

36TH ECBC PLENARY MEETING

EMF-ECBC ACADEMY TRAINING & MARKET UPDATE

CLIMATE ISSUES IN REAL ESTATE AND INVESTMENT OPPORTUNITIES IN SOCIAL HOUSING

Gianluca Mattarocci - Tor Vergata University of Rome



- Introduction

- Social housing and climate change
- REITs and social housing
- Conclusion



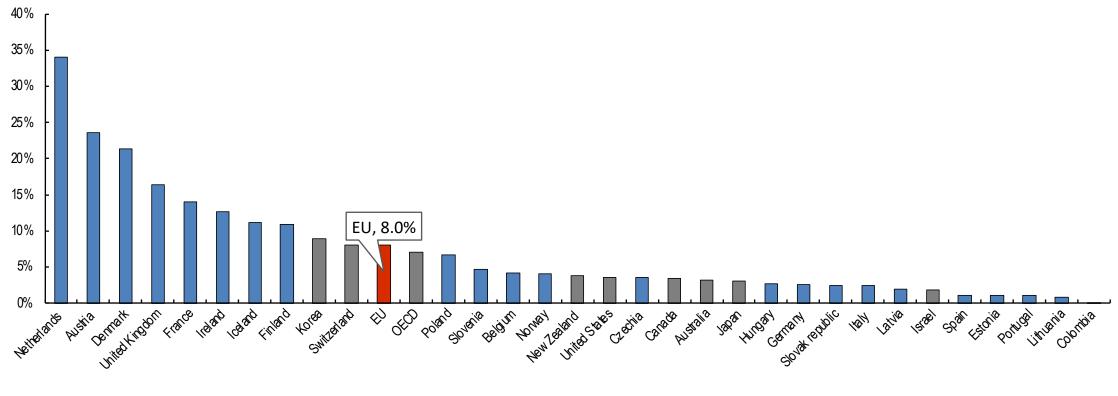




Introduction



Social housing as percentage of overall housing stock





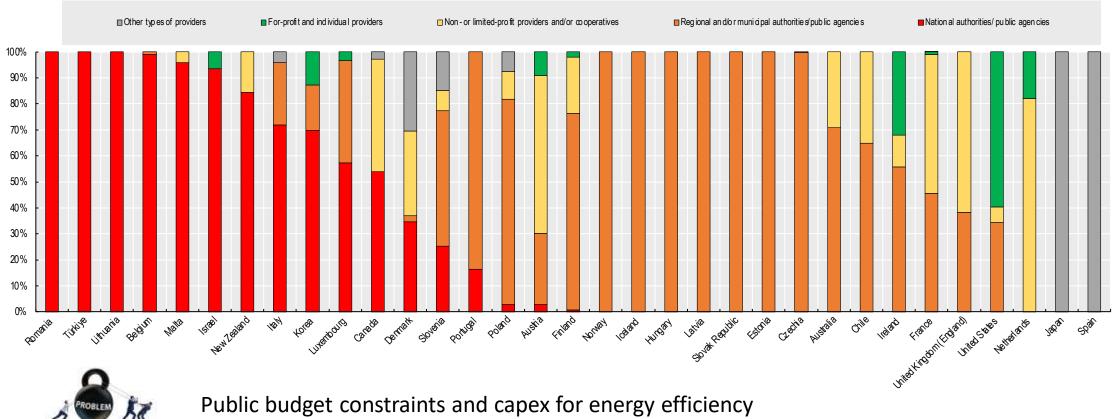






Introduction

Providers of social housing









Introduction

Model for Financial instruments and grants with co-financing from the

EIBG and others for affordable housing (April 2025)

Combined FI in one operation (guarantee or loan FI)

Guarantee to EIB, other IFI or NPBI, combined with grants in two operations

FI implemented by EIBG/IFI/NPBI, combined with grants in two operations

EIBG/IFI/NPBI funding combined with grants at final recipient level

Equity and quasi-equity Financial Instruments









Commission

- Introduction
- Social housing and climate change
- REITs and social housing
- Conclusion







Social housing and climate change

| Торіс | Reference | |
|---|------------------------|-----------|
| Energy efficiency programs and poverty | Tonn et al, 2021 | Our topic |
| Low energy efficiency of social housing stock | Ozarisoy & Altan, 2022 | |
| Cost of energy poverty | Avanzin et al, 2022 | |
| Energy retrofitting policy and social housing | Tsenkiva et al., 2021 | |
| Energy efficiency and payback for public entities | Desvallées, 2022 | |







- Introduction
- Literature on credit risk and climate risk

REITs and social housing

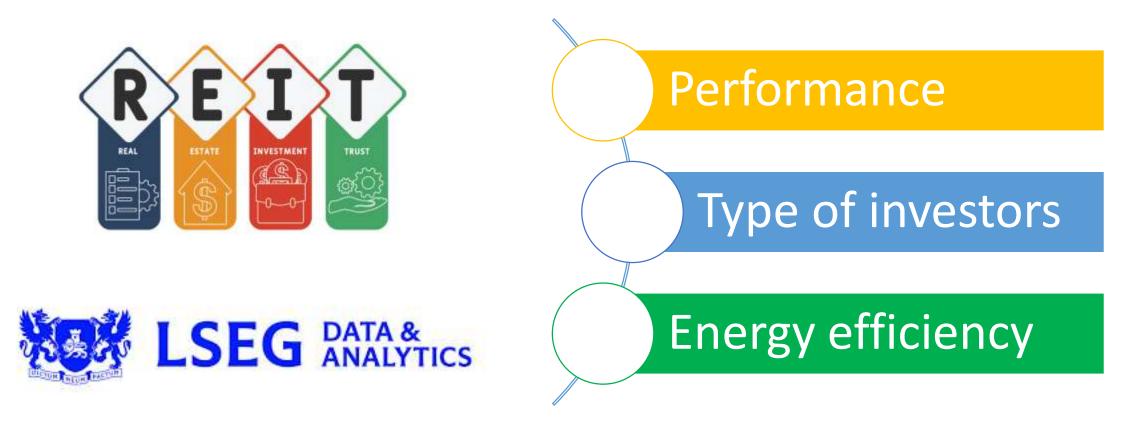
- Conclusion and perspectives







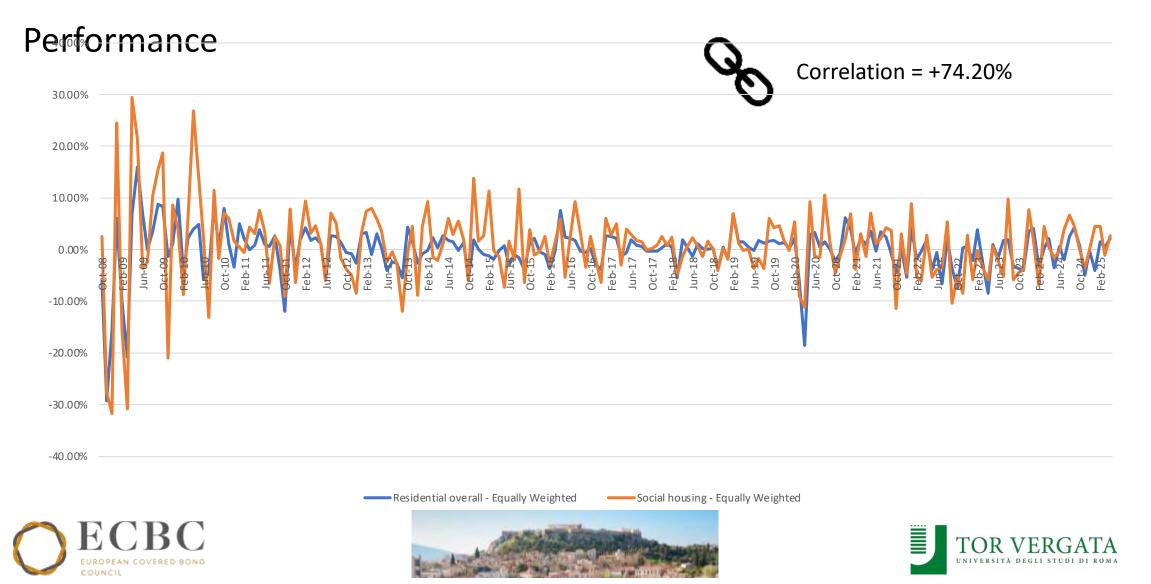
Framework of the analysis

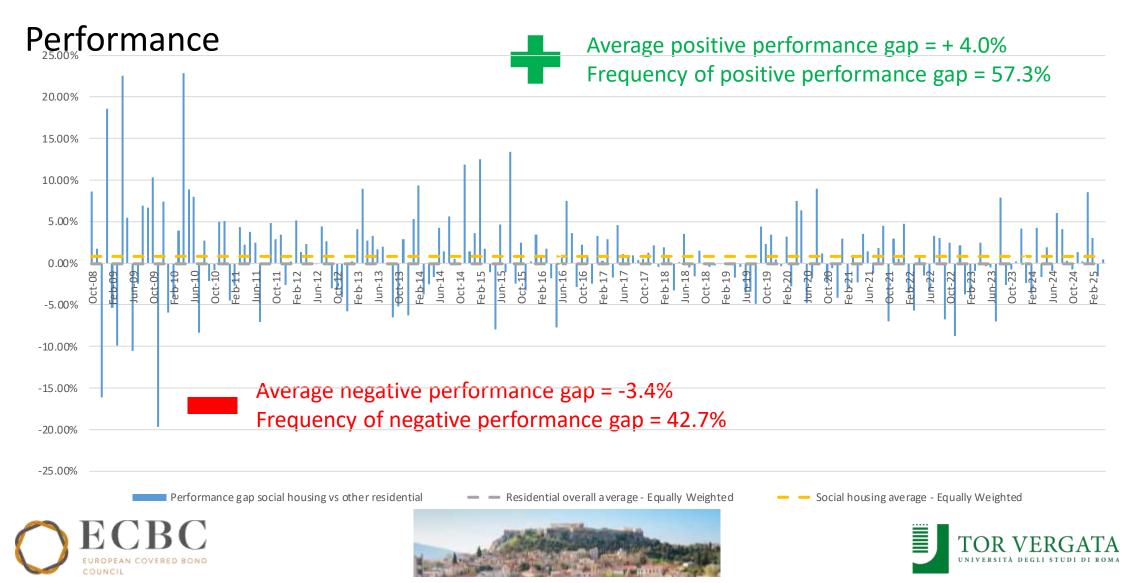




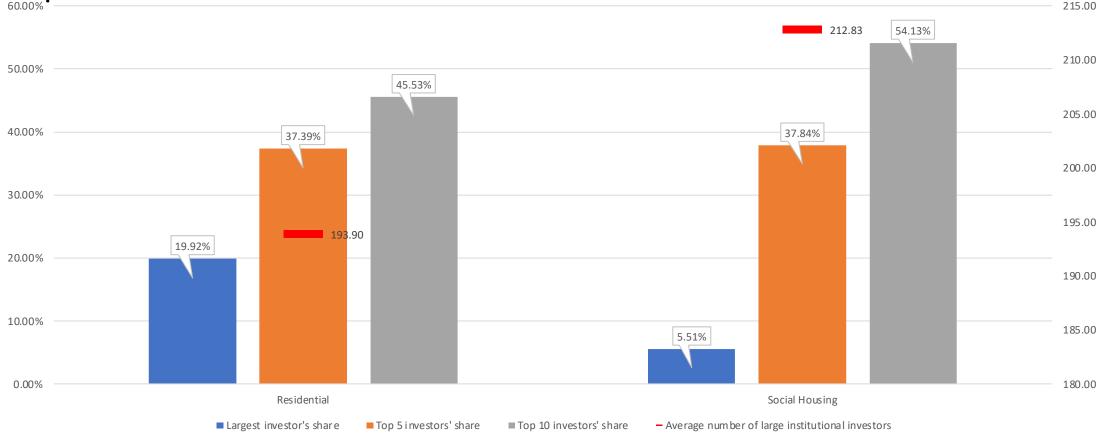








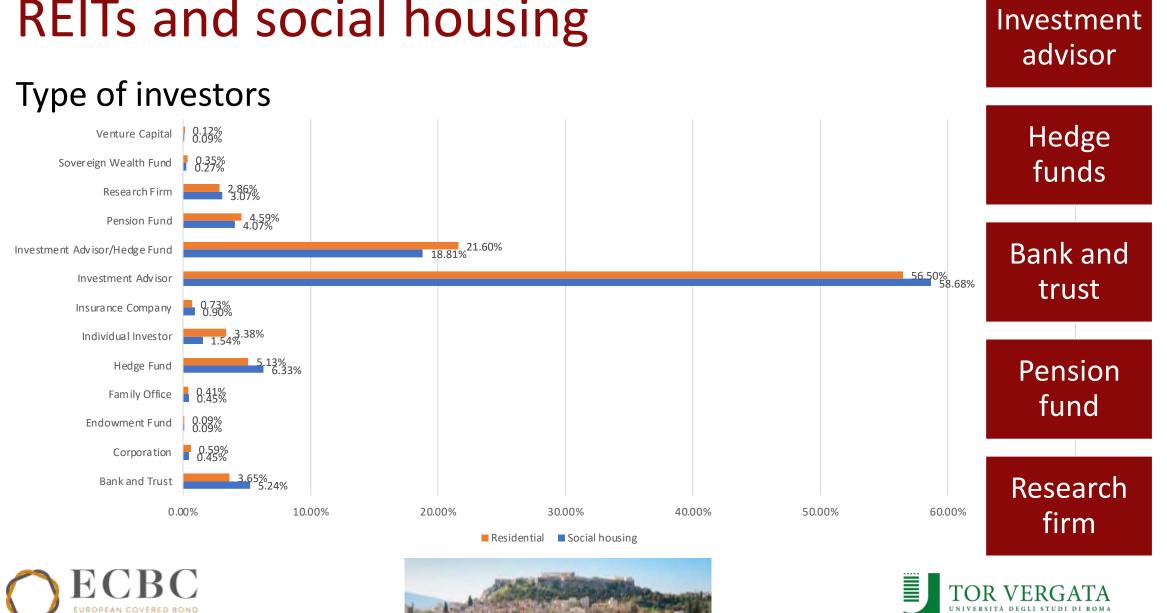
Top investors



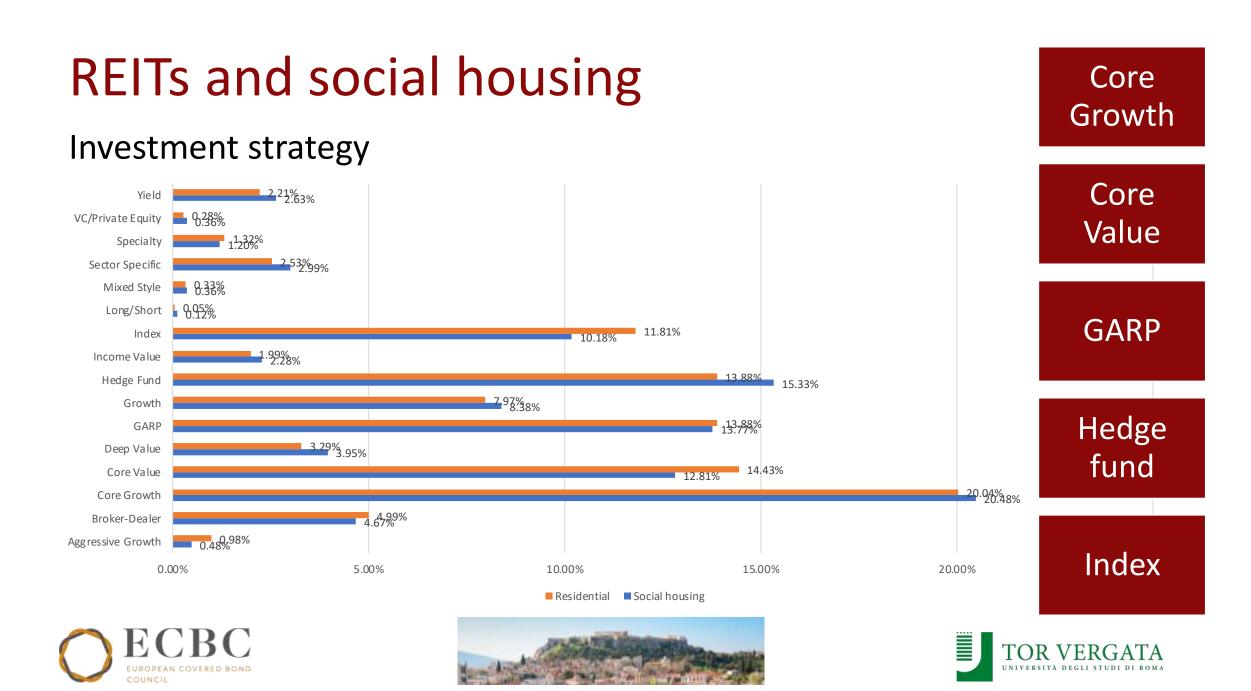






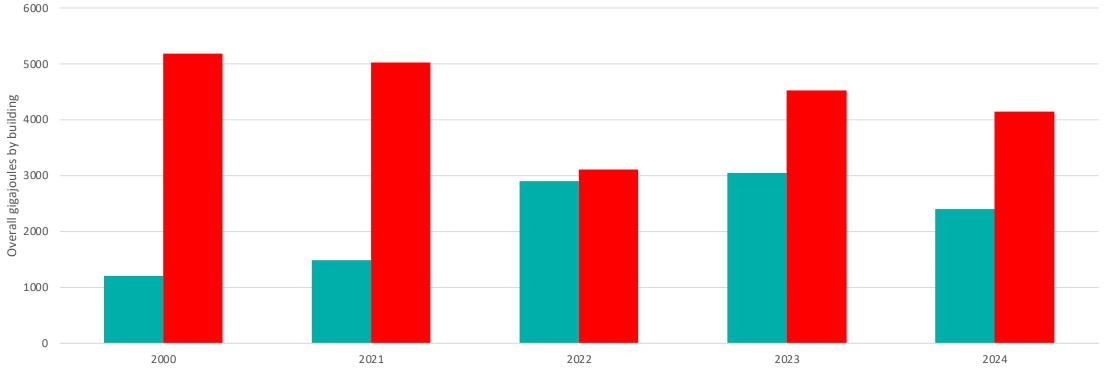


COUNCIL





Energy consumption by building - Example



■ Case study ■ Residential REITs average





Legenda: 1 Gigajoule = 277 KWH



- Introduction
- Literature on credit risk and climate risk
- REITs and social housing

- Conclusion and perspectives







Conclusion and perspectives



Social housing development may benefit from the private intervention for supporting new development and energy retrofitting of existing buildings.

The role of institutional investor is not limited to no profit entities but also traditional investors may be interested to subscribe equity investment in mutual funds or REITs specialised in the social housing area. Next steps:

- Evaluate the risk adjusted performance of social housing REITs
- Evaluate the effectiveness of REITs' CAPEX expenditure on energy efficiency of the portfolio









Gianluca Mattarocci

Professor of Banking

Tor Vergata University of Rome

E-mail: gianluca.mattarocci@uniroma2.it







