



EPRA

EUROPEAN PUBLIC
REAL ESTATE ASSOCIATION



EPRA

EUROPEAN PUBLIC
REAL ESTATE ASSOCIATION

WHAT'S NEXT?

EPRA Research Webinar Series II

*Residential Market Performance
What's in it for the European Residential Market*

JANUARY 26, 2021





Moderated by

- Alex Moss (Director, Real Estate Research Centre, The Business School and EPRA Research Committee Chairman)

Panelists:

- Dilek Pekdemir, PhD. (Research Manager, EPRA)
- Mahdi Mokrane (Head of Investment Strategy&Research, Patrizia AG)



Dilek Pekdemir, PhD. (Research Manager, EPRA)

European Residential Sector Performance

E

P

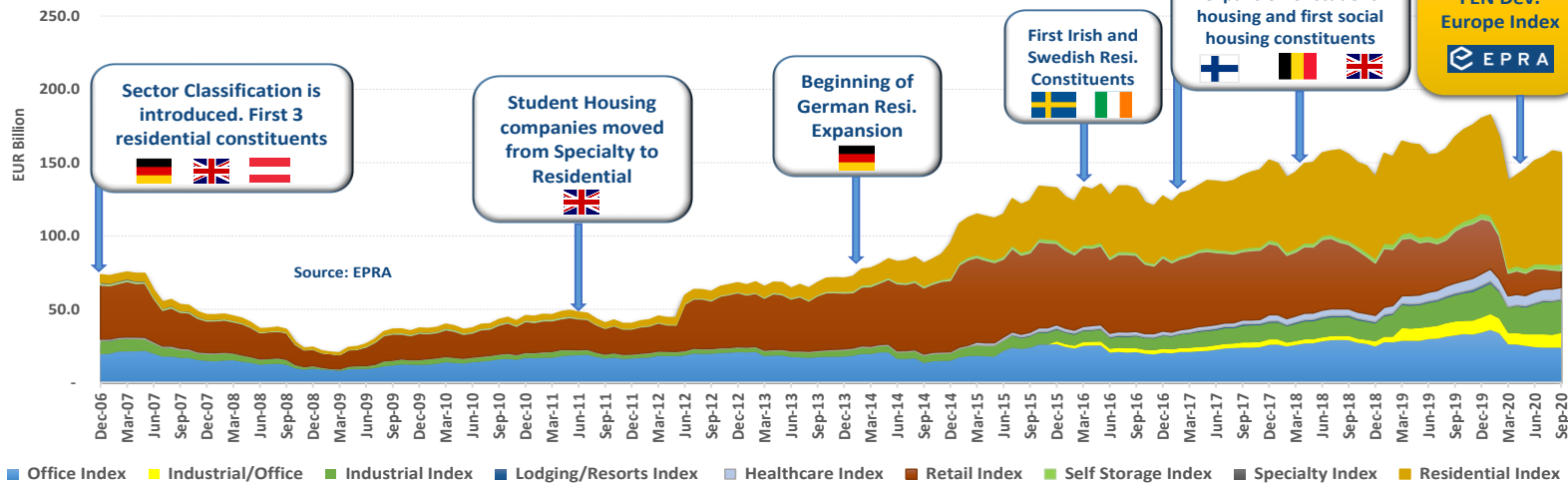
R

A

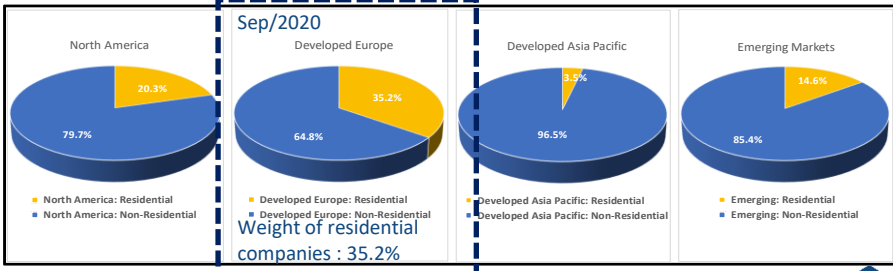
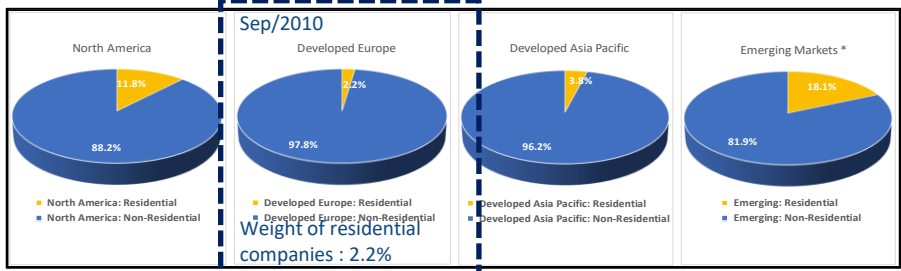


Evolution Residential Sector in Europe Index

FEN Dev. Europe Index - FF Market Cap by Sectors
(Excluding Diversified)

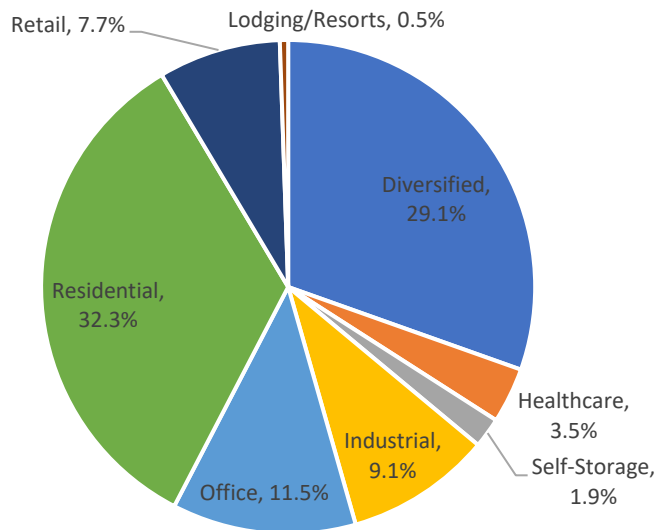


■ Office Index ■ Industrial/Office ■ Industrial Index ■ Lodging/Resorts Index ■ Healthcare Index ■ Retail Index ■ Self Storage Index ■ Specialty Index ■ Residential Index

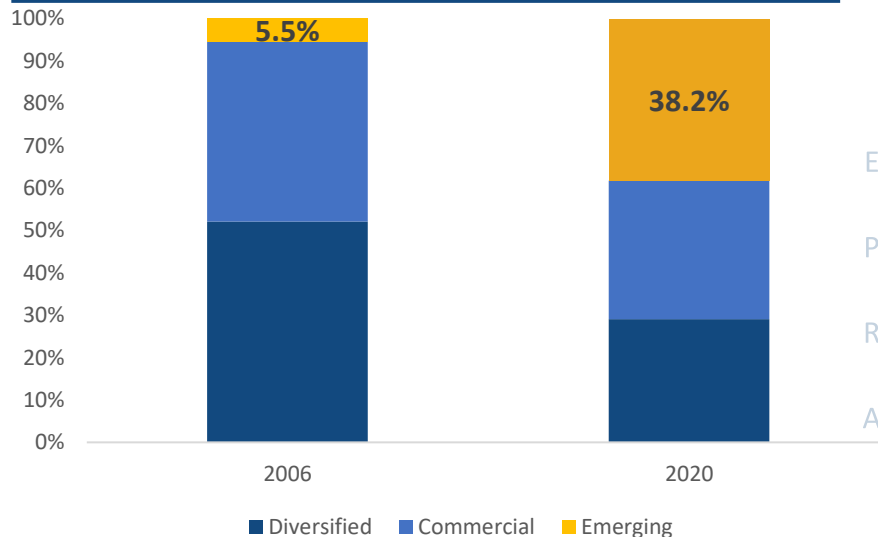


Index Evolution : Emerging Sub-Sectors

Property sectors exposure (31/12/2020)



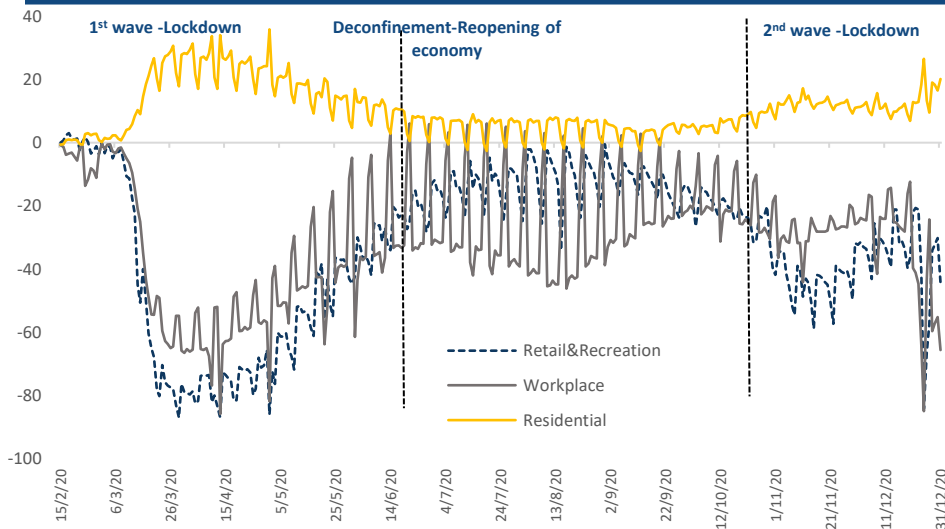
Share of emerging sub-sectors (2006 vs 2020)



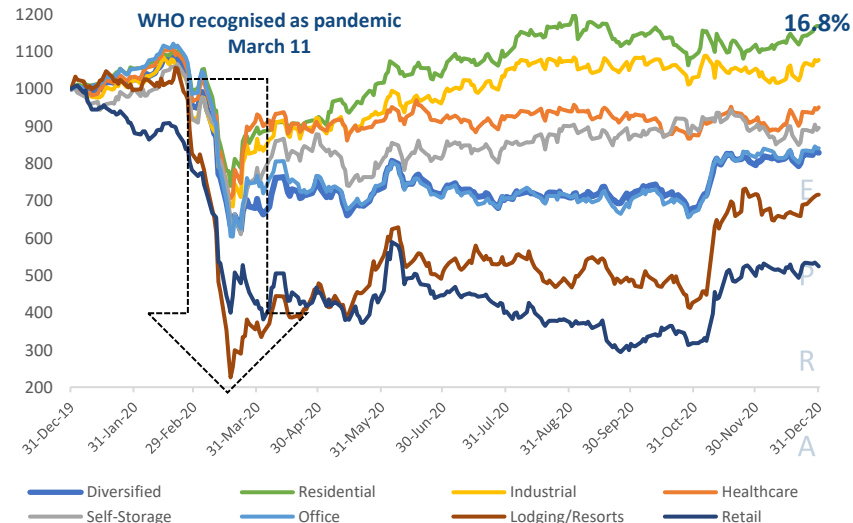
- Residential in Europe an emerging sector for the listed market in Europe
- Including student accommodation and social housing

Covid-19 Era : Residential sector kept it resilience

Average Mobility Scores



Dev. Europe : Total return by sector (31/12/2019=1000)



- Most of the European countries implemented strict measures (including full lockdown) in line with the increasing number of cases and fatalities. The work and retail-related mobility were adversely impacted by restrictions during the first and second waves, although a slight improvement has been observed with deconfinement policies during the summer period.
- Focusing on FEN Developed Europe's sector indices, residential (16.8%) and industrial (7.7%) are the only sectors to stay above pre-crisis levels. The resilience of the residential sectors is supported by investor appetite as they represent a safe, stable and attractive asset with more secure income generation.

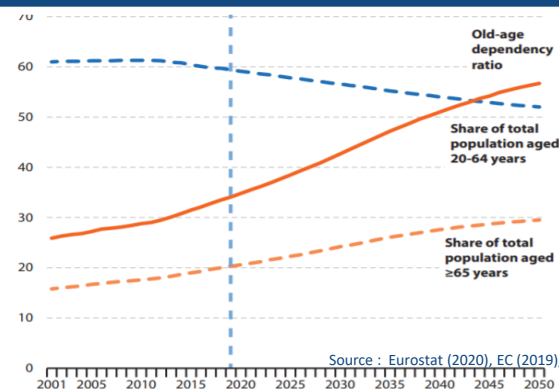


Post pandemic world : permanent vs temporary changes

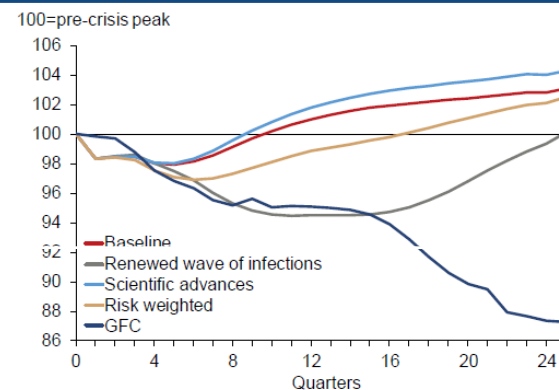
Structural shifts and expected implications on residential market:

- WFH and its impact
- Demographic changes, urbanization trends, changing lifestyles
- Increasing income and financing condition
- Housing deficit, housing affordability, regulatory issues
- Climate change, energy efficiency, sustainability and ESG
- 2021 and onwards

Population Structure : Aging population (2001-2050)



Eurozone : Real house price recovery durations



Investing successfully in European residential markets

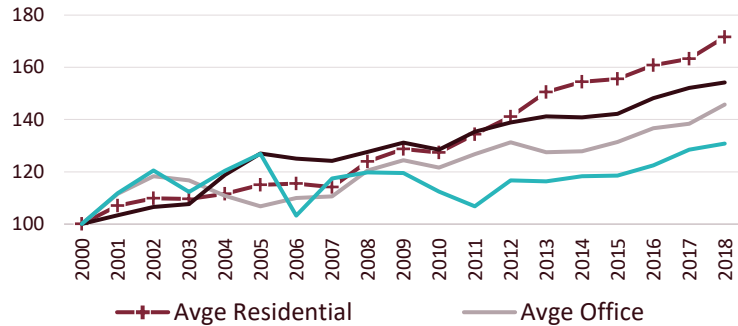
Mahdi Mokrane (Head of Investment Strategy & Research, Patrizia AG)

EPRA Research Seminar
26/01/2021

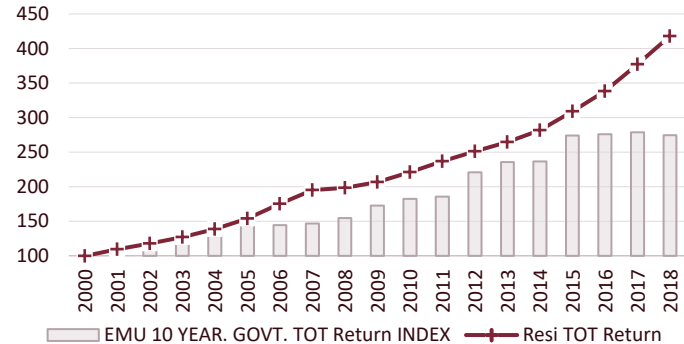
European residential increasingly seen as an attractive bond substitute

Residential offers stability and attractive income growth over time: portfolio stabiliser and income enhancer

Long term comparison of NOI performance (by sector – Europe)



Govt bonds vs. Residential - Total Return Index (Base 100 in 2000)

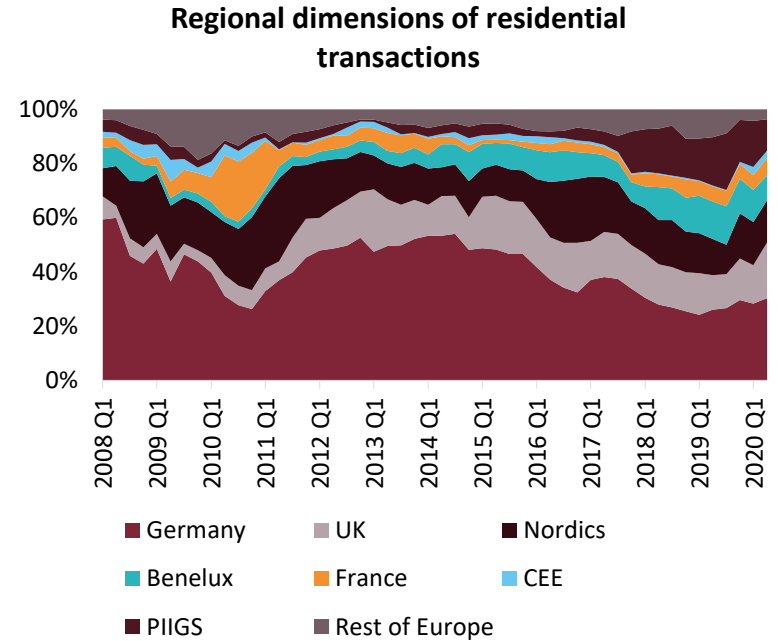
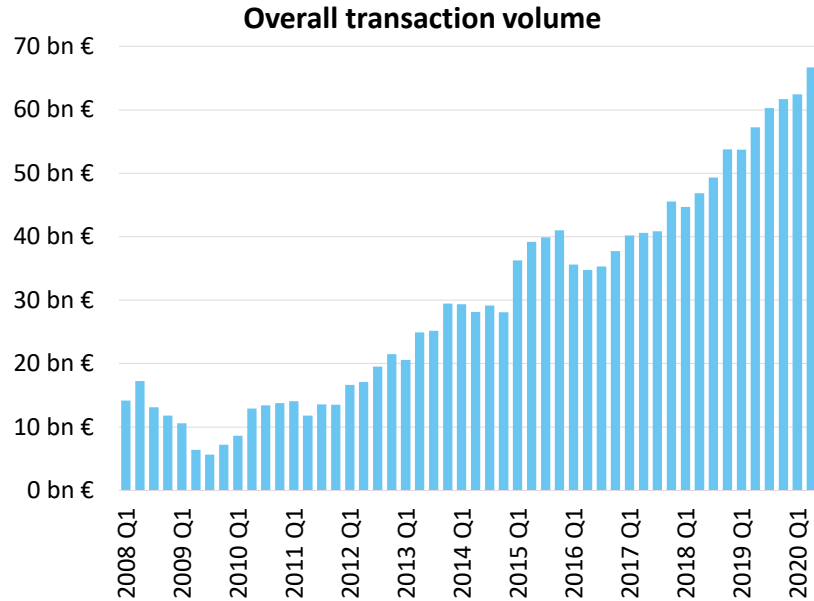


Conclusion

- Residential offers stable NOI growth over time
- NOI growth of residential investments is significantly less volatile than commercial NOI (office, retail or industrial)
- Commercial sectors’ NOIs were affected by the recessions, while residential remained resilient
- Since 2000, residential NOI growth even outperformed commercial investments (except in Sweden).

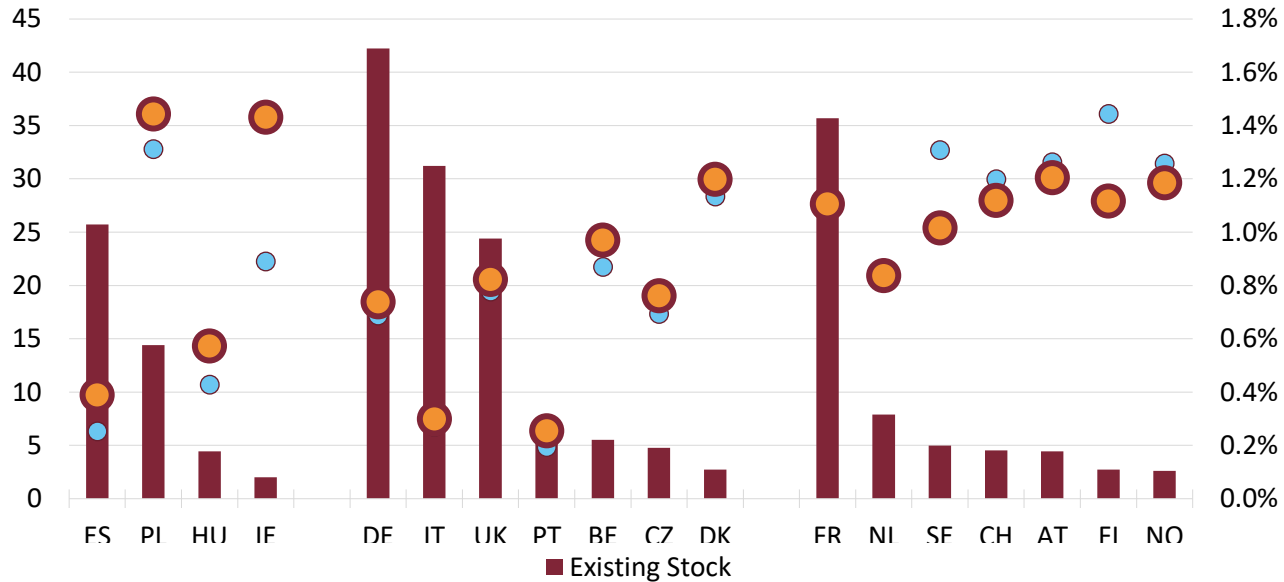
Every 5th Euro is invested in European residential

Germany loses relative importance, as other European markets mature



Generally subdued building activity limits supply risks

Despite a long-term undersupply of housing and strong rental and price growth across Europe, construction activity has not picked up strongly in any European country: Covid-19 will most likely lead to delays in the delivery of current developments.

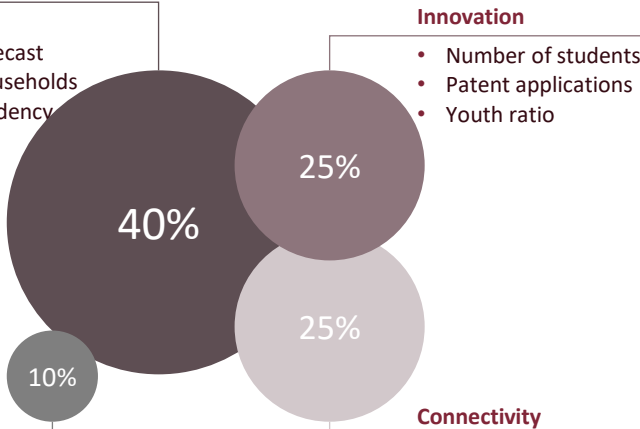


PATRIZIA European Residential City Index

The top 25 cities in the innovation and connectivity subgroups in the Living Cities Index: a good starting point for selecting attractive target markets

Demography

- Population
- Population forecast
- Number of Households
- Old-age dependency ratio



Innovation

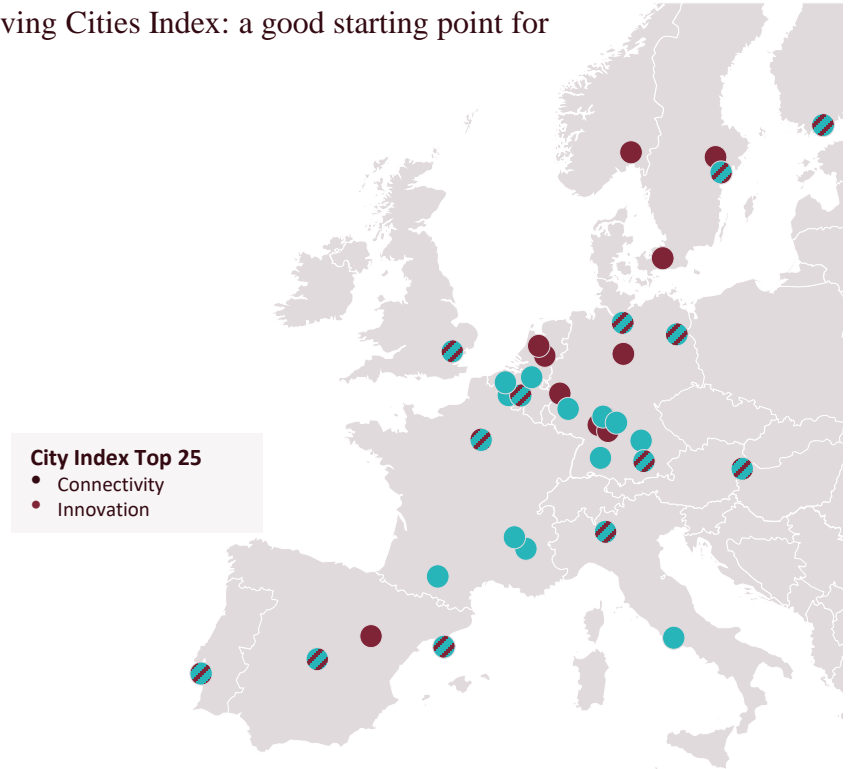
- Number of students
- Patent applications
- Youth ratio

Economics

- Unemployment rate
- GDP
- Household disp. income

Connectivity

- Number of (airport) passengers
- Average time for journey to work



For investors **STABILITY** in regulations is the key!

You need to know the rules of the (residential) game!



Rent increases / level

- Allowed by law
- Maximum rent permissible
- Rent deposit
- Rent indexation

Cost allocation

- Maintenance
- Operating costs
- Modernization
- Basic repairs

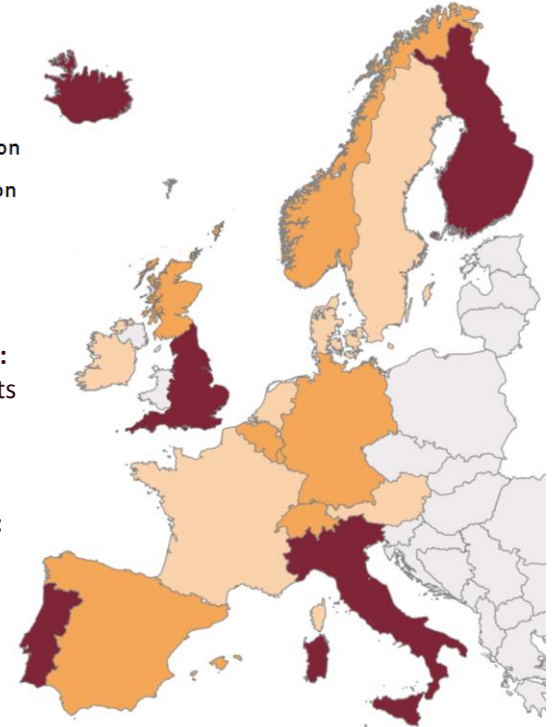
Lease term

- Limited/unlimited
- Automatic renewal

Rent Regulation




- 2nd generation
- 3rd generation
- free markets

- **2nd generation:** both, initial rents and rent increases are regulated
- **3rd generation:** only rent increases are regulated



Residential ESGs focus areas: illustration for key sustainable development goals

PATRIZIA's strategy is aligned with the UN SDGs¹

	Target	Examples of action plan	ESG Metrics
Environment <i>Example</i> 	Commit to achieving net-zero emissions by 2040	Investments <ul style="list-style-type: none"> • Low carbon development projects • Renewable energy on-site, solar panels • Refurbish building stock for improved energy efficiency • Green Energy for all common areas • Smart meters and LED lighting in all buildings 	Clear reduction targets by 2024 <ul style="list-style-type: none"> • energy consumption • water consumption • GHG emission • 100% Waste diverted from landfill
Social <i>Example</i> 	Commit to strengthening local sustainable and inclusive communities	Investments <ul style="list-style-type: none"> • Access to child care, education and regeneration • Green neighbourhoods to foster healthy lifestyle • Community areas for urban cohesion • Tenant survey on quality of housing / improvements 	Community targets <ul style="list-style-type: none"> • Kindergartens in portfolio • Green space for social encounter & tenant events • Improvement of communal green spaces • Sustainable and inclusive mobility (car sharing, e-bikes, e-chargers) • All required amenities within 1000m
Governance <i>Example</i> 	Implement Green Leases	Monitor compliance <ul style="list-style-type: none"> • Industry standard reporting: GRESB, INREV, ... • Implementation at fund level: (1) ESG KPIs in decision-making, risk management and due diligence, (2) annual review of progress 	<ul style="list-style-type: none"> • Identification of common interests and potential for cooperation • ESG reporting for best possible transparency and comparability • Stakeholder engagement: property managers, service providers, tenants and communities

Source: PATRIZIA (01/01/2021) - 1 Sustainable Development Goals, United Nations: 3 Good health and well-being, 4 Quality education, 7 Affordable and clean energy, 11 Sustainable Cities and communities, 13 Climate action

Using PATRIZIA's Impact Solutions to better select micro-markets

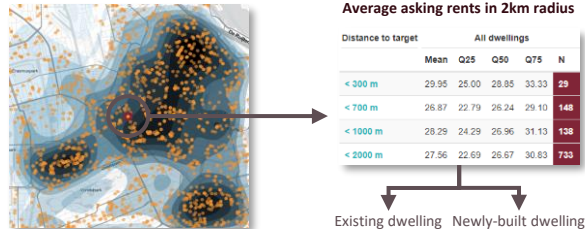
Market Radars

PATRIZIA market radars are based on big data analysis of internal and external datasets.



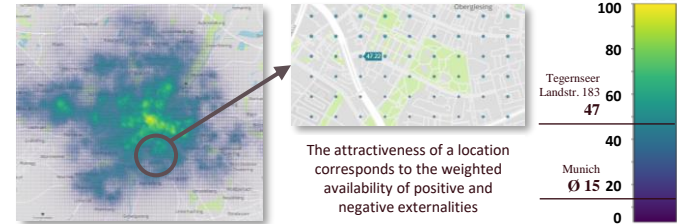
Asset Pricing Report

Tailored insights and recommendations for better decisions making use of the latest technology for processing and analysing datasets.



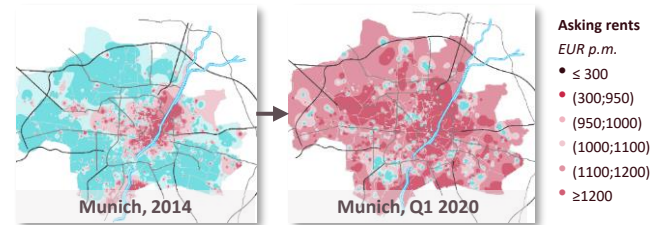
Amenities Magnet Report

PATRIZIA Amenity Magnet Score measures the attractiveness of locations transparently with the help of artificial intelligence.



Market Dynamic Report

Rents are connected in space and time. Spatio-temporal econometrics are applied to detect relationships and movements.



PATRIZIA is Europe's leading residential fund manager

36 years of residential investment experience

> 200

residential real estate professionals



EUR

12.5_{bn}

residential AuM



EUR

11.8_{bn}

residential properties transacted 2015-2019

Local presence for residential sourcing & management



By accepting this material, recipient acknowledges, understands and accepts the following:

The information contained herein is directed only at professional clients and intended solely for use by the recipient. No part of this document or the information herein may be distributed, copied or reproduced in any manner, in whole or in part, without our prior written consent. This document is for information and illustrative purposes only. It does not constitute advice, a recommendation or a solicitation of an offer to buy or sell shares or other interests, financial instruments or the underlying assets, nor does this document contain any commitment by PATRIZIA AG or any of its affiliates. Whilst prepared in good faith, the information contained in this document does not purport to be comprehensive. PATRIZIA AG and its affiliates provide no warranty or guarantee in relation to the information provided herein and accept no liability for any loss or damage of any kind whatsoever relating to this material. The information herein is subject to change without notice.

Notice regards your Rights and Data Protection: www.patrizia.ag/privacy



Thanks for your attention.

For further queries:
research@epra.com