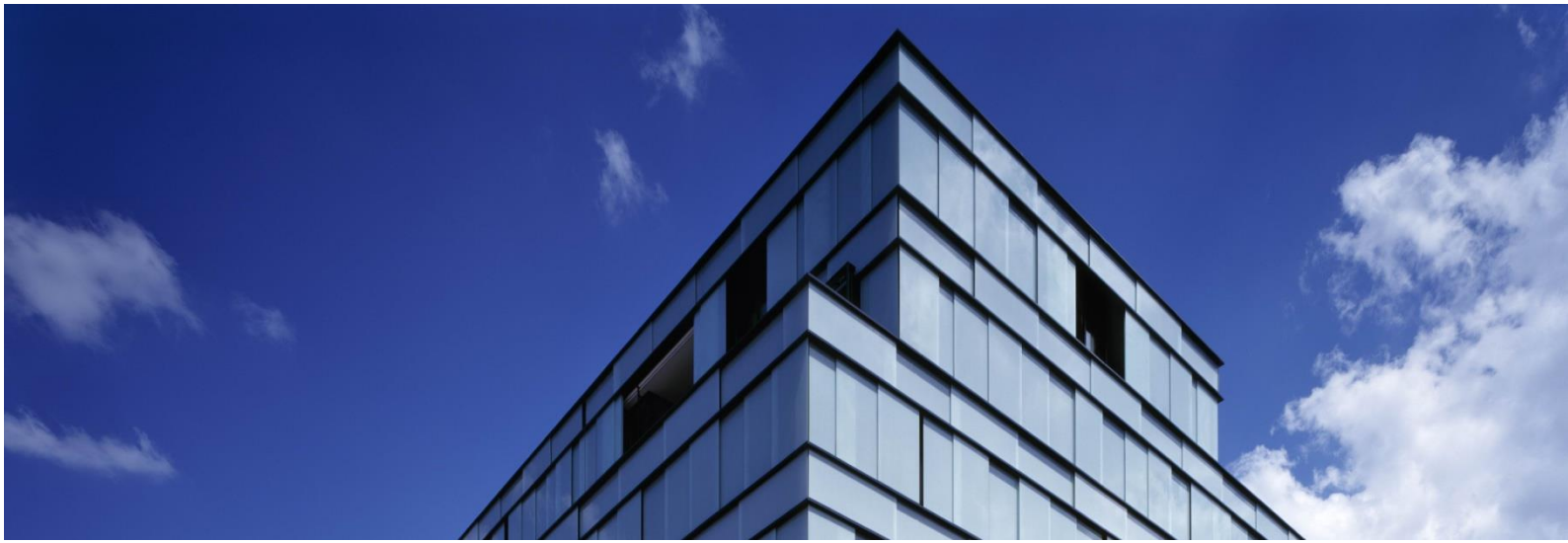
Swiss Sustainable Finance | 17. Juni 2015

Energy Strategy 2050 and Sustainable Real Estate

Christian Bächinger



Universität Zürich[UZH]

ccrs Center for Corporate Responsibility and Sustainability at the University of Zurich

Introduction to Energy Efficiency in the Building Sector

Relevance of Buildings in Switzerland

- Buildings use approx. 46% of total energy
- Strict buliding codes («MuKEn» / «MoPEC») for
  - New buildings
  - Comprehensive retrofits
- Rate of comprehensive retrofits: approx. 1% anually

Main Agents

- Private owners (88% of buildings) [1]
- Barriers: lack of interest, lack of financing, building codes, low return, etc. [2]

[1] BFS (2015)

[2] Wiencke and Meins (2012), Energieforschung Stadt Zürich

Profitability of energy efficient retrofits

Properties held for own use:

Profit = energy savings - costs

→ energy price as important driver

Properties held for investment:

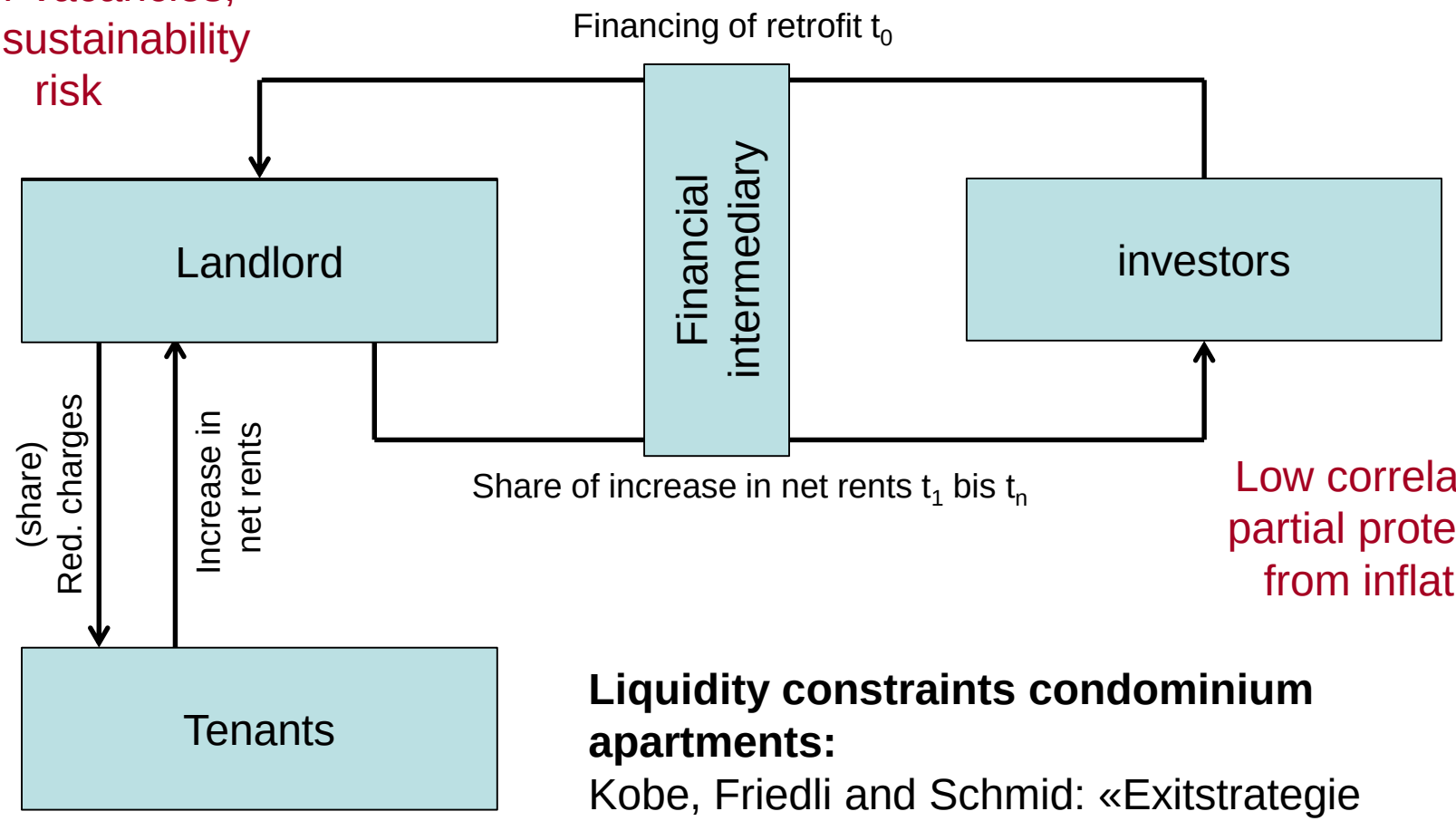
Profit = rent increase - costs

→ rental law and market as main drivers

- Difference between current rents and market rents
- Level of market rent

Liquidity constraint for private investors: investment fund scheme

Lower vacancies, lower sustainability risk



Low correlation, partial protection from inflation

Incraese in comfort

Liquidity constraints condominium apartments:
Kobe, Friedli and Schmid: «Exitstrategie Stockwerkeigentum» (to be published in Swiss Real Estate Journal 10 / 2015)

Source: Bächinger / Meins 2014, Massnahmen und Modelle zur Finanzierung von energetischen Erneuerungen, EFZ Forschungsprojekt FP-2.2.7

Energy Strategy 2050

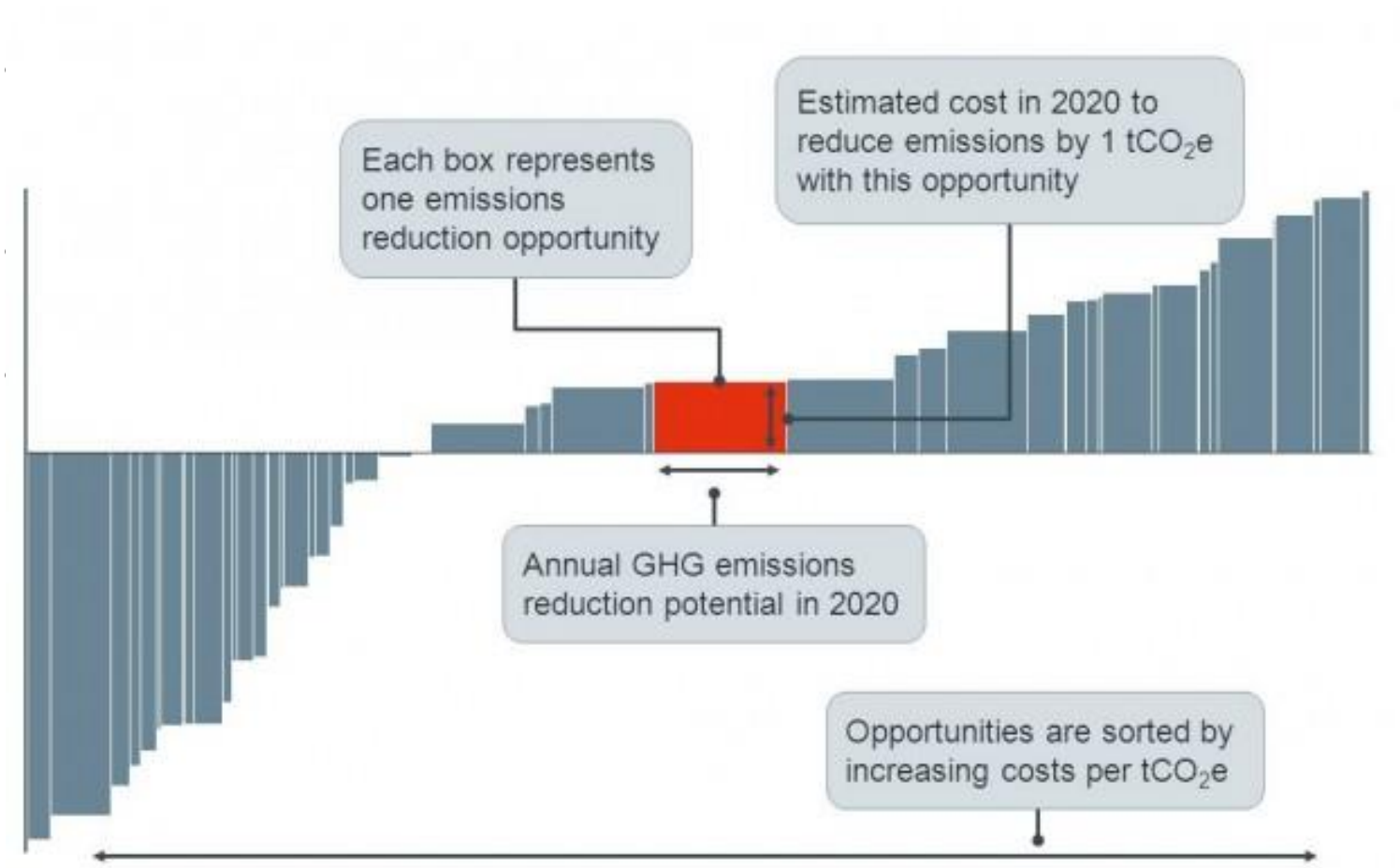
Changes in the real estate sector

- Increase of CO_2-tax for fossil fuels
- Increase of subsidies for energy efficient retrofits

Expected impacts on investment behaviour

- Properties held for own use:
  - rise of energy prices and subsidies will increase ROI
  - Higher demand for financing
  - other barriers remain in place
- Properties held for investment:
  - CO_2-tax: minor effect on Cash Flows
  - Subsidies: impact on locations with low demand?

Alternative: ETS for buildings?



Example of marginal abatement cost curve
(www.climateworksaustralia.org)