

Assoc. Prof. Dr. Yana Stoencheva

# INVESTMENT ATTRACTIVENESS OF RESIDENTIAL REAL ESTATE IN THE

**CAPITALS OF THE EUROPEAN UNION**



Assoc. Prof. Dr.  
Yana Stoencheva



Associate professor at the "Real Estate" department at University of National and World Economy (UNWE), doctor of economics;

Master's degree in "Marketing" and "Public Finance" from the University of National and World Economy, Sofia;

Leads lectures and exercises on the disciplines:  
"Market analysis in the real estate business", "Real estate marketing", "Territorial-planning aspects of real estate", "Marketing research" and others.

Author of over 50 scientific publications - in Bulgarian and English.  
Member of the Union of Scientists and the Union of Economists in Bulgaria.

Participated in projects and research mobilities at the economic universities in Perugia, Florence (Italy), Poznan (Poland), Thessaloniki (Greece), Bucharest (Romania) and Zagreb (Croatia).



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# University of National and World Economy (UNWE)

The University of National and World Economy (UNWE) is located in the capital city of Bulgaria – Sofia.

It is the largest and the oldest higher educational institution for Economics and Management in Bulgaria.

UNWE provides excellent opportunities for studying, teaching and research activities within its 4 institutes, 4 training centers, 9 research centers, 2 mobility and career centers.



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# University facts



- Location – Sofia, Bulgaria
- Founded 1920
- Bilingual university (English and Bulgarian)
- 500+ full-time lecturers
- 22 000 students (Bachelor and Master)
- 43 Bachelor programs
- 108 Master programs
- 41 PhD programs
- Over 200 courses taught in English
- 8 faculties, 4 institutes, 4 training centers, 9 research centers, 2 mobility and career centers



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# Bachelor and Master study programs in English



## Bachelor study programs in English:

- Economics
- International Economic Relations
- Finance and Accounting
- Business Informatics and Communications
- Business Economics and Management
- Marketing and Strategic Planning

## Master study programs in English:

- International Business
- Economy of Defence and Security - Nuclear Security
- Business and Innovations
- Accounting, Financial Control and Finance
- Supply Chain Management
- Digital Marketing
- Hospitality Management
- Internal Auditing
- Marketing Management



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# UNWE has initiated and successfully developed 5 joint/double degree programs:



- Joint/Double Master Degrees
  - ✓ International Business with Università degli Studi Internazionali di Roma – UNINT, Italy ;
  - ✓ International Business and Management with Jiao Tong University - School of International and Public Affairs, Shanghai, China
- Joint/Double PhD Degrees
  - ✓ Vrije Universiteit Brussel (VUB) – Brussels, Belgium
  - ✓ Haxhi Zeka University – Peja, Kosovo
  - ✓ Modern University for Business and Science (MUBS) – Beirut, Lebanon

*\*The study programs in English are offered for all Bulgarian and international students as well as for exchange and ERASMUS+ students.*

*\*The UNWE applies the European Credit Transfer System in all undergraduate, graduate and post-graduate programs. Credits earned at our university can be transferred to other higher educational institutions in any of the participating European countries*



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# 8 Faculties

- General Economics
- **Business**
- Management and Administration
- Finance and Accountancy
- Economics of Infrastructure
- International Economics and Politics
- Law
- Applied Informatics and Statistics

## Business faculty

- Industrial Business
- Economics of Natural Resources
- **Real Estate**
- Intellectual Property and Technology
- Entrepreneurship
- Physical education and sports



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# Department “Real Estate”

## Founded in 2007

### Study Programs:

- **Bachelor’s Degree:**
  - *Real Estate Management*
- **Master’s Degrees:**
  - *Real Estate Business*
  - *Finance and Investment in Real Estate*
- **PhD Program**

### Key Features:

- Modern curriculum and teaching methods
- Practice-oriented education
- Supportive academic environment



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# Highlights from 2025 Academic Conference – 2025



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# Highlights from 2025

## Guest Lectures & Off-site Training



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# Highlights from 2025 Business Academies



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# Highlights from 2025

## Erasmus+ Mobility and Events



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# UNIVERSITY CENTRE FOR STUDENTS AND TEACHERS MOBILITY (UCSTM) – Erasmus+ office



Nowadays the UCSTM activities are:

- Student mobility (outgoing/incoming)
- Staff mobility (outgoing/incoming)
- Conclusion of Bilateral agreements
- International Credit Mobility
- Organization of Mobility Support

<https://www.unwe.bg/mobility/en/>



\*

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Co-funded by the  
Erasmus+ Programme  
of the European Union



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# INVESTMENT ATTRACTIVENESS OF RESIDENTIAL REAL ESTATE IN THE

## CAPITALS OF THE EUROPEAN UNION

### Purpose of the study

- To analyze capital growth and investment returns in the capitals of the European Union
- To group cities with similar real estate characteristics (*cluster groups*)

## Data source

- The main data source is **Numbeo**, one of the largest global platforms for cost of living and residential real estate data.

## Geographic focus

- The analysis focuses **only on the city center** of EU capital cities  
This ensures better comparability of properties in terms of: transport accessibility, infrastructure and services, safety and central location

## Property type

- The study focuses on **one-bedroom apartments (around 70 m<sup>2</sup>)**  
These properties are: more affordable, highly liquid, popular both for living and investment purposes

## Time period and exclusions

- Data refer to **end of November** for the years **2017 and 2025**



# The following indicators were studied:

- **Average sale and rental prices;**

- **Average annual rate of return;**

Calculated using the static method – average annual rate of return

Rental yield is calculated as:

$$\text{Expected annual rental income} / \text{purchase price per m}^2$$

Assumes **10 months of rental income per year**

- **Affordability of the residential properties;**

Affordability is calculated as the ratio between the average price per square meter of a 70 square meter apartment and the average net salary.

- **Overall investment attractiveness**

A composite indicator measuring the **overall attractiveness of residential real estate investment**. Each EU capital city receives a **score based on its ranking** in:

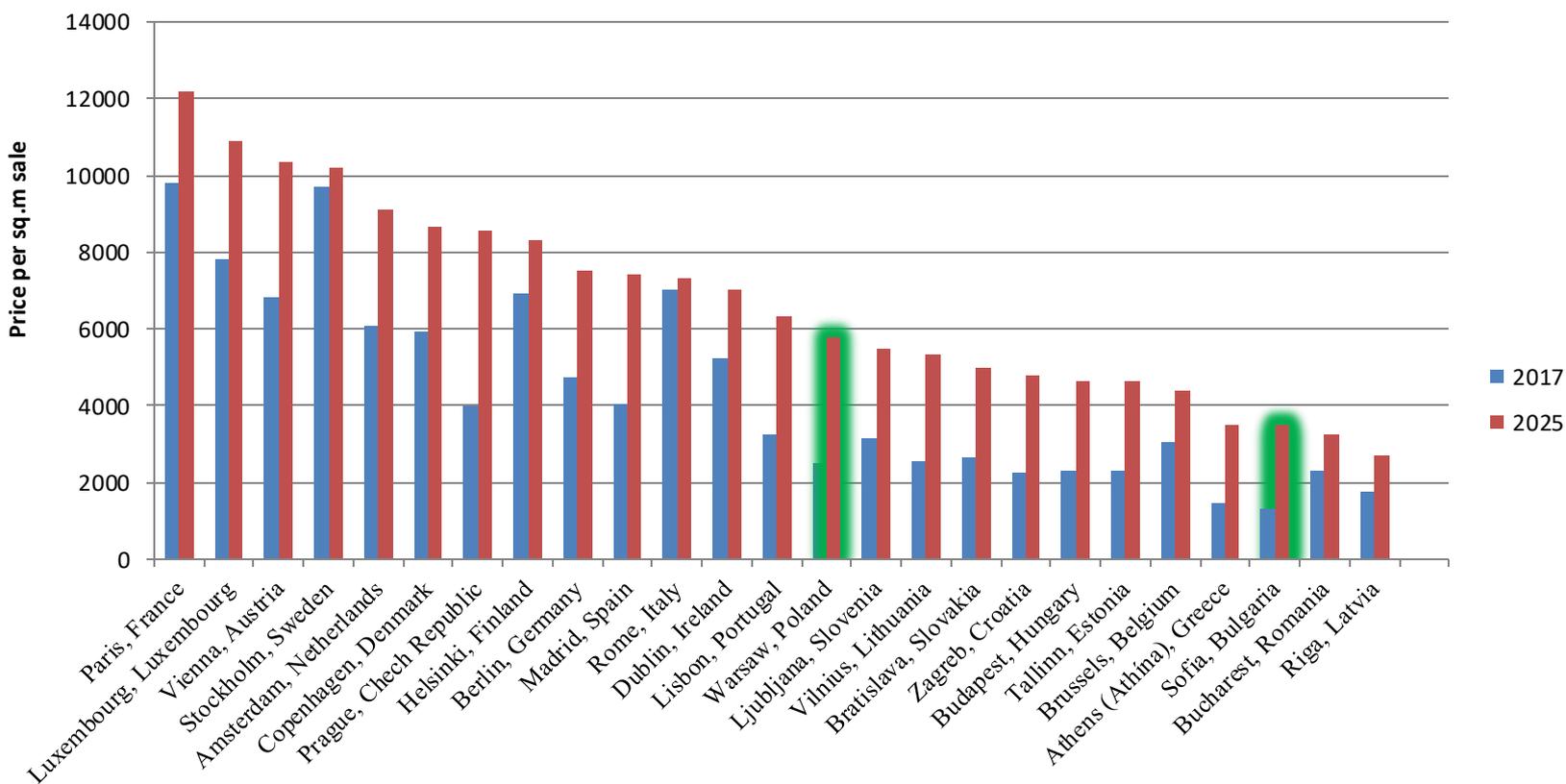
- price growth
- rental yield growth

The **total score** is calculated as the sum of these two rankings

**Higher total score = higher investment attractiveness**

*In simple terms, this indicator shows which cities perform well both in terms of price growth and rental returns.*

*This approach allows for an easy comparison between cities without focusing on a single indicator only.*



Source: Numbeo

## Fig. 1. Average purchase prices in Euros per square metre in the city centre in capitals of EU in 2017 and 2025

\*When it comes to the growth rate of housing prices, our capital city, **Sofia**, is at the top of the ranking, with a price increase of 167.26%. Price increases of over 100% can be observed in seven European capitals: Sofia (Bulgaria), Brussels (Belgium), Athens (Greece), Warsaw (Poland), Prague (Czech Republic), Zagreb (Croatia), and Vilnius (Lithuania).



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# Additional Costs When Buying Property in Bulgaria

Besides the purchase price, buyers in Bulgaria typically pay:

- Local property tax: 2% – 3%;
- Notary fee: 0.1% – 1.5%
- Property registration fee: 0.1%
- *Agency commission (if applicable): 2% – 3%*

👉 **Total additional costs: typically: 3% – 6%**

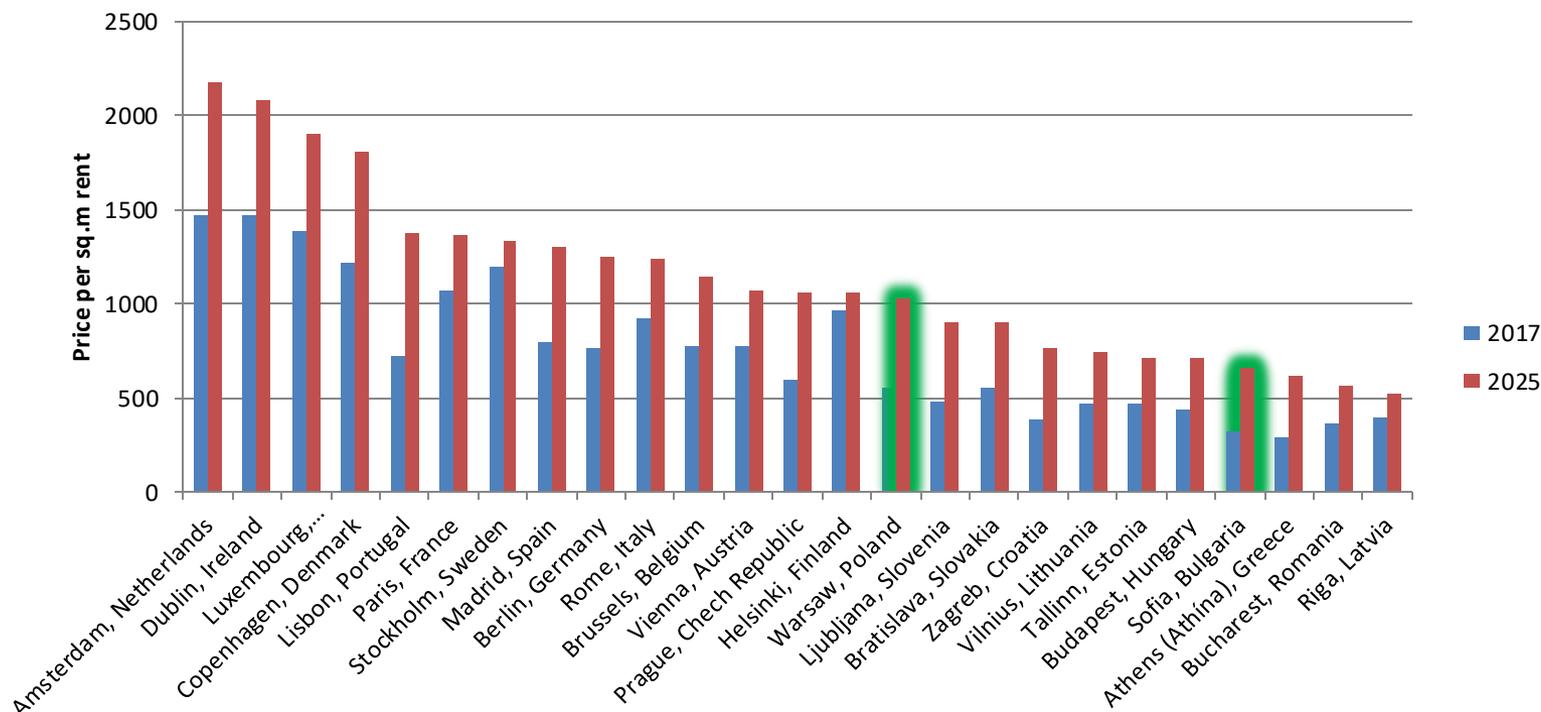
## Real Estate Brokerage in Bulgaria

- Agency commission: typically **2% – 3%**;
- Use of a broker is **not mandatory**;
- No mandatory education or licence requirement;
- Draft law proposed by NSNI (National Real Estate Association)  
(still under discussion)



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Source: Numbeo

**Fig. 2. Average rental prices in Euros per square metre in the city centre in capitals of EU in 2017 and 2025**

\* According to data from the latest rental market report published by the property portal Daft, at the beginning of November 2025 there were only 1,901 rental properties available in Ireland, while the number of rooms offered for rent decreased by 7% on an annual basis. Rental supply is also very limited in the capital city of Dublin. As of November 1st, 2025, the number of properties available for rent was around one quarter lower compared to the same period of the previous year. As a result, upward pressure on rental prices is likely to persist.



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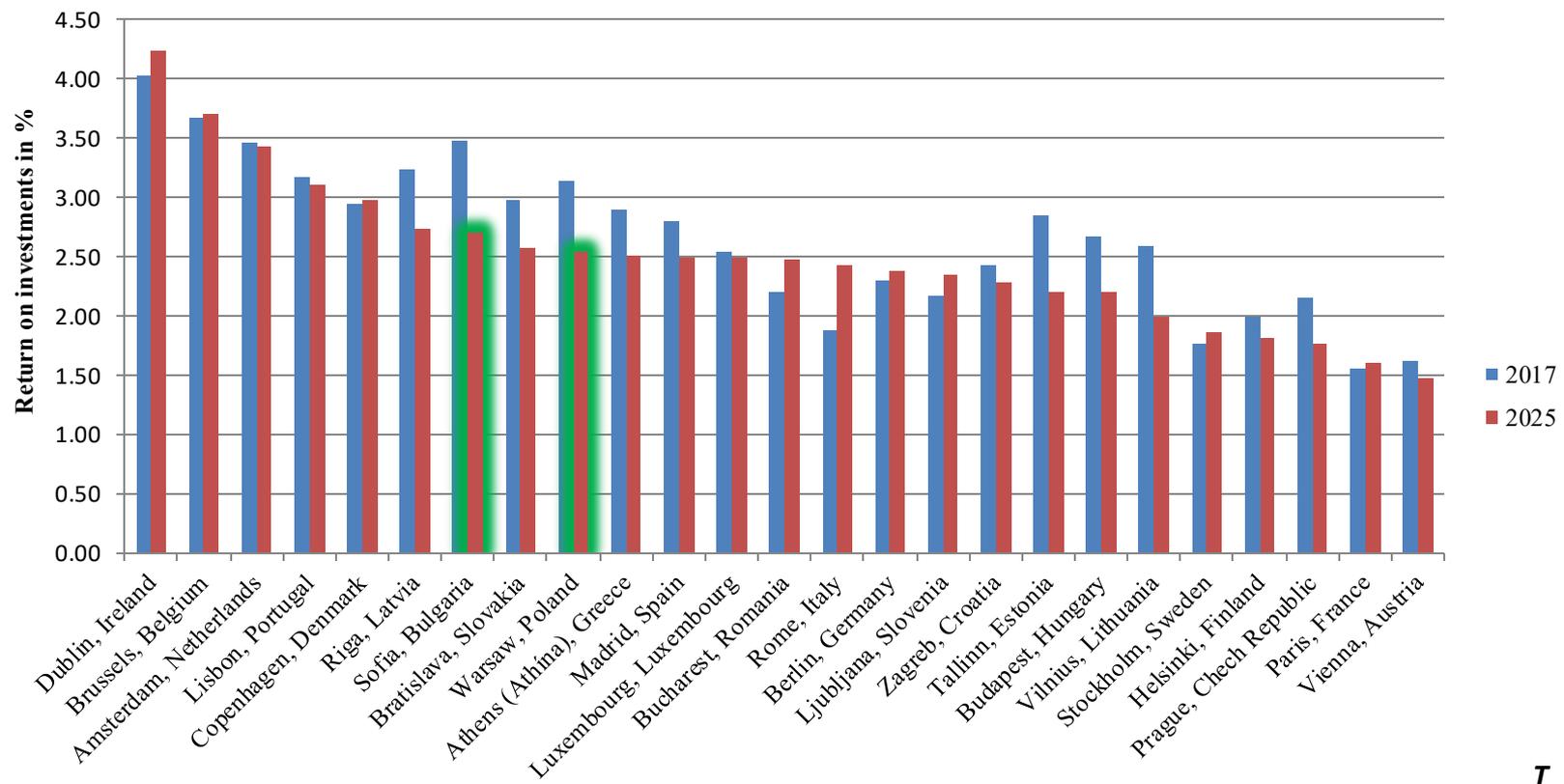
**Table 1 – Examples of rules on short-term accommodation rental services**

City	Maximum annual number of days that a host can rent out a unit on a short-term basis	Presence of owner required	Multiple properties prohibited	Licence/registration required
Amsterdam	30	No	No	Yes
Berlin	90 (if secondary residence, no limit if primary residence)	No	Yes (if secondary residence)	Yes
Copenhagen	70 (no limit on sharing private rooms)	No	No	No
Dublin	90 (if primary residence, no limit if secondary residence)	No	No	Yes
Lisbon	-	No	No	Yes
Madrid	90	No	No	Yes
Paris	120 (if entire primary residence, no limit if secondary residence or private room rented in primary residence)	Yes (if primary residence)	No	No (simple declaration to the city) Yes (if secondary residence)
Rome	-	No	No	Yes



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*the values are obtained through the author's calculations based on data from [www.Numbeo.com](http://www.Numbeo.com)*

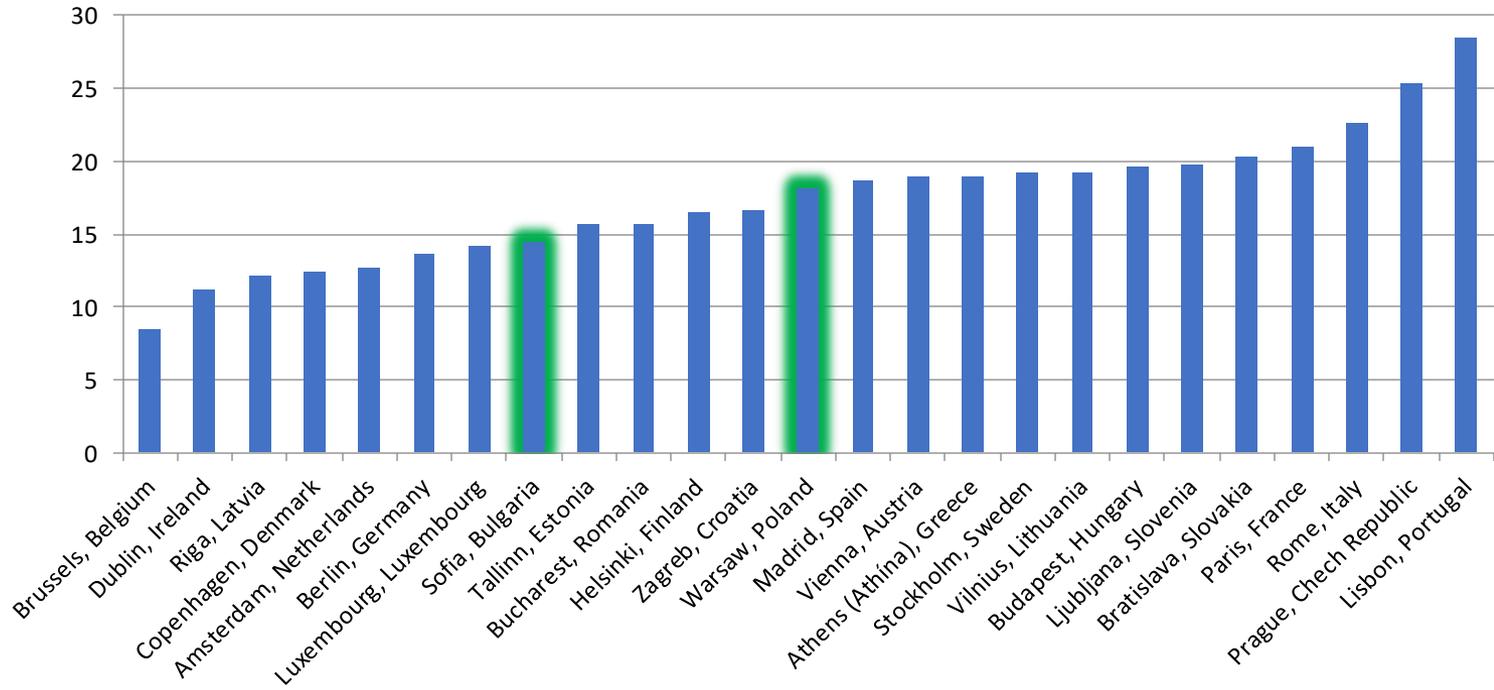
**Fig. 3. Average annual rate of return on investment in one-bedroom apartments in 2017 and 2025**

\*Nine European capitals report a positive change in investment returns compared to the base year 2017. The largest increase is observed in Rome (28.75%), while the lowest change is recorded in Vilnius (-23.14%).



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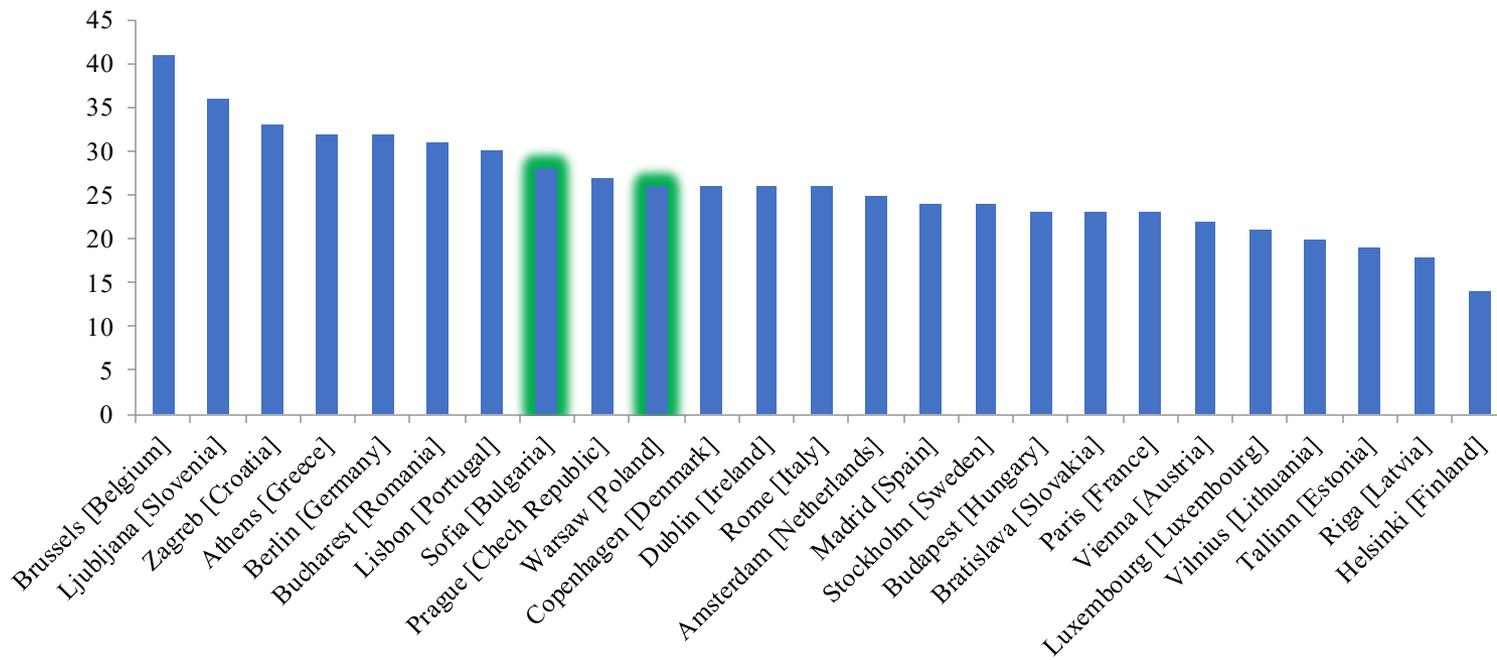


The values are obtained through the author's calculations based on data from [www.Numbeo.com](http://www.Numbeo.com)

**Fig. 4. Number of years needed to acquire a one-bedroom residential property in the central urban areas of European capitals, based on the average net salary**

*\*Urban Reform Institute and the Frontier Centre for Public Policy  
Housing affordability rating*

*Affordable 3 & under; Moderately unaffordable 3.1 to 4.0; Seriously Unaffordable 4.1 to 5.0; Severely Unaffordable 5.1 & Over*



**Fig. 5.** Ranking of European capitals by the „universal investment attractiveness“ indicator

### Overall investment attractiveness

A composite indicator measuring the **overall attractiveness of residential real estate investment**. Each EU capital city receives a **score based on its ranking** in: price growth; rental yield growth

The **total score** is calculated as the sum of these two rankings

**Higher total score = higher investment attractiveness**

*In simple terms, this indicator shows which cities perform well both in terms of price growth and rental returns.*

*This approach allows for an easy comparison between cities without focusing on a single indicator only.*



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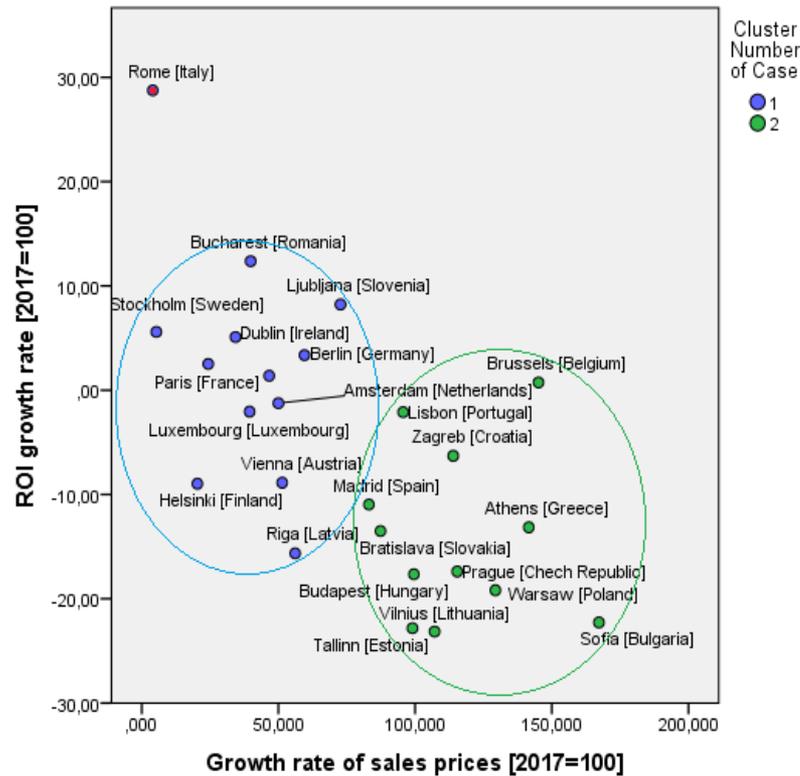


Fig. 6 Classification of capital cities into clusters based on growth in sale prices and growth in return on investment (ROI)

The graphical representation of the clusters clearly reveals an **inverse relationship** between the **growth rate of returns (ROI)** and the **growth rate of sales prices**.

In capitals where a high growth rate of ROI is observed, the increase in sales prices is relatively low. Conversely, in capitals with a high growth rate of sales prices, a lower or even negative growth rate of returns is recorded.

This relationship explains the formation of the two clusters and indicates that **market attractiveness manifests itself in different forms** — either through higher returns or through stronger capital growth.

Table 1. Results of the analysis testing the significance of variables influencing cluster formation

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Growth rate sales [2017=100]	36625.2	1	538.7	23	67.9	0.000
Growth rate ROI [2017=100]	1662.9	1	94.4	23	17.6	0.000

The results of the ANOVA analysis indicate that both variables make a statistically significant contribution to cluster differentiation, as the significance levels (Sig.) for both indicators confirm the presence of clearly defined differences between cluster means. A comparison of the F-values shows that the growth rate of sale prices ( $F = 67.9$ ) exerts a stronger influence on cluster formation than the growth rate of return on investment ( $F = 17.6$ ). This suggests that differences in the dynamics of sale prices constitute the primary factor underlying the division of European capitals into distinct groups, while growth in returns plays a complementary but less influential role. It should be emphasised that, within the context of K-means cluster analysis, the ANOVA results are used for descriptive purposes only, as the clusters themselves are constructed so as to maximise between-group differences.



## Conclusions and Key Findings

- Residential real estate markets in European capital cities show substantial differences in investment attractiveness.
- Capitals in Western and Northern Europe are characterized by higher rental yields and moderate price growth, reflecting mature and stable markets.
- In contrast, capitals in Central, Eastern, and Southern Europe exhibit stronger capital appreciation, with sale price growth exceeding rental income growth.
- Rome stands out as an extreme case, combining low price growth with exceptionally high returns on investment, underlining the uniqueness of certain local markets.
- The ANOVA analysis confirms that price dynamics play a more significant role in the clustering of capitals than returns on investment.



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# Smart Tower

**LUXURY APARTMENTS & OFFICE SPACE**



## CHARACTERISTICS OF THE PROJECT

75,63 M

Height of the building

67 ↔ 440 M<sup>2</sup>

Layouts variety

175

Residential units

## LEVEL OF COMPLETION

Rough construction

24

Floors

up  
to 2,8 M

Height of the ceiling  
1-24 floor

up  
to 6,0 M

Height of the ceiling  
ground floor

## FINISHING OPTIONS

Fully furnished

## SMART SERVICES

A specially developed smart application, including:

- remote control of your smart home, including control of lighting, household appliances and the microclimate in the home;
- access to personalized information about household accounts and payments: renewal and change of remote subscriptions, receiving news and notifications, paying utility bills;
- access to the internal infrastructure of the building, reservation and ordering of goods and services in it, providing remote access for your guests and others;
- direct connection with the facility management of the building

### MORE ADVANTAGES



panoramic  
windows



Option of joining  
apartments



view  
apartments



heat pump  
air conditioning



smart control

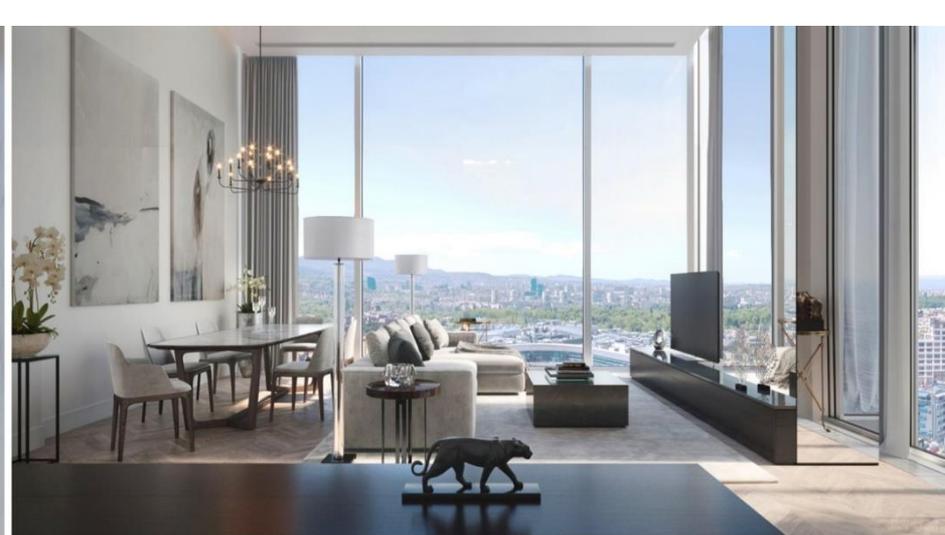


Smart Tower: Reception and central lobby



FIVE STAR EXPERIENCE AND 24/7 RECEPTION

WARM AND  
ELEGANT WELCOME



YOUR PERFECT SPACE

# PREMIUM PENTHOUSE



360° panorama  
Scan the QR code with  
your mobile phone to view the 360° panorama.

PREMIUM  
PENTHOUSES  
YOUR PERFECT SPACE





# Twin Tower

**BRANDED RESIDENCE**

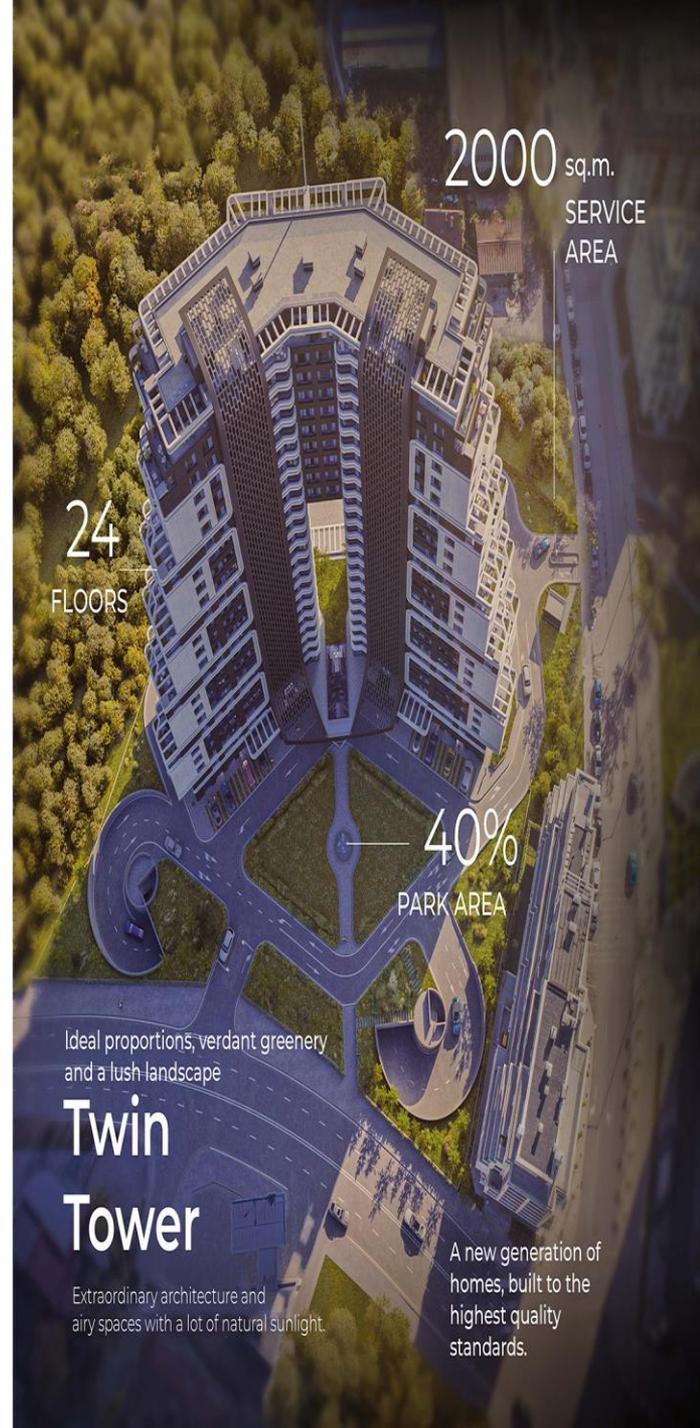
Smart green building connecting with nature, exclusivity and prestige, extraordinary luxury, smart services and technologies.



HOME WITH ITS OWN ATMOSPHERE -  
**IDYLIC PLACE TO SAVOR LIFE'S BEAUTIFUL MOMENTS**

Relax, have fun, socialize and live actively in TWIN TOWER.

Experience the allure and invigoration of a luxury location coupled with expertly designed residences.



2000 sq.m. SERVICE AREA

24 FLOORS

40% PARK AREA

Ideal proportions, verdant greenery and a lush landscape

## Twin Tower

Extraordinary architecture and airy spaces with a lot of natural sunlight.

A new generation of homes, built to the highest quality standards.

# General Information

**Location:** Sofia, Bulgaria

**Project type:** Premium residential complex (branded residences)

**Market positioning:** Among the first branded residence developments in Bulgaria

**Design partner:** Cattelan Italia

**Developers:** Glavbolgarstroy and Smart Consultant

## Role of Cattelan Italia

Cattelan Italia, a globally recognized Italian luxury furniture and interior design brand, contributes to the **interior design concept of the common areas**, including the lobby and shared spaces.

The partnership brings:

- Italian contemporary design language
- High attention to materials and detailing
- Strong brand identity enhancing project prestige

This collaboration positions the development within the global trend of branded residential real estate.



## Project Concept

Twin Tower Sofia introduces the **branded residence model** to the Bulgarian housing market. The concept combines the privacy and ownership advantages of residential property with the aesthetics, services, and prestige typically associated with luxury hotel brands. The project aims to raise the standard of high-end residential living by integrating international design expertise, high-quality construction, and premium amenities. It reflects the growing demand in Sofia for luxury urban housing with added lifestyle value.







An architectural rendering of a modern residential complex. The scene shows several tall, multi-story apartment buildings with a mix of light-colored facades and dark window frames. A central courtyard features a circular swimming pool, landscaped walkways, and greenery. In the foreground, a street with a red-paved crosswalk and a few cars is visible. The sky is bright blue with scattered white clouds.

# Residential Park Plovdiv

**RESIDENTIAL COMPLEX WITH MALL**



RESIDENTIAL  
**PARK**  
P L O V D I V

THE LARGEST RESIDENTIAL  
PROJECT IN BULGARIA AND THE BALKANS

The construction is divided into 3 stages

Location:

Trakia area, next to a park,  
secured transport/boulevards

**60** Buildings

**3900** Apartments

**500 000** Sq.m. TBA

# ABOUT PLOVDIV

Second largest and important city in Bulgaria



- Industrial projects
- Labor market
- Universities
- Attractive economic & cultural center

## The biggest challenge

- Hot climate
- Thin layer of soil
- Artificial hills / visual separation of the hills
- Forecasting places for mechanization
- Irrigation systems and methods



# THANK YOU!

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