

Table 2

Summary of core sample used in analysis

City/Agglomeration	Number of Unique Records (Flats) used in analysis (OtoDom Analytics)	% of Sample to Available Supply (as of 1st of April 2025; JLL)
Threecity (Gdańsk, Gdynia, Sopot)	3,204	40%
Kraków	6,585	64%
Łódź	5,323	68%
Poznań	5,117	66%
Warszawa	6,692	42%
Wrocław	5,169	56%
Total	32,090	

Source: OtoDom Analytics, JLL.

The percentage share of the available supply (as reported by JLL at the end of Q1 2025) might seem lower than the overall market coverage. However, the requirement that an apartment must remain in continuous offer throughout the entire study period (April to September) significantly reduces the available pool, as any unit sold during this time is excluded. This strict criterion was essential for the integrity of the property-level longitudinal analysis. The overall 32,090 unique records represent nearly 100% of the continuously available supply, considering the base data coverage of 90-95% of the total market.

Furthermore, a broader sample was used for a more general view of the market, encompassing the six major cities (agglomerations) above plus additional large markets where developer activity is significant: Białystok, Bielsko-Biała, Bydgoszcz, Częstochowa, Gorzów Wielkopolski, Katowice, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Siewierz, Szczecin, Toruń, and Zielona Góra. For these additional cities, the base data coverage

also ranged from 90% to 95% of the total available supply. The total number of unique records considered was 57,041.

4. Results

The introduction of price transparency regulations on the Polish residential property market occurred during a period of relative stability in terms of demand, supply, and prices; this was a period in which developers managed to offset the adverse effects of the government program known as Safe 2% Loan, which supported mortgage-based financing of purchases. The supply had already increased to a level that did not threaten significant price increases, while also not exceeding the level of oversupply, due to the efficient slowdown in development investments as demand declined. However, the most important factor improving market stability was the government's clear announcement that it had no plans for housing program, which usually disrupt the market.

Thus, from the perspective of this study, factors other than the introduction of price transparency regulations that could have been significant for the residential property market during the period under review can be ruled out. This period spans from 1 April 2025 to 27 September 2025 and was chosen to encompass not only the date of entry into force of the regulations but also the period during which the first reports of this legislative initiative appeared; this is particularly important in a market such as the real estate market, as this market usually reacts as soon as there are signs of possible legal changes, as was clearly demonstrated by the aforementioned government program Safe 2% Loan, which came into force on 1 July 2023. The first market effects were already felt at the beginning of 2023. At that time, investors, anticipating a sudden surge in demand among customers seeking better financing conditions for real estate purchases, bought premises with the intention of reselling them later at a higher price (hence the increase in prices, also due to a decrease in supply). It was therefore to be expected that the market reaction to the introduction of price transparency would also be reflected several months before the planned actual entry into force of the relevant law.

Let us recall some of the most important stages of this legislative initiative:

- 1) on 24 April 2025, the Sejm passes an amendment, commonly referred to as the Transparency Act on the transparency of flat prices;
- 2) on 5 June 2025, the President signs the Transparency Act, confirming that the project is entering the implementation phase;
- 3) the new regulations come into force on 11 July 2025 for new investments starting sales after that date, while complete transparency (also covering investments already underway) was introduced on 11 September 2025.

The study was conducted on a sample of 57,041 residential properties developed in the 23 largest cities in Poland (Białystok, Bielsko-Biała, Bydgoszcz, Częstochowa, Gdańsk, Gdynia, Sopot, Gorzów Wielkopolski, Katowice, Kielce, Kraków, Lublin, Łódź, Olsztyn, Opole, Poznań, Rzeszów, Siewierz, Szczecin, Toruń, Warsaw, Wrocław, Zielona Góra) and their suburbs. These properties remained on the market throughout the entire research period, indicating that the research unit consisted of a single flat. If a new investment appeared (in its centre) during the research period, it could not be taken into account. In particular,

32,090 residential properties in the largest cities in Poland (Wrocław, Warsaw, Łódź, Kraków, Poznań, Tricity) were also examined.

Initially, the percentage of flats whose prices changed over the course of individual months was examined. The analysis was also carried out separately for selected large cities. Surprisingly, the most significant changes concern the period outside July 2025, i.e. when the first provisions of the Transparency Act came into force. It is true that at that time, these provisions only applied to new investments, which were not covered by the assumptions adopted in the study. Nevertheless, based on the expert knowledge of the authors of this article, it should be noted that many developers introduced complete price transparency as early as 11 July, not only to test the presentation of this data and its reception by the market, but also to show that they were not afraid of the possible market consequences of disclosing prices, as these were very attractive anyway.

The empirical data presented in this section suggest that the primary housing market's response to the Transparency Act was not a single event, but a multi-stage behavioral process triggered by varying levels of regulatory uncertainty.

The longitudinal analysis of the 23 largest residential markets in Poland, as presented in Figure 1, reveals a strategic calibration of offering prices in direct response to the evolving legislative landscape of the Transparency Act. During the baseline period of April 2025, the market exhibited a high degree of natural fluidity, with only 57% of properties maintaining price stability, while the remaining 43% were subject to active adjustments. This dynamic shifted notably following the government's formal announcement of price disclosure intentions in May, which triggered an initial phase of stabilization as the share of unchanged prices rose to 64%. A period of profound price rigidity—termed a "regulatory freeze"—emerged during the draft and initial implementation phases between June and August, culminating in an unprecedented 90% stability rate in July, where a mere 3% of developers opted for price reductions. However, this artificial stability dissipated as the full enforcement deadline approached in September 2025, leading to a renewed wave of price discovery. During this final stage, the share of properties subject to price corrections rose to 22%, characterized by a higher frequency of downward adjustments (12%) compared to upward moves (10%), suggesting a final market realignment necessitated by the mandate for absolute price transparency.

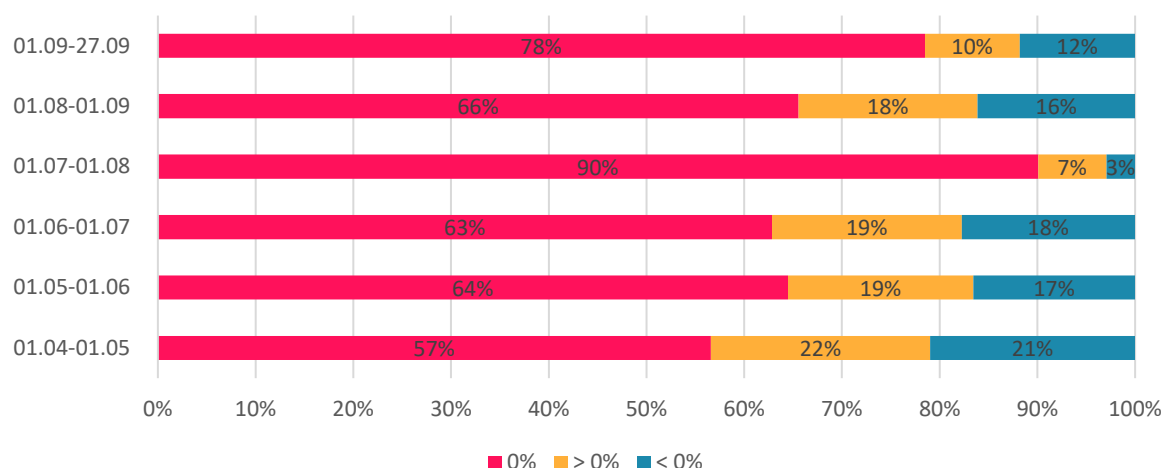


Fig. 1. Share of properties subject to price changes on the primary housing market over individual months in 2025. The 23 largest cities in Poland. *Source:* own study.

The pricing dynamics in Poland's six largest metropolitan areas exhibit a distinct pattern of "pre-emptive volatility" followed by a strategic "regulatory freeze." While the broader national market showed gradual stabilization, the reaction in major urban centers – where the most prominent developers are concentrated – was more immediate and pronounced. The most significant period of market adjustment occurred from 1 May to 1 June, preceding the formal introduction of the regulations. During this anticipation phase, the share of properties subject to price changes reached 56% (comprising 29% increases and 27% decreases), as illustrated in Figure 2. This elevated volatility suggests that major market players, equipped with advanced legal and strategic planning departments, began restructuring their offering prices as soon as the initial legislative intent became public. However, this chaotic adjustment phase was followed by a striking trend toward price rigidity as legislative certainty increased. As the regulation moved from a preliminary announcement to a concrete legislative draft:

- Initial Announcement Phase (anticipation; 01.05–01.06): only 44% of properties maintained stable prices.
- Draft Release Phase (01.06–01.07): the share of unchanged prices rose sharply to 87%.
- Initial Compliance (01.07–01.08): stability remained high at 82%.

This transition from high volatility (56% of prices changing in May) to extreme stability (only 18%

changing in June) indicates a strategic "wait-and-see" approach. Developers appear to have frozen their public offering prices once the specific technical requirements of the transparency mandate were released, effectively pausing active price discovery until the full enforcement period began in September.

By the final enforcement window (1–27 September), the market entered a new phase of realignment, with 26% of units undergoing price corrections to meet the new standards of public disclosure.

To validate whether the observed pricing dynamics in 2025 were indeed a response to the transparency regulations rather than typical market seasonality, a comparative analysis was conducted using data from the corresponding periods in 2024. The results for the 23 largest cities (Fig. 3) and the 6 largest urban centers (Fig. 4) in 2024 reveal a fundamentally different pricing behavior.

In 2024, the primary housing market exhibited high price stability across all studied intervals, independent of the calendar period. In the 23 largest cities, the share of properties with unchanged prices remained consistently high, ranging from 82% to 91% throughout the entire year.

Similarly, in the 6 largest urban centers, price stability fluctuated within a narrow band of 81% to 91%. These figures represent the "natural" state of the market, where price adjustments are incremental and occur at a relatively low frequency, typically affecting only 9% to 19% of the inventory at any given time.

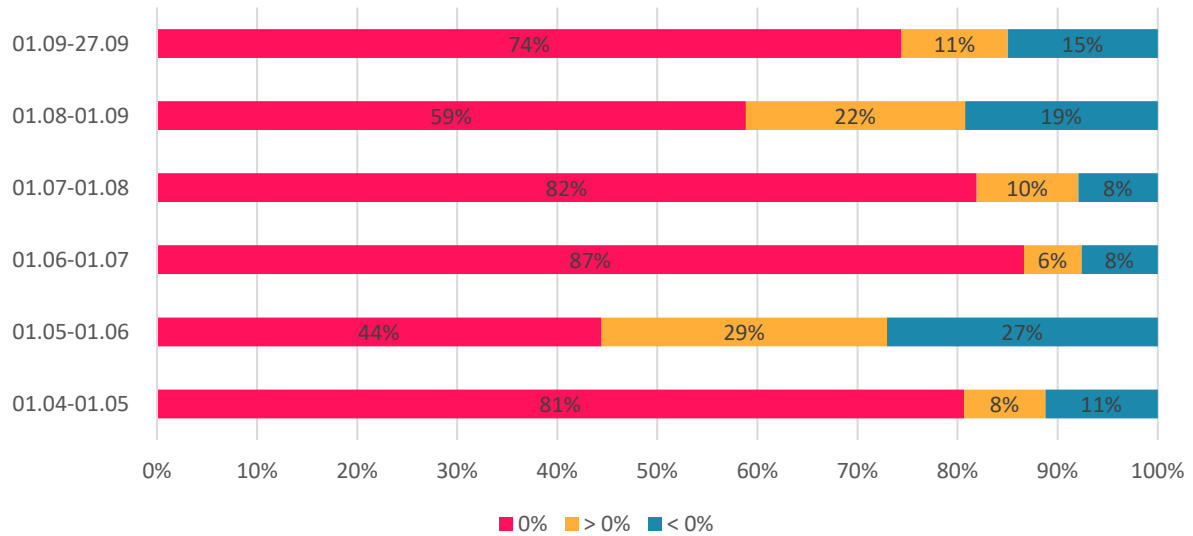


Fig. 2. Share of properties subject to price changes on the primary housing market over individual months in 2025. The 6 largest urban centres in Poland. *Source: own study.*

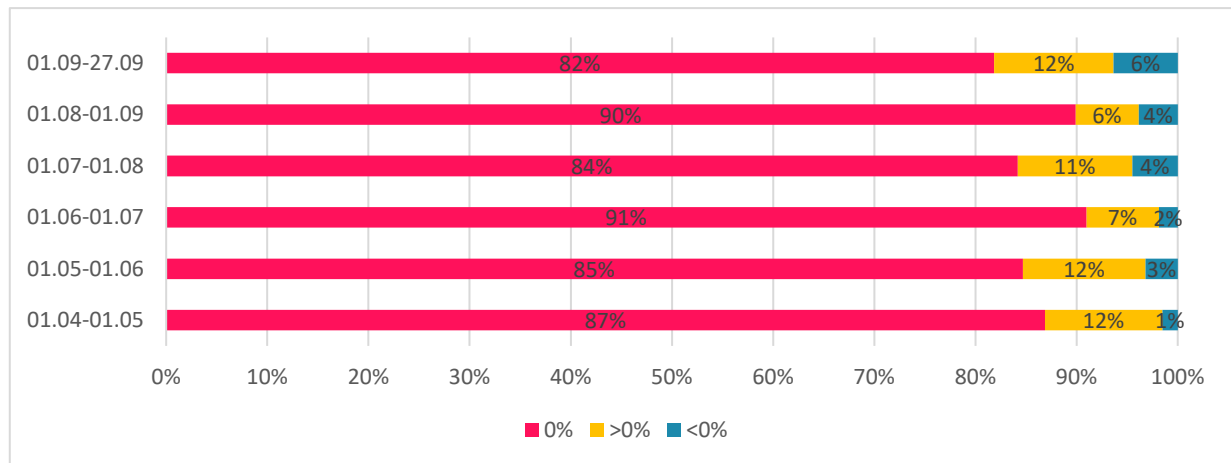


Fig. 3. Share of properties subject to price changes on the primary housing market over individual months in 2024. The 23 largest cities in Poland. *Source: own study.*

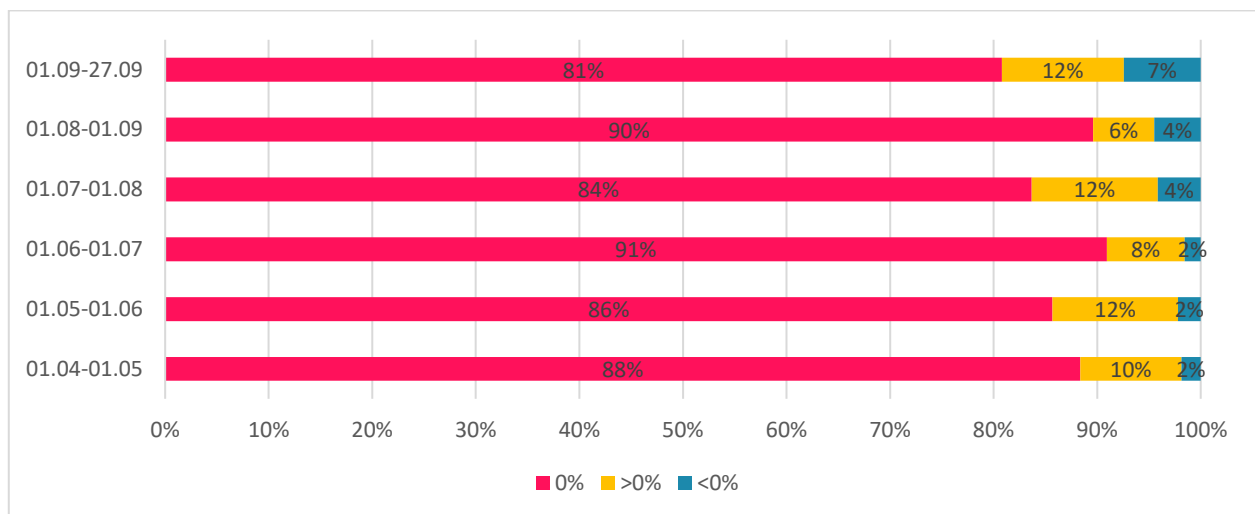


Fig. 4. Share of properties subject to price changes on the primary housing market over individual months in 2024. The 6 largest urban centres in Poland. *Source: own study.*

This confirms that the announcement of the Transparency Act caused a volatility shock that cannot be explained by seasonal market trends. This year-over-year comparison clearly demonstrates that while the 2024 price changes were routine market adjustments, the 2025 shifts were extraordinary in both magnitude and timing. The high volatility in the anticipation phase and the significant realignment during the enforcement phase in 2025 stand in stark contrast to the stable, predictable environment of 2024, providing robust evidence that the Transparency Act was the primary driver of the observed market behavior.

Complementing the analysis with a structural dimension, it is essential to examine the structure and depth of the implemented adjustments, as illustrated in detail by the scatter plot in Figure 5. Data collected between 1 and 27 September 2025 indicates that the price adjustment process affected 26% of the total housing supply remaining in the offer. This chart, presenting the offering unit price after the change on the abscissa (X-axis) and the percentage value of the correction on the ordinate (Y-axis), provides evidence of the high heterogeneity of developer strategies in the face of full market transparency. The analysis of the data point distribution indicates that price corrections were not limited to a specific market segment but encompassed properties across all price brackets—from budget units below 10,000 PLN/sqm to the luxury segment, which exceeded 25,000 PLN/sqm. Both upward (positive) and downward (negative) corrections were observed, suggesting a two-way process of price realignment. Although the main concentration of observations is clustered around the 0% axis, indicating a predominance of small, cosmetic price changes, the overall picture of the results remains significantly dispersed. Of particular interest is the occurrence of extreme outliers, where downward corrections reached levels of -15% to nearly -20% in some cases, especially in the most heavily represented price range between 12,000 and 18,000 PLN/sqm. Such significant dispersion of results confirms that the introduction of the obligation to publish an information prospectus forced developers to move away from averaged pricing strategies toward the precise valuation of individual units. The scatter of points on the chart proves that the primary market during this period was in a phase of intensive *price discovery*, aiming to eliminate the information asymmetry that, prior to the Transparency

Act's entry into force, allowed for the maintenance of artificially inflated offers prepared for individual negotiations.

To further deepen the analysis, Figures 6 and 7 present the distribution of price adjustments categorized by the magnitude of change, excluding the stable price category (0%), while still calculating shares relative to the total research sample. This breakdown enables the precise identification of which pricing strategies – inflationary price increases or deep corrections – dominated at specific stages of the legislative process.

The data for the 23 largest cities (Figure 6) reveals that throughout most of the study, the most frequent upward adjustments were modest, falling within the 1% to 5% range. However, a fundamental shift occurred during the final enforcement period (01.09–27.09), where the share of properties experiencing significant downward corrections exceeding 10% surged to 4% of the total inventory. This was the highest recorded frequency for this specific category across all studied intervals, suggesting that the mandate for price transparency forced a rapid liquidation of the "negotiation buffers" previously embedded in listing prices.

In the six largest urban centers (Fig. 7), the concentration of adjustments during the final phase of full transparency is even more pronounced. The most dominant category of change was a moderate increase between 1% and 5%, affecting over 8% of the properties. This likely reflects a standardization of offers where developers, stripped of the ability to negotiate individual discounts, set a finalized "public" price. Simultaneously, more than 5% of the properties in these major markets underwent significant price cuts, with some exceeding 10%, and nearly 10% of units saw smaller decreases (between -1% and -10%).

Collectively, these results confirm that the "illusion of transparency" was maintained through a dual strategy: while many prices were slightly adjusted upward to account for the loss of negotiation flexibility, a significant portion of the market was forced into deep corrections. This suggests that, prior to the regulations, nearly 15% of properties in prime locations (those experiencing decreases in September) were listed at prices that were significantly disconnected from their true market value, intended only as a starting point for non-transparent negotiations.

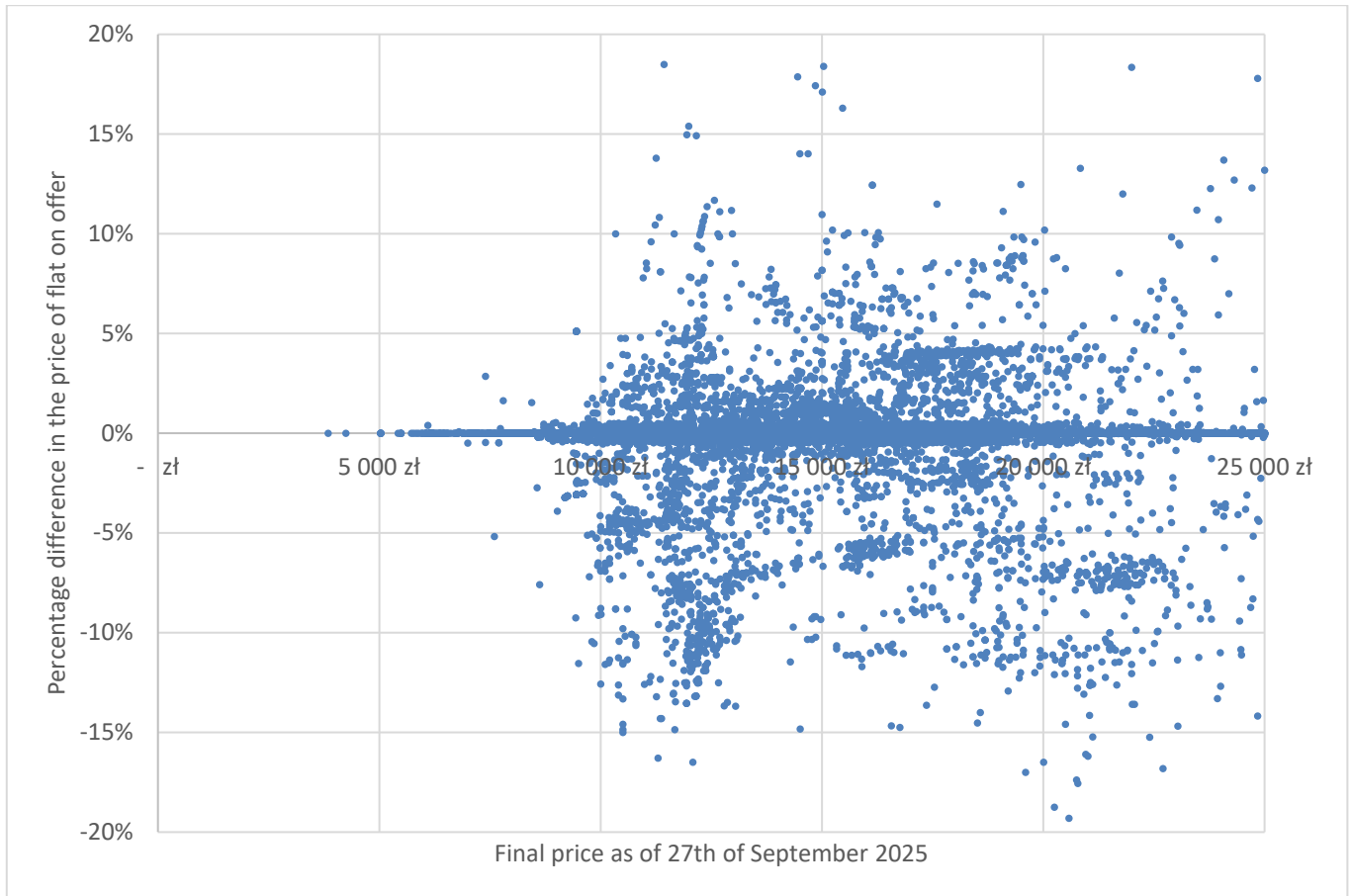


Fig. 5. Percentage difference in the price of flats on offer in the biggest cities in Poland from 1 to 27 September 2025. *Source:* own study.

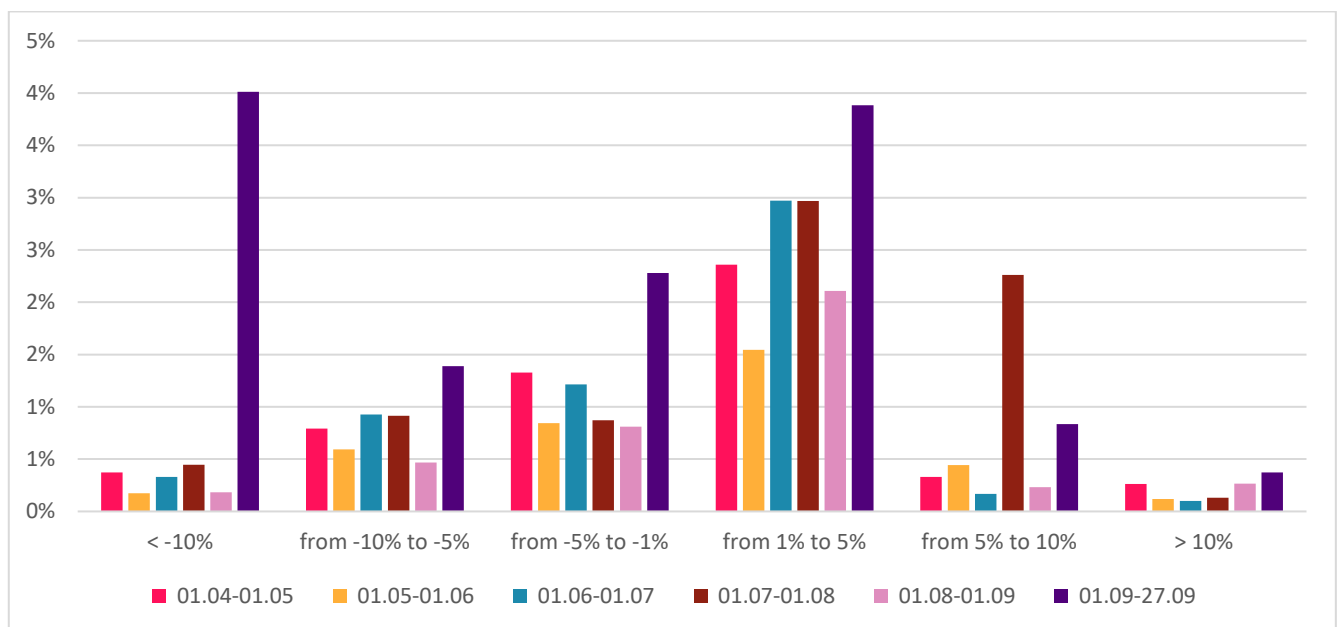


Fig. 6. Percentage of residential properties subject to price changes within specific percentage ranges in the 23 largest cities in Poland over the study periods. *Source:* own study.

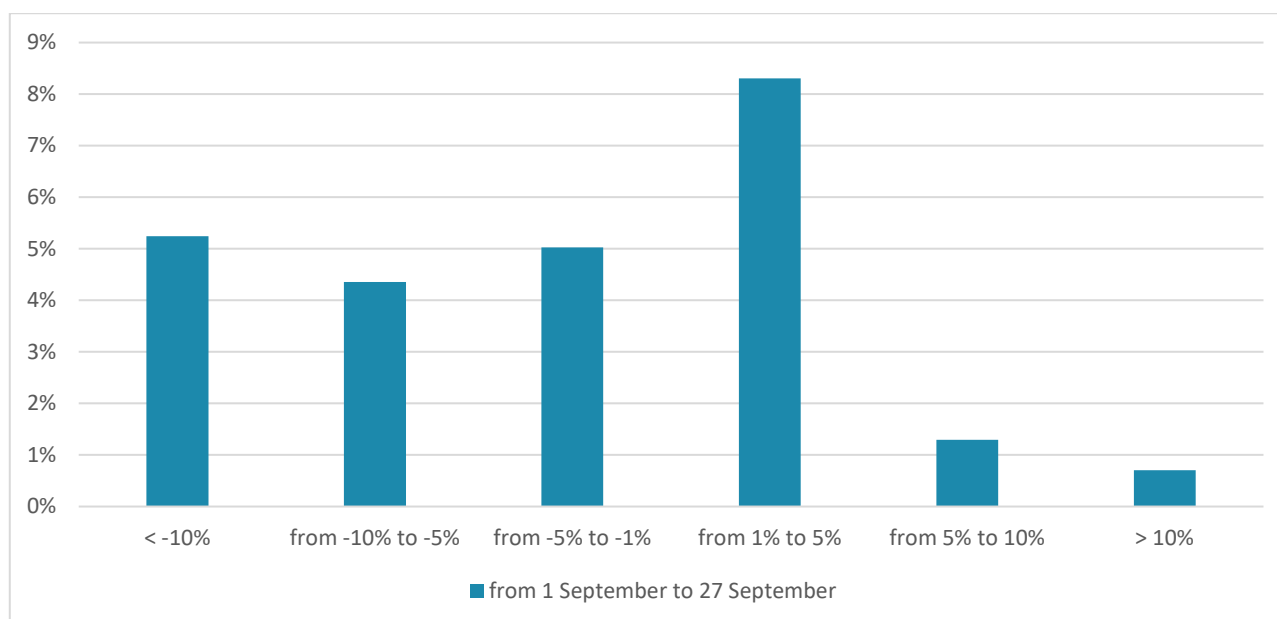


Fig. 7. Percentage of residential properties subject to price changes in specific percentage ranges in the six largest cities in Poland, between 1 and 27 September 2025. *Source:* own study.

The above research results leave no doubt about the importance of increasing transparency on the Polish property development market in terms of the prices of flats offered on this market. Nevertheless, we are talking about price changes, not their direction. The studies cited earlier most often pointed to price increases caused by a reduction in information asymmetry. However, these studies concerned the market and its adaptation to new regulations. In the case of our study, there is no such clear interpretation. In fact, looking at Figure 5, i.e. the results in large cities, we can instead talk about the negative impact of increased transparency on the market (fall in prices). This effect is fascinating, but it cannot be attributed to the market; rather, it is due to the developers' short-term reaction to the new regulations taking effect. It can therefore be assumed that, somewhat fearful of customers comparing offers and being guided solely by price, they decided to reduce those prices. This effect should be offset, or even reversed, by the market in the long term. However, this will only become clear in the coming quarters or years of the new regulations' operation.

6. Discussion on empirical findings

The study demonstrates that the legislative process itself, rather than just the final enforcement of the law, acted as a powerful catalyst for market realignment. Developers in major metropolitan areas exhibited a proactive response, with 56% of property prices in the six largest cities being adjusted immediately following

the government's announcement of the regulations in May 2025. This suggests that market participants used the period of legislative transition to restructure their pricing strategies in anticipation of increased public scrutiny.

The empirical data confirm the existence of the "illusion of transparency" prior to the Transparency Act. The requirement for public price disclosure forced a significant correction of listing prices that previously served merely as high starting points for individual negotiations. This is evidenced by the fact that during the full enforcement period in September 2025, over 15% of properties in major cities saw price reductions, with more than 5% undergoing deep cuts exceeding 10%. These deep corrections were observed across all price segments, indicating that the practice of maintaining "negotiation buffers" was a widespread industry standard regardless of property value.

The research identified a phenomenon termed the "regulatory freeze," where price volatility dropped significantly once concrete legislative drafts were released. In July 2025, price stability reached an unprecedented 90% across the 23 largest cities. This "wait-and-see" approach indicates that developers sought to minimize active price discovery until the technical requirements of the transparency mandate were fully crystallized, thereby avoiding multiple public adjustments during the compliance phase.

International experience shows that interventions aimed at limiting information asymmetry in the real estate sector yield varied results – both in terms of

prices and quantities (liquidity, time of exposure to the offer). Importantly, there are also known cases of deliberate transparency restrictions, which allow the effects of information “obscuration” to be empirically captured. Below is a selection of examples, arranged from systemic approaches (as measured by the transparency index) to case studies of countries and cities.

6.1. Global Real Estate Transparency Index (GRETl) and its research utility

Every two years, JLL (Jones Lang LaSalle) compiles the Global Real Estate Transparency Index (GRETl) (JLL, 2024). Its purpose is to assess the transparency of real estate markets in individual countries and cities. GRETl verifies the degree of access that investors, developers, and other market participants have to reliable, credible, and up-to-date information – not only about individual assets, but also about the macroeconomic, microeconomic, and institutional-legal contexts. The index includes several dozen indicators, the most important of which are:

- 1) market data: availability of statistics on prices, rents, vacancy rates, investments;
- 2) standards and practices: regulations, valuations, reporting standards;
- 3) legal and regulatory environment: property rights, transaction security, investor protection;
- 4) corporate governance and ethics: standards related to ESG, environmental reporting, and social responsibility;
- 5) technology and digitization: level of PropTech use and availability of digital databases.

The index defines market transparency as the level of clarity (or transparency) regarding how market mechanisms and the variables behind these mechanisms operate. The completeness and relevance of information are not measured solely from the perspective of a specific property, but also from its macroeconomic, microeconomic, and legal environment. It is therefore a slightly different type of transparency than that associated with the disclosure of property prices. Nevertheless, given that the primary objective of the index is to indicate the level of information asymmetry in the real estate market, we have taken the liberty of referring to it in this article.

6.2. Price reactions to transparency (panel study of 21 European metropolitan areas)

Ionaşcu et al. (2021) examined the relationship between transparency (as measured by GRETl) and housing prices in 21 European metropolitan areas between 2004 and 2016¹. The overall result is consistent with theoretical intuition: a decline in transparency is associated with an increase in housing prices. However, more interesting conclusions were drawn from the analysis of various sub-indices of the aggregate GRETl index:

- 1) Investment Performance Measurement (subindex GRINV) indicated that the lower the information regarding characteristics such as direct property indices and valuations, the larger the housing prices.
- 2) Regulatory and Legal (subindex GRREG) indicated that the inefficiency or lack of regulatory reforms leads to higher prices for dwellings, with 0.11%.
- 3) Transaction Process (subindex GRTRA) indicated that the weaker the transaction process, the larger the housing prices (+0.11%), showing that complexity in search procedures and inadequate professional standards of real estate agents generate higher costs.
- 4) Market Fundamentals (subindex GRMKT) indicated that insufficient availability of market knowledge (e.g., lack of databases and property transaction data) reduces demand pressure and therefore lowers housing prices by 0.20%.
- 5) Governance of Listed Vehicles (subindex GRGOV) indicated no statistically significant impact on changes in housing prices within the analysed panel.

The most significant price increases associated with the decline in transparency in the above-mentioned study were observed in eastern metropolitan areas such as Bratislava (1.29), Bucharest (2.39), Warsaw (2.53), and Zagreb (1.16), as well as in some western cities, including Copenhagen (2.89) and Madrid (2.01). These results, for example, indicate that for Warsaw, a 1% increase in the GRETl index (i.e., a decrease in market transparency, as this index is inversely correlated) leads to a 2.53% increase in housing prices, with the GRETl index itself ranging from 1.0 to 5.0.

6.3. Disclosure of transaction prices and prices and time of sale (reform in Finland in 2007)

An interesting context for transparency emerged in Finland in 2007. Prior to that, only aggregate data on

¹ It is worth noting that the GRETl index primarily focuses on the commercial property market; however, the study authors

considered it representative and used it to analyse residential markets, as they explain in detail in their article.

housing prices was publicly available there. Sellers entering the market, therefore, faced considerable uncertainty about the valuation of their properties and the demand for them. As a result, a website was launched that began publishing detailed information on individual transaction prices in Finland's 13 largest cities. The aim of this reform was precisely to improve transparency in the housing market. Its effects were examined in a study by Eerola and Lyytikäinen (2015). The empirical results showed that increased transparency of transaction prices had a positive impact on prices (they increased by about 5% in the area covered by the reform compared to the control area) and a negative impact on the time of sale (a reduction of about 20%), with the note that the information was more valuable to sellers who had underestimated the value of their property. In addition, it was emphasized that buyers had more accurate information about what types of houses were within their price range, which could have increased the likelihood of finding a potential offer. These results were interpreted as consistent with a situation in which sellers use additional information to revise their expectations upward and with the fact that the reform contributed to more effective sorting of offers by buyers in the market.

6.4. Transparency of information on technical condition and price levels (USA)

The United States is an exciting market for researching transparency in the real estate sector. Here are two examples applicable to this location.

The first case, which led to the requirement for sellers to declare the technical condition of real estate, was decided in a California Court of Appeals ruling in 1984. Following this, over the next 20 years, 34 state governments imposed requirements to disclose the condition of real estate on the housing market. The so-called Seller's Property Condition Disclosure Law was intended to transfer the risk from buyers and brokers to sellers, and to provide buyers with the opportunity to obtain compensation for previously known, undisclosed defects after acquiring the property. A study of this phenomenon by Nanda & Ross (2008) found that requiring sellers to provide a mandatory disclosure statement about the property's condition, thereby reducing information asymmetry, allowed sellers to obtain higher prices, with the observed price increase ranging from 3% to 4%. It was noted that this effect was most noticeable four to six years after the law's adoption, suggesting that buyers and sellers

gradually became convinced of the effectiveness of the new law and its impact on transaction transparency.

6.5. The impact of price disclosure on valuations and credit risk (USA)

The second case study from the United States concerned a broad study conducted by Gárate et al. (2025), in which the authors compared the functioning of real estate markets in states that restrict or prohibit the public disclosure of real estate sale prices (so-called non-disclosure states) with states where complete transparency of transaction prices applies (so-called disclosure states); this is interesting because both situations co-occur in the same country, under the same market conditions, and only differ in terms of the regulatory environment in the US. Two key aspects of the mortgage and real estate market were examined, namely appraisal bias and mortgage default. The study's results clearly demonstrated that a lack of transparency in transaction prices hurts the mortgage market, particularly for borrowers with limited financial resources. In a non-disclosure state environment, appraisers have fewer opportunities to verify and limit the appraisal process, which creates an opportunity for manipulation to help secure a positive loan approval.

6.6. Deliberate restriction of information versus prices and liquidity (Beijing 2017)

At the end of this section, we will cite a fascinating study on transparency, which focused not on the disclosure of information, but on the prohibition of its disclosure on the secondary real estate market in Beijing (Zheng et al., 2023). The case concerns the introduction by the local authorities in Beijing on 11 April 2017, of a policy prohibiting the disclosure of information about belonging to a key primary school district in online sales advertisements. Before this regulation was introduced, advertisements could include labels stating that a given property was located in a prestigious school district. Although this information seems insignificant to us in Europe, in China, it was crucial due to the critical link between education and real estate. Although public schools are the dominant type, the quality of primary schools varies significantly. A small percentage (approximately 7%) are so-called key primary schools, whose students achieve better academic results and have higher enrollment rates for further education. Parents have a strong preference for sending their children to these schools. At the same time, registration in primary school is linked to the place of residence. In Beijing, only the children of homeowners in a given complex

(not tenants) are eligible to attend the assigned elementary school. As a result, properties associated with key schools commanded a high premium, and their prices rose faster than those of houses across the city. The ban on disclosing school district labels led to a 2.44% reduction in transaction prices for properties associated with key schools, compared to other properties. The decline in transaction prices was mainly due to sellers lowering their listing prices. The ban on disclosure also led to a 19.82% increase in the time properties in key school districts spent on the market,

compared to other properties. An analysis of the dynamics of the effect over a more extended period showed that the impact of the policy faded over time (becoming statistically insignificant after about six months) as buyers found alternative ways to obtain information, limiting its effectiveness as a long-term solution.

A summary of the review of the presented studies on information asymmetry (of various types) is presented in Table 3.

Table 3

Summary of the review						
Country	Source	Scope of transparency (type of change)	When it occurred (date/period)	Effects for the Buyer (Demand)	Effects for the Developer/Seller	Effects for the Market (Prices/Supply)
Finland (Helsinki Metropolitan Area)	Eerola & Lyytikäinen (2015)	Disclosure of detailed transaction prices for individual apartments and houses via the launch of a public website.	1 July 2007	Access to more accurate price information could lead to more efficient sorting of listings by buyers.	Sellers (mainly households; new dwellings excluded): higher achieved prices (increase of approx. 5%) and faster sales (reduction in time-on-market by approx. 20%). Sellers could better revise their expectations regarding the property's value.	Price increase (approx. 5%). Faster sales (time-on-market shorter by approx. 20%). Improved efficiency in matching demand and supply.
USA (States with Property Condition Disclosure Laws – PCDL)	Nanda & Ross (2008)	Introduction of a state-level mandate requiring sellers to disclose information on the property's technical condition (PCDL).	The analysis covers 1984–2004, examining the impact of PCDL rollouts across different states.	Greater buyer trust in the quality of the purchased property. Greater transaction transparency.	Sellers can fetch a higher price for the property.	Increase in average property prices by about 3% to 4%. Aim: to eliminate the information asymmetry problem.
USA (Comparison of Non-Disclosure vs. Disclosure states, e.g., Memphis MSA)	Garate et al. (2025)	Lack of public transparency of transaction prices (non-disclosure) compared with full transparency (disclosure).	Analysis covers 1999–2022.	Borrowers with financial constraints (financially constrained): higher probability of default.	Sellers/Borrowers: higher mortgage prepayment rates in non-disclosure states.	Increase in appraisal overvaluation (appraisal bias) in non-disclosure states, adversely affecting the mortgage market.
China (Beijing)	Zheng et al. (2023)	Reduced transparency: ban on disclosing in online listings information on key primary school districts.	Study period: October 2016 – September 2017.	Increase in search costs. Decline in property viewings. Better-informed buyers were in a stronger position to obtain a lower price.	Increase in time-on-market by 19.82%. Sellers of properties near less renowned schools experienced a larger drop in prices and a longer time-on-market.	Drop in transaction prices by 2.44%. Decline in transaction volume by approx. 19%.

Source: own study.

The results of this study, indicating a rapid developer reaction during the anticipation phase and a subsequent price realignment – marked by decreases of over 10% in September 2025 – find strong support in the international literature while shedding new light on the specifics of the Polish primary market.

The research by Ionaşcu et al. (2021) suggests that Warsaw is one of the metropolitan areas most sensitive to information asymmetry; a 1% decrease in transparency (increase in the GRETI index) correlates with a 2.53% increase in housing prices. The study confirms this relationship: the mandated increase in transparency led to price corrections that, in certain segments (particularly the 12,000–18,000 PLN/sqm range), reached levels of -15% to -20%. This supports the thesis that information asymmetry in Poland has historically been utilized to maintain prices at a higher level than would result from pure market competition.

Experience from Finland (Eerola & Lyytikäinen, 2015) and the USA (Nanda & Ross, 2008) indicates that data disclosure often results in price increases (approximately 3-5%), as sellers become more adept at estimating their property's value. In the Polish case, we observed the opposite phenomenon: a dominance of deep downward corrections in September 2025. This discrepancy stems from a unique starting position: the Polish primary market operated heavily on "negotiable listing prices". While in Finland, transparency helped undervalued sellers raise expectations, in Poland, it forced overvalued developers to liquidate "negotiation buffers" to remain competitive in a newly transparent digital environment.

Zheng et al. (2023) observed in Beijing that the effects of information restriction policies often fade within six months as the market finds alternative information channels. The research identified a different mechanism which is the "regulatory freeze". In the draft phase of the Transparency Act, price stability in the largest cities surged to 87%. This suggests that under Polish conditions, developers reacted by halting decision-making processes until the law was fully crystallized – a more conservative behavior compared to the dynamic secondary market in Beijing.

Referencing the Global Real Estate Transparency Index (JLL, 2024) in the context of the Polish Transparency Act is highly appropriate. Although GRETI measures systemic transparency, the Polish regulation directly impacts two key sub-indices identified in the literature:

- Market Fundamentals (GRMKT) - by establishing a centralized price database, the Transparency

Act theoretically increases demand pressure by making information more accessible.

- Transaction Process (GRTRA) - by standardizing offers and reducing search costs for buyers, the regulation improves the professional standards of the sales process.

This study proves that the Polish primary market existed in a state of high information asymmetry, which developers consciously exploited to manage the negotiation process. The introduction of the Transparency Act disrupted this mechanism, forcing the market to undergo a rapid transition from a "negotiated price" model to a "transactional price" model at the public offer stage. This results not only in a shift in price levels but, fundamentally, a shift in market behavior, making the Polish case a significant contribution to the global discussion on real estate market transparency.

It is imperative to emphasize that at this juncture, it remains premature to formulate definitive conclusions regarding a systemic change in property price levels or the long-term impact of the legislation on the broader housing market. The market is currently in a transitional phase where the observed shifts primarily reflect a fundamental realignment at the offering price level. While the data clearly captures a significant response in how developers present prices publicly – moving away from negotiation-heavy listing strategies toward more transparent disclosure – the full transmission of these adjustments into final transaction prices and overall market liquidity will require a more extended period of observation and longitudinal data collection.

7. Market implications

The Transparency Act has successfully reduced information asymmetry in the Polish primary market. By forcing the transition from a "negotiated price" model to a "publicly disclosed price" model, the regulation has standardized the market environment. While some developers implemented modest price increases (1% to 5%) to compensate for the loss of negotiation flexibility, the overall effect has been a more transparent and comparable marketplace for consumers.

The residential property market, characterized by an exceptionally high degree of transaction complexity and the significant value of individual purchases, often representing the largest financial commitment in a consumer's life, requires special attention from legislators in terms of consumer protection. The fundamental problem that disrupts the balance in this sector is the information asymmetry between the

developer and the buyer, most often quite prosaically identified with the price of a given good.

Before the introduction of the regulations, the lack of complete price transparency manifested itself in practice on several levels. Firstly, the price presented in marketing materials was incomplete, not covering all elements of the transaction. Secondly, the offer was unclear, which was a result of the possibility of individual price negotiation. As a result, this made it difficult to compare offers². Thirdly, the price of a flat was rarely limited to a single amount, as it included several additional charges (e.g. the cost of purchasing a parking space, a storage room, notary fees, etc.), which could come as a big surprise to a person unfamiliar with this type of transaction and remain undisclosed at the preliminary stage.

This situation created a risk of violating consumer interests, paving the way for potential abuse and manipulation.

In the Polish legal system, price transparency issues were initially regulated by the Act of 9 May 2014 on the provision of information on the prices of goods and services (Journal of Laws 2014, item 915, as amended). This regulation introduced a general obligation to indicate prices in a clear and comprehensible manner, including all taxes and additional costs. However, in practice, it proved insufficient for property development. Due to their complexity and disproportionate financial scale, residential transactions required more precise legal solutions than those that were effective in retail trade. The regulations focused on the place of sale rather than on complex investment and financial transactions. In practice, this meant that developers could interpret their obligations in this regard by indicating the price only in an individual offer.

As a result, the primary legislative challenge became the need to transition from general protection to sectoral protection. The legislator partially responded to this challenge by introducing the Act of 20 May 2021 on the protection of the rights of purchasers of residential premises or single-family houses and the Developer Guarantee Fund (Journal of Laws 2021, item 1177; hereinafter referred to as the Development Act). This regulation aimed to reduce consumer risk by using

a comprehensive system of information obligations, the key element of which was the prospectus. It was intended to provide the purchaser with complete information about the property's price, the rules for determining it, and all additional costs. However, consumer protection only came into play when the consumer entered into the process of purchasing a flat. Thus, it did not address the information gap at the stage of searching for a flat and comparing offers.

To address this issue, on 21 May 2025, an amendment to the aforementioned Development Act was introduced, which requires developers to disclose property prices openly, specifically on their websites and in promotional materials. It aimed to eliminate the practice of prices on request and to provide consumers with equal and easy access to information on costs.

The amendment to the Development Act, effective 21 May 2025, focused on strengthening the protection of residential property buyers and aimed to resolve several key information issues in real estate transactions. In particular, it aimed to:

- eliminate the practice of so-called “prices on request”: the need to call the developer each time limited the transparency of offers and made it challenging to compare investments,
- strengthening the position of consumers: the obligation to publish prices openly was intended to give buyers quick access to information about the price of a property at the stage of searching for a flat,
- increasing market competitiveness: transparent prices make it easier for consumers to compare investments from different developers; as a result, competition is based not on hiding information, but on the real quality of the offer and price attractiveness,
- standardizing information standards: until now, some developers voluntarily published prices, while others concealed them under the pretext of individual negotiations; the amendment was intended to end this chaos and introduce uniform rules,
- protection of collective consumer interests: the new regulations also provide tools for the Office of Competition and Consumer Protection

² There are known cases on the market where the transaction prices of all flats sold in a given development differed from the asking prices by at least 20%, as this was the policy of the company offering the flats for sale. Additionally, the discount granted at the beginning of each day varied depending on the level of the plan achieved in a given month. As a result,

two customers enquiring about the same flat within a few days of each other were quoted prices that differed by several per cent. This type of behaviour not only increased misinformation, but also contributed to a lack of trust in the property development market and fears about taking advantage of the offer.

(UOKiK), which has gained a basis for intervening against developers using non-transparent practices.

One of the developer's obligations is now to provide data on the prices of properties on offer to a government portal daily.

From the perspective of the above objectives, a relatively narrow picture emerges of the implications that the amendment to the Development Act was supposed to have, according to the authorities that made it. First and foremost, the customer was to receive information about the price, and if we narrow down the objective to this issue, we can fully acknowledge that it has been achieved. Nevertheless, the subject is much broader, as is the group of its stakeholders.

In the property development market in particular, we can identify three groups of entities interested in knowing the prices of developer flats. These are the customers already mentioned: developers and property market analysts. Let us examine the above objectives and attempt to characterize their implications for the broadly understood property development market from the perspective of these different stakeholder groups, taking into account the potential problems associated with them.

From the consumers' point of view, price disclosure should increase the efficiency of the purchasing process by eliminating the need for direct contact with sales offices. In practice, however, they mainly use non-public platforms that present offers from selected developers or agents, grouping offers from sellers who cooperate with them; this means that although customers have easy access to a kind of offer comparison tool (they can apply filters of their choice and easily search for flats that meet their criteria), they must take into account that they are not viewing the entire market, but only selected investments. Hence, we used the term "proxy", as such a browser will not fully address the need to reduce information asymmetry. Thus, without conducting their own thorough market research, customers lose the opportunity to see the full range of offers. At the same time, to compete effectively with market giants and reach a similar number of customers, smaller developers are often compelled to collaborate with intermediaries, which often entails a substantial financial burden. Ultimately, they will pass on the cost of this service to the price of the flat.

Another problem concerns the varied approaches taken by developers to presenting their offers on websites. Some of them utilize advanced comparison tools to facilitate selection, such as a user-friendly interface or a comparison tool that allows properties to be selected by the customer. On the other hand, other developers complicate access to price information, deliberately lengthening the purchasing path in order to increase the conversion rate of visits to the sales office, which, according to popular opinion, significantly increases the likelihood of selling a flat. However, only developers with an established position on the market, offering desirable locations, prices, or other benefits, can afford such a policy. Despite the transparency of prices, this practice may lead to a reduction in the functional transparency of the market.

The third problem is related to the broadly understood promotion policy used by developers. Prices have appeared on websites which are intended to be treated as theoretical. They are accompanied by information about a promotion, the terms of which can only be found out at the sales office; this can be seen as an incentive to visit the showroom, but such actions have substantial market implications. Market analysts, whose task is to provide information to individual customers about the current state of the property market, may rely on unreliable data; this is particularly applicable to the reporting of prices in specific local markets. Let us take a closer look at this issue.

It appears that the legislator, prioritizing the protection of flat buyers, took a too narrow view. Flat buyers do not limit their knowledge to observing price changes on websites. They are embedded in a market environment that informs them daily about the state of the market through industry portals, statistics and analyses. Based on this information, they decide whether to purchase a flat or invest their funds for another purpose, to postpone or accelerate their purchase decision. In particular, they also consider ways of financing such a capital-intensive purchase. They must therefore assess, for example, the ratio of loan installments to rent installments, choose between variable or fixed interest rates for their loan, and determine the amount of their own contribution. In theory, the full knowledge that analysts³ should possess regarding the introduction of the amendment should provide customers in this market with a clear picture of the situation. However, let us focus on the

³ This knowledge is only complete in theory, as there are significant obstacles to analysing the data published by developers, which are discussed later in this article.

simplest analysis, which is average property prices, in the case of an initial promotion policy. In that case, conclusions from the market, such as an increase or decrease in average property prices, may not be adequate for the situation. Similarly, when comparing average prices of flats on offer and those sold, the differences between them may result from company policy rather than the strong negotiating power of buyers (customer market vs developer market); this leads to market misinformation, manifested in catchy article headlines presenting, for example, significant increases in property prices on the market and encouraging quick property purchases. In such a situation, there is no quick access to information about the property's price, only a distorted picture of the market, which causes even greater chaos.

Similar misinformation also affects developers, who, under the amendment, should, in theory, be able to make more efficient and adequate valuations of their investment projects, in particular, estimating the prices of bringing these investments to market, taking into account the market and the value of the housing estate itself, as well as the individual characteristics of the flats. Incorrect data collected from the market may, in this case, have more serious consequences than the lack of such data or partial data collected, for example, in the process of enquiring with the developer. This topic, in the context of the impact of competitive project prices on the prices of newly launched investments, will be discussed later in this article, in the section on the market.

The last issue worth mentioning is developers' concern about customers directly comparing the prices of properties on offer without taking into account other features characterizing a given housing estate, such as the quality of finish, land development, materials used, and compact layouts. From this perspective, the amendment to the Development Act has brought many benefits. First of all, it compelled developers to emphasize the distinguishing features of their investments, stimulating their creativity in both presentation and user-friendly interface design. As a result, customers already have much more information about a given property than just the price when browsing websites, which ultimately increases the comparability of offers and market transparency and may ultimately affect its liquidity, understood as the time of sale; this is how it should be in theory, but unfortunately the heterogeneity of residential properties, discussed in the next section, effectively hinders this.

As indicated earlier in this study, due to the

heterogeneity of the goods offered, the real estate market is characterized by persistent and difficult-to-overcome information asymmetry. This problem is not limited to restricted access to data, but primarily concerns the lack of uniform and universally accepted standards for data collection and presentation. The ambiguity of classification and the lack of a consistent database structure mean that information, even when available, cannot always be interpreted unambiguously.

A good example is the issue of the number of rooms. In Poland, an apartment described as a "two-room apartment" can refer to either a flat consisting of a bedroom and a living room with a kitchenette, or an apartment with two rooms and a separate kitchen. American standards represent yet another approach, where a "two-bedroom apartment" refers to a unit with two bedrooms and a separate living room, regardless of whether the kitchen is located separately. Doubts also arise regarding apartments with a mezzanine. There are no clear regulations allowing a mezzanine to be classified as a full-fledged room – in practice, it can serve a variety of functions, from an additional bedroom, through auxiliary rooms (laundry room, dressing room) to a space for a kitchen or bathroom, while at the same time, according to the law, it is not taken into account when calculating the usable area of the apartment.

The example cited illustrates only a fragment of a broader problem. The lack of standardization applies to many parameters of real estate, both physical and functional. The entry into force of a regulation requiring developers to publish prices openly has highlighted this problem – the regulation aimed to reduce information asymmetry and increase market transparency. In practice, however, the lack of precise guidelines regarding the scope and structure of data submitted to the government portal has led to a situation where each developer creates their own, different database format. The technical instructions primarily address formal issues (such as file format, data uniformity in columns, and the use of specific formulas), leaving the substantive structure itself to the discretion of entrepreneurs. As a result, the resulting data sets are complex for analysts to compile and compare, and their further processing requires specialized tools.

This situation has created an opportunity for external companies with the relevant know-how in web scraping software and the creation of aggregate databases from information obtained from developers and government portals. While market research professionals – such as analysts, financial institutions, and investment advisors – can utilize such services, the

average customer remains virtually deprived of access to uniform, structured data.

As a result, the introduction of mandatory price disclosure has, instead of increasing transparency, exacerbated information chaos in certain areas. It has failed to meet the expectations of two key stakeholder groups:

- consumers, in terms of easy and intuitive comparison of offers,
- market analysts, whose task is to provide reliable information on the state and dynamics of the real estate market.

These problems already existed before the amendment, but they became particularly apparent after its introduction, when the market should theoretically have had a complete and uniform picture of the data. The regulation was customer-centric – it aimed to provide the buyer with basic information about the price, and this condition was indeed met. However, it is worth noting that other stakeholder groups also expected the new regulations to provide them with broader and more consistent access to data, thereby enabling reliable analysis. The failure to meet these expectations does not mean that the objectives have not been achieved; rather, it indicates the limited scope of the regulation.

The fundamental problem that arises in this context, concerning the real estate market in general, remains the lack of a data categorization system – a unified system for recording the characteristics of residential premises to standardize them and make them easy to compare. In an ideal model, each characteristic of a residential property should be included in a uniform, transparent standard applicable regardless of location, and in the long term also internationally. Meanwhile, serious inconsistencies are already apparent in the Polish market. An example of this is the aforementioned number of rooms, which is often defined as the number of chambers in the land and building register (*pl. kataster*). The differences, therefore, concern not only the interpretation of the value of a given feature, but also its very definition. There are many more such problems, for example, defining what location is and how to describe it, how to correctly assign compass directions and views, how to assess the structure, size of additional rooms, standard of investment, noise exposure and, above all, how to compare these features with each other. Each of these elements plays an important role in assessing the attractiveness of a property; however, the lack of standardization makes it impossible to make reliable

comparisons. While price as a nominal parameter allows for a quick comparison of offers, interpreting what is included in the price requires much greater involvement on the part of the customer. Of course, this is not an unknown problem, as property appraisers, who use methods such as the pair comparison method, face it daily. This time, however, by suggesting that it has eliminated the phenomenon of information asymmetry, forcing developers to disclose prices, the legislator has not, in fact, relieved the customer of the burden of comparing these features. This case is not new, except that today customers may feel exempt from comparing features and having a broader knowledge of the market, as the media suggests that they can choose an apartment without any additional involvement, since they have access to a complete set of data.

8. Conclusions

The introduction of the Transparency Act has fundamentally altered the communicative landscape of the Polish primary residential market, yet the findings of this study suggest that the transition toward genuine transparency is far from complete. The empirical evidence presented in this research suggests that while the "hidden price" has been eliminated, it has been replaced by a more complex form of functional non-transparency.

The primary success of the Transparency Act lies in the immediate liquidation of "negotiation buffers" that had historically characterized the Polish developer market. The fact that over 15% of properties in major metropolitan areas saw significant price reductions during the full enforcement period – with many exceeding 10% – confirms that pre-existing listing prices were often disconnected from actual market value. However, as the focus of developers shifted from price asymmetry to more sophisticated marketing strategies, such as "theoretical pricing" and undisclosed promotional terms, the burden of information discovery for the consumer has merely moved from the price itself to the terms of the offer.

This study concludes that the legislator's focus on the formal disclosure of a nominal price parameter was insufficient to resolve the inherent information asymmetry of the real estate market. The lack of unified standards for defining core property characteristics – such as room counts, usable area (e.g., the treatment of mezzanines), or location quality – remains the greatest obstacle to market efficiency. By allowing developers to maintain their own unique database formats and

descriptive structures, the regulation has, in certain areas, exacerbated "information chaos" rather than facilitating easy comparison and analysis. Consequently, market transparency remains an "illusion" for the average consumer, who, despite having access to prices, is still unable to perform a meaningful, objective comparison of the underlying value of the assets.

The emergence of a market for data aggregation – where external firms must "scrape" and restructure government-mandated data to make it usable – indicates a significant gap in the public infrastructure for market analysis. For market analysts and professional appraisers, the lack of a consistent, substantive data architecture means that average price statistics may now be more distorted by developer "promotion policies" than they were prior to the Transparency Act. This misinformation, often amplified by media headlines, can create artificial pressure on consumers and lead to suboptimal investment decisions.

Ultimately, the Transparency Act should be viewed as an initial, rather than a final, step toward market maturity. For transparency to become functional rather than merely nominal, future regulatory efforts must move beyond price disclosure to address the categorization of property characteristics. Until a unified, national standard for recording and presenting the physical and functional features of residential units is established, the Polish primary market will continue to be characterized by persistent information asymmetry, where the public price serves as a mask for a lack of genuine comparability. The observed "regulatory freeze" and subsequent price realignment, as captured in this study, demonstrate that the market is capable of rapid adjustment; however, the next phase of evolution must focus on the qualitative, rather than quantitative, dimension of market data.

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