

Nici Zimmermann, Kaveh Dianati and Mike Davies

FUTURE WORK





HEW future

Past

- Pilot project
- Participatory mapping
- Quantitative system dynamics
- Interactive learning environment
- Module (10 lectures)

Future

- Continuously piloting new approaches
- Scenarios of uncertainty
- Policy work
- Organisational decision-making in housing (values, identity, attention)
- Master's course
- Transdisciplinary research
- **–** ...





PhD Research Proposal by Kaveh Dianati Supervisors: Nici Zimmermann, Mike Davies

THE HOUSING CRISIS IN LONDON A SYSTEM DYNAMICS MODEL

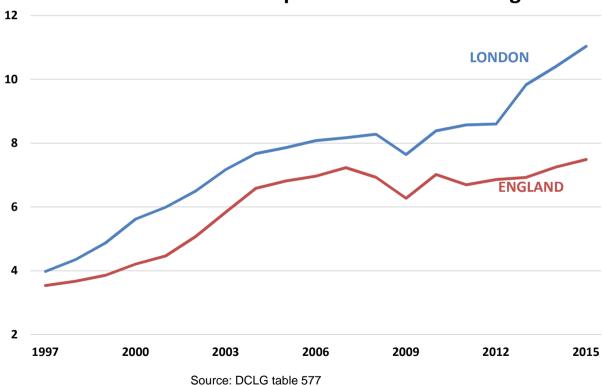


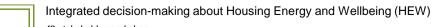
Research motivation



Housing affordability

Ratio of median house price to median earnings

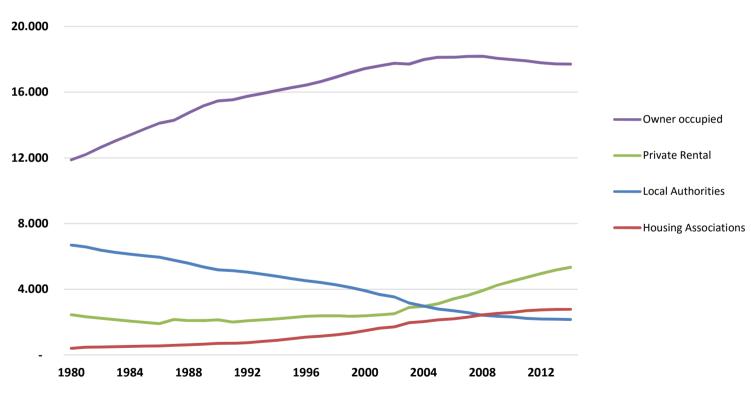






Tenure patterns

Dwelling stock by tenure (in thousands, 1980-2014)









Research objective and method



Research objective and method

Objective:

 To describe the underlying socio-economic structure responsible for the housing crisis in London

Method:

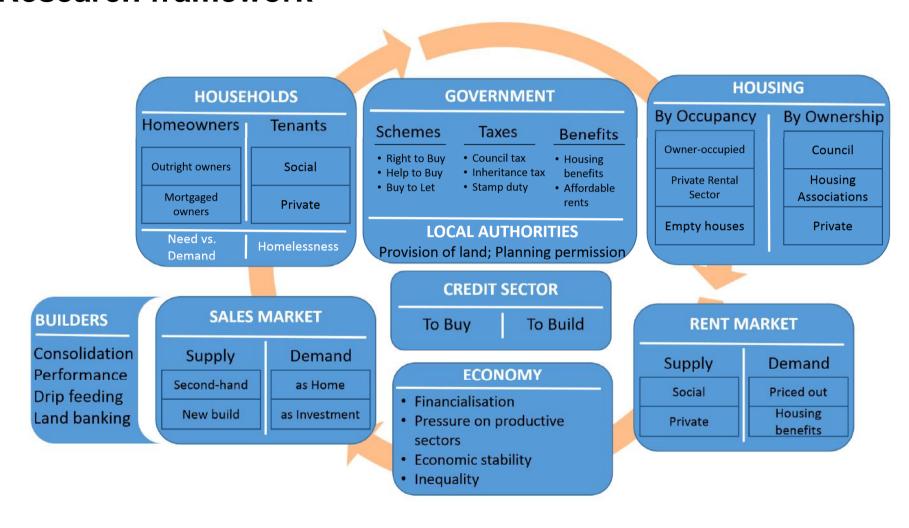
- Create a System Dynamics model that can endogenously reproduce past trends
- Use the model to explain the current situation
- Simulate into the future to speculate how the situation may unfold under BAU
- Use the model to test various sets of policies



Research framework



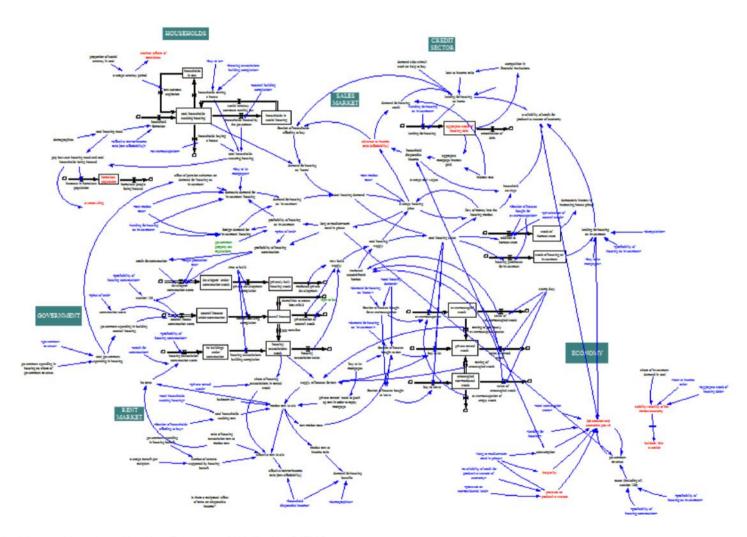
Research framework







The model



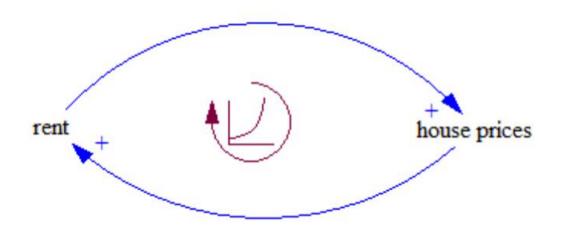




Preliminary insights

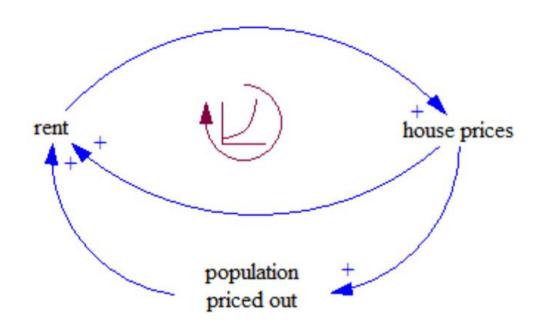


Bite-size insights The price-rent loop





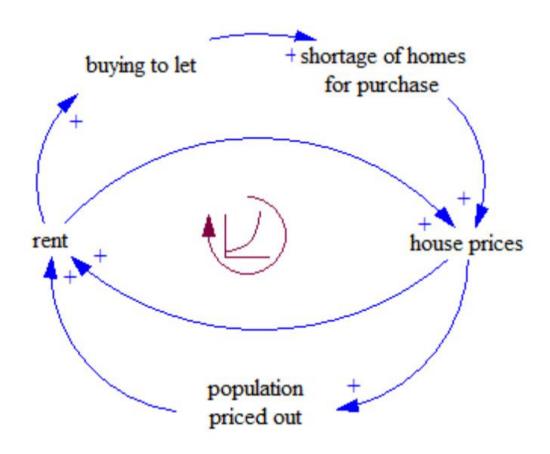
Bite-size Insights The price-rent loop



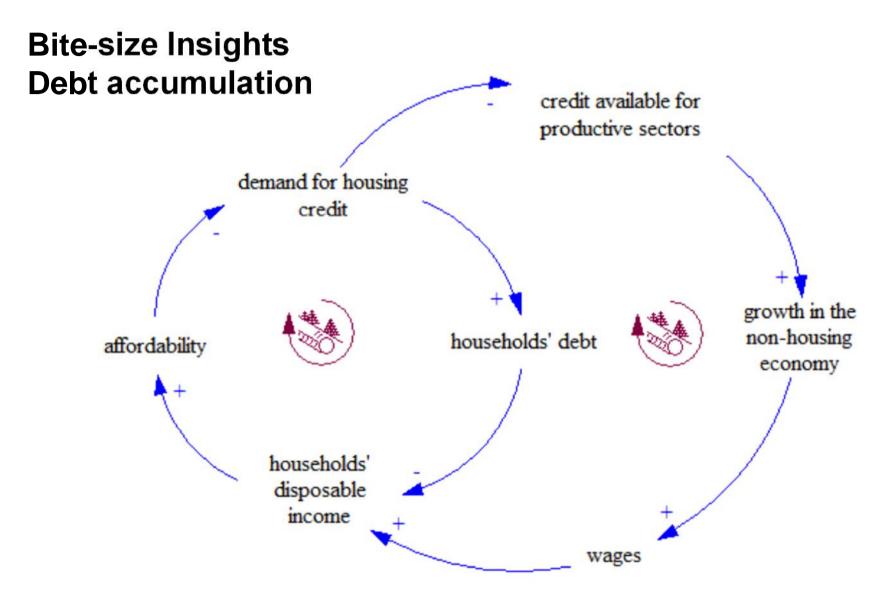




Bite-size Insights The price-rent loop











Platform grant plans

- Complex Built Environment Systems
 - Complexity and context
- Unintended Consequences of Decarbonising the Built Environment
 - Challenges
- Built Environment Systems Thinking
 - Integrated solutions
 - Mechanisms
 - Dynamics
 - Soft AND hard factors
 - Microworld and connector → management of interdisciplinarity
 - Content areas: moisture, healthy buildings, ...





Mike Davies

EVALUATION AND MOVING FORWARD QUESTIONNAIRE



Mike Davies CLOSING REMARKS

