Energy Performance and Property Valuation

Approaches for integration energy performance into Valuation Practice

Interims results of the EU research project IMMOVALUE

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Agenda

1. Research project IMMOVALUE
2. Green Value versus Market Value
3. Fundamental Problems to Value “Green”
4. Conclusion

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Research project IMMOVALUE

- Aims of the research project IMMOVALUE
- Multinational team members
- Multinational co-sponsors
- Start: September 2009
- End: Spring 2010

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Research project IMMOVALUE: Aims

- Preparing **methodologies** and **guidelines** for the appraiser to ensure that energy efficiency and LLC aspects are included
- Collecting and **assessing property valuation approaches** to identify to which degree integration makes sense
- Review **different approaches** of Energy Performance Certificate (EPC) in Europe in order to find common indicators
- Find a solution for an integrated valuation approach
- **Testing with pilot projects**
- Communication the results to the appraising community

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Research project IMMOVALUE: Team members

- KPMG Financial Advisory Services GmbH, Austria
- Dr. Leopoldsberger + Partner, Germany
- SINTEF, Norway
- e7 Energie Markt Analyse GmbH, Austria
- Technical University "Gheorghe Asachi" Iasi, Romenia
- Fachhochschule Kufstein Tirol Forschungs GmbH, Austria

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Research project IMMOVALUE: Sponsors

- Intelligent Energy Europe
- Austrian Federal Ministry of Economic, Family and Youth
- Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management
- RICS Education Trust, United Kingdom
- Gesellschaft für Immobilienwirtschaftliche Forschung, Germany

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Research project IMMOVALUE: Status

Done

- Valuation approaches collected, compared and assessed
- Different EPC approaches collected and compared
- Some market evidence of EPC, LCC and Green Values collected
- Ways to include EPC and LCC into appraisal methodologies

To be done

- Pilot projects and Information to the appraisal community

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“Green Building” and “Green Value”

- A **Green Building** is a property that uses resources efficiently, reduce waste and CO2 emission and provide superior indoor air and other qualities

- A **Green Value** is the net value added obtainable by a green property in the market compared to a non-green peer group.

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“Green Value” versus “Market Value”

- Market Value is the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm’s length transaction after a proper marketing wherein parties had each acted knowledgeably, prudently, and without compulsion.

- According to the definitions of green and market value it can be assumed that the green value is an **integral** part of the overall market value.

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“Null-Hypothesis” proved wrong

- In many available publications related to green buildings and their value the former belief that there is no connection between green-attributes and property value (known as the *Null-Hypothesis*) can already be proved as being wrong.

- There are already few market results available showing that there is an impact of green features, but there are still a lot of obstacles.

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Appraisers do not make the market !!!

- The appraiser does not create the market
- He is looking for market evidence
- So speculating what might happen in the future and trying to price in something that has not yet been quantified is not useful
- It is wrong if appraisers would add a value-premium to a property just because of the energy certificate in place

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“Green Value” is not Costs !!!

- Green cost does not necessarily lead to a Green Value and vice versa.

- A sustainable property with identical cost to construct and identical certification can still have a totally different added value, just because the willingness to pay revealed by consumers in different markets might vary substantially.

- Therefore **evidence** from other markets concerning price variations might not be relevant anywhere else.

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Fundamental problems of putting value on green

1. Limit of System
2. Limit of Focus
3. Limit of Practice, Evidence and Methods

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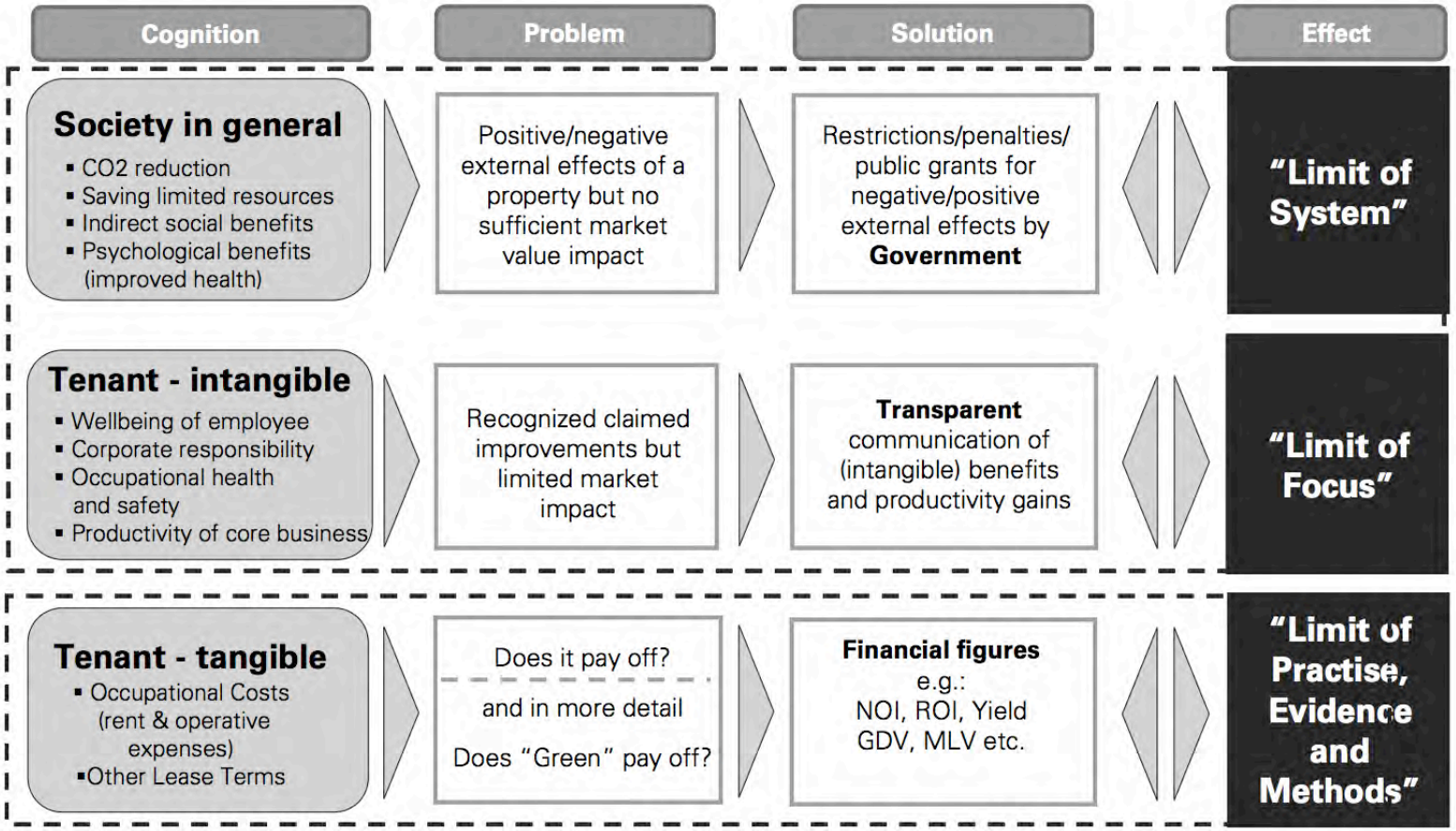
Fundamental problems of putting value on green



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Property Valuation Approaches

1. Income Related Approaches
   - Income Capitalization Approach
   - Discounted Cash Flow Approach
2. Cost Approach
3. Value Comparison Approaches

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Adjustments to Income Related Approaches

1. Adjustment of the Gross Income
2. Adjustment of the Landlord Related Costs and Expenses
3. Adjustment of the Yield
4. Other Adjustments

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Adjustments to Income Related Approaches

1. Adjustment of the Gross Income ???

- Willingness of tenants to pay higher rent, if energy costs are lower? Or is just the average market rent decreasing?
- Legally permitted? Often residential rents are restricted.

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Adjustments to Income Related Approaches

2. Adjustment of the Landlord Related Costs and Expenses

- Potentially lower vacancy rates
- Do the maintenance cost decline?
- Or do they rise due to a more sophisticated technical infrastructure?

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Adjustments to Income Related Approaches

3. Adjustment of the Yield

- The Yield reflect the risk profile of a property
- “Green Building” should reflect a smaller risk, because they are considered to be “future proved”
- Could be redundant, if gross rents adjustments made

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Conclusion

- Due to the recent introduction of the energy certification systems, there is a **lack of empirical data** a the moment.
- As long as nobody knows how the market will react, appraisers **should not act proactively** by pricing in speculative developments
- There will **never be a global benchmark** to price energy efficiency classes. Different utilizations, locations and market situations require different types of calculations.

but

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Conclusion

1. Premiums for green buildings are likely
2. Premiums will differ in different markets
3. Premiums will decrease as green becomes standard
4. Discounts for non-green building are likely
5. Discounts for non-green building will increase in the future

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Energy Performance Certificates and Property Valuation

Homepage

www.immovalue.org

online questionnaire

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