Housing Justice as Expansion of People's Capabilities for Housing
Proposal for Principles of Housing Policy and Evaluation of Housing Inequality

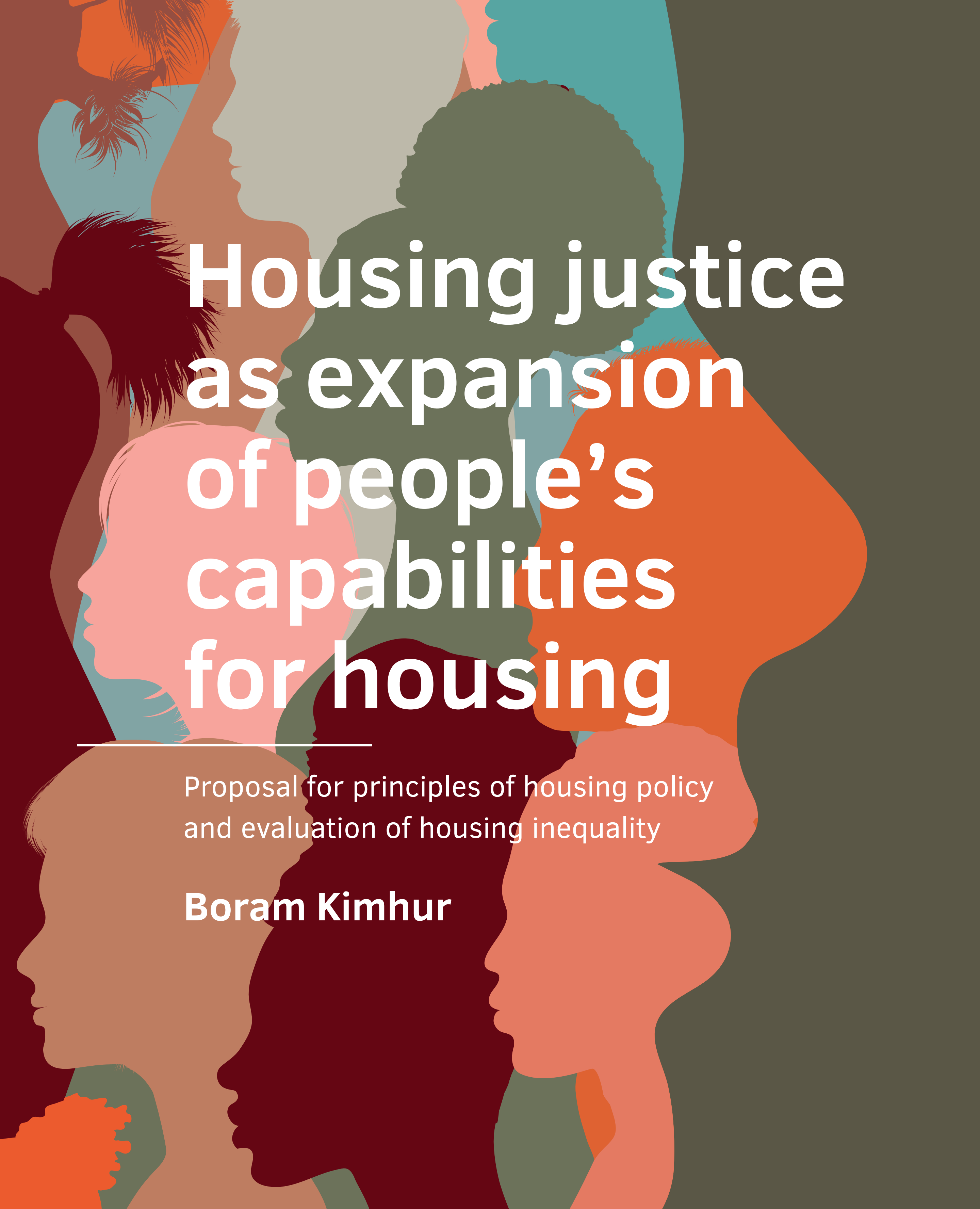
Kimhur, Boram

DOI
10.7480/abe.2022.23

Publication date
2022

Document Version
Final published version

Citation (APA)
Kimhur, B. (2022). *Housing Justice as Expansion of People's Capabilities for Housing: Proposal for Principles of Housing Policy and Evaluation of Housing Inequality*. [Dissertation (TU Delft), Delft University of Technology]. A+BE | Architecture and the Built Environment. https://doi.org/10.7480/abe.2022.23



Housing justice as expansion of people's capabilities for housing

Proposal for principles of housing policy and evaluation of housing inequality

Boram Kimhur

Housing justice as expansion of people’s capabilities for housing

Proposal for principles of housing policy and evaluation of housing inequality

Boram Kimhur

TOC

A+BE | Architecture and the Built Environment | TU Delft BK

22#23

Design | Sirene Ontwerpers, Véro Crickx

Cover photo | Melita / Alamy Stock

ISBN 978-94-6366-639-8
ISSN 2212-3202

This dissertation is open access at https://doi.org/10.7480/abe.2022.23

Housing justice as expansion of people's capabilities for housing

Proposal for principles of housing policy and evaluation of housing inequality

Dissertation

for the purpose of obtaining the degree of doctor
at Delft University of Technology
by the authority of the Rector Magnificus, prof.dr.ir. T.H.J.J. van der Hagen
chair of the Board for Doctorates
to be defended publicly on
Thursday, 22 December 2022 at 10:00 o'clock

by

Boram KIM (pen name: Boram KIMHUR)
Master of Arts in International Development: Urban Development,
The University of Manchester, the United Kingdom
born in Daegu, Republic of Korea

TOC

This dissertation has been approved by the promotors.

Composition of the doctoral committee:

Rector Magnificus,	chairperson
Prof.dr.ir. M.G. Elsinga	Delft University of Technology, promotor
Dr. M.E.A. Haffner	Delft University of Technology, copromotor

Independent members:

Prof. D. Clapham	University of Glasgow (United Kingdom)
Dr. A.A. Frediani	International Institute for Environment and Development (United Kingdom)
Prof.dr. E. Buitelaar	University of Utrecht
Prof.dr. M. van Ham	Delft University of Technology
Dr. R.C. Rocco de Campos Pereira	Delft University of Technology
Prof.dr.ir. M.J. van Dorst	Delft University of Technology, reserve member

Preface and Acknowledgements

Housing has been a topic of my study and work for the past twenty years. During that time, I was afforded opportunities to study housing in two different disciplines—architecture and social science—and worked on housing issues in various sectors, including private companies, civil society organisations, multilateral and bilateral organisations, and philanthropic foundations, with experts from different disciplines worldwide. It was a privileged experience to observe different, often conflicting, views across disciplines and experts regarding *good* housing solutions and policies in different institutional contexts. Naturally, growing questions in my mind were: where did such conflicting views originate?, and what are good housing policies for people? My PhD journey began with a reflection of these personal experiences and inquiry.

In exploring foundational questions regarding good housing policy for people, my research was greatly inspired by Amartya Sen and scholarly discussions on his proposal for the capability approach. However, I must also acknowledge that I am heavily indebted to lessons from communities in disadvantaged situations, discussions with my colleagues, and wisdom shared by many seniors with whom I worked in the field before beginning my PhD journey. My perspective underlying this dissertation has been developed over the years while working with them.

In conducting the research for this dissertation, I received much support from countless people. I would like to express my sincere gratitude to my supervisors, Prof.dr.ir. Marja Elsinga and Dr. Marietta Haffner, for their support and efforts to create a supportive work environment, including funding for data access and conference participation. I am also extremely grateful for Prof. Bo Bengtsson and his insightful comments on particular chapters and his warm encouragement. I extend gratitude to Dr. Kees Dol, who always made time to help and support me. Lastly, I wish to acknowledge the support of the Microdata team in Statistics Netherlands (CBS) and the ODISSEI Microdata Discount programme.

I extend my gratitude to a multitude of individuals in the research communities of housing, the capability approach, and the just city and ethics, who have been an unfailing source of inspiration, advice, and reassurance. I benefited from the opportunity to interact with many knowledgeable researchers of the Housing and Social Theory group in the European Network for Housing Research (ENHR), the Human Development and Capability Association (HDCA), and the Ethics, Values and Planning group in the Association of European Schools of Planning. I extend special thanks to Prof. David Clapham, Prof. Hannu Ruonavaara, and Dr. Julie Lawson, who gave me immense encouragement in the ENHR 2018, my first attendance to a housing academic community. Thanks to you, I had the courage to pursue my research further on the topic of this dissertation. I have also truly benefited from the HDCA members' spirit of unconditional advice and sharing under the common goal of making our society better. I must also thank Alonso Ayala at the Institute for Housing and Urban Development Studies (IHS) for giving me an excellent opportunity to interact with students of the Urban Housing, Equity, and Social Justice course. My thanks also go to Ellen Geurts in the IHS (now the TU Delft) and Prof. dr.ir. Benham Taebi in the Faculty of Technology, Policy, and Management in TU Delft, for providing fruitful advice on my research proposal in the Go/No-Go meeting. I thank Dr. Joris Hoekstra for his support in the early stage of my PhD trajectory. Finally, I would be remiss if I did not mention the anonymous reviewers of my papers who provided constructive criticism that helped me sharpen my arguments.

I am very grateful to Claudio Acioly for supporting and uplifting me when I felt lost. A special thank you also goes out to Arend Jonkman, Céline Janssen, and Jolien Kramer. I have enjoyed many inspiring discussions with you about social justice, housing, and operationalisation of justice ideas. I welcome this opportunity to thank Luz María Vergara and Igor Pessoa. I had an enjoyable and fun time with you while developing and delivering the course on ethics and co-production research. I am also grateful to my friend Minji for her valuable advice about the journey of PhD research. Thanks should also go to my dear colleagues in the Department of Management in the Built Environment and the former OTB Department. Many thanks for your caring and sharing, and for creating a joyful work environment.

My warmest thanks go to Arne de Boer, for being always there for me and keeping my spirit and motivation high during my research. Lastly, I thank my lovely family. Your belief in me and love have kept me sane and happy during this long process of doctorate study.

Contents

List of Tables

List of Figures

Abstract

Housing inequality is a growing concern in our society. In recent decades, this inequality has been exacerbated by the phenomenon of housing being financialized and commodified as a means for wealth accumulation. Management of financial institutions and housing markets has become the centre of attention in policy discussion. The questions of how to promote the moral values tied to housing, such as human rights, dignity and freedom, and how to better enable people to access suitable housing have been marginalized. As a way forward, the states' re-intervention and re-distribution policies, and the human rights-based approach to housing policies are discussed, but this thesis advocates for a more ambitious paradigm shift. By extending Amartya Sen's capability approach to housing, the thesis argues for resetting the primary goal of housing policies as expansion of people's capabilities for housing—expanding opportunity, ability and security to lead their valued ways of residing—beyond the distribution of monetary and material resources for housing, such as housing benefits and dwelling units. This thesis presents the theoretical foundations of this argument and proposes basic principles to guide housing policies, which can serve as a normative basis of housing debates on necessary policy actions. An essential tool to guide housing policies towards this newly proposed goal is to evaluate policy outcomes and housing affairs of people—well-being, deprivation and inequality in housing—with capability considerations. The thesis suggests how this evaluation can be done and can help policies address the inequalities in what people can do to pursue their suitable housing options and how well they are actually residing.

Summary

This dissertation proposes guiding principles for housing policy to place people and moral values at the centre of policy concerns, and suggests a new evaluation approach to policy outcome and housing affairs of people—such as housing inequality, well-being in housing and deprivations in housing situations—by incorporating ideas from the capability approach.

This dissertation was motivated by concern about the growing housing inequality that has been exacerbated by the phenomenon that housing is financialized and commodified as a means for wealth accumulation. As the financial and commodity value of housing becomes the core value of housing, management of financial institutions and housing markets has become the centre of attention in policy discussion. The questions of how to better protect and promote the moral values tied to housing, such as the human right to housing, dignity, and freedom, and how to better enable people to access suitable housing have been marginalised in policy discussion. These concerns brought about the question of how our society can redirect the housing policy attention to people and such moral values.

As a way forward, the states' re-intervention and human rights-based approach to housing policies are discussed, but this dissertation advocates for a more ambitious paradigm shift by applying the capability approach. The capability approach, pioneered by Amartya Sen, is an evaluation approach to well-being and inequality. It proposes evaluating them in terms of substantive freedom, or the capabilities of people, to have the kind of lives they value, rather than in terms of the level of resources they possess (e.g. income, commodities, and basic goods) and desire they fulfil. This foundational idea about value judgement challenges the notion that good housing policy outcomes are the increased amount of houses and house possessions (to fulfil the desire to own), which holds a perception of housing as a commodity and material object. Moreover, the approach's philosophical argument about substantive freedom challenges the libertarian freedom concept in neoliberal ideology, which is often identified as the origin of the financialization of housing and increased housing inequality. In addition, the capability concept helps make human rights intelligible; its application to housing policy may help implement the right to adequate housing.

Despite these normative strengths of addressing the problematic housing phenomenon in our society, surprisingly little research has been conducted on how the capability approach can be incorporated into housing policy discussions. This dissertation addresses this under-explored question. By extending the capability approach to housing discussion, the dissertation defines a broad goal that housing policy should aim to achieve, proposes basic principles to guide the policy towards that goal, and builds theoretical foundations of these proposed goals and principles, which can serve as a normative basis of housing debates on necessary policy actions. The dissertation also suggests how the capability approach can be incorporated into evaluation exercises, such as measurements of housing inequality, and thereby can help policies address the inequalities in what people can do to pursue their suitable housing options and how well they are actually residing.

Housing discussion of the capability approach began only in the past decade, and there is as yet a paucity of research. This dissertation is dedicated to building theoretical foundations of new housing policy approach with capability considerations, and insights into its empirical application to evaluation practices; the aim of this dissertation is neither to establish complete principles for housing policies nor to claim what the operationalization of the capability concept should look like in the housing field.

The dissertation is aimed primarily at researchers, policymakers and practitioners in the field of housing; however, it may be of interest to those working in the field of urban studies, applied philosophy, development studies on poverty, and their cross-cutting topic of the capability approach; this dissertation is anchored to housing studies but exists at the intersection of these studies.

Research aim and questions

The aim of this dissertation is **to develop a way to place people and moral values at the centre of housing policy concerns by incorporating the ideas of the capability approach into housing policy.** To achieve this aim, this dissertation answered four research questions in four chapters; each of the chapters consists of a published paper or a paper manuscript. First, through the lens of the capability approach, the study diagnosed prevailing perspectives on good policies in housing discussions that might have led policy discussion to lose its attention to people and moral values in housing. In response to the issues, the study proposed how good housing policies should be judged differently by extending arguments of the capability approach to the housing context, which led to the proposal for a new broad goal of housing policies (Research Question 1 (RQ 1); Chapter 2)—i.e. expansion of people's *capabilities for housing*, referring to *opportunity, ability and security to reside in ways they have reason to value and to pursue suitable housing options*. Building upon this argument, the study examined what guiding principles housing policies could refer to for moving towards the goal of expanding the capabilities for housing (RQ 2; Chapter 3). Third, by moving the study focus to questions about empirical applications of the capability approach, the study investigated what influence on policy decisions can be expected when housing deprivations are measured in the capability approach (RQ 3; Chapter 4). Finally, the study examined how measurements of housing inequality can incorporate capability considerations, and what new insights into housing problems and policy implications can be expected from this application (RQ 4; Chapter 5).

Research approaches, methods and data

The first two questions involved building theoretical grounds and proposals for a new goal of housing policies and their guiding principles. This was accomplished through conceptual reasoning based on theoretical research on the capability approach, social justice in housing studies and political philosophy, and existing observations on the issues of housing inequality. To examine RQ 1 about underlying perspectives on good housing policies, the study analysed the evaluative points of view in housing discourses, more specifically, types of informational bases commonly referred to in the value judgements of housing policy research and discussion. For RQ 2 on developing proposals for guiding principles of housing policies, the research designed two steps of study: first, identifying essential questions to establish basic principles of housing justice, and second, scrutinizing answers to those identified questions. The essential questions were defined by analysing what principles the capability approach can and cannot provide, compared to other distinguished theories of justice, and what questions are generally addressed in housing discourse on social justice. Answers to each question were developed by examining the ideals proposed in justice theories and their connections to or gaps from realities in housing policy practices.

The studies for RQ 3 and RQ 4 (Chapters 4 and 5) empirically applied the ideas developed from RQ 1 and RQ 2 (Chapters 2 and 3). For examining RQ 3, the study *compared policy target group identifications* by indicators of distinguished housing capabilities and the traditional housing deprivation measures commonly used for housing welfare policies. Through this method, the study investigated the influence of the housing capability concept on policy decisions, and empirical evidence of the weaknesses of traditional evaluation approaches to housing deprivations, which the study for RQ 1 diagnosed. For RQ 4, the study first developed an approach to evaluate the capabilities for housing and an *evaluation framework* by translating capability concepts into the vocabulary of housing research and measurable concepts. The study then applied this evaluation framework to measure housing inequality. This test measurement was done for illustrative purposes with selectively chosen indicators. It used the *Alkire-Foster method* of poverty measurements; the properties of this method fulfilled the necessary conditions of the evaluation framework (i.e. the property that can factor in the intensity of simultaneous disadvantages that confine the extent of capabilities for housing).

The study used micro-datasets of Statistics Netherlands (CBS) register data (RQs 3 and 4), the 2011 housing and financial literacy surveys on the panel of Longitudinal Internet Studies for the Social Science (LISS) (8704 individuals across 3863 households) (RQ 3), and the 2017 DNB Household Survey (DHS) on financial behaviour (5032 individuals across 2292 households) (RQ 4). The surveys were on the Dutch population. In selecting datasets, two crucial conditions were considered. The first condition was the linkability of datasets because the studies were designed to compare measures of housing affairs rooted in different perspectives and required to expand types of data beyond conventional housing survey data. Another crucial condition was the feasibility to compute indicators that could be best aligned with the conceptual ideas of the capabilities for housing this study aimed to test.

Research for empirical application: approach and scope

The two studies for empirical applications did not aim to design a measurement of people's total capabilities for housing. Instead, the studies evaluated distinguished capabilities for housing and compared them to other measures. This study approach followed Sen's (1999, p. 82) argument that 'the comparison of some particular capability [of the focus] can be quite illuminating … on their own' and '[h]aving more of each relevant functioning or capability is a clear improvement' (Sen 1992, p.46). Therefore, a comparison of particular capabilities for housing can still offer reliable information for policy debates. This approach was suitable for the study purpose (as to be illustrated below) under the empirical constraints to apply the housing capability idea at scale (e.g. scant capability-oriented housing data, and little established knowledge on types of important capabilities for housing). In selecting indicators of distinguished capabilities for housing, the studies employed the two-stage approach of selecting capabilities (i.e. making a pragmatic choice of proxy indicators with suggestions for ideal indicators) (Robeyns 2005) and designed the second-best level of proxy indicators by making use of available data.

The studies for empirical applicatons aimed to suggest a practical shape of the housing capability idea, and test what informational benefits can be expected when it is operationalised in future studies. More specific motivations behind were to investigate the following subjects: the expected influence on housing policy directions; extent of feasibility of integrating the housing capability idea into measurements of housing inequality; methodological properties to be considered when designing the measurements; and empirical constraints to be resolved.

Summary of the research results

The following figure provides an overview of research questions, approaches and outcomes.

	Aim to develop a way to place people and moral values at the centre of housing policy concerns by incorporating the ideas of the capability approach			**Proposals** for principles to guide housing policies and evaluation of housing inequality
	Research questions	Research approach	Methods	Proposals and findings
Ideas Building theoretical foundation	RQ 1. What perspectives on good housing policies to date, and implications from the capability approach?	Diagnose evaluation approaches in housing policies and research from the capability perspective	Theoretical research Analysis of existing observations Conceptual reasoning	**Proposal:** • **Expand evaluation focus** <u>from</u> material/monetary attributes of housing; housing satisfaction <u>to</u> people's **capabilities for housing** (or housing (relevant) functionings)
	RQ 2. What guiding principles for housing policy to move towards the goal of expanding people's capabilities for housing?	Scrutinise (i) principles that the CA can/cannot provide, and (ii) gaps between ideals in justice theories and realities in housing policy practices		**Proposal:** • **Broad goal:** expanding the capabilities for housing • **Sub-goal:** expanding real opportunities for housing by reducing inequalities in: *housing opportunities, securities, and abilities* (***evaluation framework***) • **Guide housing policy direction by:** continuous monitoring and comparisons
Studies for applications Measurement of housing affairs (housing inequality, deprivations, wellbeing)	RQ 3. What influence on housing policy decisions when housing affairs are measured with housing capability considerations?	Through policy target-identification comparisons , empirically test the weakness of the current evaluation approaches in housing welfare policies	Distinguished capability comparison Quantitative measurement Data: existing surveys & register data in the Netherlands (microdata)	**Findings:** • substantial influence on policy target group identifications • evaluation practice could become sensitive to: adaptive preference of the deprived, moral issues tied to housing, and inequality in conversion efficacy (empirical evidence of the conceptual advantages identified by RQ 1).
	RQ 4. How to incorporate capability considerations into housing inequality measurement, and what new insights are expected?	Develop an evaluation approach and framework (with RQ 2); and Design measurement and test (with selective indicators)		**Proposal: MHDs-f index as a measure of housing inequality** (Indicating whose housing situations are more constrained to what degree) • evaluation framework: dimensions of disadvantages that constrain people's choices in the housing process (the framework this study developed in RQ 2) • units of disadvantage identification: when applicable, *current and latent* households to differentiate coerced and deliberative choices • Index: use/develop a method that can reflect the intensity of simultaneous disadvantages (AF method)

Summary of research structure, approaches, and contributions

Question One

Delving into the perspectives on good policies in housing discussions, Chapter 2 analysed evaluative points of view in housing policies and research. The study found that evaluation focuses have largely been on material and monetary resources for or from housing (e.g. physical dwelling conditions, income for housing costs, possession of housing property, housing prices, and housing wealth) and housing satisfaction (e.g. pleasure and fulfilments of the desire to own), leading to set policy goals as their increase and distribution. Through the lens of the capability approach, the study assessed that these evaluation approaches are foundationally limited in giving direct attention to people's actual state of residing and the non-monetary and non-material values tied to housing, such as human rights to housing, meaningful ways of residing, and freedom from constraints that cause coerced housing choices (e.g. oppression, discrimination, and exclusion).

By extending the capability approach to housing, the study recommended that good housing policies should be judged by their effectiveness in expanding people's capabilities to reside in ways they have reason to value (the capabilities for housing) and reducing their inequalities, rather than an increase in holdings of housing resources and housing satisfaction. As a proxy of such capabilities, policies may aim to increase achievements in housing (relevant) functionings (i.e. activities for and states of residing that people value or have reason to value). Housing policies should also aim to reduce inequalities in individuals' ability to convert resources to actual housing achievements. The study suggested that these ideas can be applied to policy target identifications, an evaluation framework for policy performance and particular housing issues, housing programme design, participatory housing development, and a normative basis for political critics.

Question Two

Having defined the broad goal of housing policies (i.e. expanding people's capabilities for housing), the study examined guiding principles for housing policies toward this goal. For this, the study suggested that three essential components of justice theories should be examined, namely, characteristics of ideal institutions, metrics of justice, and distributive rules. Upon scrutinising them, Chapter 3 proposes: (i) traditional questions about housing regime types and distribution rules for basic housing services should be secondary, and the focus should be on what changes housing policies make in terms of expanding the capabilities for housing, (ii) housing policies should be guided by continuous monitoring of unequal and unjust housing situations, by referring to the changes in the capabilities for housing, (iii) the capabilities for housing are shaped at least by the extent of opportunity, security, and ability for housing, of which inequality can cause coerced choices in people's housing process, because it can imply the inequalities in entitlements, empowerment and agency, and can signal oppression and discriminations; housing policies should aim to remove avoidable inequality in these three shaping conditions, and (iv) an essential tool for guiding housing policy is comparative exercises; they should compare the capabilities for housing across time and societies (communities, cities, and countries), social alternatives to resolve housing issues of concern (e.g. preferable alternatives of policy solutions, housing programmes, and regulations to expand the capability for housing), and views in different societies on the same housing issue of justice concerns.

Question Three

To investigate how an application of the housing capability concept would influence on policy-decisions, the study compared policy-target-group-identifications by indicators of distinguished capabilities for housing and by indicators of traditional housing deprivation measures commonly used for housing welfare policies and research (i.e. income and satisfaction-based measures) (Chapter 4). Direct results indicated that non-negligible proportions (ranging from approximately 20 to 30 per cent) of the study population were: (i) living in inadequate housing (deprived of basic housing functioning; a proxy of basic capabilities for housing) despite household income above the eligible threshold for housing welfare services (non-deprived in economic means for adequate housing), implying some conversion gaps, (ii) satisfied with their housing despite living in inadequate housing, implying possible inconsistences of satisfaction-based measures with a sphere of the right to adequate housing; and (iii) financially illiterate (deprived of basic abilities for housing–a proxy of basic capability for housing, or lacking enablement of informed decision-making) despite household income above the threshold (non-deprived in economic means) and satisfaction with housing, implying risks of overlooking the former issue when housing welfare policies are formed only on the latter informational bases.

Conventional measures tested in this study were the most commonly used indicators for housing welfare policies and research. Significant blind spots may have been present in those policies in: identifying groups in need of societal support for improving housing problems because of non-monetary issues; detecting inequalities in conversion efficacy from income to living in adequate housing; and considering the impact of adaptive preferences on housing satisfaction.

Question Four

Following the recommendation of Chapter 3, a way of incorporating capability considerations into housing inequality measurements (Chapter 5) is to evaluate inequality in conditions that shape a person's capabilities for housing in the dimensions of opportunities, securities, and abilities for housing. A practical shape of this concept was suggested as measurements of the multidimensional disadvantages that constrain choices in the housing process (i.e. multidimensional housing disadvantages; MHDs). As its test application, the MHDs shaped by financial terms (MHDs-f) were measured in the dimensions of entitlements to different tenure options (opportunity), a vulnerability in housing cost payments (security), and basic financial literacy for housing (ability). The study designed indicators of each dimension, and produced the MHDs-f index scores by using the Alkire-Foster method. In designing the units of disadvantage identification, the study developed the concept of *latent households* (i.e. adults living with parents, relatives or housemates) to differentiate their information from *current households* (i.e. household heads and their partners); this was to incorporate the capability approach's concern about differences between coerced and deliberative choices into measurements of housing affairs. Groups with higher MHDs-f scores imply their housing choices are more constrained than others; thus, their current housing situations are more likely to be a result of coerced choices with lower capability for housing at the level of the index score.

Provincial rankings by the MHDs-f conflicted with those by commonly used measures of housing affairs (e.g. deprivations in income for housing, adequacy in housing, and satisfaction with dwelling), implying its informational benefits to policy discussion, in terms of the information on whose housing process and situations are more intensely constrained to what degree. Although the MHDs-f measurement was primarily for an illustrative purpose, the outcomes provided some meaningful results that align with existing observations in qualitative research: the results indicated that *young latent households with precarious jobs* appeared to be the group that most struggle to pursue their reasoned housing choices (i.e. having the lowest capabilities for housing).

Synthesis of the results and lessons learned

To re-orient policy attention from the management of financial institutions and housing markets to the enablement of people to access suitable housing options and the promotion of moral values tied to housing, policy discussion and research could utilise the following principles of housing policies: (a) setting the broad end goal of housing policies as the expansion of people's capabilities for housing, (b) expanding evaluation focus in housing policies from the traditional focus on material and monetary attributes of housing and housing satisfaction to capabilities for housing (and housing functionings that people value), (c) expanding (and reducing avoidable inequalities in) opportunity, security, and ability for housing that shape the extent of what people can do and be to pursue their suitable housing options (the extent of capabilities for housing), (d) guiding housing policy direction primarily by continuous monitoring of unequal and unjust housing situations to focus on real changes to people's housing situations, rather than progress in establishing a type of housing regimes (e.g. extent of states' intervention in the housing market) and distributive rules of basic housing services, and (e) utilising comparative exercises as a tool for guiding policy, by comparing changes in the capabilities for housing across time and societies, preferable alternatives to expand the capability for housing, and views on the same housing issue in demand for justice consideration.

The prevailing evaluation focus on material and monetary resources for/from housing may have been one of the key drivers of policy attention towards promoting financial and commodity aspects of housing in our society. The conceptual application of the capability approach to housing policies (Chapter 2) indicated that changing the evaluation focus to people's capabilities for housing would redirect the policy focus to people, i.e. how well people are actually residing, what they value regarding their housing, how substantive opportunities they have to pursue their suitable housing options, and how they are able to actively improve their housing affairs. This shift of evaluation focus can enable policy discussion to be sensitive to moral values associated with housing by detecting coerced housing situations caused by violations of human rights to housing, oppression, discrimination and inequity. Whether and how these conceptual advantages can be realised in practice yet remains a wide-open question. However, the explorative study in Chapter 4 has provided the results that empirically support these conceptual advantages, especially to compensate for the blind spots that may have been present in the current housing welfare policies.

This dissertation does not argue that housing capabilities (and functionings) should be the only informational bases of housing policies; rather, both theoretical and empirical results have suggested that the key lesson is the need for expanding the informational bases of housing policy-making, and taking in multiple sources of information when judging basic housing welfare. The results in Chapter 4, for example, implied that information on multiple socioeconomic disadvantages in accessing adequate housing is not likely to be summarized into an income-based measure, and information on basic housing achievements is not likely to be summarized into a housing satisfaction measure. Each measure tested in the study could be a valuable vector of multiple features of individual housing situations. Chapter 5 results suggested the same implications in showing the conflicting provincial rankings by the MHDs-f index and other measures of housing affairs.

Measuring and comparing distinguished capabilities can be a useful and valid method for informing policy discussion. The study applied this approach instead of one that aims to measure a complete coverage of housing capabilities or functionings, and the results offered substantive implications for housing policy direction. TAlthough the MHDs-f was primarily measured for an illustrative purpose with selective indicators, the measurement outcomeson youth, latent households, and non-standard employees aligned with other studies' observations.

In the process of integrating capability considerations into measurements, the study found that the capability idea can be integrated into a number of measurement design elements, not limited to the choice of evaluation space (e.g. capabilities, functionings, monetary resources or satisfaction), dimensions and indicators; it would also include the design of measurement methods (e.g. methods considering the intensity of simultaneous disadvantages) and the units of deprivation/disadvantage identifications and analysis (e.g. latent and current households).

This research moved from rich ideas of the capability approach to a particular way of its application to measurements in the specific field of housing. In doing so, the research showed the kinds of pragmatic choices that might have to be made, such as defining a workable evaluation approach, and choosing the second-best proxy indicator in making use of available data. These pragmatic choices create a certain distance from the original rich ideas. This distance could simply be from the limited scope of the present study, or empirical constraints yet to be resolved in the housing field (e.g. little established knowledge and data of capabilities for housing). However, it might also be from unavoidable conflicts between 'incomplete but usable for actual assessments' and 'taking in the rich ideas as fully as possible' (Chapter 1). One observation of this study was that an open question to debate among scientific researchers could be how far scholarly discussion can or should embrace a diminishing of the original richness of the normative ideas when they are operationalised, especially while empirical constraints change.

Societal relevance

The normative foundations built in this dissertation and insights gained from empirical studies may help advocate why and how housing policies should promote human and moral values in housing and enable people to pursue their suitable housing options. The research outcome of this dissertation could serve discussion of the agenda-setting framework for global housing issues, such as expanding the framework from rights to adequate housing to justice in housing. Further, such discussions may situate concern about people's capabilities for housing at the forefront of global agenda to make the human rights-based approach more tangible.

From the studies for empirical application, a few practical suggestions were drawn for guiding policy directions. Housing policy-makers should reconsider the informational bases of their decision-making. Currently, welfare policies for basic housing services define their target group largely by household income levels (e.g. housing benefits, social/public housing, and other policies for promoting low-income housing provision). However, this policy approach could substantially undermine housing problems and underestimate the population group experiencing non-monetary disadvantages that need to be addressed by societal support. The study showed a sizeable proportion of cases living in inadequate housing despite generating income above the eligibility threshold for housing services; those groups likely fall outside of the current policy attention (Chapter 4). The MHDs-f measurement outcome also showed how some groups could be disadvantaged in the housing process despite having a household income above the eligibility threshold (Chapter 5).

The results suggested that welfare policies for housing need to design more diverse and tailored programmes to reduce inequality in housing. That is, programmes should extend beyond the distribution of basic housing services (e.g. housing benefits and provisions) that focus on low-income households. Integrating capability considerations into the evaluation of housing affairs can help to design such tailored housing programmes. For example, considering the indicators of MHDs-f in this study, policy measures could include tailored adjustments to entitlements to varied tenure options for different subgroups, public guarantee schemes that expand access to housing finance, and a quick-bridge fund for housing costs when livelihoods experience temporary shocks. Programmes for enhancing financial and housing literacy and abilities for budget planning for housing can also be considered.

Housing data are generally collected at the household level, and the latent households' housing issues might have been greatly overlooked in the studies analysing measures of housing affairs, marginalising them in policy concerns. Future surveys and analyses of housing data should be designed to reveal information about latent households. Studies utilising existing survey data should explore how their information can be maximally reflected in the analysis.

Scholarly contributions

Only in the recent decade has housing research begun to discuss and utilise the capability approach. Thus, to date, a paucity of research exists. This study comprises one of the first attempts to rigorously examine how concepts from the capability approach can be incorporated into housing policy discussions. This dissertation is dedicated to building theoretical and normative foundations of new housing policy approaches with the capability idea, and to providing insights into an empirical application, particularly for the evaluation of housing problems from the capability perspective. These studies could serve as a groundwork for advancing the scholarly discussion of the capability approach in the housing literature.

Among the two major accounts of the capability approach, Sen’s account was the specific focus of this dissertation (thus, only slight reflection of Nussbaum’s work). Specifically, it integrates Sen’s idea regarding substantive freedom, capabilities, and choices (thus, little research on plural values, functionings, and conversion factors). Such a focus naturally opens numerous research agendas to be explored in the housing literature, including the research question of how to define relevant capabilities and functionings for housing.

Existing research on housing and capabilities has mostly focused on the extreme issues of housing, such as homelessness, slums and informal settlements. This study associated a wide range of housing issues with capability concerns (e.g. the constrained situations of tenants, youths, women without joint tenancy, those in precarious jobs, and those with low housing literacy). Relevance of the capability approach is not limited to the most severe housing situations, and research should expand its focus.

Among capability scholars, an ongoing question is how to incorporate the freedom aspect of capability consideration into an inequality measurement. This dissertation contributes to this research agenda by developing an evaluation approach that estimates the extent of capabilities for housing by evaluating constraints on people’s choices in the housing process, with its application of the MHDs-f measurement.

Rigorous studies on integrating a theory of justice and housing issues can offer a concrete housing agenda with solid justification; however, such studies remain scant in the housing literature. This dissertation adds a study of Sen's capability approach to justice, with particular attention given to conceptual clarification and interpretation of the capability idea in the housing context, as well as key ingredients to form base principles of housing justice.

In housing studies, the tendency has been to divide practical and normative questions of housing issues, but they may closely be connected at a foundational level, given that informational bases for analysing housing outcomes and housing affairs are rooted in different normative positions on *good* housing policies. It is suggested that a crucial task of researchers is to scrutinise their normative stance and explicitly clarify when they are informing the policy-making process, rather than claiming to be neutral.

Samenvatting

In dit proefschrift worden leidende beginselen voor het huisvestingsbeleid voorgesteld om mensen en morele waarden centraal te stellen in het beleid, en wordt een nieuwe evaluatieaanpak voorgesteld voor beleidsresultaten en huisvestingszaken van mensen—zoals huisvestingsongelijkheid, welzijn in huisvesting en deprivaties in huisvestingssituaties—door ideeën uit de capability approach op te nemen.

Dit proefschrift is ingegeven door bezorgdheid over de groeiende ongelijkheid op het gebied van huisvesting, die nog wordt versterkt door het verschijnsel dat huisvesting wordt gefinancialiseerd en gecommodificeerd als middel voor vermogensopbouw. Nu de monetaire waarde van huisvesting de kernwaarde wordt, is het beheer van financiële instellingen en huisvestingsmarkten het middelpunt van de beleidsdiscussie geworden. De vraag hoe de ongelijkheid op huisvestingsgebied kan worden verminderd door de bescherming en bevordering van de morele waarden die met huisvesting samenhangen, zoals het mensenrecht op huisvesting, waardigheid en vrijheid, en door mensen beter in staat te stellen toegang te krijgen tot passende huisvesting, is in de beleidsdiscussie gemarginaliseerd. Deze zorgen leidden tot de vraag hoe onze samenleving de aandacht van het huisvestingsbeleid kan richten op mensen en dergelijke morele waarden.

De herinterventie van de overheid en de op mensenrechten gebaseerde aanpak van het huisvestingsbeleid worden besproken als een manier om verder te komen, maar dit proefschrift pleit voor een meer ambitieuze paradigmaverschuiving door toepassing van de capability approach. De capability approach, gepionierd door Amartya Sen, is een evaluatiebenadering die voorstelt dat welzijn en ongelijkheid moeten worden geëvalueerd in termen van de mogelijkheden van mensen, of inhoudelijke vrijheid, om het soort leven te leiden dat zij waarderen, in plaats van in termen van het niveau van de middelen die zij bezitten (bv. inkomen, goederen en basisgoederen) en de wensen die zij vervullen. Dit fundamentele idee over waardeoordeel bestrijdt de opvatting dat een goed huisvestingsbeleid resulteert in een toename van het aantal huizen en woningbezittingen (om het verlangen naar bezit te vervullen), die een perceptie van huisvesting als handelswaar en materieel object inhoudt. Bovendien vormt het filosofische argument van de benadering over inhoudelijke vrijheid een uitdaging voor het libertaire vrijheidsconcept in de neoliberale ideologie, dat vaak wordt aangewezen als de oorsprong van de financialisering van het wonen en de toegenomen ongelijkheid op het gebied van huisvesting. Bovendien helpt het capability-concept de mensenrechten begrijpelijk te maken; de toepassing ervan op het huisvestingsbeleid kan helpen het recht op adequate huisvesting te implementeren.

Ondanks deze normatieve sterke punten van de aanpak van het problematische huisvestingsfenomeen in onze samenleving, is er verrassend weinig onderzoek gedaan naar hoe de capability approach kan worden opgenomen in discussies over het huisvestingsbeleid. Dit proefschrift behandelt deze onderbelichte vraag. Door de capability aproach uit te breiden naar discussies over huisvesting, definieert het proefschrift een breed doel dat het huisvestingsbeleid zou moeten nastreven, stelt het basisprincipes voor om het beleid naar dat doel te leiden, en bouwt het theoretische grondslagen van deze voorgestelde doelen en principes, die kunnen dienen als normatieve basis van huisvestingsdebatten over noodzakelijke beleidsacties. Het proefschrift stelt ook voor hoe de capability approach kan worden opgenomen in evaluatie-exercities, zoals metingen van woonongelijkheid, en zo het beleid kan helpen de ongelijkheden aan te pakken in wat mensen kunnen doen om hun geschikte woonopties na te streven en hoe goed ze daadwerkelijk wonen.

De discussie over de capability approach op het gebied van huisvesting is pas in het afgelopen decennium begonnen, en er is nog maar weinig onderzoek gedaan. Dit proefschrift is gewijd aan het leggen van theoretische fundamenten voor een nieuwe aanpak van het huisvestingsbeleid met overwegingen inzake bekwaamheid, en aan inzichten in de empirische toepassing ervan op evaluatiepraktijken; het doel van dit proefschrift is niet om volledige beginselen voor het huisvestingsbeleid vast te stellen, noch om te beweren hoe de operationalisering van het capability-concept er in het huisvestingsveld moet uitzien.

Het proefschrift is in de eerste plaats gericht op onderzoekers, beleidsmakers en praktijkmensen op het gebied van huisvesting; het kan echter ook interessant zijn voor degenen die werkzaam zijn op het gebied van stedelijke studies, toegepaste filosofie, ontwikkelingsstudies over armoede, en het transversale onderwerp van de capability approach; dit proefschrift is verankerd in de huisvestingsstudies, maar bevindt zich op het snijvlak van deze studies.

Onderzoeksdoel en -vragen

Het doel van dit proefschrift is **het ontwikkelen van een manier om de ideeën van de capability approach in het woonbeleid te integreren, om mensen en morele waarden centraal te stellen in het woonbeleid**. Om dit doel te bereiken, zijn in dit proefschrift vier onderzoeksvragen beantwoord in vier hoofdstukken. Ieder hoofdstuk bestaat uit een gepubliceerd paper of een manuscript op papier. Allereerst werden in de studie, door de lens van de capability approach, de heersende perspectieven op goed beleid in het huisvestingsdiscours vastgesteld, die ertoe hadden kunnen leiden dat de beleidsaandacht met name zou uitgaan naar de financiële en materiële aspecten van huisvesting. Als reactie op de problemen werd in de studie een voorzet gedaan over hoe een goed huisvestingsbeleid anders zou kunnen worden beoordeeld door argumenten van de capability approach uit te breiden naar de huisvestingscontext. Dit leidde tot het voorstel over wat het brede doel van het huisvestingsbeleid zou moeten zijn (RQ 1; Hoofdstuk 2). Ten tweede werd in het proefschrift bepaald, middels een verdere uitwerking van het voorstel in het vorige hoofdstuk, dat het bredere doel van het huisvestingsbeleid de uitbreiding van de huisvestings-capabilities van mensen zou moeten zijn (d.w.z. de mogelijkheden om te wonen op een manier die mensen redelijkerwijs kunnen waarderen). Daarnaast werd gevraagd welke leidende beginselen het huisvestingsbeleid zou kunnen hanteren om het doel van uitbreiding van de huisvestings-capabilities van mensen te bereiken (RQ 2; Hoofdstuk 3). Ten derde onderzocht het proefschrift, door de focus van het onderzoek te verleggen naar vragen over toepassingen van capability-ideeën in de evaluatiepraktijk ten behoeve van de ontwikkeling van het huisvestingsbeleid, welke invloed op de besluitvorming over het huisvestingsbeleid, met name het welzijnsbeleid voor huisvesting, kan worden verwacht wanneer huisvestingszaken van mensen worden gemeten op basis van capability-ideeën (RQ 3; hoofdstuk 4). Ten slotte onderzocht dit proefschrift hoe capability-overwegingen kunnen worden meegenomen in metingen van huisvestingongelijkheid, en welke nieuwe inzichten in huisvestingsproblemen en beleidsimplicaties kunnen worden verwacht (RQ 4; Hoofdstuk 5).

Onderzoeksbenaderingen, -methoden en -gegevens

De eerste twee vragen hadden als doel om een theoretische grondslag te leggen en voorstellen te doen voor een nieuw doel voor het huisvestingsbeleid en de bijbehorende leidende beginselen. De aanpak bestond uit conceptueel redeneren, voortbouwend op theoretisch onderzoek naar de capability approach, sociale rechtvaardigheid (zowel in huisvestingsstudies als in politieke filosofie) en bestaande observaties over de kwesties aangaande huisvestingsongelijkheid. Om RQ 1 te kunnen onderzoeken op onderliggende perspectieven van de huisvestingsdiscussie over goed beleid, werd de evaluatie in het onderzoek toegespitst op huisvestingsdiscussies; in het bijzonder soorten informatiegrondslagen waarnaar onderzoek en discussie aangaande het huisvestingsbeleid vaak verwijzen. Voor RQ 2 over het ontwikkelen van voorstellen voor leidende beginselen van het huisvestingsbeleid, ontwierp het proefschrift twee onderzoeksstappen. Ten eerste, het vaststellen van essentiële vragen die onderzocht moeten worden voor het vaststellen van de basisprincipes van huisvestingsrechtvaardigheid als leidraad voor het huisvestingsbeleid, en ten tweede, het beantwoorden van de vastgestelde vragen door te onderzoeken hoe om te gaan met eventuele hiaten tussen idealen in rechtvaardigheidstheorieën en de realiteit van het huisvestingsbeleid in de praktijk. Deze essentiële vragen werden gedefinieerd door te analyseren welke principes de capability-benadering al dan niet kan bieden, in vergelijking met andere onderscheiden rechtvaardigheidstheorieën, en welke vragen over het algemeen worden behandeld in het huisvestingsdebat over sociale rechtvaardigheid.

RQ 3 en RQ 4 (Hoofdstukken 4 en 5) dienden voor de empirische toetsing en toepassing van de ideeën uit RQ 1 en RQ 2 (Hoofdstukken 2 en 3). Voor het bestuderen van RQ 3 vergeleek het onderzoek beleidsdoel-identificaties aan de hand van indicatoren van onderscheiden huisvestings-capabilities met traditionele maatstaven voor woningnood, die vaak worden toegepast voor het welzijnsbeleid aangaande huisvesting. Met deze methode onderzocht de studie de invloed van een meetapplicatie van ideeën over huisvestings-capability op beslissingen over het welzijnsbeleid aangaande huisvesting, alsmede empirisch bewijs voor de zwakke punten van traditionele evaluatiebenaderingen van woningnood, die werden behandeld in RQ 1 (Hoofdstuk 2). Voor RQ 4, ontwikkelde het onderzoek eerst een aanpak om het niet-waarneembare concept van huisvestings-capabilities en het bijbehorende evaluatiekader te evalueren, door capability-ideeën te vertalen naar het taalgebruik van huisvestingsonderzoek en meetbare concepten. Bij wijze van empirische toepassing van dit evaluatiekader, ontwikkelde en testte het onderzoek een meting van de ongelijkheid op het gebied van huisvesting met selectief gekozen indicatoren. Het onderzoek gebruikte de Alkire-Foster-methode voor armoedemetingen als meetmethode; de eigenschappen van deze methode voldoen aan de conceptuele en normatieve vereisten van het voorstel van dit onderzoek voor de evaluatie van de huisvestings-capabilities.

Voor het onderzoek naar RQ 3 en RQ 4, maakte het onderzoek gebruik van microdatasets van CBS-registratiegegevens (Hoofdstukken 4 en 5), het Longitudinal Internet Studies for the Social Science: de LISS-enquête uit 2011 naar huisvesting en financiële kennis (8.704 personen in 3.863 huishoudens) en de DNB-enquête onder huishoudens uit 2017 (DHS) 4) over financieel gedrag (5.032 personen verdeeld over 2.292 huishoudens) (Hoofdstuk 5). Beide enquêtes werden uitgevoerd onder de Nederlandse bevolking. Voor de selectie van datasets was hun koppelbaarheid een cruciale voorwaarde, omdat de studies waren ontworpen om de metingen van huisvestingsaangelegenheden te vergelijken die in verschillende perspectieven waren geworteld en die nodig waren om de soorten gegevens uit te breiden buiten de gegevens van de conventionele huisvestingsenquête. Een andere cruciale voorwaarde was de haalbaarheid van het berekenen van indicatoren die optimaal afgestemd konden worden op de conceptuele ideeën over huisvestings-capabilities die deze studie wilde testen.

Onderzoek voor empirische toepassing: aanpak en omvang

De studies voor toepassing op metingen van huisvestingszaken (Hoofdstukken 4 en 5) beoogden niet om met een meting van de totale huisvestings-capabilities van mensen te komen. In de studies is gekozen voor een aanpak die onderscheiden capabilities en andere maatregelen met elkaar vergelijkt. Dit sluit aan bij het argument van Sen (1999, blz. 82) dat "de vergelijking van een bepaalde specifieke capability [van de focus] op zichzelf al heel verhelderend kan zijn" en dat "het meer hebben van elke relevante functie of capability een duidelijke verbetering is" (Sen 1992, blz. 46). Daarom kan een vergelijking van specifieke huisvestings-capabilities alsnog betrouwbare informatie bieden voor beleidsdebatten. Deze aanpak was geschikt voor het onderzoeksdoel (zoals hieronder geïllustreerd) onder de empirische beperkingen om op capability georiënteerde huisvesting op schaal toe te passen (bijv. zeer beperkte op capability georiënteerde gegevens over huisvesting en zeer beperkte gevestigde kennis over soorten belangrijke capabilities voor huisvesting). Bij het selecteren van indicatoren van onderscheiden huisvestings-capabilities gebruikte deze studie de tweefasenaanpak voor het selecteren van capabilities (d.w.z. een pragmatisch keuze van proxy-indicatoren met suggesties voor ideale indicatoren) (Robeyns, 2005) en werd het op één na beste niveau van proxy-indicatoren ontworpen met gebruikmaking van beschikbare gegevens.

De empirische studies in Hoofdstukken 4 en 5 hadden tot doel na te gaan hoe het idee van huisvestings-capabilities in de praktijk vorm kan krijgen, en welke informatieve voordelen kunnen worden verwacht als het idee in toekomstige studies wordt geoperationaliseerd, in plaats van ontwikkeling van een volledige operationalisering van de capability approach in de huisvestingssector met een uitputtende lijst van indicatoren. Meer specifieke motivaties voor deze studie waren om de volgende onderwerpen te onderzoeken: de verwachte invloed op de richting van het huisvestingsbeleid; de mate van haalbaarheid van het integreren van de ideeën over huisvestings-capabilities in metingen aangaande huisvestingszaken; methodologische eigenschappen waarmee rekening moet worden gehouden bij het ontwerpen van een meting, en empirische beperkingen die aangepakt moeten worden.

Samenvatting van de onderzoeksresultaten

Vraag één

In hoofdstuk 2, waarin dieper wordt ingegaan op de fundamentele aspecten van een goed huisvestingsbeleid, wordt vastgesteld dat de evaluatie zich toespitst op huisvestingsbeleid en -onderzoek. De focus lag sterk op materiële en monetaire middelen met betrekking tot huisvesting (bijv. fysieke woonomstandigheden, inkomsten voor huisvestingskosten, woningbezit, huizenprijzen en woningvermogen) en tevredenheid over huisvesting (bijv. woonplezier en het vervullen van de wens om huiseigenaar te zijn), met als beleidsdoelstelling het verhogen en beter verdelen van deze middelen. De studie analyseerde, bekeken door de lens van de capability approach, dat deze evaluatiebenaderingen fundamenteel beperkt zijn als het gaat om het geven van rechtstreekse aandacht aan de werkelijke woonsituatie van mensen en de niet-monetaire en niet-materiële waarden die verband houden met huisvesting, bijv. het recht op huisvesting, een betekenisvol leven en vrijheid van beperkingen die tot gedwongen keuzes leiden (bijv. onderdrukking, discriminatie en uitsluiting).

Door ook huisvesting op te nemen in capability-ideeën, werd in de studie aanbevolen om een goed huisvestingsbeleid te beoordelen op zijn doeltreffendheid bij het uitbreiden van de capabilities van mensen om te wonen op een manier die ze redelijkerwijs kunnen waarderen (de capabilities voor huisvesting) en het verminderen van ongelijkheden, in plaats van op een toename van het bezit aan woonmiddelen en de tevredenheid over huisvesting. Als maatstaf voor dergelijke capabilities zou het beleid zich kunnen richten op het verbeteren van de prestaties op het gebied van huisvestingsfuncties (d.w.z. de feitelijke staat van wonen, op manieren die mensen waarderen en redelijkerwijs kunnen waarderen). Het huisvestingsbeleid moet ook gericht zijn op het verminderen van ongelijkheden in het vermogen van individuen om middelen om te zetten in werkelijke huisvestingsresultaten. De studie stelde voor om deze ideeën toe te passen op beleidsdoelstellingen, het evaluatiekader voor beleidsprestaties en specifieke huisvestingsvraagstukken, het ontwerp van huisvestingsprogramma 's, participatieve huisvestingsontwikkeling en de normatieve basis voor politieke critici.

Vraag twee

Nadat het brede doel van het huisvestingsbeleid (d.w.z. het uitbreiden van de huisvestings-capabilities van mensen) was gedefinieerd, werden in de studie de leidende beginselen voor het huisvestingsbeleid in die richting onderzocht. Hiertoe stelde de studie voor om drie essentiële ingrediënten van rechtvaardigheidstheorieën te onderzoeken: kenmerken van ideale instellingen, maatstaven voor rechtvaardigheid, en verdelingsregels. Na dit onderzoek stelt hoofdstuk 3 het volgende voor: (i) traditionele vragen over de verdelingsregels voor fundamentele huisvestingsdiensten en woningregimes moeten ondergeschikt zijn en de nadruk moet liggen op de vraag hoe het huisvestingsbeleid feitelijk functioneert en welke veranderingen het teweegbrengt, (ii) het huisvestingsbeleid moet worden gestuurd middels voortdurend toezicht op veranderingen in ongelijke en onrechtvaardige huisvestingssituaties, waarbij de nadruk dient te liggen op de huisvestings-capabilities van mensen, (iii) de huisvestingsmogelijkheden moeten op zijn minst worden bepaald door de omvang van kansen, zekerheden en capaciteiten, die de zorgen weerspiegelen over ongelijkheden op het gebied van rechten, empowerment, zelfstandig handelen, onderdrukking en discriminatie die kunnen leiden tot gedwongen keuzes in het huisvestingsproces van mensen; het huisvestingsbeleid moet erop gericht zijn vermijdbare ongelijkheden in deze bepalende omstandigheden weg te nemen, en (iv) vergelijkende oefeningen moeten het fundamentele beleidsinstrument zijn. Deze moeten het volgende vergelijken: de mogelijkheden voor huisvesting in de loop der tijd en binnen samenlevingen (gemeenschappen, steden en landen), sociale alternatieven (bijv. beleidsoplossingen, huisvestingsprogramma's en regelgeving) om huisvestingsproblemen op te lossen (bijv. voorkeursalternatieven om de capability voor huisvesting uit te breiden), en opvattingen in verschillende samenlevingen over dezelfde huisvestingsproblematiek inzake rechtvaardigheid.

Vraag drie

Om de invloed op de beleidsvorming van een meettoepassing van het huisvestings-capability-idee te onderzoeken, vergeleek het onderzoek beleidsdoelidentificaties aan de hand van indicatoren van onderscheiden huisvestings-capabilities en traditionele woningnoodmaatregelen die vaak worden gebruikt voor huisvestingsbeleid en onderzoek (d.w.z., op inkomen en tevredenheid gebaseerde maatregelen) (Hoofdstuk 4). Directe resultaten waren dat niet te verwaarlozen percentages (variërend van ongeveer 20 tot 30 procent) van de onderzoekspopulatie: (i) wonen in ontoereikende huisvesting (zonder de basisfuncties van huisvesting; een indicatie van fundamentele huisvestings-capabilities) ondanks een huishoudinkomen boven de subsidiabele drempel voor welzijnsdiensten voor huisvesting (niet achtergesteld wat betreft economische middelen voor toereikende huisvesting), hetgeen een aantal omzettingskloven impliceert; ii) tevreden zijn over hun huisvesting ondanks het feit dat zij in ontoereikende huisvesting wonen, hetgeen impliceert dat op tevredenheid gebaseerde maatregelen mogelijk inconsistent zijn met het recht op toereikende huisvesting; en iii) financieel ongeletterd zijn (achtergesteld wat betreft fundamentele huisvestings-capabilities – een indicatie van fundamentele capabilities op het gebied van huisvesting, of niet in staat om met kennis van zaken beslissingen te nemen) ondanks een huishoudinkomen boven de drempel (niet achtergesteld wat betreft economische middelen) en tevredenheid over huisvesting, hetgeen een risico impliceert dat het eerstgenoemde vraagstuk over het hoofd wordt gezien als er een welzijnsbeleid voor huisvesting wordt gevoerd dat alleen op de laatstgenoemde informatiebasis is gestoeld.

Conventionele maatregelen die in deze studie werden getoetst, waren de meest gebruikte indicatoren voor huisvestingsbeleid en -onderzoek. Er kunnen significante blinde vlekken zijn geweest bij het vaststellen van groepen die maatschappelijke steun nodig hebben voor huisvestingsproblemen als gevolg van niet-monetaire kwesties, het opsporen van ongelijkheden in de conversie-efficiëntie van inkomen naar wonen in toereikende huisvesting, en het overwegen van het effect van adaptieve voorkeuren aangaande huisvestingstevredenheid.

Vraag vier

Volgend op de aanbeveling in hoofdstuk 3, is het evalueren van ongelijkheid in omstandigheden die de huisvestings-capabilities van een persoon vormen in de dimensies van kansen, zekerheden en mogelijkheden voor huisvesting, een manier om capability-ideeën op te nemen in metingen van ongelijkheid op huisvestingsgebied (Hoofdstuk 5). Het meten van de multidimensionale nadelen die keuzes in het huisvestingsproces beperken (d.w.z., multidimensionale huisvestingsnadelen; MHN) werd voorgesteld als een praktische uitwerking van dit idee. Als testapplicatie werden de MHN die gevormd werden door financiële termen (MHN-f), gemeten in de dimensies van rechten op verschillende huuropties (opportuniteit), een kwetsbaarheid op het gebied van het betalen van huisvestingskosten (veiligheid) en fundamentele financiële kennis over huisvesting (vaardigheid). Voor elke dimensie werden indicatoren ontworpen, en de MHN-f-indexscores werden gegenereerd met behulp van de Alkire-Foster-methode. Bij het ontwerpen van de analyse-eenheden is rekening gehouden met de zorg in de capability approach over de verschillen tussen gedwongen en bewuste keuzes door het concept van latente huishoudens (d.w.z. volwassenen die bij ouders, familieleden of huisgenoten wonen) te ontwikkelen, waarbij onderscheid wordt gemaakt met reguliere huishoudens (d.w.z. gezinshoofden en hun partners). Groepen met hogere MHN-f-scores duiden erop dat hun huisvestingskeuzes beperkter zijn dan die van anderen; zodoende is de kans groter dat hun huidige huisvestingssituatie het gevolg is van gedwongen keuzes met een lagere huisvestings-capability op het niveau van de indexscore.

Provinciale ranglijsten op basis van de MHN-f botsten met die op basis van veelgebruikte maatstaven voor huisvestingsaangelegenheden (bijv. inkomensachterstand voor huisvesting, geschiktheid van de huisvesting en tevredenheid over de woning), wat erop duidt dat de informatieve voordelen ervan voor beleidsdiscussies, in termen van de informatie over wiens huisvestingsproces en -situatie het meest beperkt is en in welke mate. Hoewel de MHN-f-meting een illustratief doel diende, leverden de uitkomsten een aantal zinvolle resultaten op die aansluiten bij bestaande waarnemingen in kwalitatief onderzoek: de resultaten gaven aan dat jonge latente huishoudens met onzeker werk als groep het meest bleken te worstelen met het nastreven van hun beredeneerde huisvestingskeuzes (d.w.z. met de laagste huisvestings-capabilities).

Synthese van de resultaten en geleerde lessen

Om de beleidsaandacht te verschuiven van het bevorderen van de financiële en materiële aspecten van huisvesting naar het bieden van toegang tot geschikte huisvesting en het bevorderen van ethische waarden aangaande huisvesting, kunnen beleidsdiscussies en onderzoek de volgende beginselen van het huisvestingsbeleid inzetten door ideeën uit de capability approach op te nemen: (a) het bredere einddoel van het huisvestingsbeleid formuleren als de uitbreiding van de huisvestings-capabilities van mensen, (b) de focus van de evaluatie in het huisvestingsbeleid uitbreiden van de traditionele focus op materiële en monetaire kenmerken van huisvesting en tevredenheid over huisvesting naar huisvestings-capabilities (en huisvestingsfuncties die mensen waarderen), (c) het uitbreiden (en verminderen van vermijdbare ongelijkheid in) kansen, zekerheden en huisvestings-capabilities die bepalend zijn voor de omvang van de huisvestings-capabilities van mensen, (d) het sturen van het huisvestingsbeleid, in de eerste plaats door het voortdurend volgen van ongelijke en onrechtvaardige huisvestingssituaties, met als doel zich te richten op daadwerkelijke veranderingen in de huisvestingssituaties van mensen, in plaats van soorten vast te stellen huisvestingsregimes (bijv. de omvang van overheidsinterventies in de huisvestingsmarkt) en distributieregels voor fundamentele huisvestingsdiensten, en (e) gebruikmaken van vergelijkende oefeningen als een instrument voor beleidssturing, door veranderingen in de huisvestings-capabilities te vergelijken in de tijd en tussen samenlevingen, voorkeursalternatieven om de capability voor huisvesting uit te breiden, en opvattingen over dezelfde huisvestingskwestie met als doel de rechtvaardigheid te overwegen.

De overheersende aandacht voor materiële en monetaire middelen als het gaat om huisvesting is wellicht een van de belangrijkste afleidingen van de beleidsaandacht die gericht is op het bevorderen van de financiële en materiële waarde van huisvesting in onze samenleving. De conceptuele toepassing van de capability approach van het huisvestingsbeleid (Hoofdstuk 2) toonde aan dat het ombuigen van de evaluatiefocus naar huisvestings-capabilities de beleidsfocus zou heroriënteren naar de mensen die de woning bewonen, d.w.z. hoe mensen wonen, wat zij waarderen in hun huisvesting, welke reële mogelijkheden zij hebben om te wonen volgens hun normen, en in hoeverre zij in staat zijn om actief veranderingen aan te brengen in hun woonaangelegenheden. Deze verschuiving van de evaluatiefocus kan resulteren in een evaluatie die sensitiever is voor ethische waarden aangaande huisvesting door het identificeren van gedwongen woonsituaties als gevolg van schendingen van de mensenrechten op het gebied van huisvesting, onderdrukking, discriminatie en ongelijkheid. Of en hoe deze conceptuele voordelen in de praktijk gerealiseerd kunnen worden, blijft vooralsnog duidelijk een open vraag als het om huisvesting gaat. Desalniettemin liet de verkennende studie in hoofdstuk 4 de resultaten zien die deze conceptuele voordelen empirisch ondersteunen, in het bijzonder om mogelijke blinde vlekken te compenseren bij het ontwerpen van een huisvestingsbeleid op basis van metingen van het gezinsinkomen en het beleidsdoel vast te stellen als maximale tevredenheid over huisvesting.

In dit proefschrift wordt niet gesteld dat huisvestings-capabilities (en -functies) de enige informatiegrondslag van het huisvestingsbeleid moeten zijn; zowel theoretische als empirische resultaten suggereren veeleer dat de belangrijkste les de noodzaak moet zijn om de informatiegrondslagen van het huisvestingsbeleid uit te breiden en meervoudige bronnen van waardevolle informatie in aanmerking te nemen bij het beoordelen van het basiswelzijn op het gebied van huisvesting. Zo impliceerden de resultaten in hoofdstuk 4 bijvoorbeeld dat informatie over meervoudige sociaaleconomische achterstanden als het gaat om de toegang tot adequate huisvesting mogelijk niet in verhouding staat tot op inkomen gebaseerde maatregelen, en informatie over waardevolle fundamentele prestaties op het gebied van huisvesting mogelijk niet in verhouding staat tot tevredenheidsmetingen met betrekking tot huisvesting. Iedere maatregel die in het onderzoek wordt getest kan een waardevolle vector zijn van de multidimensionale staat van de fundamentele huisvestingsaangelegenheden van individuen. Dezelfde implicaties worden gesuggereerd op basis van de resultaten in hoofdstuk 5 die de conflicterende provinciale ranglijsten door de MHN-f index en andere maatstaven voor huisvestingsaangelegenheden laten zien, hetgeen duidt op verschillen tussen provincies als het gaat om prioriteiten in beleidsinterventies en doelgroepen.

Het meten en vergelijken van onderscheiden capabilities kan een nuttige en deugdelijke methode zijn om beleidsdiscussies vorm te geven. Het onderzoek paste deze aanpak toe in plaats van de aanpak die gericht is op het meten van een volledige dekking van huisvestings-capabilities of -functies. De resultaten boden wezenlijke implicaties voor de richting van het huisvestingsbeleid. Hoewel de MHN-f werden gemeten met selectieve indicatoren ter illustratie, kwamen de meetresultaten voor jongeren, latente huishoudens en niet-standaard werknemers overeen met de waarnemingen van andere studies.

Tijdens het integreren van capability-overwegingen in metingen bleek uit de studie dat capability-ideeën kunnen worden geïntegreerd in verschillende elementen van het meetontwerp, niet beperkt tot de keuze van de evaluatiecriteria (bijv. capabilities, functies, financiële middelen en tevredenheid) en het ontwerp van dimensies en indicatoren, o.a. het ontwerp van meetmethoden (bijv. methoden die rekening houden met de intensiteit van simultane nadelen) en de analyse-eenheden (bijv. latente en reguliere huishoudens).

De studie evolueerde van de rijke ideeën van de capability approach richting een bepaalde manier van toepassen op metingen op het specifieke gebied van huisvesting. Daarbij maakte de studie duidelijk welke pragmatische keuzes noodzakelijk zijn (bijv. het definiëren van een werkbare evaluatiebenadering, het kiezen van de op één na beste proxy-indicator, en het gebruik van beschikbare gegevens), waarbij een zekere afstand ontstaat tot de oorspronkelijke rijke ideeën en hoe de resultaten eruit zouden kunnen zien. Deze afstand zou eenvoudigweg te wijten kunnen zijn aan de beperkte reikwijdte van dit onderzoek, of aan nog op te lossen empirische beperkingen op het gebied van huisvesting (bijv. een gebrek aan gevestigde kennis over huisvestingsmogelijkheden, en zeer beperkte relevante gegevens). De afstand kan echter ook voortvloeien uit onvermijdelijke conflicten tussen 'onvolledig maar bruikbaar voor feitelijke beoordelingen' en 'het zo volledig mogelijk nota nemen van de rijke ideeën' (Hoofdstuk 1). De studie observeerde een mogelijke open vraag waarover wetenschappelijke onderzoekers zouden kunnen debatteren: in hoeverre wetenschappelijke discussie een vermindering van de oorspronkelijke rijkdom van de normatieve ideeën kan of moet omarmen wanneer deze geoperationaliseerd worden, vooral wanneer empirische beperkingen veranderen.

Maatschappelijke relevantie

De normatieve grondslagen en inzichten die uit dit onderzoek voortvloeien kunnen een bijdrage leveren aan de verdediging van het huisvestingsbeleid ter bevordering van de menselijke en ethische waarden aangaande huisvesting en de toegang die mensen hebben tot passende huisvesting. Deze kunnen eventueel worden gebruikt om de discussie over het kader voor de vaststelling van de agenda voor mondiale huisvestingsvraagstukken te bevorderen, zoals de uitbreiding van het kader van het recht op passende huisvesting naar rechtvaardigheid op het gebied van huisvesting, en de bezorgdheid over de capabilities voor huisvesting van mensen een prominentere plaats geven om de op mensenrechten gebaseerde aanpak concreter te maken.

TOC

Uit de studies voor empirische toepassing zijn enkele praktische suggesties voortgekomen die richting kunnen geven aan het beleid. Beleidsmakers op het gebied van huisvesting dienen de informatiegrondslagen van hun besluitvorming te heroverwegen. Het welzijnsbeleid voor fundamentele huisvestingsdiensten definieert de doelgroep op basis van het inkomensniveau van huishoudens (bijv. huursubsidies, volks- en sociale huisvesting en andere beleidslijnen ter bevordering van huisvesting voor lage inkomens). Desalniettemin zou deze beleidsaanpak de huisvestingsproblemen aanzienlijk kunnen ondermijnen en de omvang van de bevolkingsgroep die niet-financiële nadelen ondervindt en maatschappelijke steun nodig heeft om hun huisvestingssituatie te verbeteren, kunnen onderschatten. Opmerkelijk genoeg werden er gevallen waargenomen van mensen die in ontoereikende huisvesting leven ondanks dat hun inkomen boven de drempel om in aanmerking te komen voor huisvestingsdiensten ligt, hetgeen impliceerde dat ze waarschijnlijk buiten de beleidsaandacht vallen (Hoofdstuk 4). Daarnaast toonden de meetresultaten van MHN-f aan hoe sommige groepen in het huisvestingsproces kunnen worden benadeeld ondanks dat het inkomen van huishoudens boven de drempel om in aanmerking te komen ligt (Hoofdstuk 5).

De resultaten suggereren dat het welzijnsbeleid voor huisvesting meer gediversifieerde en op maat gesneden programma 's dient te ontwerpen om de ongelijkheid in huisvesting terug te dringen. Een en ander bovenop distributie van fundamentele huisvestingsdiensten, waaronder huisvestingsuitkeringen en huisvestingsvoorzieningen gericht op huishoudens met een laag inkomen, om ongelijkheid aan te pakken met betrekking tot verschillende nadelen die mensen ervan weerhouden de huisvestingsopties die ze waarderen na te streven. De informatiebasis uitbreiden richting huisvestings-capabilities en capability-overwegingen opnemen voor de evaluatie van huisvestingsaangelegenheden zijn maatregelen die kunnen helpen bij het ontwerpen van dergelijke op maat gemaakte huisvestingsprogramma's. Zo zouden, rekening houdend met de indicatoren van MHN-f in deze studie, beleidsmaatregelen kunnen bestaan uit op maat gemaakte aanpassingen van hun aanspraak op verschillende huuropties, overheidsgarantieregelingen die de huisvestingsmogelijkheden uitbreiden, en een fonds voor vlotte overbrugging van huisvestingskosten wanneer de bestaansmiddelen tijdelijk onder druk komen te staan. Daarnaast kan worden gedacht aan programma's ter verbetering van de financiële en huisvestingskennis en vaardigheden in woonbudgetplanning.

Huisvestingsgegevens worden in het algemeen verzameld op huishoudniveau, en het is mogelijk dat de problemen van latente huishoudens in de studies die maatregelen op het gebied van huisvesting analyseren significant over het hoofd zijn gezien, hetgeen leidt tot marginalisering van hun problemen in beleidsaangelegenheden.

Toekomstige enquêtes en analyses van huisvestingsgegevens moeten zodanig worden opgezet dat ze informatie over latente huishoudens aan het licht brengen. Studies die gebruik maken van bestaande enquêtegegevens moeten nagaan hoe deze informatie optimaal kan worden weerspiegeld in de analyse.

Wetenschappelijke bijdragen

Huisvestingsonderzoek is pas in het meest recente decennium gestart met het bespreken en toepassen van de capabilities approach, en tot op heden is hier nog weinig onderzoek naar verricht. Deze studie is een van de eerste pogingen tot grondig onderzoek naar hoe ideeën uit de capabilities approach kunnen worden opgenomen in discussies over het huisvestingsbeleid. Dit proefschrift is gewijd aan het opzetten van theoretische en normatieve grondslagen voor nieuwe benaderingen van het huisvestingsbeleid met capability ideeën, en inzichten in een empirische toepassing, in het bijzonder voor de evaluatie van huisvestingsproblemen vanuit het perspectief van capability. Deze onderzoeken zouden als basis kunnen dienen voor het bevorderen van de wetenschappelijke discussie over de capability approach in de literatuur over huisvesting.

Als een van de twee belangrijkste uiteenzettingen over de capability approach, legt dit proefschrift in het bijzonder de nadruk op de uiteenzetting van Sen (dus, een beperkte weerspiegeling van het werk van Nussbaum), en zijn idee over materiële vrijheid, capabilities, en keuzes (dus, weinig onderzoek naar meervoudige waarden, functies en conversiefactoren). Deze focus van het proefschrift biedt uiteraard een opening voor een aantal onderzoeksagenda's die in de literatuur over huisvesting verkend kunnen worden. Dit omvat ook de onderzoeksvraag hoe relevante capabilities en functies voor huisvesting dienen te worden gedefinieerd.

Bestaand onderzoek over huisvesting en capabilities ging tot op heden vooral over de extreme aspecten van huisvesting, zoals dakloosheid, sloppenwijken en niet-officiële nederzettingen. In deze studie werd een breed scala aan huisvestingsvraagstukken geassocieerd met capability-vraagstukken (bijv. de beperkende situatie van huurders, jongeren, vrouwen zonder gemeenschappelijke huur, mensen met een onzekere baan en mensen met beperkte kennis over huisvesting). De relevantie van de capability-benadering blijft niet beperkt tot de meest schrijnende huisvestingssituaties, en het onderzoek dient zijn focus uit te breiden.

Capability-experts stellen zich doorlopend de vraag hoe het vrijheidsaspect van de capability-overweging in een ongelijkheidsmeting kan worden opgenomen. Dit proefschrift draagt met de studie in het huisvestingsdomein bij aan deze onderzoeksagenda door het ontwikkelen van een evaluatiebenadering die de omvang van de huisvestings-capabilities inschat middels het evalueren van beperkingen in keuzes die mensen hebben in het huisvestingsproces, met de toepassing van de MHN-f-meting.

Hoewel grondig onderzoek naar de integratie van een theorie over rechtvaardigheids- en huisvestingsvraagstukken kan leiden tot concrete huisvestingsagenda's met een stevige normatieve rechtvaardiging, is dit type onderzoek schaars in de literatuur over huisvesting. Met dit proefschrift wordt een studie toegevoegd over de capability approach van rechtvaardigheid van Sen, met speciale aandacht voor conceptuele verduidelijking en interpretatie van capability-ideeën in de huisvestingscontext, evenals cruciale ingrediënten om basisprincipes van huisvestingsrechtvaardigheid vorm te geven.

Tot nu toe hadden huisvestingsstudies de neiging om praktische en normatieve vraagstukken op het gebied van huisvesting gescheiden te houden. Deze kunnen echter nauw verbonden zijn op een fundamenteel niveau, aangezien de informatiebasis voor het analyseren van de huisvestingsresultaten en huisvestingsaangelegenheden geworteld is in diverse normatieve standpunten over goed huisvestingsbeleid. Gesuggereerd wordt dat het onderzoeken van hun normatieve houding en het expliciet verduidelijken ervan bij het informeren van het beleidsvormingsproces, in plaats van te beweren dat ze neutraal zijn, een cruciale taak vormt voor onderzoekers'.

1 Introduction

1.1 Background

Call for a new approach to housing policies

Housing inequality is a growing concern in our society. In recent decades, this inequality has been exacerbated by the phenomenon of housing being financialized and commodified (UN 2012, 2017a; Aalbers 2016). As housing becomes a means for wealth accumulation and security for a financial instrument, the financial and commodity value of housing has become the core value of housing instead of the human and social values of housing. In policy discussion, the question of how to better manage financial institutions and housing markets has become the centre of attention; the questions of how to better protect and promot the moral values tied to housing, such as human rights, dignity and freedom, and better enable people to access suitable housing have been marginalised.

In the Global North, this phenomenon has been accelerated by the homeownership-oriented approach to housing policies. It has promoted homeownership with innovative financial instruments, based on a belief in the role of housing (property) ownership in ensuring individuals' economic security and well-being. However, unlike the expectation, this policy approach has rather reinforced the perception of housing as a means for wealth accumulation. It has also strengthened the unequal system in society (Madden and Marcuse 2016), imposed insecurity on households (André 2017), and has become a driver of wealth inequality (Maclennan and Miao 2017). The critical analysis of Piketty (2014) on the inequality in capital highlighted the role of housing wealth in the growing inequality, and it rings alarm bells for current housing policy directions. Meanwhile, in the Global South, the financialization of housing has often resulted in evictions and displacements for luxurious residential and high-end commercial real estate. These trends have imposed the greatest challenge to realizing the right to adequate housing, and increased inequality and spatial segregation in cities (UN 2017). Various housing programmes have been attempted for the last twenty years but mostly failed to benefit those most in need (UN-Habitat 2016).

There are increasing calls for housing researchers to review housing policy directions and explore a new housing approach. In addressing the financialization of housing and the growing housing inequality, the influence of neoliberal ideology is pointed out as their origin (Clapham 2019; Jacobs 2019; Rolnik 2013). Thus, by opposing the origin, the states' re-intervention into housing systems (e.g. re-regulation of housing markets, re-direct-provision of housing, re-taxation, and re-introduction of subsidies) are suggested with the human rights-based approach to housing policies (UN 2012, 2017a; Clapham 2019; Leijten and de Bel 2020).

The states' re-intervention and human rights-based approaches are crucial steps for reducing housing inequality and restoring human and social dimensions of housing in policy discussions. However, they have some weaknesses that need to be compensated. Above all, the re-intervention approach does not critically challenge the unfair power imbalance and social inequality in housing, nor the materialism that became dominant in the perception of housing under the commodification trend. This weakness can be compensated by placing the human rights-based approach as the base principle of re-intervention measures, re-claiming housing as a human right. Nevertheless, it remains vague regarding what policy actions should be taken and how to monitor its progress. This vagueness poses risks to the human rights-based approach of being an empty claim for rights. Another issue is that the agenda of the human right to adequate housing could reduce societal and states obligations to the ensurance of minimum standard of housing units and legislative measures for its enforcement, while the housing issues that demand justice considerations are not limited to the improvement of such basic housing situations (Chapter 3); in fact, human rights are the most urgent issues of social justice, and not all justice issues are a matter of human rights (Gilabert 2009).

Potential ideas from the capability approach

A more ambitious and tangible approach is required to correct the current housing policy direction. The new approach should have the ability to reorient policy attention to people, the human dimension of housing and moral values, away from the financial and commodity values of housing. The approach should also effectively enable people to access suitable housing options and to avoid running the risk of remaining an empty claim for the human right to housing. As potential ideas for resolving these tasks, this dissertation suggests exploring the capability approach to shape a new housing approach.

The capability approach, pioneered by Amartya Sen (1980, 2009), is an evaluation approach to well-being, equality, and justice. The approach proposes that we should evaluate them in terms of substantive freedom or capabilities of people to have the kinds of lives they value, rather than in terms of the level of resources people possess (e.g. income, commodities, and basic goods) and their desire fulfilments (see Section 2.2 in Chapter 2 for more details). This argument poses critical questions about the notion that good housing policy outcomes are the increased amount of houses and house possessions (to fulfil the desire to own), and its embedded perception of housing as a material object and commodity. Because the capability concept has a direct focus on people (i.e. emphasis on what people can do and be, and what people value), adjusting the ultimate goal of housing policy based on the capability concept has the potential to restore the human dimension of housing at the centre of policy discussion. This potential to redirect the attention to people also pertains to the feature that information about a person's capabilities can be consistent with the state of human rights; incorporating capability consideration into housing policy could help make the right to adequate housing intelligible and provide a concrete form to the claim of this right. Notably, this feature was the main reason why the Nobel Prize in Economics appreciated Sen's idea of capabilities; it highlights that Sen has clarified the 'conditions which permit rules for collective decision-making [e.g. policy choice and public choice] that are consistent with a sphere of rights for the individual' (Nobel Prize Outreach 1998). To illustrate, having limited capabilities means individuals are limited in doing things they have reason to value, which signals being unwillingly constrained or oppressed in life options due to deprivations and violations of human rights, inequity, or discrimination, causing a coerced choice. This concern about substantive freedom, whether people can lead the lives they value, could be extended to a counterargument to the libertarian freedom concept promoted in housing policies and markets under neoliberal ideology (Bengtsson 1995).

Practical applicability of the capability approach to housing policy is yet a greatly open question. However, various lessons could be drawn from existing applications in poverty and well-being research. A marked application of the capability approach was the development of the Human Development Index in 1990, in contrast to the obsession with economic growth as the ultimate development goal. This seminal work was a partial application of the capability approach but became a compelling tool to steer the policy agenda focus toward people rather than a mere increase of economic resources despite its incompleteness in applying the ideas of the capability approach.

How to shape an approach to housing policies with the capability approach?

The question is then how a new approach to housing policies can be shaped with ideas from the capability approach. In the housing literature, Bengtsson (1995) paid early attention to the value of the capability approach and noted, '[i]t would certainly be worthwhile to apply Sen's entitlement approach to housing' (p. 126), as the counterpart to the discussion framework of Nozick's absolute freedom and entitlement theory. Since then, however, there has been little research on how Sen's idea can be applied to housing discussion. In recent years, housing research using the capability approach has increased, but there are still few studies that rigorously examine the implications of the capability approach for housing policies and their applications, with only some recent exceptions (Foye 2021; Taylor 2019). In multiple housing studies, the capability approach has been used as a framework to analyse particular issues, such as homelessness, slums, and older tenants (Batterham 2018; Evangelista 2010; Frediani 2007; Haffner and Elsinga 2019; Morris 2012; Nicholls 2010), or as a philosophical foundation to advocate housing as a fundamental element of human rights, human flourishing and freedom (Fitzpatrick, Bengtsson, and Watts 2014; King 2003). These studies have created an opening for the housing discussion of the capability approach. Nevertheless, substantive studies that extend its ideas to housing policy are as yet scarce at both the theoretical and empirical levels.

The core argument of the capability approach is that 'we should ask what people are able to do and what lives they are able to lead' (Robeyns 2017, p.7). This argument is intuitively attractive, but carries a range of philosophical ideas, such as freedom, agency, value pluralism, human flourishing, rights, equality, and justice. Moreover, as to be discussed in Chapter 2, multiple abstract concepts are attached to the concept of capabilities, such as functionings (beings and doings of a person), conversion factors (between resources and functionings), and substantive freedom (or real opportunities). In addition, the idea of evaluating a person's capabilities and actual achievements leads to a series of subsequent questions about which capabilities and functionings to evaluate, and how to select and measure them. The capability approach is multifaceted, and substantial studies are required to extend the capability approach to housing policy discussions.

1.2 Research aim

Overall, this dissertation was motivated by the question of what alternative approach to housing policies can be suggested to redirect housing policy attention toward people and moral values associated with housing, diverging from the preoccupation with financial and commodity values of housing. In exploring this question, this dissertation advocates for applying the capability approach, and examines how it can be done and what practical benefits can be expected from it.

With this background, the primary **aim** of this dissertation is **to develop a way to place people and moral values at the centre of housing policy concerns by incorporating the ideas of the capability approach.**

Having reviewed the literature and analysed the features of the capability approach, I identify that there are at least four areas in which the capability idea can be incorporated into housing policy discussions: (i) establishing a policy goal and its normative foundation; (ii) conceptualising capability considerations in the housing context; (iii) developing guiding principles for housing policies; and (iv) developing an evaluation approach to housing problems that are subject to policy concerns, such as well-being in housing and housing inequality. Very little research has directly investigated these areas; this dissertation aims to lay the groundwork for these four areas of research.

1.3 Research questions and approaches

To achieve the aim, the research posed **four interrelated research questions** (RQs). Figure 1.1 provides an overview of the research structure and methods. The studies for RQ 1 and RQ 2 suggest new concepts, and they form the bases of the rest studies and the overall arguments of this dissertation. Table 1.1 presents their definitions.

Research aim	develop a way to place people and moral values at the centre of housing policy concerns by incorporating the ideas of the capability approach		
	Research questions	**Research approach**	**Methods**
Ideas Building theoretical foundation	RQ 1. What have the perspectives on good housing policies been, and what implications can be drawn from the capability approach regarding those perspectives?	To diagnose evaluation approaches (i.e. informational bases) of housing policies and research from the capability perspective	- Theoretical research - Analysis of existing observations - Conceptual reasoning
	RQ 2. What guiding principles can housing policy refer to in moving towards the goal of expanding people's capabilities for housing?	To scrutinise (i) what principles the CA can/cannot provide; (ii) how to manage gaps between ideals in justice theories and realities in housing policy practices	
Studies for applications Measurement of housing affairs (housing inequality, deprivations, and well-being)	RQ 3. What difference can we expect in housing policy decisions when housing affairs are measured using housing capability considerations?	Through comparisons of policy target group identifications, to empirically test the weakness of the current evaluation approaches to housing deprivations and well-being (addressed in RQ 1)	- Distinguished capability comparison - Quantitative measurement - Micro-datasets of existing surveys and the register in the Netherlands
	RQ 4. How can a measurement of housing inequality incorporate housing capability considerations, and what new insights into housing problems and policy implications can be expected?	To develop an evaluation approach and framework (based on RQ 2 outcome); and to design measurement and test with selective indicators	

FIG. 1.1 Research structure and approaches

TABLE 1.1 Definition of the key concepts proposed in the dissertation

	Definitions and backgrounds	Detailed discussion
Housing	*The act of residing* (housing as a verb), not limited to the concept of housing as dwelling units (a material object), shelter and the sum of activities to provide houses either by people themselves or others. – This dissertation considers the latter concepts subordinate to the act of residing, as they form a base for enabling people to reside. Thus, housing policy is discussed as the measures to address the issues related to people's activities to reside. – This housing concept is promoted here to reorient the policy attention to *how well a person is actually residing,* rather than a narrowed focus on houses	Chapter 2 (Section 2.4.1)
Housing justice	Social justice in housing, of which theory and ideas would define the goals that society should aim for and the guiding principles towards those goals. – This dissertation suggests the term 'housing justice' to discuss broad ideas of social justice in the housing context and thereby promote a more tailored housing agenda for the issues demanding justice considerations (e.g. human rights to housing, housing inequality, deprivations in housing situations, and exclusion); it does not imply that housing is unique and thus, requires distinguished theories of justice.	Chapter 3
Capabilities for housing (Housing capabilities)	*Capabilities of people to reside in ways they have reason to value and to pursue suitable housing options.* – by applying the term 'functionings' (beings and doings) in the capability approach, the *capabilities of people to achieve the housing functionings they value.* – The concept of 'capabilities' refers to *real opportunities* (*substantive freedom*) to do and be, and can be understood as *potential* to do and be. – This general concept is further specified as, *opportunity, security and ability to lead the valued ways of residing*, based on the analysis in Chapter 3 (i.e. the extent of a person's capabilities for housing are shaped by the dimensions of opportunity, ability and security).	Chapter 2 (Section 2.4.2) Chapter 3 (Section 3.3)
Housing functionings (housing-relevant-functionings)	*The activities for and states of residing that people value and have reason to value.* – The kinds of valued housing functionings can be based on *personal values* (e.g. residing with a sense of belonging, living in a house raising self-respect/ social recognition, and living in a lively neighbourhood), *community values* (e.g. preserving cultural values of the settlements, and being a stakeholder of housing development) and/or *societal normative values* (e.g. living in adequate housing, not being discriminated by lessors, having a joint tenure title, and living in a decent distance from the job).	Chapter 2 (Section 2.4.1)

Research Question One

What have the perspectives on good housing policies been, and what implications can be drawn from the capability approach regarding those perspectives?

This research question was formulated to examine what has gone wrong in the existing approaches to housing policies (thus, has led to the current policy directions), and in response to the identified problem, what implications for alternative approaches we can draw from the capability approach. To answer the question, the study revisits the taken-for-granted notions in housing discourse on good policies, as they may have led our society towards the current direction of losing attention to people and moral values in housing. The study reviews housing policy discourses and theories, and assesses their underlying perspectives on good housing policies. For this assessment, this study analyses the evaluative points of view in studies on housing policies, and more specifically, the types of informational bases of value judgements about desriable policy direction and policy outcome. The study diagnoses possible problems with current perspectives on good housing policies from the capability perspective, and develops an argument and proposal for how the capability concept can be applied to housing policy discussion. The remaining research questions are built on this line of argument.

Research Question Two

What guiding principles can housing policy refer to in moving toward the goal of expanding people's capabilities for housing?

Regarding the first question, the study concluded that good housing policies should be judged by their effectiveness in expanding people's capabilities to reside in ways they have reason to value—the capabilities for housing (interchangeably, housing capabilities) (Table 1.1 and Chapter 2). The idea of 'expansion of capabilities for housing as the ultimate goal of housing policies' can form an overarching principle of housing policy, and more generally, a base idea of housing justice. However, establishing a broad end goal is not sufficient enough to guide policy directions. The second research question intends to develop basic principles to guide housing policies towards the broad goal of expansion of people's capabilities for housing.

To answer the second question, the study is conducted in two steps. First, the study reviews what principles the capability approach can and cannot provide, compared to other distinguished theories of justice in moral and political philosophy, and what questions are generally addressed in housing discussions regarding social justice. Consequently, the study identified essential questions for establishing basic principles of housing justice, or guiding principles for housing policies. The questions identified were: (a) what type of housing regimes[1] should our society aim to establish (characteristics of institutions ideal for realising social justice), (b) what housing policy should aim to distribute (metrics of justice), and (c) which level of distribution should the society aim to achieve (e.g. amount and quality of distributive goods, services and opportunities) and who should be the concern of housing policy, such as should we aim for distribution for all, the worse-off or only the worst-off (i.e. the question about the choice of distributive rules among egalitarian, sufficientarian and prioritarian rules).

In the second step, the three sub-questions identified are examined to develop guiding principles of housing policies under the broad goal of expanding the capabilities for housing. Primarily, the study seeks workable principles to guide policies toward real changes that avoid remaining at ideals. For this, the study reviews the ideals proposed in justice theories for each sub-question, examines their connections and distance to realities in housing policy practices and researches how the distance should be managed. The three sub-questions are investigated by synthesizing housing discourses on social justice and housing regimes, existing observations on the issues of housing inequality, and theories of justice in political philosophy.

Research Question Three

What difference can we expect in housing policy decisions when housing affairs are evaluated in terms of people's capability for housing?

To answer this question, the study compares policy target groups identified by indicators of distinguished housing capabilities and traditional housing deprivation measures that are commonly used for housing welfare judgements in policy and research. Through this comparison, the study investigates implications for the influence on policy decisions, and empirically tests the weaknesses of traditional evaluation approaches to housing deprivations and well-being that were conceptually diagnosed in the study for RQ 1 (Chapter 2), namely, weaknesses in

1 This dissertation discusses ‘housing regime’ as types of social structures that shape the housing system in a given country. It pertains to the discussion of ideal institutions for social justice, such as minimal state in Nozick’s theory, and liberal (democratic) socialism in Rawls’ theory of justice. Thus, the concept of ‘housing regime’ in this dissertation is close to the concept, ‘a set of fundamental principles according to which housing provision operating’ by Ruonavaara (2020, p. 10), than the broader concept, ‘the set of discourses and social, economic, and political practices that influence the provision, allocation, consumption and housing outcomes in a given country’, proposed by Clapham (2019, p. 24).

reflecting inequalities in conversion efficacy from an economic-means to an end, impacts of adaptive preferences on satisfaction, and rights and other moral values. The study utilises micro-datasets of Statistics Netherlands (CBS) register data and surveys in the Netherlands.

Research Question Four

How can a measurement of housing inequality incorporate capability considerations, and what new insights into housing problems and policy implications can be expected?

By examining this question, the study aims to develop and test a measurement design that reflects capability considerations. A series of sub-tasks were designed for conducting this study: (i) analysing the existing applications in other fields for defining measurement methods, especially measurements of poverty and well-being, (ii) translating the philosophical ideas of the capability approach into the vocabulary of housing research and measurable concepts, (iii) defining an evaluation approach and framework for the capabilities for housing, and (iv) defining necessary conditions of datasets to apply the evaluation framework, and exploring available data that meet those conditions. Tasks (ii) and (iii) were conducted in conjunction with RQ 2, which scrutinises the meaning of 'capabilities for housing' and its translation into workable concepts. uilding on the findings from these four tasks, the study develops a proposal for incorporating the housing capability considerations into measurements of housing inequality, designs a measurement with selectively chosen indicators, and empirically applies it to the Netherlands. The aim of this empirical application is to illustrate what practical shape may be given to the idea of housing capability-oriented evaluation, and what informational benefits can be expected when the idea is operationalised in future studies.

1.4 Research scope

This research is interdisciplinary. Anchored in housing studies, it integrates knowledge and methods of moral and political philosophy, development studies on poverty (particularly evaluation approaches), and their cross-cutting theme of the capability approach.

The dissertation consists of two Parts: studies for developing foundational ideas (RQs 1 and 2), and studies for empirical applications (RQs 3 and 4). Part I aims to suggest a broad housing agenda with ideas from the capability approach, propose an approach for guiding housing policies towards that agenda, and build their theoretical foundations, which can be used for housing debates and research on necessary policy actions. The aim of this dissertation is, therefore, not to define specific policy instruments and solutions for expanding housing capabilities and reducing their inequalities. As broad as housing issues and as diverse as the context of issues, such solutions would be extensively varied.

In Part II, the studies explore empirical applications to measurements of housing affairs, such as housing inequality, deprivations, and well-being. The studies are designed for two purposes: to build knowledge on how the concept 'capabilities for housing' may be applied for evaluation of people's housing affairs; and to empirically test expected tangible informational benefits for policy discussion. As such, the study aim is to lay a groundwork for future studies of operationalisation, instead of developing a complete operationalisation of the capability approach in the housing sector with an exhaustive list of indicators of the capabilities for housing or valued housing functionings.

Overall, the purpose of studies for empirical applications is to investigate: the expected differences in housing policy directions; the extent of feasibility of integrating the housing capability considerations into measurements of housing affairs; methodological properties to be considered when designing a measurement; and empirical constraints to be resolved.

Among the various ways of applying the capability approach, this dissertation investigates an application for quantitative measurements. Two motivations were behind this choice. First, qualitative studies have established rich knowledge of housing deprivations and inequality, and the findings often have good linkages to capability concepts; nevertheless, such knowledge has not been sufficiently transformed into measurements, while policy directions are considerably impacted by numbers in practice. Qualitative studies and narrative evaluations have strength in enriching our insight into people's capabilities for housing and policy implications. The present studies for measurements may offer useful reference to integrate the findings of such qualitative studies into measurement design.

The second motivation is to test the extent of feasibility of integrating capability considerations into measurements of housing affairs considering the current state of knowledge and housing data. Transforming philosophical ideas into quantitative measures can diminish the original richness of the ideas. However, the conflict between incomplete but usable for actual assessments and taking in the rich ideas as fully as possible seems unavoidable (Sen 1987, p. 20). Studies should examine how such conflicts emerge and how to manage them. The present studies for empirical applications could elucidate issues that lie between the incomplete and complete application of the capability idea in the housing sector, and may inform necessary further studies to narrow the distance or relieve the tension between the two.

1.5 Methods and data for empirical application

Distinguished capability comparison

The research for application to measurements take the alternative practical approach that compares distinguished capabilities and other measures (suggested in Sen 1999) instead of an approach of measuring a comprehensive set of capablities and/or functionings. For the selection of indicators for distinguished capabilities for housing, this research utilises the second-best level of information by employing the two-stage approach of selecting capabilities (i.e. making a pragmatic choice of proxy indicators with suggestions for ideal indicators) (Robeyns 2005).

Three reasons were considered for choosing this empirical strategy. First, the research focus is on the knowledge-building of empirical applications rather than full operationalisation, as described above (Section 1.4). Second, operationalisation does not have to aim to measure people's total capabilities for housing. This follows Sen's (1999) argument that one practical approach to incorporating capability considerations in evaluation can be the 'comparison of some particular capability chosen as the focus, without looking for completeness of coverage' because 'despite the incomplete coverage [...], such comparisons can be quite illuminating, even on their own, in evaluative exercises' (p. 82). In addition, this research concurs that '[h] aving more of each relevant functioning or capability is a clear improvement' (Sen 1992, p.46). Therefore, a comparison of particular capabilities for housing can offer reliable information for policy debates.

The third reason reflects the current state of knowledge. Discussion of housing capabilities is relatively new. Naturally, the demand for capability-oriented data has been scant in housing surveys. Knowledge of important capabilities for housing must be accumulated, and housing surveys need to expand the types of survey questions. While these empirical constraints change, pragmatic approaches utilising available data can explore the possible progress and reveal requirements for progress.

Datasets

The study utilizes micro-datasets of Statistics Netherlands (CBS) register data, the 2011 Longitudinal Internet Studies for the Social Science (LISS) survey on housing and financial literacy (8704 individuals across 3863 households), and the 2017 DNB Household Survey (DHS) on financial behaviour (5032 individuals across 2292 households). The surveys were on the panel administered by CentERdata, Tilburg University, Netherlands, and were designed with true probability samples. These datasets were selected because their microdata were linkable (i.e. between CBS and LISS, and between CBS and DHS) and it is feasible to compute housing indicators best aligned with the conceptual ideas that this study aims to test. Data linkability was a crucial condition because the studies for empirical applications were designed to compare measures of housing affairs rooted in different perspectives.

1.6 Outline of dissertation

Chapter 2 diagnoses the problems of prevailing perspectives on good housing policies in housing discourse, which may have led our society toward the current direction of losing attention to people and moral values. In response to the identified problem, the chapter discusses what implications for alternative approaches we can draw from the capability approach. The chapter argues that the evaluation focus to assess good housing policies should shift from housing resources and satisfaction to people's capabilities for housing.

Chapter 3 advances the argument established in Chapter 2, and proposes an approach to guiding housing policies toward the expansion of capabilities for housing, more generally, base principles of housing justice that incorporate capability considerations. This chapter argues that housing policy should primarily be guided by progress in unequal and unjust housing situations observed in terms of the differences in people's capabilities for housing. An essential guiding tool is the evaluation of housing affairs; hence, this study moves to questions about measurements.

Chapter 4 explores the influence of the capability-oriented measurements of housing deprivations on policy decisions. This chapter compares measures of basic capabilities for housing and traditional measures of housing deprivations in terms of identifications of deprived groups the housing welfare policy should concern. This chapter empirically verifies the extent of weaknesses of conventional evaluation approaches to housing deprivation discussed in Chapter 2 and the expected informational benefits from a capability-oriented measurement.

Chapter 5 proposes a measurement of housing inequality that applies the evaluation approach suggested in Chapter 3 (Section 3.3). The chapter illustrates the measurement process and presents which groups are more constrained than others in making choices in the housing process (i.e. having lower capabilities for housing).

Chapter 6 synthesises the arguments and proposals of this dissertation. It discusses the implications of this research for the global housing agenda, housing policy design and debates, and contributions to scholarly discussion. The chapter concludes with recommendations for future studies.

PART 1 Ideas

Toward a new approach to housing policies

2 Perspectives on Good Housing Policy and the Capability Approach

The contents of this chapter are based on the article "How to Apply the Capability Approach to Housing Policy? Concepts, Theories and Challenges" (Kimhur 2020a, *Housing Theory and Society*), with minor changes in the section titles and introduction to align with the overall structure of this dissertation. The article was published as a focus article in the journal, with six open comments from other housing scholars. Response to the comments was published as "Author's reply" (Kimhur 2020b); the full text is provided in the Epilogue.

Underlying perspectives on good housing policies may have led our society toward losing attention to people and moral values associated with housing. These perspectives can be identified by examining the evaluation approaches that housing policy discussions commonly refer to. The chapter revisits types of informational bases of those evaluation approaches, and diagnoses possible problems of the current underlying perspectives from the capability perspective. In response the identified problems, the chapter discusses the implications for alternative approaches to housing policy that we can draw from the the capability approach. The chapter proposes the concepts of 'housing (relevant) functionings' and 'capabilities for housing', and argues that the goodness of housing policy should primarily be assessed by those informational bases. To guide future studies, the chapter adds suggestions for possible areas of housing research and practices to which the capability idea can be applied. This chapter concludes by addressing the challenges and potentialities of applying the capability approach in the field of housing.

2.1 Calls for a new approach to housing policies

Housing policy discussions have been losing human and social dimensions in recent decades. Housing has increasingly become financialised (UN 2017; Aalbers 2016) and treated as "a commodity, a means of accumulating wealth and often as security for financial instruments" and disconnected from its social function (UN 2017, 3). Homeownership has been promoted in Western countries since the 1990s with a belief in its role in ensuring individuals' economic security. The critical analysis of Piketty (2014) on the increased inequality in capital and the role of housing in it rings alarm bells for the current housing policy directions. In the Global South, the financialization of housing has often resulted in evictions and displacements for luxurious residential and high-end commercial real estate (UN 2017, 4). Various housing programmes have been tried for the last twenty years but benefited only middle-income groups (UN-Habitat 2016). There are increasing calls for housing researchers to review the housing policy directions, and to explore a new housing approach in response to these challenges.

The notions of welfare economics and utilitarianism have implicitly or explicitly formed the underpinning perspectives on good housing policies. A good starting point for housing researchers to respond to the calls for a new housing approach would be a critical re-examination of such underpinning perspectives and taken-for-granted notions of good housing policies: they determine how to diagnose housing problems, analyse their causes and thus define solutions. This chapter re-examines these notions by extending the argument of the capability approach to housing discussions.

The capability approach is a normative evaluation approach. It proposes freedoms (or capabilities as proxies of the freedoms) as an appropriate evaluation space of well-being, social arrangements and social justice. For assessing well-being, the standard focus has been on opulence (real income, wealth, and commodities), and utility (satisfaction or desire-fulfilment) (Sen 1985). The capability approach criticises these notions in welfare economics and its philosophical foundation of utilitarianism, in which housing policy studies have been deeply rooted traditionally. What implications does this provide for housing policy studies, particularly for its evaluation approach that eventually defines what housing policy is desirable? How will this be related to housing policy development and influence on it? The chapter will explore these topics.

For more than twenty years, the capability approach has widely been recognised and discussed in the field of poverty and development studies, and accepted in the UN agenda framework, such as the human development framework. The United Nations Development Programme annually publishes the Human Development Reports (HDRs) since 1990. The reports assess a country's development not solely by income dimension (e.g. GDP per capita) but by multi-dimensions of human development —such as long and healthy life, access to knowledge, a decent standard of living, participation in the life of the community and influence on the decisions affecting their lives – which enhance people's capabilities and enlarge their choices of the lives that they value. Amartya Sen's capability approach has provided the core principles of the human development approach and formed a conceptual framework for the HDRs (for the concepts, measurement tools and policy perspective of human development, see, for example, Fukuda-Parr and Shiva Kumar [2003], a collection of papers that have shaped the human development approach).

In the field of social welfare and policy, only since the late 2000s, the discussion on the capability approach appears in a few sub-domains of social welfare agendas regarding, for example, youth unemployment, mental health service, and early childhood interventions (Evans 2017). Although its practicality and compatibility with social welfare agendas are yet controversial, it is drawing more attention from some governments. In 2004, for example, the German government decided to adopt Amartya Sen's capability approach as a theoretical framework for its official Poverty and Wealth Reports and its national action plan for poverty reduction (Arndt and Volkert 2011). In 2015, the Re-InVEST research project (Research for Rebuilding an Inclusive, Value-based Europe of Solidarity and Trust through Social Investments), which was funded by the EU Horizon 2020 programme, has adopted the capability approach as the main theoretical framework in order to strengthen the theoretical and empirical bases of the Social Investment Package in Europe (Re-InVEST 2015).

In the housing domain, there is surprisingly little research applying the capability approach. As Bengtsson (1995) noted earlier, normative discussions in housing research had been rare, and still are very seldom made. Only a handful of studies applying the capability approach are observed in housing research. Some examples are: theoretical discussions of King (2003) and Fitzpatrick, Bengtsson and Watts (2014), which discuss the right to housing and Nussbaum's (2003, 2011) central human capabilities; and empirical studies of Frediani (2007a), Nicholls (2010), and Morris (2012), which examine the effects of slum upgrading programmes, changed housing circumstances, and social ties and activities at the neighbourhood level, on the capabilities of slum dwellers in Brazil, homeless people in the UK, and the older tenants in Australia, respectively. Some conceptual studies on homelessness propose to broaden the conception of homelessness by applying the capability approach (Evangelista 2010; Batterham 2018). These studies provide an opening for capability approach applications, but remain at a trial phase. Rigorous studies on the capability approach at both the theoretical and empirical level have not been conducted yet in housing studies.

This chapter discusses the extent to which the capability approach can be applied to housing studies and thus can contribute to discussions on housing policy directions. It consists of five parts. It first summarises the core concepts of the capability approach. The second part analyses the implications of the capability approach for housing policy studies. It is followed by a conceptual discussion on how the core concepts of the capability approach – functionings and capabilities – can be applied to housing and the implications this might have. The fourth section suggests some possible areas of application of the capability approach in housing research. Finally, it concludes by addressing the challenges and potentialities of its application.

2.2 The capability approach to justice, equality and well-being

The capability approach was pioneered by Amartya Sen, an economist-philosopher. It has been further developed and expanded by many scholars in political philosophy, economics, humanities and social science, such as Nussbaum (1988, 1992, 2003), Alkire (2002), Robeyns (2003, 2017), Crocker (2008), Wolff and de-Shalit (2007) and Berry (2017). Although all thinkers' contributions provide valuable theoretical grounds and a useful way for applying the capability approach, the discussion here will mainly refer to the account of Sen. The earliest root of the capability approach is based on his fundamental questioning of the assumptions and notions of welfare economics and utilitarianism in the 1970s. He then developed it further into the concept of the capability approach (Sen 1980). Meanwhile, the account of Nussbaum, another leading scholar of the capability approach, is more oriented to a philosophical journey on human rights and moral concerns in the humanities. Given that housing policy studies are largely influenced by the notions of welfare economics, I find that Sen's account is a good starting point for opening a discussion in the housing field. Secondly, while Nussbaum (2003, 2011) argues that a set of universal capabilities necessary for human flourishing can be defined and suggests ten central capabilities (see Table A.1 for detailed descriptions of these central

TOC

capabilities), Sen disputes this by highlighting that the capability set is highly contextual and purpose specific. Nussbaum's list provides a good philosophical ground and framework while keeping a flexible space for defining specific contextual central capabilities. However, I find that there is much to explore about capabilities related to housing, before we promptly define a boundary of the exploration.

2.2.1 Key Concepts

The key concepts of the capability approach are *freedoms, capabilities, and functionings*. In Sen's term, the concept of f*unctionings* is 'the various things a person may value doing or being'. Functionings are 'beings and doings', such as being adequately nourished, being free from avoidable disease, being happy, having self-respect, and being able to take part in the life of the community (Sen 1999, 75). A person's *capability* is "the alternative combinations of functionings that are feasible for her to achieve (ibid.)." The capabilities indicate to what extent a person has *real opportunities* or *abilities* to choose valuable options of lives. "A functioning is an achievement, whereas a capability is the ability to achieve (Sen 1987, 36)." Having such capabilities implies that she has *freedoms* to achieve valuable functionings as an active agent, and not because she has no other options or is coerced to do so.

The key concepts are defined in a range of Sen's literature and numerous studies that adopt the capability approach have recited or rephrased the definitions. However, the problem is that the meaning of these terms is not intrinsically captured. It requires several readings to get a sense of meaning within its reasoning texts. Alkire (2002) elaborates the meaning of *functioning*, *capabilities* and *freedoms* by comparing Sen's concepts and what the terms usually connote to readers, and by tracking the subtle changes in which Amartya Sen uses them in his literature. It helps readers to form a clearer understanding. However, as Alkire emphasises, what has to be focused on is the fundamental insight of the capability approach: the goal of societal arrangements including social policies should be "to expand the capabilities that people have to enjoy 'valuable beings and doings'. They should have access to the positive resources they need in order to have these capabilities. And they should be able to make choices that matter to them (ibid., 2)." The term *capabilities* and 'opportunity set' is often interchangeably used, and it requires careful attention not to limit the objective of this approach to produce opportunities. The capability approach's fundamental objective is to create meaningful and fulfilled lives (ibid., 19).

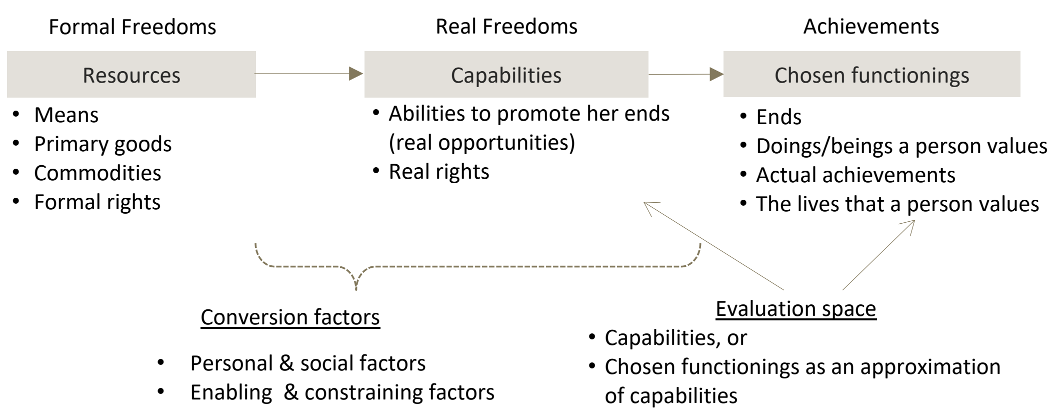


FIG. 2.1 A simplified conceptual diagram of the capability approach framework

Source: author, based on Sen's (1999) description of the capability approach

2.2.2 Distinctive features

The capability approach proposes **capabilities as a space for evaluating** or comparing advantages and deprivations of individuals instead of resources and utility. Its rationale is closely related to its other key features, such as the concept of conversion factors, acknowledgement of human diversity, and an agent-oriented view. **The concept of conversion factors** takes into account that individuals have different abilities to convert means (resources) into valuable opportunities (capabilities) or outcomes (functionings). The same amount of food provided would be converted into different levels of outcomes depending on a person's metabolic rate, deficiency of specific nutrition or disability (personal factors), or power to take the provided food solely without the influence of, for example, gender inequality within a household (social factors). The focus on conversion factors is precisely why the capability approach proposes the capability as an evaluation space, and focuses on the ends (e.g. being able to be well nourished) instead of means (e.g. provided foods). A third core feature is that it takes into account **human diversity**. This perspective is based on a critical diagnosis of the utilitarian approach in public policy that focuses only on sum-ranking and maximizing the total amount of welfare. It does not count the heterogeneous conditions of human beings (i.e. their different ability to convert resources into welfare), and various preferences and values of human beings (i.e. different choice of a functioning from feasible options). The issue of different abilities is particularly critical for evaluating the welfare of marginalised groups who are less efficient in converting resources into achievements (functionings) such as disabled people, women, ethnic minorities and migrants. Last but not least, **the agent-oriented view** is a core concept of the capability approach. It recognises individuals as, unlike common perceptions in welfare policies, “an active agent of change rather than passive recipient of dispensed benefits (Sen 1999, xiii).” Therefore, it places the role of the state and society in a supporting role for strengthening and safeguarding human capabilities, rather than one of ready-made delivery. It perceives individuals as being capable of shaping their own destiny and helping each other if adequate social opportunities are provided (Sen 1999).

2.2.3 Capabilities, well-being and justice

The capability approach examines the evaluation space of well-being (states of affairs) of individuals. However, its key contribution is to re-establish ethics at the centre of policy discussion and to reconnect ethics and economics (Deneulin and McGregor 2010; Berry 2017). It fundamentally is an approach to social justice and to answering the question: “what should we look at, when evaluating whether one state of affairs is more or less just than another?” (Robeyns and Brighouse 2010, 1). The capability approach proposes capabilities—real opportunities—as the proper metric of justice, especially by differentiating it from the metric of Rawls’ theory of justice (i.e. social primary goods; for detailed descriptions, see Rawls 2001, 58-61). In his book ‘The Idea of Justice’, Amartya Sen discusses the connection between the capability approach and justice more explicitly. Public policy has a corrective role in reducing injustice and unequal opportunities, and Sen argues that understanding the sources and nature of capability deprivation and inequity is central to removing existing injustice in our society (Sen 2009).

2.3 Problems of the current evaluation approaches to housing outcome

The implications of the capability approach for housing studies and policy research can be examined at two levels. One is related to the extent to which we can have a better understanding of well-being (states of affairs) of individuals when the primary focus of the evaluation approach is on the capability space, and thus what a housing policy should aim to improve. The other one is related to how we can make the state of affairs more just by understanding the sources and nature of capability deprivation and inequity. The second question will allow us to draw richer implications for housing policy discussions. It is linked to structural factors in our society and indicates what housing policy needs to or should do for reducing injustice and for enlarging capabilities (real opportunities) of people for advancing justice. The discussion on the second topic will bring a missing but important dimension in the contemporary public policy discussions —i.e. ethics, as Berry (2017) highlights. While the two questions are interrelated and are under the same umbrella question on how we can advance justice better in our society, the discussion on the former one would form a foundation of the later one. This chapter, therefore, will primarily focus on examining the former one: the evaluation space of well-being (states of affairs) and its implications for housing studies and policy. It will critically re-examine the underpinning perspectives of housing policy discussion on well-being, through the lens of the capability approach, and draw a very initial implication. Further discussions on the second question —implications related to making states of affairs and society more just —is vital but will require another extensive discussion. This chapter will keep this topic brief and reserve it for future work.

The core argument of the capability approach is that the appropriate evaluation space of well-being is *freedoms* (or *capabilities*), and is neither "utilities (as claimed by welfarists), nor [...] primary goods (as demanded by Rawls) (Sen 1999, 74)." In other words, the primary objective of public policy for well-being should be neither the increase of individuals' satisfaction and desire-fulfilment nor the increased resources such as opulence sources, commodities and primary goods. For clarification, the concept of 'well-being' here is defined in terms of a person's achievement (i.e. how 'well' is his or her 'being'?), and 'advantage' as the real opportunities that a person has (Sen 1985, 3). The concept of well-being in the capability approach is a state of having access to particular valued functionings. It is close to the concept of quality of life, or "well-living" as a more active term (Gasper 2004), or "states of affairs" as Sabina Alkire usually uses in her literature. In this dissertation, this concept of well-being is used. It is different from the hedonic-oriented or desire-fulfilment-oriented conception amongst the well-being theory types defined by Parfit (1984, 493), and from subjective well-being of which the conception is in the hedonic stream (Gasper 2004), which have satisfaction-oriented conceptions, and are common in various disciplines of economics, psychology, social epidemiology and public policy studies (Clapham, Foye, and Christian 2017). The proposal of Sen is based on diagnosis on the flaws in the informational bases of well-being (states of affairs) evaluations that are used by conventional economics, Rawlsian justice, libertarianism, and utilitarianism – opulence, primary goods, liberty, and utility respectively. His diagnosis on the flaws of the other evaluation approaches and his reasoning for proposing the capability approach raise various questions for the notions in housing policies.

The traditional evaluation spaces of housing policy or project outcome have largely been material resources, monetary resources and satisfaction. The main informational bases include the number of dwellings supplied, the ratio of public rental housing stocks, housing quality (e.g. physical conditions of dwellings such as floor areas, utilities, and structural durability), government expenditure on the housing sector for a cost-benefit analysis, and housing expenditure-to-income ratios (see, e.g. indicators used in Haffner, Lennartz, and Dol [2012], comparing public performance in the housing sector in 28 countries). These material and monetary conditions are often used as key indicators for assessing the effect of housing on well-being (see, e.g. Boelhouwer [2010], a national report on well-being in the Netherlands).

Another core evaluation space is 'satisfaction'. One of the key housing research areas has been housing satisfaction and preferences. Recently, there has been increasing research attempting to analyse the effect of housing on subjective well-being by examining the relationship between a person's life satisfaction and housing physical characteristics, or housing tenure types (Clapham, Foye, and Christian 2017). The assumption on the correlation of the possessions of goods, individuals' life satisfaction or preferences, and well-being has also served as a rationale for promoting homeownership-oriented housing policies in many Western countries. This rationale was further supported by the argument that people have an instinctive 'desire to own', this desire fulfilment should be a leading factor, and thus the government should promote homeownership (Saunders 1990). Housing affordability is another key space of evaluation. It may have a certain linkage to a person's capabilities, in a sense that it allows her or him to have more freedom to utilise the rest of income and savings for other functionings or capability enhancement. However, the validity of this monetary dimension to understanding the housing problems of the poor and vulnerable groups is in debate depending on its measurement methods.

The diagnosis of Sen on the flaws of other evaluation spaces does not imply that they are not important elements for human development and well-being. Sen clearly notes that income is an important element in providing people with more opportunities, but he points out that a problem arises when we place it as an end goal of policy. He also notes that subjective well-being (happiness) is obviously an important element of human life as a functioning, but refuses to place it as the final end goal to pursue. The purpose of Sen's diagnosis is to argue why the central concern needs to move from resources or utility to capabilities. Similarly, the material and monetary conditions of housing can still be important elements as a means of enabling people to expand other opportunities. Housing satisfaction (or preferences) can still be meaningful information for understanding people's happiness and for analysing policy implications from the gaps between what intervention has aimed at and what people actually perceive as its outcome. The problem comes when we place the increase of material/monetary resources for housing and housing satisfaction as a primary goal of housing policy.

2.3.1 Problems of the resource-focused evaluation approach

The capability approach argues that resources such as income, wealth, commodities and basic goods have been misplaced as the ends of economic and social policies, while they are only a means of human flourishing and well-being. By re-orienting the attention to human-beings, the capability approach places the enhancement of a person's *freedoms* (or *capabilities*) or valued *functionings* as end goals. Housing has been discussed as a core and self-evident capability that allows a person to expand other capabilities such as education and health. Some examples include the Housing First approach for the homeless (Tsemberis 1999, 2010; Gulcur et al. 2003), placing housing as a cornerstone of the welfare state (Malpass 2008), and supporting the growth of homeownership as part of an asset-based welfare strategy (ibid.; Sherraden 1991, 2003; Regan and Paxton 2001). As they argued, adequate housing can contribute to individuals' economic opportunities in life, physical and mental well-being, personal safety, a sense of worth and economic status. In these approaches, the role of housing appears to rather be a resource that a person may or can utilise for expanding her other capabilities, depending on her circumstances and other kinds of available resources. For instance, Nicholls (2010) conducted a qualitative longitudinal study of 28 people who were recently homeless and examined the role of housing in enhancing Nussbaum's central human capabilities. The study concluded that many people were still lacking the central capabilities while there were clear improvements in their material circumstance. The study does not provide in-depth analysis of the reasons for such disconnection, but indicates a somewhat possible limitation of a resource-focused approach.

From the capability approach perspective, "well-having" should be distinguished from "well-living", if Gasper's terms (2004) are borrowed. Again, the focus should be placed on the capabilities that are generated with resources, and the resources should not be an exclusive focus on assessing how well people are doing and being. This is because individuals have different levels of abilities to convert resources into their capability expansions or valued functionings. Relevant personal and social

TOC

circumstances influence the conversion of primary goods to the real enjoyment of the primary goods. The important concern should be "what the person succeeds in *doing* with the commodities and [their] characteristics at her or his command" in assessing the well-being of a person (Sen 1985, 6). The capability approach emphasises that human flourishing, instead of economic growth, should be the final ends of development. However, it does not claim that economic growth, material resources, and monetary issues are not important and should be neglected. Rather, it critically questions the final ends at which the social policy and welfare discussion conventionally aim. It reveals some misleading informational bases in evaluating well-being, and suggests what should be the ends of economic and social policy.

The informational bases of housing policy have had a focus on the housing itself (a resource) rather than on what it generates, or what capabilities (opportunities) are necessary for individuals to achieve a housing-relevant-functioning (e.g. residing in a way that a person has reason to value). Much recent research has in fact examined how housing generates social outcomes in relation to health, education and environment. However, these valuable findings and implications have relatively little been integrated into housing policy practices. In addition, there has been an assumption of a direct correlation between housing possession or housing quality (characteristics of housing) and a person's well-being, with little consideration of different abilities to convert resources into capabilities (real opportunities) and functionings (chosen achievements). This can mislead our understandings of housing policy outcomes and of the extent that policies meet the people's need. This analysis naturally raises the question if the end goal of housing policies has been appropriate for expanding human flourishing and real human development.

2.3.2 Problems of the utility-focused evaluation approach

Adding to the resource-focused judgements of housing outcome evaluation, surveys on housing preferences and housing satisfaction have been a major evaluation approach of housing policy outcomes. The capability approach points out that the utility-focused judgments on well-being (states of affairs) pay no direct attention to non-utility concerns such as meaningful and fulfilled lives, and violation of rights and duties (Sen 1999, 59). In the utility-oriented judgments, for instance, happy slaves will be categorised as those in well-being (ibid.). The meaning of well-being has been reduced to "well-feeling" counting pleasure. Its focus has further been reduced to utility, as a scalar of unitary pleasure, and by economists, it has been reduced even further to being well-off financially or materially, or "well-having" (Gasper 2004). The assessment of well-being based on individual's feeling and responses to questionnaires has limitations in distinguishing adaptive attitude and mental conditioning. For instance, homeowners are commonly perceived to have a high level of life satisfaction and good mental well-being. However, in a review of different empirical research results on the effect of homeownership on subjective well-being (e.g. effects on mental well-being), Clapham, Foye, and Christian (2017) conclude that the effect is dependent on the owners' circumstances such as financial security. The issue of adaptive attitude is more significant when it comes to the well-being of deprived people. The people who are persistently deprived can be unfairly assessed as being in well-being. They tend to limit or adjust their desires and expectations to what is seemingly feasible for them, focus on the sheer necessity of their survival, and thus "the mental metric of pleasure or desire is just too malleable to be a firm guide to deprivation and disadvantage" (Sen 1999, 63).

2.3.3 An example of gaps in resource and utility-focused evaluation

Let's assume that there is a housing policy that successfully produced its target number of housing units. The newly built houses have good physical conditions in terms of floor areas, windows, housing utilities, gardens and balconies. They are also green areas nearby. The purchase and rent prices are affordable. A high percentage of residents are reporting that they are satisfied with their house. This project will be counted as a good housing policy outcome that contributes to the residents' well-being. However, if a wife in a household cannot have a joint tenure title over a house even if she also invested in the house together with her husband, she can be in an insecure position in relation to her husband. It will be difficult to say she is in a good state of affairs even if she finds herself in well-being. She may be unaware of that she may have to be dependent on her husband for her pension, or have to be obedient to her husband in order to secure a place to stay even if she does not want to do so one day. She has a lower level of freedoms to pursue the life she values. Or, if the newly built houses are too far from the places of income generation opportunities, and thus if a youth has to commute 3-4 hours every day, he may have much fewer chances than others for investing his free time for skill development, resulting in lower opportunities of getting a better or secure job. In this case, the housing policy actually reduces his capabilities to achieve well-being. If a household is renting a housing unit but there is no proper system for securing tenants' right, the household may be in an insecure position against the landlord. That person may be forced to accept any unfair conditions from the landlord, and endure violations on his dignity. The total number of households that have benefited from this project is high, but the majority of benefactors might be those who can easily mobilise funds for a house, either through formal mortgages or informal borrowing. If there is such inequality in the access to the newly built housing units, it is difficult to say it was a successful project simply by referring to the total number of units and benefited households.

The capability approach still recognises the role of resources and mental satisfaction in improving a human's well-being. But focusing merely on them can easily mislead, as shown above. Conversion factors, non-material and non-utility aspects, heterogeneousness of human-beings, and distribution issues need to be at the foundations of housing policy and its evaluation approach.

2.4 Proposal for evaluation spaces: Housing capabilities and functionings

This section holds a conceptual discussion on how the concept of *functionings* and *capabilities* can be applied in housing studies. It leads to the fundamental question on how *housing* should be perceived in policy discussions and its position in the capability approach framework—i.e. whether housing should be perceived as a functioning, capability, or resource. The position of *housing* may be shifting between them, depending on the context and specific purpose of the application of the capability approach. While the chapter keeps this issue open, this section suggests reviewing how *housing* is generally perceived in practice, and a need for explicitly stating housing-relevant-functionings for re-orienting the main focus of housing policy. The section also discusses a more narrative description of housing-relevant-capabilities by breaking down necessary abilities and opportunities for individuals to achieve a housing-relevant-functioning.

2.4.1 Functionings relevant to housing

Functionings in the capability approach refers to the states of 'being or doing' of a person. *Housing* can have various meanings and can also present various states of being or doing. In academic discussions in different disciplines, the implied *meaning* of housing ranges from a socio-economic mechanism to a socio-cultural process of social construction, an experience of individuals, and personal expression and reflection of the self (Hatuka and Bar, 2017). However, in housing policy practices, of which relevant disciplines include housing studies, economics, laws and planning, *housing* is generally discussed as a type of commodity or basic good to be supplied. The literal meaning of *housing* in the English language has two different meanings whether used as a noun or a verb: it is a material object, and also the sum of activities to provide housing (a material object) by people themselves or others (Ruonavaara 2018). Even if the aspect of housing as a verb is taken into account, however, the end goal of the housing activities still tends to remain at providing a material object of housing. This tendency exists in policy practices, and King (2009, 42) captures this aspect as: "housing policy [...] is the concern for the production, consumption, management and maintenance of a stock of dwellings." Naturally, the final end goals of housing policies have largely been concerned with the supply of (adequate and affordable) housing (as a commodity or basic good), rather than expanding a person's *capabilities* or 'valued being or doing' (*functionings*) that a person can achieve by utilising the resource housing (I mark it here as housing$_{(R)}$).

Although the primary focus of the capability approach is to expand the 'capabilities' of people, conceptualising housing-relevant-functionings that a person can achieve is still important. First, it allows re-orienting the primary attention from housing(R) to the real housing outcome of 'valued being or doing'. Second, understanding what housing-relevant-functionings a person has reason to value provides a basis for discussing what capabilities she or he needs to achieve those functionings. The third reason is the practical reason. The achieved functionings of a person is not the most ideal evaluation space, as discussed in the next section, but it is often inescapable to measure the achieved functionings in practice, largely because of limited data availability and measurability. The achieved functionings can still provide relatively more valuable information to understand people's well-being compared to the resource- and utility-focused one, and thus many empirical studies applying the capability approach have used the achieved functioning data.

When conceptualising the housing-relevant-functioning, it might be possible to place housing as a functioning by exclusively emphasising its meaning as a verb—being housed or being housing oneself, and its implied meanings. However, in many countries, the term ***housing*** often connotes a stock of houses, housing units, or dwellings. To let a policy focus more on outcome—a state of being or doing—rather than means, and to explicitly differentiate what housing-relevant-functionings people have reason to value , as a first step, we may need to consider other expressions, like King (1996, 2009) suggests the term of dwelling (as a verb) for example. The conceptualisation of housing-related-functionings can be expressed as, for example, ***residing*** in the form of being or doing, which a person can achieve with various capabilities and resources including housing(R). To add values to the functionings, well-, adequate-, or dignified- can be added, for instance. The additional question of conceptualising housing-relevant-functionings is how the values, such as well- or adequate-, can be defined. This question may require substantive discussion in various disciplines. This chapter leaves further discussion to the future, and uses the expression *residing* in the following discussion in order to distinguish the concept of housing-relevant-functioning from housing$_{(R)}$.

2.4.2 Capabilities relevant to housing

The capability approach claims that the *primary* evaluation space should be freedoms or capabilities as proxies of freedoms. The capability space has counterfactual nature and concerns process, which is different from the actually achieved functionings. For instance, a person staying home with his own will has different capability than the one staying home forcefully, while the achieved functioning appears exactly the same in both cases (i.e. staying home). Sen highlights the need for distinguishing between "*doing* something" (achieved functioning) and "being *free* to do that thing" (capability), and notes that a focus on the later one is important for a policy and justice related discussion (Sen 2009). It can especially include the concerns on rights, possible obstacles and unjust conditions in the process of achieving a functioning. Housing-relevant-capabilities are thus what policy needs to primarily aim at instead of a sole focus on housing(R).

However, defining or rather selecting a set of capabilities relevant to housing is a complicated task. The approach is overly vague and open when it comes to defining a capability set. One of the central debates in the capability approach literature is which capabilities are relevant. This topic is also the most critical difference between Amartya Sen and Martha Nussbaum, the two leading scholars of the capability approach. Sen argues that a list of capabilities should be purpose and context specific, and needs to be developed by involving democratic process and public reasoning. Nussbaum argues, on the contrary, that a well-defined universal list of capabilities can be developed, and proposes ten central human capabilities: (i) life; (ii) bodily health; (iii) bodily integrity; (iv) senses, imagination and thought; (v) emotions; (vi) practical reason; (vii) affiliation; (viii) other species; (ix) play; and (x) control over one's environment (Nussbaum 2011, 33–34).

There are debates not only at a theoretical level, but also on the issue of empirical applications of the theories. They include various concerns on methods of the capability selection in practice, the feasibility of implementation, and data availability (Robeyns 2006). On the other hand, Alkire (2013) notes that it is a complex problem but the methods for capability domain selection are unexpectedly straightforward. As an example, she lists five methods that are used by most researchers, either alone or in combination. They are: to draw from existing data, selecting capability dimensions from data that is available; to assume implicitly or explicitly what people do value or should value based on the informed guesses of the researcher; to use public consensus such as universal human rights at international level or values agreed at national or local levels; to conduct a deliberative participatory process; and to use empirical evidence regarding people's values. However, this does not mean that there are a confined boundary of application methods and the existence of the most appropriate method among them. Different methods are used for different purposes of research, and all of them have both weaknesses and strengths. Alkire (ibid.) provides a typology of the commonly used methods, but emphasises that methods will be plural: there is no universal method or a distinctive methodology for generating a universally-relevant set of capability domains that can be used for all evaluation exercises.

The general complexity and challenges of capability selection are applied also to the question of which capabilities are relevant to housing-related-functionings (e.g. residing in a way that individuals have reason to value). In addition, housing has a much more complicated nature. For achieving a housing-relevant functioning, a person or household needs multiple capabilities that are relevant, for instance, financial resources, tenure security, citizenship, standard employment, gender equality, access to basic infrastructure, and decent travelling times to income generation places.

The capabilities relevant to a functioning of well-residing can be various depending on the purpose of the application and the context applied. For clarification, this plurality does not imply that capabilities are subject to individuals' values and choices. The plurality of individual values and choices is actually more related to which functioning a person chooses out of the functionings feasible to achieve (e.g. eating, fasting, and sharing foods). The capability is about whether individuals can have such alternative combinations of functionings and can freely choose her valued functioning. The fundamental question of housing-relevant-capabilities would be what conditions, abilities, opportunities or capacities a person needs for expanding her freedoms to choose a housing-relevant-functioning that she has reason to value (e.g. residing in a way that she values). Some examples are illustrated in Table 2.1. The term *ability* may interchangeably be used with *opportunity*. Obviously, different groups, such as slum dwellers without tenure title, low-income migrants, or informal labourers need a different range of capabilities. Or, depending on the purpose of utilising housing(R), such as securing pension of elders, the required capability set can be different. The threshold line of capabilities—a similar concept to the poverty line—can also be different depending on the groups and purposes.

TABLE 2.1 Examples of housing (relevant) capabilities
Ability to secure a safe place to live
Ability to secure a stable place to live
Ability to live in a healthy living environment
Ability to live in an adequate distance to income generation opportunities
Ability of proactively being part of the community
Ability to enjoy gender equality in achieving a joint tenure title;
Ability to enjoy adequate and associated rights of tenants
Ability to have an adequate amount of income after housing cost is deducted
Ability to make an informed decision in one's housing process
Ability to utilise the information on housing options and policies
Ability to be part of the decision-making process in housing (re)development

Note: the listed examples are for an illustrative purpose

Selecting the capabilities relevant to housing will require another discussion space—however, it is not necessarily for defining a universal set—and may open up substantial debates and research. This chapter limits itself to providing an entry with some examples. The important aspect to emphasise here is that non-resource and non-utility concerns should be taken into account in the evaluation space of housing policy. In addition, multi-dimensional capabilities that a person needs to achieve a housing-relevant-functioning need to be considered. The current informational bases, such as the physical quality of housing, housing satisfaction, and housing affordability can still be valid informational bases but not sufficient enough to indicate whether a policy has produced a good housing outcome that positively effects human flourishing. The primary focus of housing policy performance needs to be placed at the enhancement of the housing-relevant-capabilities.

2.5 Possible areas of application in the housing studies

The practicality and feasibility of operationalising the capability approach are often criticised (Sugden 1993, 1953; Roemer 1996, 191–93). It is yet relatively at the beginning phase of its operationalisation, but already a lot of empirical research in other domains has applied the approach with various methods. In this section, some possible areas of application in housing studies are explored as an example, based on a review of research in other disciplines and social policy domains.

2.5.1 Identifying target groups of housing policy

A possible area of application is to include non-monetary deprivations in defining target groups of housing policy interventions. Income or consumption measurement has been the main dimension to define the social policy target groups, and housing policy is no exception to this. The capability approach critically questions the placement of opulence as a key evaluation space, and argues for taking into account non-monetary poverty, or in other words, deprivations in capabilities. The most active application can be found in multi-dimensional poverty research. It has mainly focused on assessing general well-being (state of affairs) of a community, society or country, in comparison to uni-dimensional poverty assessment with an income or consumption indicator. Non-monetary poverty dimensions may include, for instance, undernourishment, underweight, under education, gender inequality in school enrolment, and mortality.

Several research results have shown that there is a low correlation between monetary poverty and non-monetary poverty. There is a significant lack of overlap between the poor people identified according to income and according to functioning-deprivations. Some example studies include: Chiappero-Martinetti (2000), Klasen (2000), Perry (2002), Qizilbash (2002), Ruggeri-Laderchi (1999), the mid-term report on the progress of the Millennium Development Goals (Bourguignon et al. 2008). These applications still tend to measure functioning-deprivations, and to focus on overall well-being. There is limited attention on multiple capability deprivations within social welfare domains, such as education, employment, health and housing. However, these findings have provided important implications for social development programmes, given that most governments allocate their budgets based on the estimates of poor household headcounts according to income.

A similar approach can be taken in housing research. A possible application would be an analysis of multi-dimensional capability deprivations or obstacles that individuals face in achieving a housing-relevant-functioning (e.g. residing in a way that individuals have reason to value). A person may have income above a poverty line or an income threshold for target beneficiaries of a housing policy intervention, but this person can still be deprived in multiple capabilities relevant to housing at the same time. However, she will not be categorised as a target group for housing policy interventions. Such multi-dimensional capability deprivations involve, for example, lack of access to formal housing finance, no ability of mobilizing informal financial sources, little tenure security, lack of access to reliable housing market and housing policy information, limited capacity of utilising that information, gender inequality, lack of entitlements for various housing programmes due to non-standard employment conditions, or long distance to income opportunities from affordable housing. This approach may allow us to better diagnose housing problems, particularly of marginalized groups in society, and thus to define a housing policy target groups and problem solving measures.

2.5.2 Evaluation of housing policy performance

The capability approach can also be used for an analytical reasoning on, or critical analysis of, existing social practices or already existing empirical findings (Robeyns 2006). For instance, housing satisfaction and preference studies have been one of the mainstream evaluation spaces in housing research. However, as illustrated earlier, the capability approach addresses the limitations of utility-focused evaluation. The comparison of housing satisfaction, subjective well-being and the state of non-utility affairs (e.g. violations of human rights to adequate housing, discrimination in access to rental markets, and unequal power between the lessor and lessee) can be an area of research to evaluate a housing policy or programme performance.

A more proactive application of the capability approach entails an evaluation of the extent to which a housing policy or programme has enhanced or adversely affected capabilities. Robeyns remarks that a policy should aim at “removing obstacles in their lives so that they have more freedom to live the kind of life which, upon reflection, they find valuable (2003, 6).” Outcomes and (in)efficiencies of institutions or policies can be examined in terms of certain capability expansions. It can be framed at two levels. The first is to examine the influence of housing policy on other capability dimensions and thus on the general well-being of individuals. The outcome of a housing programme can be assessed by measuring not only positive impacts but also unintended side effects on a person’s capabilities in other domains such as less income generation opportunities and/or loss of community and social networks. The second is to place a housing-relevant-functioning as an ends and examining what capabilities are necessary to achieve that functioning. This can be framed as to what extent a housing policy and institutional framework have removed the obstacles that a person faces in achieving her housing-related-functionings. For instance, development aid projects in the housing sector, such as post-disaster housing reconstruction, can be evaluated in their effectiveness and efficiency in terms of the enhancement of housing-related-capabilities, instead of the number of units provided or beneficiaries that are sheltered. The second topic is closely connected to the question on the sources and nature of housing-relevant-capability deprivation and inequity, and eventually on how existing injustices can be reduced.

2.5.3 Housing policy and programme design

The applications in the above two areas naturally lead us to rethink how we should design a housing policy or programme, and set its final end goal. Aiming at the enhancement of multi-dimensional capabilities relevant to housing, or elimination of housing-related capability deprivations is certainly different than aiming at the provision of a certain number of housing units, an increase in subjective housing satisfaction, an improvement of housing quality, or an efficiency improvement of a public housing programme defined by cost-benefit analysis. The capability approach has a direct focus on human beings as an end goal of policy, and emphasises the inequality in capabilities of individuals rather than resource inequality. A representative case of its partial application is the human development paradigm initiated by the United Nations Development Programme as briefly described in the introduction. In the housing policy design, and its agenda development, the capability approach can be applied as a basic framework for establishing social and ethical goals by re-orienting the focus of housing policy from economic concerns to human flourishing and more just society.

2.5.4 Participatory housing development

At the project practice level, participatory methods in a housing development can be a tool for reflecting on the notions of the capability approach. During a participatory discussion process, the different levels of abilities and heterogeneous deprivations among the participants can be reflected in housing development. It can also open a space where marginalised groups can raise voices to local government, which may enhance their ability to be an important stakeholder in the government's decision-making in the longer term. It acknowledges people as an active agent and provides a space where they can take decisions over their housing and settlements. The process generally carries non-material, non-monetary and non-utility concerns.

It requires a careful interpretation, however. Due to the phrase of "freedoms to achieve the lives that a person has reason to value", and the tendency of housing practitioners – such as architectural or urban planning practitioners—to focus on physical design of a housing unit or neighbourhood, the application of the capability approach can easily be limited to the participatory housing planning or participatory surveys on design preferences for instance. A careful interpretation will be needed in order not to form such a confined boundary. Secondly, not all participatory housing projects would bring capability enhancement. It highly depends on the methods of facilitation and societal arrangement around the projects. It should not be translated simply as the expansion of individuals' freedom to achieve the housing or settlement that they prefer or desire. The focus of participatory housing development should be to expand the capabilities of a person—for instance, empowerment and expansion of space for "deliberative democracy (Crocker 2008)" where marginalized groups can raise their voice - by placing people as an active leading agent. It also needs to aim to reflect the diversity of human beings in its planning result, such as different financial capacities, life paths and phases, gender, and age.

2.5.5 Others possible areas of application

In this chapter, some possible areas of capability approach application are discussed particularly for empirical research and housing policy practices. However, the application should not be constrained to them. The capability approach is an open-ended framework, and therefore named as 'an approach' instead of 'a theory'. It is a general, open and underspecified idea, which can be specified and theorised depending on the aim of using the approach (Alkire 2005). It can be used for a theory development (e.g. a theory of justice), an assessment framework of a specific issue (e.g. gender inequality), a normative base for political critics (Robeyns 2017, 29). Some examples are Nussbaum's theory of justice (2006), Wolff and De-Shalit's theory of disadvantage (2007), and Crocker's development ethics (2008). It can also be a framework for comparing welfare states (see, e.g. "[economic] incentive giving state" versus "capability state" in the domain of work-welfare policy, by Dean et al. [2005]).

The examples of possible applications in this chapter have largely focused on understanding individual deprivations. This does not imply that the capability approach is detached from society and broader issues. The capability approach is often addressed as an excessively individualistic approach, of which concentration remains only on capabilities of individual persons. It is labelled as an example of methodological individualism (Stewart and Deneulin 2002), and criticised for paying little attention to group capabilities (Stewart 2005) and to collective capabilities (Evans 2002). Gore (1997) and Robeyns (2017), however, note that the approach is actually normative individualism. The central argument of the individualistic focus is a reaction to the limitation of utilitarianism and to acknowledge individuality for evaluation. Sen clarifies that the label of individualistic approach is a mistaken understanding of what he intends. He highlights how the capability approach actually is closely connected to society and notes "its concern with people's ability to live the kind of lives they have reason to value brings in social influences both in terms of what they value […] and what influences operate on their values […]

(Sen 2009, 244). For instance, women in sexist societies accepting their inferior position are not independent of social conditions, and enhancing their capabilities is linked to advancing wider society matters (ibid.). Environmental sustainability is connected to "the substantive freedoms and capabilities of people today 'without compromising the capability of future generations' to have similar—or more—freedom. (ibid., 251)" The concerns on housing-relevant-capabilities can be more than just individuals' well-being as well. They can also be linked to broader issues such as the well-being of the wider society, economic stability and environmental sustainability.

2.6 Challenges and the way forward

By extending the ideas of the capability approach to the field of housing, this chapter re-examined the underpinning notions of housing discussions on good policies. It revealed an added value of the capability approach to housing studies, and a need for taking into account non-resource and non-utility concerns by placing the focus on multiple capabilities relevant to housing, instead of limiting its concerns to quantity of housing units, physical quality of housing, housing satisfaction, and housing affordability. This chapter suggested some potential areas of the capability applications in housing studies. This topic requires further inputs from empirical, theoretical as well as philosophical research. The application of the capability approach to housing studies and its operationalisation can be challenging. However, an increasing number of applications in other disciplines with various methods and methodologies provide a great promise.

In this chapter, I have left many important questions for future research. Amongst them, the vital question that should be noted is about the role of housing policy and institutions in reducing injustice and in expanding capabilities (real opportunities) of people for advancing justice. It is related to re-establishing ethics at the centre of housing policy discussion. As a foundation of the further discussion on this question, I primarily focused on examining the evaluation space of well-being from the capability perspective, and its implications for housing policy, which is fundamentally connected to the question on the proper metric of justice. The role of housing policy with regard to justice and the implications of the capability approach for it need to be further discussed.

The capability approach is a well-grounded framework for diagnosing problems and for evaluating social arrangements. It is highly valuable to explore the approach and its application in housing research, especially for discussing housing policy directions in the future by re-orienting policy attention from economic concerns to contributions to human flourishing and social justice as an end goal. Its application in housing research allows having a critical review in what perspective housing policies used to diagnose problems and causes, in which way they have responded to the causes and thus to what extent they have contributed to reducing capability deprivations and inequity.

An additional advantage of the capability approach is that it is an extremely interdisciplinary approach. Within the housing domain, the capability approach application requires interdisciplinary concerns around housing, such as planning, economics, law, social science and humanities. It crosses the other domains of welfare—education, health, pension and employment. Housing studies have often been criticised for being too fragmented and specialised, and the need for an integrated approach is often addressed. A frame of capability-oriented-housing policy may bring cross-cutting issues together in a coherent framework, and thus may provide a common platform where diverse disciplines can collaborate for better housing policy.

3 Housing Justice, Capabilities, and Policy

The contents of this chapter are based on the article "Approach to Housing Justice from a Capability Perspective: Bridging the Gap between Ideals and Policy Practices" (Kimhur 2022, *Housing Studies*), with minor changes in the section titles and introduction to align with the overall structure of this dissertation.

In Chapter 2, it was argued that housing policies should focus on expanding people's capabilities for housing and reducing inequalities in those capabilities. This propsoal can form an overarching principle of housing policies and basic principle of housing justice that society should aim to realise. However, setting a broad end goal is not enough to guide policy directions. This chapter proposes three essential questions of theories of justice to establish basic guiding principles for housing policies: (a) what types of housing regimes should our society aim to establish (characteristics of ideal institutions), (b) what housing policies should aim to distribute (metrics of justice), and (c) what level of distribution should the society aim to achieve (e.g. amount and quality of distributive goods, services and opportunities) and who should be the concern of housing policy (distributive rules). These questions are examined in this chapter to shape basic guiding principles for housing policy under the broad goal of expanding the capabilities for housing.

The chapter first explains the three essential questions of social justice and how this chapter will approach them to seek answers, and scrutinises each question in turn. Based on the answers to each question, this chapter proposes an approach to guiding housing policy and policy debates, and adds suggestions for the roles of comparative housing research in implementing the proposed approach.

3.1 Questions to be examined further

In order to tackle rising inequality in housing, how should we correct the current housing policies? Answering this question needs certain principles, based on which we can judge whether the corrections are appropriate. Some useful ideas for such guiding principles can be drawn from theories of social justice, as their primary task is defining what society should aim to realize. Among the various approaches to justice, the capability approach (Sen 1980; Nussbaum 1988) has gradually attracted the attention of housing scholars due to its distinctive merits to compensate for problems of conventional housing policy orientations (Bengtsson 1995; Clapham 2019; Fitzpatrick et al. 2014; Foye 2021; Kimhur 2020a; King 2003). Some merits are originated from that the capability approach was developed as a constructive response to problems in the conventional approaches to justice, such as utilitarianism, Rawlsianism, and libertarianism (Sen, 1992; 1999), that have substantially influenced the underpinning perspectives of housing policies.

The foundational ideas of the capability approach can also provide a compelling argument for housing policies to move away from the problematic and unprecedentedly dominant housing phenomenon, the financialization and commodification of housing. This phenomenon has positioned housing as a commodity and object of wealth instead of as a basic component of human development and wellbeing; as a result, it has posed the greatest challenge to the realization of the right to adequate housing for all (UN Human Rights Council, 2017). Adjusting the ultimate goal of housing policy based on the capability principle has the potential to restore the human dimension of housing at the centre of the policy agenda.

As discussed in Chapter 2, setting the end goal of housing policy as the expansion of people's capabilities for housing offers a firm normative foundation to re-orienting policy attention from economic concerns to contributions to human flourishing and moral values tied to housing such as human rights, well-being and freedom. This policy goal can lead the policy attention directly to how people are actually residing, what they value as to their residency, and to what extent they are able to reside in ways they have reason to value.

The argument for the expansion of housing capabilities can serve a base principle to guide housing policies. However, setting this broad end goal is not sufficient enough to guide policy directions. To expand human capabilities for housing, what guiding principles can housing policy refer to? Based on which standard can we judge whether the policy interventions are in the appropriate direction? These questions about guiding principles and standards fundamentally ask principles of housing justice.

When attempting to constructing principles of housing justice with the ideas of the capability approach, it first has to resolve the issue that the capability approach does not provide answers to all questions of social justice. In developing a theory of justice, there are multiple questions subject to be examined. The study in this paper defines that the following three questions are essential to examine for establishing guiding principles of social justice: (a) what kinds of institutions should society aim to establish for realizing social justice? (characteristics of ideal institutions), (b) what should the society distribute to reduce inequality? (metrics of justice), and (c) what level of their distribution should the society aim for? (distributive pattern rules). Competing theories of justice differ from each other according to the respective theorist's stance on each subject. However, the capability ideas of justice only answers the question (b) that examines 'what should policies aim to distribute?' and 'what should be evaluated for understanding inequalities?' It proposes the 'capability' as the metric of justice, but does not provide a complete answer to other essential questions of justice theories.

Therefore, a further two additional subjects have to be examined to develop guiding principles for housing policy with the concept of housing capabilities: types of ideal institutions and distributive rules. Besides, as will be discussed later in this chapter, the concept of housing capabilities has multiple aspects, and the type of applicable distributive rules could differ depending on which aspect we are talking about. Therefore, the following three questions need to be examined to establish principles of housing justice with the idea of housing capabilities: (a) what type of housing regimes government should aim to establish for expanding the capabilities for housing and (b) which aspects of the housing capabilities to be distributed in (c) which distributive rule.

When examining these essential questions, however, there is a common issue to resolve first. Even if each question is answered, and thereby some ideal principles of housing justice are identified, when implementing them, some gaps can exist between those ideals and the realities of housing policy practice. There should be a thorough examination of whether such gaps can occur, and if so, how they need to be managed. Therefore, the starting point of discussion for each question in this paper will be clarifying the possible gaps between ideals and housing policy practices, and then discussing how to manage them. Through this reasoning process, an approach to guiding housing policies is proposed from a capability perspective. The proposal in this chapter remains theoretical, but closely connected to real-life housing issues, as the reasoning is rooted in observations of actual housing issues and their surrounding circumstances.

The practicalities of the housing capability idea is yet greatly in doubt (Foye, 2020; Batterham, 2020; McCallum & Papadopoulos, 2020), but when debating this practicality issue, it is often overlooked that philosophical ideas are not always directly transferable to practical guides for policy. Some intermediate steps are required to bridge the philosophical ideas and practical applications, such as connecting vocabulary of philosophy and policies, and dealing with the gaps between ideals and real-life situations where the ideals are to be implemented. Before shifting the focus directly from capability ideas to practical solutions for housing policy, research should investigate what intermediate issues may exist, and how they should be appraised and managed. Research on such in-between issues, however, has been scant in housing literature. This literary gap has caused lingering doubts, and stalled progress toward appropriate solutions. The purpose of this article is to progress discussion on this topic.

The remainder of this chapter is structured according to the three essential questions of justice theories above. Questions are scrutinized separately, but the conclusion of each leads to the starting point of discussion on the next, and thereupon, an approach to housing justice is proposed. Since this chapter presents discussions of several sub-subjects and draws conclusions by interweaving them, it is necessary to introduce how the discussion of each sub-topic and their conclusions are linked. Before moving on to the next, the below briefly outlines how the discussion will proceed in this chapter, with some highlights on the discussion focus.

3.1.1 The chain of discussions

In the first section, (a) characteristics of ideal institutions, an expected point of discussion might be selecting the ideal institution type for expanding capability for housing, but, the section discusses a more foundational question: whether theories about ideal institutions would indeed provide useful guides for housing policy. Among the various kinds of institutions influencing justice (e.g. state, civil, and customary/informal institutions), the section discusses state institutions that have been a dominant subject in European housing discourse, where the types of welfare states and housing regimes have been major references for debating corrective measures. Some limitations of this approach are critically examined, and in turn, an alternative approach is suggested: guiding policy by referring to the changes in unjust housing situations. In this approach, evaluation practice becomes crucial, and consequently, it turns our attention to the next question, (b) metrics of justice.

In this second section, capability for housing is thoroughly examined. An ideal of the capability approach is a society that expands the capabilities of individuals to the maximum, and that minimizes inequalities in the capabilities. Monitoring changes in capabilities requires evaluating the potentials of people to choose valued lives, but in practice, direct measurements of such intangibles are nearly impossible. Evaluation of capability may need to assess some variables that are somewhat distinguished from the ideal concept of capability. The section first clarifies the capability concept and respective ideas of justice, and then proposes an evaluation approach: that is, evaluating housing opportunities, housing securities, and housing abilities that shape the extent of capability for housing.

For the last question, (c) distributive pattern rules, the starting point of discussion is linked back to the review on aspects of the capability concept in section (b), because pertinent types of distributive consideration vary by the aspects, hence different choices of rules. This analysis then examines how the question about a selection of distributive rule should be managed when setting guides for housing policy.

Finally, an approach to housing justice is proposed. The chapter concludes with suggestions for the roles of housing research in implementing the proposed approach.

3.2 Ideal institutions: What type of housing regime is ideal?

The issue of increasing housing inequality is often connected with problems of the neoliberal housing regime, as critically discussed by Clapham (2019). Thus, some may argue for establishing a universal housing regime of social-democratic welfare states instead of a selective/residual housing regime of liberal welfare states, by following Kemeny's (1995) typology of housing regimes. When discussing policy directions in housing research, one of the key references has been studies on welfare states and housing regimes. Given that a housing regime is characterized by the 'set of fundamental principles according to which housing provision is operating' (Ruonavaara, 2020, p. 10), research on housing regimes might be a useful reference for drawing guiding principles.

From this perspective, a crucial task for directing housing policy seems to be determining the type of housing regime a society should aim to establish. The question about institutions may be 'the true subject of social justice' (Moroni, 2020, p. 255), and it has been at the centre of justice theories in political philosophy. The ultimate goal of those theories is often proposing what kinds of institutions should be established for realizing social justice, or in other words, proposing the 'way in which the main political and social institutions of society fit together into one system of social cooperation, and the way they assign basic rights and duties' (Rawls, 2001, p. 10). Some influential proposals are undeniably Rawls' liberal (democratic) socialist regime and Nozick's minimal state.

A problem with the capability approach is that it neither defines nor advocates any particular forms of institutions, and thus does not offer a concrete picture of institutions we should aim to establish. Research could examine other theories to determine the type of institution that best fits with capability ideas. However, a fundamental question has to be addressed first: would the theories about ideal institutions indeed provide useful guides for housing policy? An underlying assumption of those ideas is that, once established as an ideal institution, could the aligned policies effectively realize justice (Sen 2012). Although this may be true, some empirical observations in housing research raise considerable doubts about its validity.

Over the past 30 years, comparative housing studies have extensively researched the types of welfare states and housing regimes. Some notable observations are that there are disjunctions between welfare regimes and actual housing policies operating under those regimes (Hoekstra, 2010). It also appears that institutional arrangements for housing need not have the same characteristics to achieve the same housing policy goal, as observed in the studies on five Nordic countries (Bengtsson & Ruonavaara, 2010; Ruonavaara, 2012). Those countries, all known as social-democratic welfare states, have the same policy goal of providing decent housing to households with fewer means, but their institutional arrangements for housing fundamentally differ from each other, and the division of housing regimes in each country—whether it is universal or selective—has not always been a fixed entity over time. Furthermore, even though countries are dealing with the same housing problems under the same structural force for convergence, such as globalization of finance, it seems unlikely that they will solve the problem in the same way, and thus their housing systems converge (Stephens, 2020). Notably, the formation of housing regimes is heavily influenced by the capacity of established institutions, crucial events, and power mechanisms (Bengtsson & Ruonavaara, 2010), all of which are extremely diverse by country and city over time in the real world. Actual institutional forms and their actual operations are highly contingent on the historical, societal and cultural context.

Another key observation is that the answer as to which housing regime is ideal may vary by the structural conditions surrounding housing at that particular time. A good example to illustrate such dynamics is the classic discussion around the homeownership-oriented regime. The discussion has emphasized the social role of homeownership, such as providing ontological security (Dupuis & Thorns, 1998; Saunders, 1990), and enabling individuals to expand other financial, social, and human assets (Moser, 2006). In this line of thinking, the homeownership-oriented regime would be the most desirable model for securing housing rights and also for reducing inequality by spreading ownership among all income classes. In some structural conditions, it could be an ideal regime for achieving a social goal of housing policy (e.g. socialized homeownership regime in Ireland until the 1990s [Norris, 2016]; Norway until the mid-1980s [Gulbrandsen, 2004]). However, when surrounding structural conditions change, it raises some serious doubts about its validity. There are now much fewer middle-income groups, more non-standard employment, and more restricted entries for youth into labour markets, hence a much smaller size of the population with access to housing finance for homeownership. With changes in population structures and labour markets, the homeownership-oriented regime could even accelerate the increase in housing inequality. At the same time, under the financialization of housing, the social role of homeownership has faded away; housing has become an investment tool rather than one for securing a home. The legitimacy of the arguments for the homeownership regime is now critically questioned (e.g. Ronald, 2008; Madden & Marcus, 2016). In reality, the structural conditions surrounding housing are highly dynamic. If the government makes a commitment to establish a particular housing regime, it could hinder the government from timely responding to changes in the surrounding conditions. Risk of such commitment is indeed that 'there is nothing in the procedure to make interactive corrections [when it goes wrong]' (Sen, 2012, p. 103).

Apart from these practical challenges, there are also moral challenges when relying on the theories of ideal institutions. The underlying perception of those theories is that social justice operates at state level. It implies that policy interventions are legitimate only for the contracted members within respective state boundaries (Sen, 2012). Policy debates become restricted from involving 'voices beyond the membership of the contractarian group,' and are thereby neither able to include the interests of non-contracted members nor to avoid entrapment in local parochialism (Sen, 2009, p. 70). There exist morally relevant housing issues that are not confined to state boundaries, such as housing rights of non-state members (e.g. refugees, asylum seekers, and seasonal workers crossing borders), and unjust performance of global firms in the housing sector. When housing debates rely on the theories about institutions, there is no space to justify policy interventions in those housing issues.

Let us now turn back to the starting question about whether devising principles of housing justice with the ideas on institutions would provide useful guides for housing policy. As examined above, observations on welfare-housing regimes and housing systems rather indicate the complexity of realizing an ideal institutional model in practice; regardless of which idea of institutions is taken from theories of justice, it is likely to remain purely hypothetical. In addition, when relying on their reasoning for justifications for housing interventions, policy discussions can be constrained from addressing the morally relevant issues that are not bound to the state. A subsequent question is: how should we then manage these problems when devising principles of housing justice for guiding policies?

Instead of the conventional approach that asks what a perfectly just society should look like, thus asking for establishing ideal institutions (labelled as the arrangement-focused view of justice or transcendental institutionalism in Sen (2012)), discussions on housing justice can consider an approach primarily asking for correcting the unjust cases observed and for choosing the best alternative solutions for resolving the cases (labelled as the realization-focused view of justice in Sen (2012)). When shifting the debate focus from housing regimes to actual cases of unjust housing situations, the debate has to examine causes and corrective measures under the concrete circumstances surrounding the cases. This forces policy discussion to fully recognize the plurality of institutions; policy alternatives have to be built on the full recognition of what the current institutional arrangements for housing look like, how they actually operate, and what their actual consequences are, instead of striving to resolve the disjunctions between welfare-housing regimes and housing policies. Furthermore, this approach can provide a space for policy discussion to interact with the dynamics of structural changes surrounding housing. Another compelling merit of the realization-focused approach is that policy interventions for non-state members can be justified (Sen 2009) and roles of various entities other than states can be recognized when promoting justice in housing. It opens up space for discussing global housing justice and international interventions by various actors.

When debating housing policy directions, there has been a tendency to tacitly accept that types of state institutions are key references for guiding policies. In housing research, the comparative studies on housing regimes have provided useful insights into possible options of a policy direction, but the studies have also tended to restrict a boundary of the possible options. In particular, the discussion regarding problems of neoliberal housing regimes and welfare state retrenchment has unintentionally narrowed the choice to either favouring markets or favouring the corrections of market failures, whereas the market is not a proper normative benchmark for guiding policy debates (Bengtsson, 1995).

All the observations discussed in this section indicate that the prime reference for directing housing policy orientation should not be the types of ideal institutions to establish, but the progress of corrections to unjust housing situations. Consequently, evaluation practices become the most crucial, and this leads to the next subject: metrics of justice.

3.3 Metrics of justice: What should be distributed and which equality to be evaluated?

Competing theories suggest different metrics of justice that define what to distribute for reducing inequality and which informational base to use for evaluating inequality. Some well-known metrics are primary goods in Rawls's theory, resources in Dworkin's theory (e.g. housing wealth, income for housing, and dwelling units), libertarian rights in Nozick's theory (e.g. housing property rights), utility in the traditional welfarism approach (e.g. housing satisfaction and desire/preference fulfilment), and capabilities in Sen's and Nussbaum's approach.

For an evaluation of wellbeing and inequality in housing, monetary, material (resource) and satisfaction-based (utility) metrics have dominantly been used. From the capability perspective, however, these metrics have limitations in capturing the actual states of housing affairs, as well as in addressing ethical issues such as a violation of the right to adequate housing. To compensate for the problems, alternatively, the metric of housing capability can be considered (Foye 2021; Kimhur, 2020a).

Using the housing capability metric is theoretically well justifiable on the grounds of all the reasoning of the capability approach. A lingering issue is how to evaluate it. Evaluating capability for housing means estimating the potential of individuals to achieve their valued ways to reside. Conceptually, it is ideal to measure such potential, but in practice, this is extremely challenging as the potential is not directly observable. Evaluation approaches might need to compromise between the ideal concept and measurable concepts, that can be somewhat different from very foundational ideas of the capability concept. By scrutinizing how the capability concept pertains to housing issues and social justice, this section examines a compromising approach to evaluate capability for housing while retaining its underpinning philosophical thoughts of justice.

3.3.1 How housing capability pertains to justice and real-life housing issues

The capability concept is in fact not consistently applied throughout the literature. Nevertheless, its application tends to fall into one of the two approaches as follows, depending on which tenet of the capability ideas is emphasized for the evaluation of the state of affairs. One approach focuses on understanding (i) actual 'beings and doings' (functionings) what people value, and another focuses more on understanding the (ii) extent of real opportunities to be and do what people (have reason to) value.

Among the points of capability arguments, the former emphasizes reflecting on heterogeneous values of individuals and conversion factors between means (e.g. possessed resources) and ends (i.e. actual beings and doings). The latter, however, emphasizes the extent of substantive freedoms of people. In the former case, the capability concept is generally used as an alternative combination of functionings that a person can choose from according to their reasoned value (e.g. Nussbaum, 2011; Sen, 1985, 1999), mainly when discussing human development, poverty, and quality of life. In the latter case, capability is discussed as the real opportunity to achieve the functionings a person values. Discussions of inequity and justice are often based on this concept (e.g. Sen, 2009; Wolff & de-Shalit, 2007). These two different focuses have then led to different approaches to justice, as found in Nussbaum (1992; 2011) and Sen (2009); while Nussbaum argues for ensuring all persons sufficiently achieve basic human functionings,[2] Sen emphasizes the removal of sources that constrain real opportunities.

When we bring these concepts into housing, housing functionings would be conceptualized as acts or states of residing and dwelling, while housing capability would be conceptualized either as a set of available valued housing functionings (in line with (i)), or the possession of real opportunities to reside in ways a person has reason to value (in line with (ii)). Accordingly, there are two ways to use the housing capability metric to assess inequality in housing: (i) defining a set of valued states of residing (i.e. valued housing functionings) and assessing their deprivations, or (ii) assessing the extent of real opportunities to achieve valued housing functionings and its interpersonal difference. To illustrate the difference between the two approaches

2 To promote clearer discussion in this chapter, I have used 'basic human functionings' instead of 'central human capabilities [to function].' In the quality of life/poverty discussion, central human capabilities are considered as the precondition of substantive freedom to achieve a decent life; for example, people can have basic freedoms to choose desired jobs only if they have the basic functioning of bodily health. In this usage, the concept of human capabilities is similar to basic human functionings.

TOC

for the same issue of the right to adequate housing, the former approach would assess deprivations in basic housing functionings that constitute states of living in adequate housing, while the latter would assess the extent of real opportunities to live in adequate housing and any unjust situations that constrain this potential.

In housing discussions, the use of the capability ideas has mostly followed the first approach. Here, the notion 'what people (have reason to) value' in the capability concept is interpreted as varied attributes of residential preferences or residency-relevant values (e.g. Coates, Anand and Norris, 2013; Batterham, 2018). While this approach can force housing policy to acknowledge the heterogeneous values of people regarding their housing, it has also created bottlenecks in the use of the capability ideas.

In reality, there is a great diversity of housing functionings that individuals value. There is a wide range of variables that characterises a situation of residing (e.g. house attributes, location/neighbourhood, length of locational residency, and tenure type). Each variable has multiple options to choose from, and a choice of the valued option then again varies greatly from person to person according to their personal goals, living conditions, and local notions. Furthermore, even for the same person, the most valued option can change over time as their housing strategies may be adjusted throughout their life course. Such extensive diversity of valued housing functionings makes it nearly impossible for research to compile their complete list for a scaled policy usage. Otherwise, the list has to be simplified to a certain extent, and this poses the risk of majority rule, that is contrary to the capability argument for recognizing heterogeneous values of individuals.

In fact, this bottleneck created by the first approach not only increases the uncertainty about the practicality of the capability metric, but also limits the housing justice agenda. Instead of exhaustive list of heterogeneous values, the capability discussion has focused on the basic functionings necessary for realizing human rights, as a second-best solution. Applying the same solution, we can first identify basic housing functionings minimally required to secure the right to adequate housing. However, the housing issues demanding justice considerations are not limited to their deprivations. A person could live in adequate housing but still face unjust housing situations because of unequal power between the landlord and tenants (e.g. Chisholm et al., 2018). The housing issues subject to justice considerations certainly include the situations caused by oppression, discrimination, structural exclusion and unequal power relations. Such unjust situations drive some groups to make coerced choices for their housing, and this means their real housing opportunities (or, housing capability) are more constrained than others. A sole focus on deprivations in valued housing functionings can overlook these unjust situations, that might actually be the key source of the deprivations.

For addressing justice agendas adding to deprivations in basic housing functionings, housing capability needs to be conceptualized with an emphasis on the principles of substantive freedoms. For this, the interpretation of the diversity in what people (have reason to) value has to be revisited. So far, this notion has been associated with varied preferences on attributes of housing or normative values of housing, but it is rather closely associated with the diversity in reasonable housing paths and housing strategies throughout the life course. As Clapham (2005) described in his housing pathways approach, valued housing options vary according to personal goals, lifestyles and living conditions (e.g. family situations, employment conditions, income levels and age), all of which are variable over time. In the housing process, some individuals are forced to make undesirable choices regarding housing, whereas others are able to pursue their valued housing path without significant constraints. The interpersonal difference in such substantive freedoms would indicate inequalities in housing and the existence of unjust situations.

In summary, housing capability is conceptualized as the real opportunity (or potential) to reside in ways a person has reason to value, when placing justice considerations at the centre rather than wellbeing and poverty considerations. The concern about heterogeneous values of people relates to a wide variety of reasonable housing options according to personal housing strategies throughout their life course. In such a housing process, some people may have more constraints than others, and the policy task would be to remove such avoidable interpersonal differences, that is surely different from fulfilling what people value in terms of subjective preferences in housing attributes.

3.3.2 Workable approach to evaluating the capability for housing

In shifting the focus from valued housing functionings to real opportunities for housing, evaluation practices now need to capture the potential of individuals to realize their valued housing options. Although the potential aspect is difficult to measure, its extent could be estimated by measuring the conditions that shape the extent, similarly to the measurement of the volume of a room by the lengths of its structural elements. Thus, we can consider evaluating capability for housing by measuring dis/advantages in conditions that expand or confine a person’s potential to execute the housing process necessary for realizing their valued housing options.

Higher degrees of disadvantages in such conditions imply more constraints, reducing the extent of housing capability, in which case a person is more likely to be forced to choose a housing path they do not value (thus indicating a lower level of freedom).

Examining such conditions would highlight what situations cause some people to make coerced choices (thus addressing the sources of capability deprivation). Here, the question about which valued housing functioning to achieve is left to individual choices (thus fully recognizing plural personal values and choices). In this way, housing capability can be evaluated with observable information of the conditions shaping the extent of potentials, while retaining the core tenets of the capability ideas of justice (i.e. those described in parentheses).

A subsequent question is now: which conditions should be evaluated? The following discussion further scrutinizes what 'capability as *real* opportunities' would mean in the housing context. Through this, it proposes three conceptual dimensions of the conditions, namely housing opportunities, housing securities, and housing abilities. For each dimension, along with the reasoning behind it, I also discuss how it must be conceptualized to sufficiently reflect the capability ideas of justice.

3.3.2.1 Dimension 1: Housing opportunities

A very basis for having *housing capability*, or *real housing opportunities*, would obviously be eligibilities and entitlements that lead to valued housing options, such as opportunities to access to housing information, financial facilities, affordable housing or participation in the decision-making process. In policy discussion, this basic condition is commonly discussed in terms of eligibility criteria for means and social services for housing. However, this concern has to be expanded when discussing housing opportunities as a dimension of the conditions shaping capability for housing. It must involve concerns about unjust structures of eligibility in society that constrain feasible choices of people during the housing process, instead of a mere focus on formal entitlements for particular social services and means for housing.

To illustrate how this dimension needs to be conceptualized, by using the text of Murie (1974, as cited in Duncan, 1976, p. 119) below, I connect the relevant ideas of the capability approach to the housing vocabulary. Although the text was written several decades ago, it effectively illustrates important subjects to address when examining housing opportunities. The respective capability ideas were noted in italics in brackets below:

TOC

Housing processes are best considered within an interrelated set of institutional arrangements *[social arrangements]*. These determine what income groups *[which individuals]* can gain access to *[opportunities to]*, whether households can adjust to family growth or threshold of stress *[substantive freedoms to reside in reasonable and valued ways]*, how far and in what ways filtering occurs *[inequity in housing opportunities]*, the nature of competition for space, and the nature of choice between alternatives *[factors constraining or expanding choices]*. The structure of institutions does not inevitably remove alternatives *[alternative housing functionings/options in society]*, although certain groups are clearly excluded or trapped in specific parts of the system *[inequity in the extent of feasible housing functionings/options]*. The degree to which alternatives remain, and the nature of constraints and choice, within and between parts of the system are determined by the eligibility structure which is derived from the collective decisions of the agencies involved *[public reasoning]*.

Information on housing opportunities would reveal mechanisms that cause some population groups to be trapped in unequal housing situations. In the housing and urban fields, there is a long history of research on the relation between housing inequality and demographic characteristics, often under the theme of social exclusion and spatial segregation. Nevertheless, it has been limited in diagnosing inequity in housing opportunities. When this research theme started gaining popularity, especially following the seminal work of Rex and Moore (1967) on ethnicity and housing, Duncan (1976) critically pointed out that most studies solely analysed spatial status and patterns of disadvantaged housing positions, instead of what caused some groups to be in such disadvantaged positions in the first place. Similarly, over 40 years later, Moroni (2020) points out the same problem; researchers examine segregation and unjust situations under the theme of spatial justice, but their analyses and discussions are ‘a sort of “shorthand expression” […] to denote desirable or undesirable spatial situations and arrangement’ (Moroni, 2020, p. 5).

When evaluating housing opportunities as a basic dimension of conditions to shape housing capability, an appropriate question to start with would be ‘what and who determines access to housing resources and facilities, how this is managed, justified and rationalized, and how opportunities and constraints are changing and may be modified’ (Duncan, 1976, pp. 10–11). Thus informed, evaluation of this dimension can provide information about the source of inequality in housing, thereby avoiding stasis at the ‘shorthand expression’.

3.3.2.2 Dimension 2: Housing securities

Having entitlements and eligibility, however, does not necessarily mean the person has *real* housing opportunities. A person may involuntarily choose to forgo eligible housing opportunities when they foresee potential risks in their residency or other important functionings. To give an illustration, tenants may not raise their voice against unfair demands from landlords if it would place their residency at risk, even if they were entitled to a right for security of tenure. A partner or roomer may not dare to request joint tenancy out of fear of losing what they have now. Some individuals may choose not to utilize opportunities for public housing if they feel at risk of losing dignity due to the stigma of public housing, or if they do not foresee feasible solutions to secure housing after the contract term expires.

Some groups of people may be more likely to forgo eligible opportunities as they face more risks to residency than others. In particular, the high unpredictability in the livelihood conditions of deprived people forces them to focus on sheer survival and risk reduction by limiting what they can do or be (Chambers, 1989). The security dimension is indeed essential for having genuine opportunities (Wolff and de-Shalit, 2007), and for enhancing the role of housing in providing personal safety and ontological security (Madden and Marcus, 2016).

As discussed above, *real* housing opportunities are not solely reflected by entitlements and eligibility, as their utilization can be hindered by insecurity in residency. To have *real* housing opportunities, a person should be able to freely choose available opportunities without risking their current residency or other functionings. To ensure such agency freedom, there must be surrounding conditions that ensure housing securities.

The evaluation of housing securities as a base of agency freedom would involve questions about the following three aspects, adding to the general concerns in the policy literature about legal arrangements for the security of tenure and the prevention of forced evictions. First, what kinds of risks to residency security may hinder a person from utilizing the available housing opportunities? Secondly, what situations would force a person to make other valued functionings insecure in order to secure current housing functionings (or vice versa) while others do not have to consider such trade-offs? Lastly, to what extent is a person's residency resilient—to what extent can a person uphold their current residency or recover adequate residency after adverse effects on their livelihood? Deprived groups appear more vulnerable to external shocks, and require greater efforts and means to recover their livelihoods after the shocks (Chambers, 1989). The difference in residency resilience would indicate that some individuals face greater barriers than others when attempting to utilize feasible life options and housing opportunities.

Thus, when evaluating the housing security dimension for a policy implication, it needs to investigate the factors that impose risks on residency security, who has fewer means and abilities to cope with the risks, and who needs more means for recovery after falling under the threshold of living in adequate housing.

3.3.2.3 Dimension 3: Housing abilities

Adding to housing opportunities and securities, equally important conditions are those that can enable people to proactively improve their housing situations, thus promoting the maximum expansion of agency freedom in the housing process. As discussed by Drydyk (2008) as well as Ibrahim and Alkire (2007), fostering the expansion of agency entails empowering and enabling people to 'shape their own lives for the better' (Drydyk, 2012, p. 32). The conditions for raising agency freedom in the housing process can be conceptualized as housing abilities.

To evaluate housing abilities, at least two aspects should be examined. One aspect is the ability to effectively utilize eligible housing opportunities. Such abilities would include housing literacy, financial literacy, and abilities to access housing benefits and social/public housing (e.g. Eurofound [2015], showing limited access to appropriate information causes the non-take-up of social benefits).[3] It would also concern the ability to effectively participate in the decision-making process; in reality, being entitled to participate does not necessarily mean that they can effectively influence the decision, as this requires certain knowledge and skills.

Another key aspect is the ability to proactively improve one's own housing situation. It is clearly distinguished from the ability to utilize the opportunities provided by others. To control housing situations and take actions, people need, for instance, the ability to develop suitable housing strategies throughout the life course. It would also be crucial to develop housing literacy, that is, the ability to understand various housing subjects pertaining to rights, policies, contract terms, housing markets and financial programs and, more importantly, how variations of these subjects affect one's housing strategies and rights.

3 Causes of non-take-ups of housing benefits/allowance include misperceptions about the benefits and lack of the following: information about entitlement/application procedures, awareness, resources (e.g. time for application), and ability to navigate the system or travel to the welfare office.

These proactive housing abilities would also include the ability to create (or demand) housing opportunities and rights that are not yet societally established but necessary, for example, the ability to mobilize collective actions for addressing an unjust housing situation. This particular ability, however, may have to be understood in relation to collective capabilities (Frediani 2009; Ibrahim 2006) and institutional capabilities; the aggregation of individual housing abilities may not be equal to the capability of a group/society to manage unjust housing situations.

In summary, an approach to evaluating a person's capability for housing is to assess the degree of dis/advantages in conditions that shape the extent of housing capability. For this, at least three dimensions of shaping conditions must be examined: housing opportunities, securities, and abilities, to reflect the concerns about substantive freedoms of the capability ideas about justice. While housing opportunities provide a basic entry condition for expanding capability for housing, housing securities form a low threshold of agency freedom to utilize provided housing opportunities, and housing abilities raise the agency freedom for the better. Inequality in those conditions implies that some groups have to cope with more constraints in their housing process, hence having to cope with unjust housing situations. Table 3.1 summarizes these three dimensions with some examples of relevant housing subjects.

TABLE 3.1 Confining and expanding conditions that shape the capabilities for housing: Three dimensions

Housing Opportunity	**Concept**	A person's basic position to have the capabilities for housing by: – having access – being entitled – being included in (formal/informal) eligibility structure
	Examples	Eligibility for/entitlement to access: – adequate information about housing programs – adequate/affordable housing – housing financial facilities – participation in decision making, etc.
Housing Security	**Concept**	A low threshold of agency freedom by: – protecting achieved states of residing (housing functionings) – preventing forced trade-offs between securing residency and other functionings – having residency resilience
	Examples	Differences in the degree of: – vulnerability to the risks making residency insecure – necessity of trade-offs between securing current/minimal housing functionings and other life options/functionings – means or abilities to cope with the risks (or recover from adverse impacts) – security of tenure
Housing Ability	**Concept**	A raiser of agency freedom by: – maximally fostering the expansion of agency freedom – enabling/empowering people to shape their own lives for the better
	Examples	For effectively making use of available opportunities: – knowledge/understanding of housing services (e.g. housing benefits, public housing) – financial literacy; financial ability – knowledge/skills related to participation For proactively building housing situations for the better: – ability to plan housing strategies – housing literacy – ability to participate in/mobilise collective actions for resolving housing issues – ability to claim rights and demand opportunities

Note: example subjects of each dimension are listed for an illustrative purpose

3.4 Distributive rules: What level of distribution should be aimed for?

The section now turns to the last subject: distributive pattern rules. When implementing justice ideas, defining a distribution threshold could be crucial as it would be a key yardstick to reflect the overall success of policy performance. In principle, the capability approach has an egalitarian perspective; it perceives that everybody equally deserves to have substantive freedom to choose their valued life options. When applying this idea for guiding housing policy, however, questions about distribution arise naturally. Should society take responsibility for expanding the housing capability of everybody, the badly off, or solely the worst off? If society should guarantee basic housing functionings for all, such as living in adequate housing, which level of adequacy should be defined as the threshold?

For progressing our discussion about guiding principles for housing policy, the last key task now seems to be scrutinizing theories on ideal distributive pattern rules (e.g. egalitarianism, sufficientarianism, and prioritarianism), and defining the level of distribution of housing capability that policy should aim for. However, as with the two subjects of justice discussed above, some gaps can exist between ideal rules for distribution and those that are feasible to apply for policy practices. In addition, debates on distribution thresholds are apparently not pertinent to all kinds of justice issues, such as power and recognition that are not tangible objects to distribute per se, whereas, for some metrics of justice, like resources, it is indeed crucial to define a threshold (e.g. social housing units and housing allowance). This section scrutinizes to what extent a choice of distributive rules would provide practical guides for housing policy, and discusses how the question about ideal distributive patterns needs to be managed when applying the capability approach.

3.4.1 Different types of distributive consideration

In section (b), two approaches to using the housing capability metric were discussed: evaluating valued housing functioning, and evaluating the extent of real housing opportunities. So far, most studies have been in the first approach with particular attention to addressing the right to adequate housing, because it is considered as the most basic housing functioning that people would and should value (e.g. Fitzpatrick et al., 2014; King, 2003; Nicholls, 2010). In the same line of reasoning, multidimensional poverty measurements in the capability perspective have often selected housing adequacy as the indicator of basic housing functioning (e.g. Alkire et al., 2020; Burchardt & Vizard, 2011). In this approach, discussion about distributive patterns becomes essential because it has to define a threshold of adequacy for setting policy goals and target groups. Some scholars have proposed prioritizing the least advantaged groups (e.g. Taylor, 2019; Wolff & de-Shalit, 2007), but most hold a sufficientarian view that public actions should guarantee a sufficient level of universal basic housing functionings to ensure the right to adequate housing for all.

It may be seen that the distributive pattern of sufficiency is most suitable when devising principles of housing justice with the housing capability metric. However, there is an important point to consider, regardless of which distributive pattern is selected. Human rights are the most urgent issues of basic global justice, and not all justice issues are a matter of human rights (Gilabert 2009, p. 676). When applying the capability approach to housing issues, Nussbaum's list of central human capabilities has frequently been referred to, but her underlying idea is actually to address the most urgent demands through a human rights approach before advancing toward a more ambitious standard of justice. Hence, she noted that her theory is only a 'partial and minimal account of social justice' (Nussbaum, 2006, p. 71). Extensive discussion about basic housing functionings and their distribution pattern can unintentionally narrow the agenda of housing justice to the distribution of minimal housing conditions necessary for survival and poverty avoidance.

The issues pertaining to housing justice are not limited to the matter of housing rights and basic housing functionings. Different levels of power, respect and recognition (Fraser, 2003; Young 1990) cause housing discrimination against some groups (e.g. Heylen & Van den Broeck, 2016). There are also issues of social equality that concerns 'the right types of classless relationships between people, avoiding oppression, exploitation, domination, servility, snobbery, and other hierarchical evils' (Wolff & de-Shalit, 2007, p. 5). All of them can cause some people to make coerced housing choices, hence injustice in housing.

As discussed in the previous section, when policy aims to expand real housing opportunities, measures have to address various intangible constraints affecting one's housing process, such as housing discriminations by landlords or insecurities that hinder one from requesting a joint tenancy. These issues are, apparently, not tangible objects to distribute per se, but still demand distributive considerations; some groups experience disadvantages more than others because of inequalities that arise from circumstances beyond their control (e.g. gender, age, ethnicity, disability, and citizenship status), but such inequalities could be balanced by policy interventions. For those intangible disadvantages, policy needs to involve other kinds of distributive consideration, different from setting a threshold for distribution of tangible goods.

The types of distributive rules could be broadly categorized as follows, according to Anderson (2010): (i) unconstrained procedural rules (e.g. rejection of any distributive interventions in Nozick's theory), (ii) distributive pattern rules that 'fix distributions of actual goods independently of what anyone does' (e.g. distribution of primary goods to the least advantaged in Rawls' theory; distribution of essential human functionings in Nussbaum's approach) and (iii) constrained procedural rules that 'only fix *opportunities* for access to goods' (e.g. correction of rules to remove obstacles to choosing valued life options in Sen's ideas)—here, actual distribution of functionings is left up to individual choices to take advantage of the opportunities open to them.

Therefore, when discussing policy to guarantee basic housing functionings, we need to select a particular distributive pattern, that is, a threshold of basic housing functionings and target groups. On the contrary, when discussing policy to expand real housing opportunities, we need to define constrained procedural rules that can ensure equity in such opportunities, or how to fix the rules that constrain the expansion of housing capability; such rules should include both formal and informal ones whichever rule actually operate in society.

The very starting point for discussing principles of distribution is, therefore, not the selection of an ideal distributive pattern, but the clarification of which aspect of housing capability the discussion aims to address. Depending on this, the pertinent type of distributive consideration is different, which is not necessarily about a choice of distribution thresholds among everybody, the badly off, and the worst off.

3.4.2 Distributive rules as references for debates, rather than principles of justice

After all, selecting an ideal distributive pattern must not be considered as *the* task for guiding policy. As discussed so far, depending on the nature of issues to address, a major task could be: selecting a particular distributive pattern of housing functionings and basic goods; or fixing the rules that unfairly constrain real housing opportunities and that create inequity in intangible advantages.

Another key point is that, the exclusive focus on distributive patterns can narrow the conception of distributive justice. Traditionally, the major social agenda of housing policy has been the distribution of housing services and housing units. It has naturally led to an excessive focus on distributive patterns when debating justice in housing. This narrow interpretation of distributive justice has been mistakenly treated as equivalent to social justice (Moroni 2019), and was heavily criticized as a 'distributive paradigm' (Young, 1990).

Meantime, the application of the capability approach has forced the conception of distributive justice to widen to a certain extent, by adding concerns about the adequate state of residing pertaining to human rights. However, debates on the distribution of adequate housing still narrow the conception of distributive justice as they limit the scope of housing justice to the distribution of minimal conditions necessary for survival. When the selection of distributive patterns is placed as a core task of housing justice, it entraps the discussion to the conventional narrow conception of distributive justice, that dismisses distributive concerns about other types of advantages that are morally relevant, but not always subject to the selection of a distribution threshold.

Besides, debates on ideal principles of distribution could also remain purely theoretical and thus may not provide practical guides. For some issues, such as adequate housing units and basic economic goods for accessing adequate housing, even if debates on distribution thresholds reach an agreement on an ideal distribution threshold, in reality, the best idea for actual implementation is likely to vary by case. This is because actual decisions on thresholds have to consider the nature of unjust cases to deal with, and their surrounding conditions, such as the current institutional capacity, public perceptions, politics, available budgets, and the urgency of surging issues.

In essence, when guiding corrections to unjust housing situations, discussions around distributive (pattern) rules should be perceived as useful references for examining potential options to employ and their possible limitations in the context of the unjust cases to resolve, rather than as a subject to determine the best idea to apply universally. The key task must be scrutinizing which distributive rule would be contextually more justifiable than another.

3.5 Approach for guiding housing policies and public debates

In this chapter, the study examined some intermediate issues between the philosophical ideas of the capability approach and housing policy practices. This study looked at the three essential subjects of justice theories, namely ideal institutions, metrics of justice, and distributive pattern rules. From this, an approach to housing justice for guiding policies is drawn as follows. Instead of absolute principles of distribution, or characteristics of a welfare state/housing regime, policy should be guided primarily by the changes in unjust housing situations in terms of people's capability for housing. Discussion about types of institutions and distributive pattern rules is still important, but the point of discussion should be about which option is contextually more justifiable and feasible, rather than which one the society has to ultimately pursue.

In this approach, it is a crucial task to detect unjust housing situations by evaluating housing capability, and monitoring progress. For the evaluation practice, as a proxy of people's capabilities for housing, we can consider assessing the dis/advantages in conditions that shape the extent of capability for housing, that is, constraints in a person's housing process that cause coerced choices of housing options and housing paths. Three conceptual dimensions of the shaping conditions must be evaluated for reflecting the capability ideas about freedoms and justice: they are, housing opportunities, housing securities, and housing abilities.

There is, however, a remaining issue to resolve. The approach proposed here does not refer to any absolute principles—neither a particular form of housing regime, nor distributive threshold. Consequently, it raises a critical question: based on which yardstick can we assess how well a society is functioning? This approach requires alternative kinds of moral references to evaluate social performance. The solution could be quite straightforward. In this approach, the core task is to continuously scrutinize unjust housing situations and monitor their progress. Apparently, the essential moral reference would be comparisons of changes in society.

The primary task of the comparisons would be observing changes in housing capability regarding the observed unjust situations, and thereby indicating how far societies—communities, cities, or countries—are advancing housing justice. However, this is still not enough to compensate for the absence of any absolute principles of justice. Two additional tasks can be identified as follows.

The first is to compare social alternatives to resolve the observed unjust housing situations. It involves questions about which alternative would better expand housing capability than another, of which discussion would provide the basis for a social choice between the alternatives. The second is to compare how different societies view the same cases of injustice in housing. When judging whether a case is unjust and whether a policy measure is rightful, if the discussion is left solely to a confined boundary of society, an appropriate judgement can be ruled out by the majority groups. In addition, it can be affected by entrenched customs or vested interests in society (Sen, 2009). To avoid these problems, transcendental principles of justice have been sought. However, as discussed in this chapter, those principles run the risk of remaining purely hypothetical. An alternative solution could be promoting 'trans-positional objectivity' (Sen, 1993). For determining which housing situation should be considered unequal and thus requiring policy interventions, especially for the issues of marginalized groups, comparing views from different societies on the same housing issue could play a significant role.

All these tasks highlight that comparative housing research has a crucial role in providing normative references for housing policy debates. Comparative research has featured prominently in housing literature, especially in Europe since the 1960s. It could be a good basis for developing alternative normative references. For this, however, research has to expand its scope substantially. Previous focus has mostly been on comparing housing systems and regimes, and the comparisons tend to remain descriptive without explicit normative implications (Oxley, 1991, 2001). To serve as a tool for guiding housing debates on policy for reducing inequality in housing, comparative housing research must expand its agenda by including the monitoring of progress in corrections to unjust housing situations, comparing alternative solutions for the corrections, and comparing views from other societies on the same unjust cases. Guided by this, concrete housing policy measures could be suggested, hence advancing housing justice in our societies now.

PART 2

Studies for Empirical Application

Studies for measurements of housing affairs of people—well-being, deprivation and inequality in housing—with capability considerations

4 Housing Welfare Policies and Choice of Evaluation Approach

The contents of this chapter are based on the article "A Capability Approach to Evaluating Well-being and Equality in Housing: Clear Conceptual Difference but Unclear Practical Difference?" (Kimhur 2022, *Housing Theory and Society*) with minor changes in the introduction to align with the overall structure of this dissertation.

Chapter 2 re-examined evaluation approaches in housing policy discussion regarding housing situations of people (e.g. well-being in housing and housing inequality) and policy outcomes. It analysed that the conventional evaluation approaches have weaknesses in addressing some critical normative concerns and that applying the capability approach can compensate for those weaknesses. This theoretical analysis as yet requires empirical clarification. This chapter presents a study that empirically tests this theoretical argument and why the choice of evaluation approach matters in practice, especially for welfare policies for housing. Using data from the Netherlands, the study compares the conventional and capability-oriented evaluation approaches to housing deprivation in terms of the identification of deprived groups that housing welfare policies are supposed to address. Through this comparison, the study verifies whether the conventional evaluation approaches create significant blind spots in housing welfare policies as theoretically analysed in Chapter 2, and explores to what extent an application of the capability approach may help fill the gaps. This chapter also draws implications about the choice of the measurement method and its influence on the understanding of housing situations of people.

4.1 Clear conceptual difference but unclear practical difference

An essential task of housing welfare policy is to evaluate Evaluating the housing situations of people, such as well-being, deprivation and inequality in housing. This evaluation practice guides policymakers' value judgements about target groups, necessary interventions and budget allocations, and policy outcomes. As discussed in Chapter 2, such evaluation practice is conventionally grounded on measures of economic and material means for housing (e.g. household income and attributes of dwellings), or satisfaction-oriented measures (e.g. fulfilments of determinants of housing satisfaction). However, from a theoretical perspective of the Sen's capability approach (CA), this evaluation approach overlooks some important normative concerns, such as the unequal abilities of individuals to convert economic means to actual achievements in housing, adaptive housing preferences of deprived people and non-monetary/material values such as the human right to adequate housing and meaningful ways of living; therefore, the conventional evaluation practices create gaps in the information of how well a person is actually residing (Kimhur 2020; Foye 2021). To compensate for these weaknesses, evaluation practices can incorporate the CA's proposal for alternative informational bases (i.e. people's capabilities and functionings), such as evaluating the capabilities (real opportunities and abilities) to reside in ways people have reason to value and pursue their suitable housing options, in short, the capabilities for housing (Kimhur 2020)—note that, the concept of 'housing' here is considered an act of residing instead of a dwelling unit or an act of its provision, and this concept is applied throughout this chapter.

Conceptually speaking, the conventional evaluation practices have weaknesses, and the capability-oriented evaluation has clear advantages in addressing the normative concerns overlooked by the conventional evaluations. What remains unclear is whether such conceptual weaknesses and advantages are also empirically significant. As diagnosed in theory, have the current evaluation practices indeed created significant informational gaps in housing policy discussion? If well-being in housing and housing inequality are evaluated by people's capabilities for housing, will there be substantive informational benefits for policymakers, leading to notably different policy decisions? This study examines these questions with data from the Netherlands.

In discussing overall well-being and poverty, the difference of capability-oriented measurements has been examined extensively, and it is now widely acknowledged.

However, whether this is also the case for the narrowed-down level of the housing domain yet requires further empirical clarification. In housing research, some qualitative studies have applied the CA as a framework to analyse housing issues of interest, such as homelessness, and showed that the approach can provide a new perspective on those issues (e.g. Irving 2021; Tanekenov, Fitzpatrick, and Johnsen 2018; Watts and Blenkinsopp 2021). Nevertheless, when we extend our interest to its application to measurements, such as measuring housing deprivation and inequality in terms of the capabilities for housing—aside from the question of whether this is actually measurable—some contesting views arise regarding its practical difference and informational benefits. As to be discussed in the next section, empirical evidence often indicates that conventional measures of economic means for housing or housing satisfaction may largely represent the deprivation of basic capabilities for housing. In addition, when speculating a practical shape of the capability argument for *reflecting what people value* in evaluation, in the housing context, it seems there is little difference from the existing research that assesses determinants of residential satisfaction.

This chapter first reviews the sources of contesting views on the practical difference of the CA to evaluating well-being/inequality in housing. The chapter then presents a study that clarifies those views. The study compares the conventional and capability-oriented approaches to evaluating housing deprivation in terms of their identification of deprived groups that housing welfare policies are supposed to address. For the comparison, the study selects the indicators commonly used in housing welfare policies and research (i.e. household income and housing satisfaction) and indicators of basic capabilities for housing (i.e. living in adequate housing as a basic functioning of people to reside (housing functioning), and financial literacy as a basic ability for housing). Using these indicators, the study identifies deprived groups, analyses the extent of their overlap, and draws implications for the practical difference and the influence on housing welfare policies. This study utilizes micro-datasets of two surveys in 2011 on the LISS (Longitudinal Internet Studies for the Social Sciences) panel in the Netherlands by CentERdata (Tilburg University), and register data from Statistics Netherlands (CBS).

4.2 Three contesting views on informational benefits

4.2.1 Contesting views on measures of economic means for housing

TThe foremost argument of the CA is that means-oriented evaluations—such as income and commodity possessions—fail to reflect conversion gaps between means and ends (i.e. actual well-being achievements) as well as inequalities in conversion efficacy among individuals. From this perspective, the primary focus of housing welfare policy should not be providing *means* for housing, such as housing benefits and dwelling units, or providing such housing services based on income levels; the focus should rather be *real opportunities for housing* (i.e. capabilities for housing) or *the end states of housing* achieved by such capabilities (i.e. housing functionings).

Few housing scholars would question that determinants of well-being/inequality in housing are multidimensional, and economic means are only one dimension of those determinants. However, this recognition is not necessarily transformed into non-economic evaluations in housing policy discussions. In housing welfare policies, such as housing benefits and social/public housing provisions, a means test has long been the key, and often the sole instrument to identify target groups, with an implicit assumption that information on multiple socioeconomic disadvantages can be summarised into an income-based measure. Such measures have been a crucial guide for governments to set policy goals and allocate budgets for welfare in housing. Therefore, the CA's criticism over the means-oriented evaluation can be a wake-up call for housing policymakers.

Meanwhile, the relevance of criticism of means-oriented evaluation is empirically challenged. In housing research, there is substantive evidence that there is a clear positive relationship between income poverty/inequality and deprivation in the basic end state of housing—i.e. deprivation in basic housing adequacy (among others, see Dewilde and Lancee 2013; Dewilde 2021; Eurostat 2018; Haffner, Lennartz, and Dol 2012; Stephens et al. 2010; Ulman and Ćwiek 2020). This empirical challenge adds a question of whether the problem of neglect of the means-to-ends conversion gaps would be marginal in the housing context, especially considering that housing is capital-intensive and the most expensive basic good for individuals, unlike other basic goods. Economic means may play a much more significant role in achieving the basic end state of housing than in achieving other basic goods and human functionings. Considering the empirical evidence and the distinctive features of housing, *would the current measures of economic means not largely represent deprivations of the capabilities for housing and related conversion factors?*

4.2.2 Contesting views on measures of housing satisfaction

Another basis of Sen's proposal for the CA was that the utility-oriented evaluation (e.g. measures of desire/preference fulfilments, satisfaction, and happiness) neglects non-utility concerns such as human rights and meaningful lives (Sen 1992), and underestimates welfare problems because the oppressed and deprived people tend to 'adjust … expectations and desire to what they unambitiously see as feasible' (Sen 1999, 63). Applying this argument to housing, measures of housing satisfaction can mislead housing welfare judgements to disregard some important moral issues associated with housing, such as the right to adequate housing.

What does the empirical evidence to date tell about this conceptual weakness of housing satisfaction measures? Studies on housing satisfaction and dwelling quality have shown that the correlation between the two is not always clear, but this observation generally applied to cases above the minimum standards of housing adequacy (e.g. Amérigo and Aragonés 1990; Galster 1985; Jansen 2013). For the cases below the minimum standards, such as with insufficient space, inadequate heating, and lack of basic amenities, the results have repeatedly shown an unambiguous relationship between a low level of housing satisfaction and poor dwelling conditions (e.g. Diaz-Serrano 2006; Balestra and Sultan 2013; Coates, Anand and Norris 2015). These observations raise doubts whether the problem of adaptive preference and the inconsistency between housing satisfaction and the human right to living in adequate housing would be significant; it may be marginal in reality, unlike in Sen's critical argument.

Aside from this empirical doubt, certain conceptual ambiguities raise another contesting view. Sen (1999, 18) proposes evaluating the 'capabilities of persons to lead the kind of lives *they value*—and *they have reason to value*' (emphasis by author). When applying this proposal to housing, the concern about *what people value* can be related to the concern about *subjective residential values and preferences*, such as a sense of belonging and close distance to work (e.g. Coates, Anand, and Norris 2015; Clapham, Foye, and Christian 2018), of which practical shape may be similar to evaluating determinants of housing satisfaction. In addition, when we speculate how the concept ‘capabilities for housing’ can be operationalized, it seems reasonable to assume that, if a person has the capabilities, they would be able to realise their valued way of residing, and if those values were fulfilled, they would then report higher satisfaction with housing; therefore, the level of capabilities for housing may ultimately be indicated by the level of housing satisfaction. Despite the conceptual novelty of the capabilities for housing, *is it not all about housing satisfaction and its determinants in the end?*

4.2.3 Contesting views on measures of housing adequacy

The capability concept pertains to the *potential* of people to achieve the kinds of lives they value, but such potentials are difficult to measure. Alternatively, in poverty and well-being measurements, researchers have evaluated the achieved state of living (i.e. achieved functionings, such as being healthy and being educated) as a proxy of the potential. In these practices, housing adequacy—as an indicator of the basic functioning of living in adequate housing—is frequently measured as a proxy of a person’s potential to live in adequate housing (i.e. a proxy of basic capability for housing) (e.g. Alkire, Kanagaratnam, and Suppa 2020; Arndt and Volkert, 2007). This indirect measurement approach works on the pragmatic assumption that people would choose to avoid deprivation of basic functionings when it is feasible to do so and, therefore, measuring their deprivations could be reasonable proxies for basic capabilities. Here, the evaluation focuses on *basic* capabilities because such focus makes it feasible to reach an agreement on a list of important capabilities to measure (Sen 1992).

Reflecting on the lessons from poverty and well-being research, measurements of capabilities for housing may come down to measurements of basic housing functioning, such as basic standards of adequate housing. This line of reasoning naturally raises the question of, *how will this differ from a composite indicator of adequate housing that has long been evaluated in the housing field?*[4] Moreover, as previously described, several lines of evidence suggest that deprivation in basic housing adequacy is strongly correlated with a low level of household income and housing satisfaction; therefore, from the policymakers’ perspective, there may be little benefit to expanding the informational bases of their value judgements.

---

4 It is worth noting that, in general, indicators of adequate housing have only partially reflected the elements of adequate housing that the UN has promoted (OHCHR 2009).

Meanwhile, the CA differentiates 'the state of beings and doings' and 'real opportunities to be and do'; therefore, there should be a difference between measures of 'living in adequate housing' and 'real opportunities to live in adequate housing' (e.g. abilities and enabling environments to live in adequate housing). However, this conceptual difference has not yet been empirically examined. *In measurements, would there be a significant difference between living in an adequate housing and having the ability to live in one?*

4.3 Research design

4.3.1 Empirical strategy

To resolve the contesting views above, an ideal study would be measuring a person's total capability for housing, and comparing the result with a measure of economic means for housing (a summary of multiple socioeconomic disadvantages limiting access to adequate housing) and a measure of housing satisfaction (a summary of fulfilments of personal residential values and achievements). For such a study, there must first be substantive research on types of important capabilities for housing, and housing surveys collecting data of those capabilities. However, substantive works on these subjects are yet to be accumulated. An exploratory strategy is necessary by making use of the already available data, while the empirical constraints change. This study designed the exploratory strategy as follows.

First, the study focuses on testing to what extent the conventional evaluation approaches are limited in reflecting the normative considerations that the CA enables, such as the concerns about means-to-ends conversion gaps, inequality in conversion efficacy, adaptive preferences of deprived groups, and direct attention to human beings and moral values. Through this, the study explores the expected difference that the CA application can make in measurements of well-being in housing and housing inequality.

Second, in comparing the evaluation approaches, the study examines how similarly or differently they identify who is in a deprived housing situation. If the conceptual differences between the approaches are relevant, a capability-oriented evaluation should lead to substantially different value judgements on whom the housing welfare policy should concern, creating differences in policy decisions.

Third, the study compares only some distinguished capabilities for housing, although there would be multiple capabilities subject to be examined. This empirical strategy follows Sen's (1999, 82) suggestion that one alternative practical approach to incorporating capability consideration into evaluation is the 'comparison of some particular capability chosen as the focus, without looking for completeness of coverage [because] such comparisons can be quite illuminating ... in evaluative exercises', as he has shown in his work (1985, 1999). In addition, '[h]aving more of each relevant functioning or capability is a clear improvement' (Sen 1992, 46), and therefore, this study perceived that comparing a particular capability or functioning for housing can offer reliable information for policy discussion.

Forth, when selecting indicators of distinguished capabilities, the study selects both a functioning-oriented indicator that concerns the valued state of residing (e.g. living in adequate housing) and a potential-oriented indicator that concerns the real opportunities to achieve the valued state of residing (e.g. an ability to live in adequate housing). This is to explore the informational benefits of differentiating the concepts of 'housing functionings' and 'capabilities to achieve the housing functionings'.

Lastly, the study selects the indicators most commonly used in housing welfare policies and research to test whether the conventional evaluation practices have created a significant blind spot in housing welfare judgements, as discussed in theory. An exception was a potential-oriented indicator. Conceptually, this indicator should reflect basic abilities or enabling/empowering conditions that expand a person's potential to lead/achieve their valued ways of residing. However, there is yet little empirical ground for selecting such indicators and measuring them. For this potential-oriented indicator, the study employs a two-stage approach to selecting capabilities suggested by Robeyns (2005); that is, defining the ideal indicator and evaluating the second-best level of that indicator while the empirical constraints change over time.

4.3.2 Methods

As described above, the study chooses one indicator of each evaluation approach and compares their identification of deprived persons that housing welfare policies are supposed to address—in short, comparing target-group identifications. The study analyses whether the person identified as deprived in the housing situation by one indicator is also identified as deprived by other indicators, and observe the percentage of their overlap. Table 4.1 and Table 4.2 illustrate the base method, which adapted the methods used in a few studies of disjuncture among different dimensional measures of poverty (e.g. Cornia and Stewart 1993; Ruggeri–Laderchi 2008; Alkire and Roche 2011).

Table 4.1 is to examine the extent to which the four measures simultaneously identify a person as deprived, hence the extent of in/commensurability of their information. A high proportion of the cases of Person 1 and Person 2—those identified as non-deprived or deprived consistently by all measures—implies that different evaluation approaches may lead to roughly equivalent value judgements in housing welfare policies.

While Table 4.1 is to offer a brief overview, Table 4.2 is to dissect this overview through pairwise comparisons; it analyses the extent of discrepancy between the capability-oriented evaluation and economic means/satisfaction-oriented evaluation of deprivation in housing (case categories II and III). This analysis was designed to gauge the relevance of the conversion issue, adaptive preferences, and deprivations in non-monetary/utility issues when making value judgements on needed policy actions, which would evidence the practical differences that a capability-oriented evaluation can make in the housing field. When the discrepancy appears non-negligible, the study further explores inequalities in conversion efficacy between economic means for housing and the basic end state of housing (basic housing functioning) (Table 4.3).

TOC

TABLE 4.1 Method to test the commensurability of measures of well-being in housing

	Basic economic means for housing	Satisfaction with housing	Basic housing functioning	Basic ability for housing	Number of measures jointly identifying as deprived
Person 1	Non-deprived	Non-deprived	Non-deprived	Non-deprived	0
Person 2	Deprived	Deprived	Deprived	Deprived	4
Person 3	Non-deprived	Non-deprived	Non-deprived	Deprived	1
Person 4	Deprived	Deprived	Deprived	Non-deprived	3
Person 5	Deprived	Non-deprived	Deprived	Deprived	3
Person *i*	…	…	…	…	*n*

TABLE 4.2 Method to compare evaluation approaches to housing deprivation

Measure 1	Non-deprived		Deprived	
Measure 2	Non-deprived	Deprived	Non-deprived	Deprived
Case category	I (overlap)	**II** (mismatch)	**III** (mismatch)	IV (overlap)

TABLE 4.3 Method for assessing inequality in conversion efficacy

Subgroups of population (e.g. household type; ethnic background)	Non-deprived of means	Non-deprived of ends	Assessment of difference in conversion rates among subgroups
Ideal score	non-deprived of means (M)	non-deprived of means (M) and non-deprived of ends (E)	(E/M) – 1 = 0
By household type - Single (s) - Multi-person (m) - Single parent (p)	 M_s % M_m % M_p %	 E_s % E_m % E_p %	 $(E_s / M_s) - 1$ $(E_m / M_m) - 1$ $(E_p / M_p) - 1$
By …	…	…	…
By …	…	…	…

4.3.3 Why the method of target-group identification comparison?

Ultimately, the method described above is about testing the redundancy of information about the deprivation of basic capabilities for housing. To check such redundancy, a study can employ a statistical correlation analysis that examines whether there is a high correlation between deprivation of capability for housing and other deprivations (i.e. insufficient income for housing and dissatisfaction with housing, in this study), or employ a regression analysis to investigate whether the former deprivation is predictable or representable by the latter. Instead of these sophisticated statistical modelling methods, this study adopted a method that directly compares the counts of deprived persons and their overlaps. Three reasons were considered for this choice.

First, some doubts about the benefits of applying the CA are raised by ample evidence of close relationships between economic means, housing satisfaction and the basic functioning of living in adequate housing; this evidence is primarily built on statistical correlation and regression analysis. To revisit the existing findings from a different angle, the study selected an assessment of their association based on direct counting.

Second, this counting-based assessment enables an intuitive value judgement. Whereas purely statistical measures of associations tend to conceal implicit welfare judgements (Chaudhuri and Ravallion 1994), the analysis of overlaps between targeting measurements can offer straightforward implications for value judgements (Ruggeri–Laderchi 2008). In addition, this direct assessment of association can check the potential delusion of correlation efficiency analysis (Alkire et al. 2015).

Finally, a purpose of this study is to investigate the practical relevance of theoretical discussion about evaluation approaches to housing policy. A concern for policymakers is effectively targeting the population groups in need. The counts of deprived persons and their comparison can provide direct implications for this concern.

4.3.4 Data selection

The datasets were selected based on the following criteria: (i) the feasibility to compute indicators that best align to the conceptual ground of each evaluation approach; and (ii) the linkability between the variables of those indicators. The second criterion was critical because the analysis of Table 4.1 and Table 4.2 required connecting the data of each person for the four indicators, but a single survey rarely provided all the data needed. Three linkable micro-datasets in the year 2011 were selected: register data from Statistics Netherlands and two surveys on housing and financial literacy from the LISS panel. The study sample comprised 8,704 individuals across 3,863 households.

4.3.5 Indicators and deprivation cut-offs

Primary criteria for selecting indicators were whether the indicators were commonly used for housing welfare judgements and whether they conceptually aligned with the underlying ideas of each evaluation approach to be compared. An exception was an indicator of basic ability for housing; only the second criterion was applied for its selection. Table 4.4 presents the selected indicators and the deprivation cut-offs.

TABLE 4.4 Empirical test design: Selected indicators and deprivation cut-offs

Evaluation approach	Indicators	Household members are deprived if:
Economic means-oriented	Sufficient income for adequate housing	Taxable household income is less than or equal to 33,614 euros per year per household (the social housing eligibility threshold in 2011)
Satisfaction-oriented	Dwelling satisfaction	The satisfaction level is a score of 6 or lower than 6 (out of the 11-point scale)
Functioning-oriented: basic housing functionings	Housing adequacy	One of the following conditions is met: • the number of rooms is less than the sufficiently required number: one for a single household, one per couple, one per pair of children under 10 years of age, one per person for the rest, and one shared living room; and • leaking roof, damp walls/floors, rotten window frames/floors, too dark, too noisy, or inadequate heating
Potential-oriented: basic abilities for housing	Basic financial literacy	Either the head of household or the spouse incorrectly answered the two survey questions that tests basic knowledge of compound interest and inflation[1]

Note: [1] For the financial literacy test questions, see Table A.2 in Appendix A.

As an exemplary indicator of basic economic means for housing, income eligibility for social housing was selected since it is an essential indicator for housing welfare policies in many countries and carries the assumption that the CA critically questions. This indicator is built on an implicit assumption that information on multiple socioeconomic disadvantages limiting access to adequate housing can be reduced to a measure of household income. The income threshold for housing services is a kind of poverty line in the housing sector, under which households are considered to have insufficient income to live in (or access) adequate housing and, therefore, in need of public assistance. The deprivation cut-off was set at the income threshold for social housing in the Netherlands.

The indicator of dwelling satisfaction referred to a study of dissatisfaction cut-offs in the Netherlands that suggests the Dutch population is likely to consider a value of six or lower (out of the 11-point scale) to represent dissatisfaction (Beuningen, Houwen, and Moonen 2014).

As an indicator of basic functioning for housing, housing adequacy was selected because it is the most commonly used indicator to assess housing deprivation and is considered a basic human functioning in the CA in line with arguments for the human right to adequate housing. In addition, it is the common source of the contesting views on the informational benefits of applying the CA. This study defined an indicator of housing adequacy by reflecting the norm of habitability in the definition of adequate housing in OHCHR (2009), and a need for adjusting the standard adequate space for the advanced economies in Europe (Haffner 2015).

To select an indicator of basic ability for housing, the study defined a number of sub-criteria by scrutinizing what could be a reasonable approach to selecting the indicator when studies and data are limited.[5] Reflected on the underlying ideas of the CA, the criteria were set as follows: (i) does the indicator directly focus on human beings and non-monetary/material matters, and does it entail the concern about the potential of people to achieve what they value or the enablement of people to choose?; (ii) is there substantive evidence of the indicator's relevance to housing? (iii) does it entail concerns on ethics and rights, and thereby, would its importance be agreeable? (iv) does the indicator identify a non-negligible proportion of the population as deprived (thus, could it be a policy concern)? This condition follows the argument of Ruggeri–Laderchi (2008) for the practical value of focusing on non-negligible aspects of capability deprivation; and (v) is the indicator's data linkable to other survey data?

Unfortunately, substantive surveys on housing literacy were not found. Thus, as a second best guess of housing literacy, this study selected an indicator of financial literacy out of the already available data. At the empirical level, multiple studies have shown that financial literacy is closely related to housing issues, such as housing wealth (Lusardi and Mitchell 2007; Lusardi, Michaud, and Mitchell 2017) and the likelihood of taking out risky mortgages and mortgage delinquency that increases

5 A lack of relevant data would be a critical challenge when operationalizing the concept of capability for housing. A similar challenge has existed for poverty/well-being measurements because existing surveys were not specifically designed to collect data on functionings or capabilities. This has forced researchers to work with second-best surveys (Robeyns 2006). This approach may also need to be taken in housing research while expanding the database.

housing insecurity (van Ooijen and van Rooij 2014; Zahirovic–Herbert, Gibler, and Chatterjee 2016). The normative value of financial literacy is discussed in connection with capability considerations (Lubis 2018; Sherraden 2013; Storchi and Susan 2016); at the conceptual level, financial literacy has a direct focus on people's abilities, and entails a moral concern about informed decision-making and financial inclusion. It is concerned with the 'ability to discern financial choices, […] plan for the future, and respond competently to life events that affect everyday financial decisions' (Vitt et al. 2000, xii). Housing requires a person to manage large sums of money over the life course; such ability to plan for the future and life events can be essential, as observed in the example of interest-only mortgage holders. It was observed that people with low financial literacy were more likely to use an interest-only mortgage (Seay et al. 2017; a study with the 2009 data). When this mortgage product was introduced in the 2000s, it was concerned 'whether and to what extent borrowers fully understand the implications of taking out such a mortgage, and whether they have a clear understanding of how they will repay the capital sum' (Scanlon et al. 2008, 114). Twenty years after its introduction, it is reported in the Netherlands that many borrowers reaching the end of an interest-only mortgage term were not fully aware of its consequences, and about 23,000 to 46,000 elderly households have neither an adequate repayment strategy nor enough equity to release, hence facing the risk of having no place to live (van Prooijen 2018; Julen 2018; Waterval 2019).

Noteworthily, overall, this study takes a contextual approach to choose indicators and cut-offs rather than an approach referring to universal consensus. As illustrated above, it uses the income threshold of Dutch social housing policy and a satisfaction cut-off in the Dutch context, defines housing inadequacy in the context of advanced economies, and chooses an indicator of housing ability that identifies the non-negligible population as deprived..

4.3.6 Unit of analysis

The individual was set as the unit of analysis since the household-level analysis can conceal the scale of the deprived population. The analysis first identified which household was deprived (i.e. household as the unit of identification), allocated the same value to the household members (i.e. individual as the unit of analysis; applying the assumption that the members share dis/advantages), and assessed deprivation at the individual level.

4.4 Results and discussion

4.4.1 Test 1: correlations and commensurability of measures

Before discussing the results of a comparison of target-group identifications, let us first grasp a general picture of deprivations for each of the four indicators and their correlations. Table 4.5 shows, deprivation rates for each indicator appeared similar, ranging from 21% to 30%, except for dissatisfaction with dwellings. Then, when the study analyses their associations, as Table 4.6 shows, it is clear that all measures have positive correlations. The result particularly highlights that dwelling satisfaction and housing adequacy are strongly associated. A subsequent inquiry here is whether the deprivation of basic capability for housing would be predictable by the conventional measures. Looking at Figure 4.1, it seems clear that, statistically, those having low-income are highly likely to live in inadequate housing and have low financial literacy, and those living in inadequate housing are likely to report dissatisfaction with their dwelling. It also shows relationships between low financial literacy and other deprivations.

TABLE 4.5 Deprivation rates for each indicator

	Means-oriented measure	Satisfaction-oriented measure	Measures of basic capabilities for housing	
			Functioning-oriented	Potential-oriented
	Sufficient income for adequate housing	Dwelling satisfaction	Living in adequate housing	Basic Financial literacy
Non-deprived	77.0%	88.6 % (70.6%)[1]	78.7%	70.3%
Deprived	23.0%	11.4% (29.4%)[1]	21.3%	29.7%

Note: [1] the incidence rates when the average score of 8 is applied as the cut-off (i.e. 0–7 = deprived, 8–10 = not deprived)

TABLE 4.6 Correlations between the compared measures of housing wellbeing

	(1) Income	(2) Dwelling satisfaction	(3) Housing adequacy	(4) Financial literacy
Income	1.00			
Dwelling satisfaction	0.093**	1.00		
Housing adequacy	0.189**	0.312**	1.00	
Financial literacy	0.229**	0.027*	0.104**	1.00

*Note: Spearman's rank-order correlation; **p < 0.01; *p < 0.05. (1) income refers to taxable household income; (2) dwelling satisfaction is at 11-scale (3) the ordinal values of housing adequacy refer to the number of deprived dwelling conditions (maximum 7); (4) the ordinal values of financial literacy refer to the number of correct answers (maximum 4).*

A question shared by the three contesting views is whether capability-oriented measures of well-being/inequality in housing would be commensurable with the conventional measures, and hence there would be little informational benefits from capability-oriented measures. According to the statistical associations in Table 4.6 and Figure 4.1, information on deprivation of basic capabilities for housing (either functioning or ability) appears reducible to that of economic means for housing or housing satisfaction; thus, there may be few additional advantages of capability-oriented evaluation for policymakers. However, the comparison of target-group identification (Table 4.1) provides a quite different picture, as described below.

As illustrated in Table 4.7, the four indicators identify the expected target groups substantially differently. The proportion of population that at least three indicators jointly identify as the target group is only about 6% (column 1). The results with a lowered cut-off for each indicator show a similar pattern (column 2). When this result is dissected into pairwise comparisons (Table 4.8), we can observe an even sharper contrast to the pairwise statistical correlations in Table 4.6 and Figure 4.1. Unlike the strong statistical correlations between the indicators, their joint target-identifications range only between 4% and 9%. Interestingly, housing adequacy and dwelling satisfaction have the highest statistical correlation, but their target identifications overlap at one of the lowest rates.

FIG. 4.1 Predictability of the deprivation of basic capabilities for housing by income and of dwelling dissatisfaction by basic capabilities for housing

TABLE 4.7 Degree of consistency in identification of deprived persons: a test of in/commensurability

Number of measures jointly identifying a person as deprived	(1) With the cut-offs set for the study	(2) With lowered cut-offs for a robust check
0 (identified as non-deprived by all four measures)	44.6 %	53.1 %
1 (identified as deprived by one measure)	33.2 %	29.9 %
2 (identified as deprived by two measures)	15.9 %	13.1 %
3 (identified as deprived by three measures)	5.3 %	3.4 %
4 (identified as deprived by all four measures)	0.9 %	0.5 %
Total	100.0	100.0

Note: The lowered cut-offs applied for the robust check (column 2) were set as follows: housing is inadequate if two or more problems of dwelling conditions exist; members of households are financially illiterate only if both the household head and spouse incorrectly answered the two survey questions; members of households are dissatisfied with their dwelling when the satisfaction level is 5 or lower. No changes to the income threshold as it follows the current social housing policy of the study country.

TABLE 4.8 Pairwise comparisons of target group identifications

		Sufficient income for adequate housing	Dwelling satisfaction	Living in adequate housing	Basic financial literacy
	Study population deprived in each measure	23%	11% (6%)	21% (9%)	30% (19%)
		Percentage of population joinly identified in the column and row measures			
Sufficient income for adequate housing	23%	–			
Dwelling satisfaction	11% (6%)	3.9% (2.2%)	–		
Living in adequate housing	21% (9%)	7.6% (3.2%)	5.7% (2.0%)	–	
Basic financial literacy	30% (19%)	9.1% (6.9%)	4.7% (2.1%)	7.5% (2.4%)	–

Note: Figures in parenthesis: the percentage of population jointly identified with lowered cut-offs (applied the same rule in Table 4.7).

A crucial task of housing welfare policies is effectively targeting the groups in need of public support. Contrary to the implications of the statistical correlations, this counting-based assessment rather indicates that the income-based or satisfaction-based measures have a risk of missing a non-negligible portion of the population that the housing policy needs to concern. The next section further investigates the underlying implications of this general overview.

4.4.2 Test 2: weaknesses of the current evaluation approaches

As described earlier, it is uncertain whether gaps between means for housing and ends of housing achievements would be a substantive issue, and thus whether the conventional evaluation practices indeed cause a significant blind spot in welfare judgements about housing. A straightforward method to examine this question is to observe the overlap between deprivations in income for adequate housing (means) and the state of living in adequate housing (ends). Figure 4.2 shows the degree of their overlap. Contrary to expectations, the overlap is only about 37% (case IV). The discrepancy between basic means for housing and basic housing ends appears not negligible, implying that housing welfare judgements based on the level of economic means may substantially underestimate the public actions needed. For the remaining 63% (case III), causes of living in inadequate housing are likely due to something other than insufficient income. The possible explanations would be diverse, including external constraints (e.g. limited housing choices for some middle-income groups (Jonkman and Janssen-Jansen 2015) and lack of proper maintenance by lessors), personal strategic choices to live in a small flat, different personal expense priorities, varying levels of acceptance of housing inadequacy, and so forth. The causes of the discrepancy could not be determined with the current dataset of this study. Still, a clear policy implication was that, to ensure people live in adequate housing, more tailored policy interventions are required, not limited to financial subsidies.

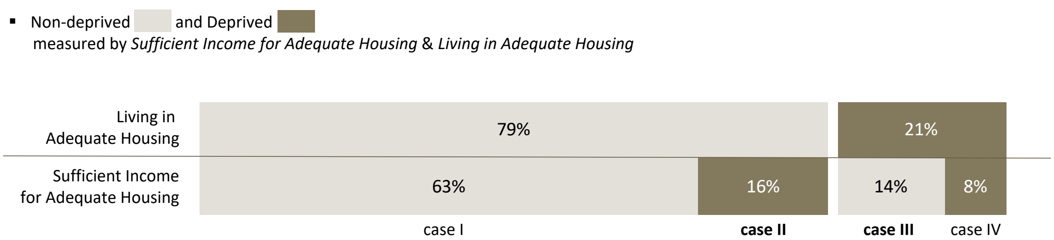


FIG. 4.2 Overlap of deprived groups: basic economic means and housing functioning.

Note: see Table B.1 in Appendix B for detailed figures

To examine the contesting view on housing satisfaction measures, target identifications by dwelling dissatisfaction and housing inadequacy were compared. What stands out in Figure 4.3 is that, among those living in inadequate housing (cases III and IV), about 75% (case III) reported they were satisfied with their dwelling. The same analysis for the more deprived cases (i.e. having problems with two or more dwelling conditions) also showed a high discrepancy (above 65%). This result suggests a possible delusion of the strong correlations between housing inadequacy and low housing satisfaction, and supports the conceptual argument about the limitations of satisfaction measures. The considerable mismatch between the two measures may simply be attributed to the heterogeneity in residential values and preferences among individuals. If this was the case, a sizeable proportion of cases who live in adequate housing but report dissatisfaction (case II in Figure 4.3) would be expected, but such cases represented only 7% of the sample, which was very marginal compared to the 75% mismatch rate in the opposite situation (case III). Thus, the considerable mismatch may rather indicate the adaptive preferences of the deprived groups, or other kinds of deficiency, such as low awareness of the importance of housing adequacy for their well-being. It is limited here in providing any definitive conclusion, but the clear finding is that the housing welfare judgements based on satisfaction measures have a high chance of underestimating housing problems, such as the insufficient realization of the right to adequate housing.

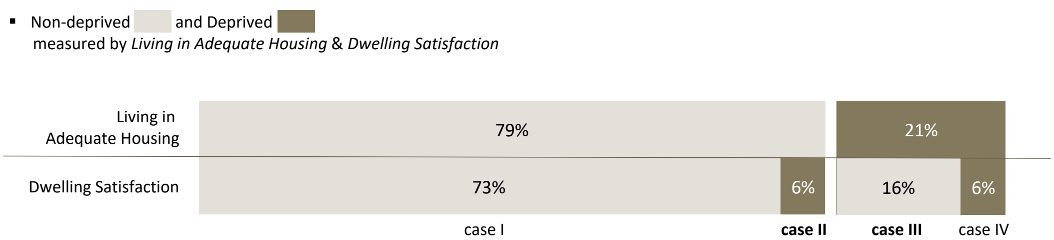


FIG. 4.3 Overlap of deprived groups: housing satisfaction and basic housing functioning

Note: see Table B.1 in Appendix B for detailed figures

Finally, financial literacy was compared with other measures. Earlier, we observed the statistical correlations between financial illiteracy and housing inadequacy (Table 4.6 and Figure 4.1). However, the target identification analysis shows (Figure 4.4) a substantial discrepancy between the measures. If we employ the pragmatic assumption that people prioritize utilizing their available abilities for achieving basic human functionings, one may expect a relatively low discrepancy between having basic financial literacy and living in adequate housing. However, Figure 4.4 shows that among those deprived of adequate housing, over 60% were non-deprived of basic financial literacy (case III), and about 30% among non-deprived of housing

TOC

adequacy were deprived of basic financial literacy (case II). Meanwhile, this high discrepancy can be an expected result because necessary basic abilities for housing are multiple and their actual utilization is a matter of personal choice. Additionally, financial literacy is a proxy for basic housing literacy and the factors that influence the state of living in adequate housing are undoubtedly numerous.

From this test, the findings regarding the potential-oriented evaluation are somewhat limited. Nevertheless, two meaningful implications can be drawn for future studies on operationalizing the capability concept. First, measuring basic housing functionings as proxies of basic capabilities for housing needs careful examination before adopting the pragmatic assumption made in poverty and well-being measurements. Second, if we are concerned with morally sensitive matters, such as financial inclusion and abilities to make informed decisions, value judgments based on the current evaluation approaches would be significantly limited in reflecting those issues—as observed in Figure 4.5 and Figure 4.6, unlike the implication of the strong statistical correlations between their measures and financial literacy (Figure 4.1).

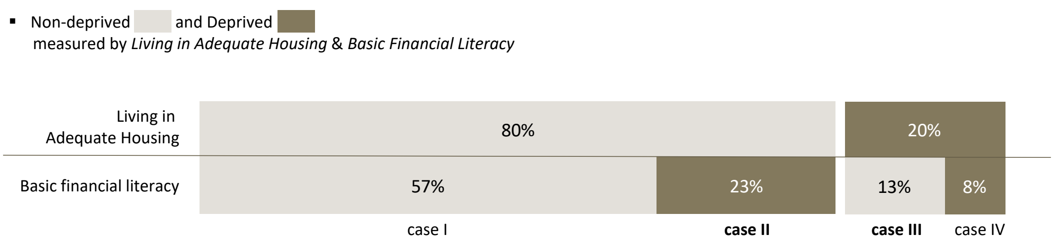


FIG. 4.4 Overlap of deprived groups: basic housing functioning and ability for housing

Note: see Table B.1 in Appendix B for detailed figures

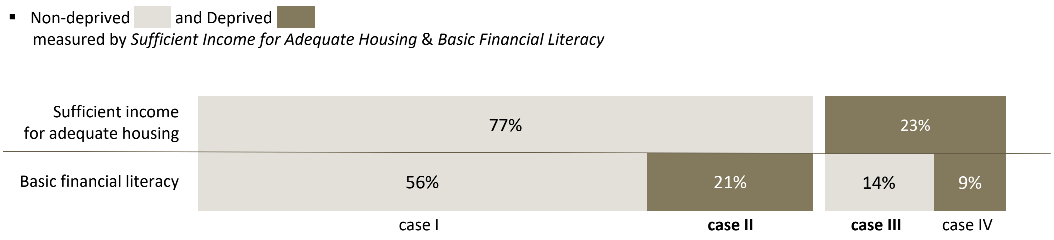


FIG. 4.5 Overlap of deprived groups: basic economic means and ability for housing

Note: see Table B.1 in Appendix B for detailed figures

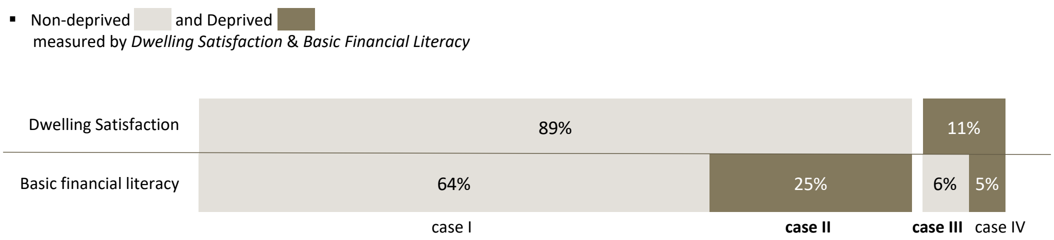


FIG. 4.6 Overlap of deprived groups: housing satisfaction and basic ability for housing

Note: see Table B.1 in Appendix B for detailed figures

4.4.3 Test 3: inequality in conversion efficacy

The test above revealed a notable mismatch between sufficient income for housing and basic housing functioning. This result suggests that housing welfare policies may need to seriously consider the conversion issue in shaping policy actions. The study extended its scope to observe differences in conversion efficacy among subgroups. Within the purpose of this chapter, this analysis set out to observe the relevance of the conceptual discussion about conversion gaps in the housing context; research on the factors causing such conversion gaps is reserved for future work.

As illustrated in Table 4.3, this third test was designed to compare the percentage of the population of each subgroup that had a discrepancy between possession of basic means and achievements of basic housing ends, to examine conversion inequalities between subgroups and policy implications. The results are summarized in Figure 4.7. The numbers in the graphs indicate the percentage of people who are non-deprived of income for adequate housing (possessing sufficient economic means) but who are deprived of housing adequacy (deprived of a basic housing functioning). By setting the ideal score as zero (i.e. all subgroup members have no discrepancy between means and ends), the distance from zero indicates the conversion efficacy score; thus, a longer bar means that a group has a lower conversion efficacy. Figure 4.7 clearly shows that tenants, youth, single-parent households, and people from non-Western backgrounds have the lowest conversion efficacy among the compared groups. These results suggest that, to live in adequate housing, they experience more kinds of non-monetary constraints, or the same non-monetary constraints affect them more profoundly.

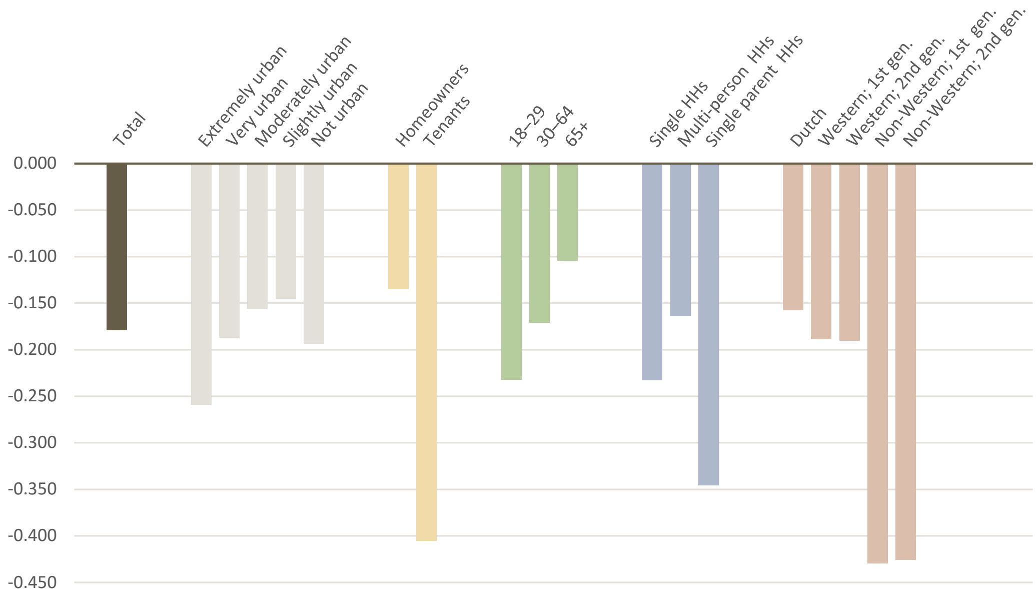


FIG. 4.7 Conversion efficacy by subgroups: from basic economic means to basic housing functioning

Note: see Table B.2 in Appendix B for detailed figures

4.4.4 Test 4: difference in multidimensional measurements

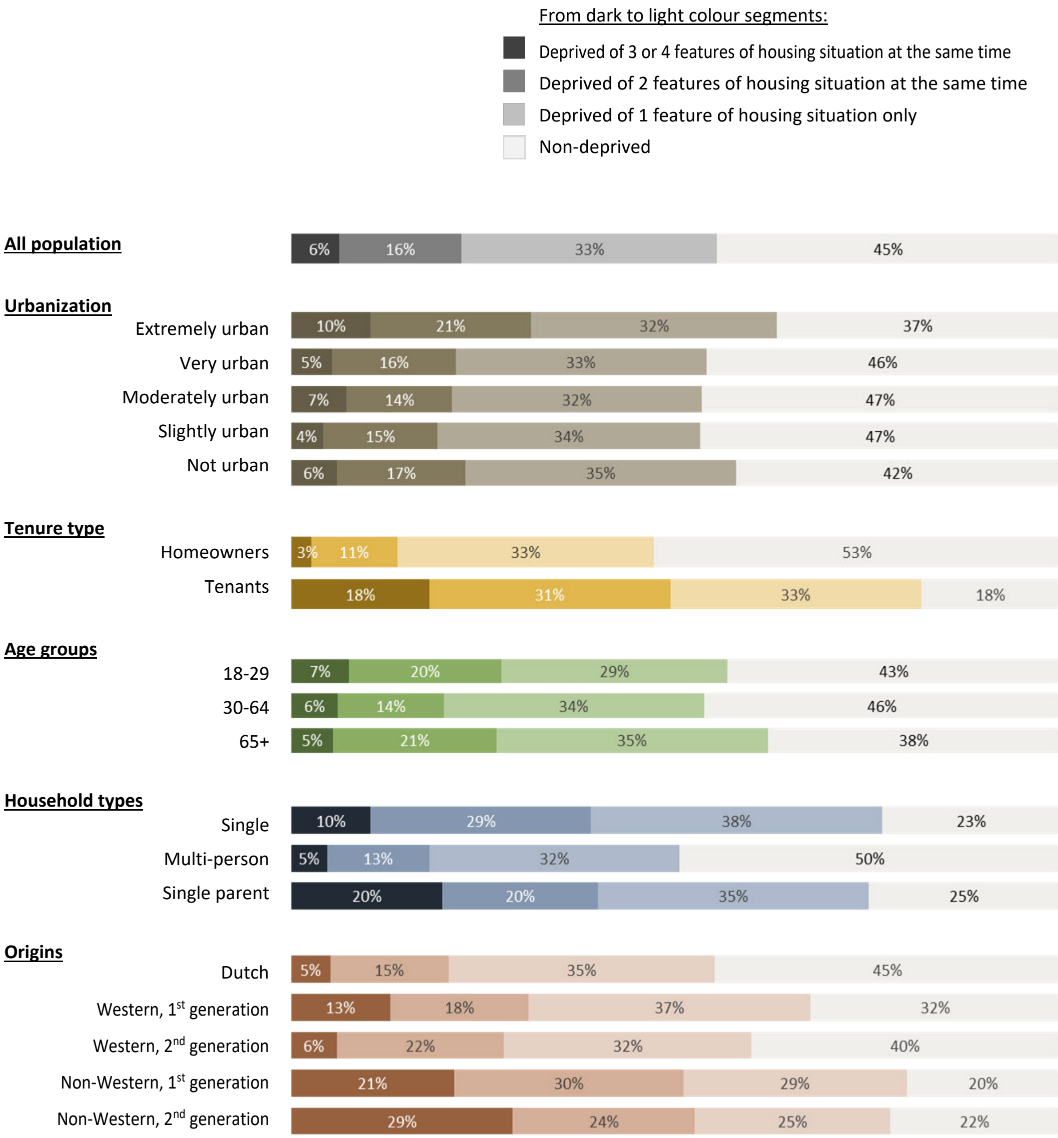
The results showed that the compared measures inform the expected target group of housing welfare policies substantially differently. These findings provide some initial evidence that the compared measures are likely incommensurable and suggest that each measure could be an independently important source of information for housing welfare judgments. Indeed, a starting ground for Sen's proposal for the CA was the imperfect nature of means-oriented and utility-oriented evaluation approaches (Comim 2018). Measures of satisfaction and economic resources are also valuable sources of information for social welfare judgments but not simply as a homogeneous magnitude of all plural features of our lives (Sen 2009). Thus, economic means for adequate housing, capabilities for housing and satisfaction with housing could all be important factors that shape individual well-being in housing, of which relations would be too heterogeneous to be statistically modelled in the linear frame of *from means to capabilities to functionings and to satisfaction*, since how individuals combine and make use of these factors is extremely diverse in reality.

Overall, these findings come down to an implication that multidimensional measurements are crucial for making housing policies effective. In practice, however, evaluation with multiple indicators is not a novel idea, and depending on one's perspective, it is similar to evaluating multidimensional determinants of housing satisfaction. How would the multidimensional measurement in the CA differ from the current practices, apart from asking for additional variables that reflect the capabilities for housing?

If we put forward the proposition that all four measures compared in this study could be independently important features of individual housing situations (as Sen argues regarding plural features of our lives), and thus all be components of a multidimensional evaluation, the test results in Table 4.7 indicate that individuals have different levels of simultaneous deprivations in their well-being in housing, implying a degree of inequality in housing. On this basis, this study extended the test to investigate the degree of simultaneous deprivations per person across: sufficient income for housing, dwelling satisfaction (subjective well-being in housing), housing adequacy, and financial literacy.

Using Table 4.1 as a basis, which was adapted from a frame of multidimensional poverty analysis (Alkire and Roche 2011), the study counted the number of simultaneous deprivations that each person had and disaggregated the results by subgroups. Figure 4.8 illustrates the percentage of people deprived of none, one, two, or three or more features of housing situations. From this analysis, we can observe which groups experience more joint deprivations compared to others, implying inequalities among subgroups and the need for multidimensional policy actions for them. Among the study population, it appears that the most deprived were those in extremely urban areas, tenants, young people, single-parent households, and groups from non-Western backgrounds. These groups had the lowest proportion of non-deprived individuals in all four aspects of housing situations, and the highest proportion of deprived individuals in three or four aspects. Interestingly, these groups also had the lowest conversion efficacy as observed in Figure 4.7. They experienced not only multiple deprivations in housing situations but also more disadvantages in converting economic means to basic housing ends.

In measuring housing issues multidimensionally, the most common method is a dashboard approach in the format of Table 4.5. This approach, however, does not tell us whether those deprived of each indicator are generally the same people or not, and who experience simultaneous deprivations at which degree of intensity (Alkire et al. 2015). Distinguished features of multidimensional measurements in the CA could refer not only to evaluating plural features of well-being in housing, but also to reflecting the different intensity of joint possessions (or deprivations) of those features, since more simultaneous possessions of those features imply a person has more diverse combinations of means, abilities and/or functionings to utilize for choosing their valued way of residing, and hence more capability for housing.



Note: see Table B3 in the appendix for detailed figures

FIG. 4.8 Different degrees of simultaneous deprivations in housing situation among subgroups

Note: see Table B.3 in Appendix B for detailed figures

4.5 Conclusions

When measuring well-being in housing and housing inequality, in theory, applying the CA has clear advantages in addressing the normative concerns overlooked by the conventional evaluation approaches. However, its practical difference has been unclear in the housing field. This study reviewed sources of such uncertainty and, for their clarification, compared the conventional and capability-oriented evaluation of housing deprivation in terms of identification of deprived groups that housing welfare policies are supposed to concern. The results showed that non-negligible proportions of the study population were: (i) living in inadequate housing (deprived of basic housing functioning) despite household income above the eligible threshold for housing welfare services (non-deprived in economic means for adequate housing), implying some conversion gaps; (ii) satisfied with their housing despite its inadequacy, implying possible inconsistencies of satisfaction-based measures with a sphere of the human right to adequate housing; and (iii) financially illiterate (deprived of basic ability for housing or lacking enablement of informed decision-making) despite household income above the threshold (non-deprived in economic means) and satisfied with housing, implying risks of overlooking the former issue when housing welfare policies are formed only on the informational basis of the latter. Furthermore, the results revealed clear inequality among the studied population in conversion efficacy from economic means to the basic functioning of living in adequate housing. Tenants, youth, single-parent households, and people from non-Western backgrounds appeared to have a low conversion efficacy. Individuals with this conversion gap are likely to be outside of current housing welfare policy targets.

The results empirically supported the theoretical advantages of incorporating capability considerations into measurements of well-being/inequality in housing, especially to compensate for possible informational gaps in the conventional evaluation practices. In welfare policies for housing, significant blind spots may have been present in addressing the housing problems associated with non-monetary issues, reflecting inequalities in conversion efficacy, and considering the adaptive preferences of the deprived. Welfare policies for basic housing services define their target groups largely by household income levels. This study demonstrated that this practice can substantially undermine the housing problems and underestimate population groups in need of societal support to improve their housing situation. The findings imply that housing policies need to seriously reconsider their informational bases, and design more diverse and tailored programmes beyond subsidies and social housing provisions that focus on low-income households. Value judgements in housing policy may refer to housing/residential satisfaction to reflect varied values and meanings of home among individuals, but increasing the satisfaction should not be the ultimate goal of housing policy, as this can be inconsistent with moral concerns.

The findings suggest that basic economic means for housing, basic capability and functioning for housing, and satisfaction with housing could all be valuable sources of information for judging basic welfare in housing, as a vector of multiple features of individual housing situation. Taken together, multidimensional measurements become crucial. Related to this implication, another uncertainty was the difference between the CA to multidimensional measurements and the current practice in the housing field, apart from adding new indicators of capabilities for housing. As shown in the study, the answer can differ depending on measurement methods; this study explored the difference between the dashboard approach and the joint-deprivation-counting approach and its implications for understanding the capabilities for housing. Further studies on this difference are recommended for an operationalization of the CA to evaluate well-being/inequality in housing. Additionally, when evaluation practice is to serve the needs of policy-makers and inform public debate, it should consider incorporating a counting-based assessment into the analysis to provide more explicit implications for value judgements, and to check the potential delusions; as shown in this study, the overlap between deprived groups for four indicators was rather limited than many would have expected from the results of statistical correlations and regression analysis.

The purpose of this study was to clarify uncertainty about the practical difference a capability-oriented evaluation can make in the housing sector. Therefore, it neither seeks to claim which specific indicators of capabilities for housing should be measured nor propose how capability ideas should be operationalized. Instead, this study aimed to lay the groundwork for future research into the operationalization of the capability concept to evaluate well-being/equality in housing.

This chapter showed what tangible benefits for housing policy discussion can be expected from an application of the CA, and clarified some ambiguous theoretical ideas through empirical tests. To gain further insights into policy implications, future research can investigate why substantial mismatches between the identification of deprived groups are observed, which would indicate the conversion factors that housing policy needs to address.

5 Measuring Housing Inequality with Capability Considerations

The contents of this chapter are based on the article "Measuring Housing Inequality with the Value of Freedom of the Capability Approach: A Proposal and a Demonstration" (Kimhur, submitted to a peer-reviewed journal in 2022 and work in progress), with minor changes in the section titles and introduction to align with the overall structure of this dissertation.

Measuring a person's capabilities for housing is challenging due to their non-observability. In dealing with this challenge, this chapter proposes estimating the extent of capabilities for housing by evaluating their confining and expanding factors in the dimensions of housing opportunity, security and ability (defined in Chapter 3). As a practical shape of this proposal, the chapter suggests measuring multidimensional disadvantages that constrain people's choices in the housing process—in short, multidimensional housing disadvantages (MHDs). This chapter presents a study of its application with data from the Netherlands. The study designed a measurement of the MHDs shaped by financial terms (MHDs-f) and produced an index score by applying the Alkire-Foster method. The chapter illustrates the measurement process and presents the measurement outcome of housing inequality in terms of which groups are more constrained than others in making choices in the housing process (i.e. having lower capabilities for housing). This empirical application aims to illustrate what practical shape may be given to the concept of capabilities for housing, and what informational benefits are expected from its operationalisation.

5.1 Introduction

> Since the United Nations Conferences on Human Settlements…in 1976…, and the adoption of the Millennium Development Goals in 2000, *we have seen improvements in the quality of life* of millions of urban inhabitants, including slum and informal-settlement dwellers. However, the persistence of…*growing inequalities*…remain among the major obstacles to sustainable development worldwide, with social and economic *exclusion* and spatial *segregation* often an irrefutable reality in cities and human settlements.
>
> The New Urban Agenda, Article 3, declared at the UN Conference on Housing and Sustainable Urban Development, 2016 (Habitat III) (UN 2017b; emphasis by author)

The global housing agenda is beset by growing housing inequality, with urgent issues no longer limited to deprivations in slums and informal settlements. As was revealed in Piketty's (2014) work, the gap in housing wealth has been a key driver of overall inequality over the last century. In addition, the problem of housing inequality became more acute in recent decades with the global phenomenon of housing financialization; as housing systems in countries are shaped by financial corporations, access to adequate housing has become more exclusive, resulting in a huge challenge to realising the right to adequate housing for all (UN Human Rights Council 2017). In an urge to tackle the housing problems, UN-Habitat has even proposed a 'Housing at the Centre' approach in urban agendas to promote proactive and holistic public actions to bridge the housing gap (UN-Habitat 2015). The global housing issues are calling for expanding the scope of housing actions to reduction of inequality in housing beyond the alleviation of deprivations in basic housing adequacy. Accordingly, new measurements are necessary to guide housing actions.

In the previous chapters, I have argued for evaluating housing inequality by incorporating capability considerations—that is, measuring inequality in the capabilities of people to choose their valued ways of residing—because of its conceptual advantage in addressing oppressed and constrained situations that force people to make coerced housing choices. To realise this conceptual merit in measurement practice, the value of freedom in the capability approach needs to be mainstreamed in the measurement design. However, its operationalisation has been challenging due to its non-observability and conceptual complexity.

In studies applying the capability approach to measurements, reflection of the freedom aspect has been greatly limited even though it is the central concern of the capability approach (Burchardt and Hick 2018), and it is even more scant in the housing domain. This absence is partially because of empirical constraints, such as limited housing surveys collecting data on capabilities for housing, but also because of the complexity of the capability concept. Measuring inequality in the capability approach requires us to evaluate the inequality *multidimensionally* by quantifying *non-monetary disparities*, and by closely engaging the *latent* issues of *freedom* and *choices* that are *non-observable* to measure. Integrating all these features into measurement design is indeed challenging. Hence, as for other social domains, housing researchers have alternatively assessed a set of basic functionings relevant to housing that people value—states of residing and attributes of residency that people value (e.g. Coates, Anand, and Norris 2015; Frediani 2007b; Mitchell and Macció 2021; Navarro and Ayala 2008; Ulman and Ćwiek 2020).

Information about the achievements of housing functionings and inequality in those achievements is undoubtedly valuable. It helps understanding of the housing well-being of individuals and setting policy goals accordingly. In particular, information about the basic functioning of living in adequate housing is essential. It is a basic dimension of human development (e.g. Alkire, Kanagaratnam, and Suppa 2020; Arndt and Volkert 2007) and a key yardstick of the right to adequate housing (e.g. measures of slums, UN-Habitat, MDG 7, and SDG 11; measures of housing deprivation, EU-SILC, and OECD). Nevertheless, these measures have a few critical shortcomings. The foremost weakness is, the measures of deprivations in basic housing functionings can inform us only about, currently, whose housing situation is deprived, and little about why some people become to be in such deprived situation whereas others not. In addition, housing is a process that interacts with changes in living circumstances, but the measurement focus on what people value does not reflect this aspect, thus overlooking the inequality in the housing process. Beside, measuring housing functionings at scale is challenging because kinds of residential attributes and states that people value are extensively plural.

This chapter first briefly reviews the limitations of the functioning-focused evaluation approach in the housing context. To overcome those limitations, this chapter suggests that measurement practices may shift the evaluation focus from what people value to what constrains people's choices, placing the value of freedom at the centre of inequality measurements. As a particular way to operationalize this proposal, a pilot study is designed to measure the multidimensional disadvantages that constrain people's choices in the housing process—multidimensional housing disadvantages (MHDs)—in the dimensions of opportunity, security, and ability that bound the extent of housing capabilities. Through this pilot measurement of the MHDs in the Netherlands, this chapter illustrates what practical shape may be given to the ideas of housing capabilities for the evaluation of housing inequality, and what informational benefits can be expected from this measurement.

The study measures the MHDs by devising the Alkire-Foster (AF) method of multidimensional poverty measurements (Alkire and Foster 2011) with freedom-oriented dimensions, indicators, and analysis units. The dimensions and indicators are chosen through conceptual reasoning—those best aligned to concerns about the value of freedom and real opportunities in the housing context—in combination with pragmatic consideration of data availability and policy relevance. The measurement utilises register data from Statistics Netherlands and the DNB Household Survey (DHS) on the panel administered by CentERdata (Tilburg University, the Netherlands), in 2017.

5.2 Approach to estimating the capability for housing

5.2.1 Moving from what people value to what constrains people's choices

Let me first re-clarify the concept of housing capabilities. In this dissertation, housing is discussed and analysed as acts of residing, instead of dwelling units to provide or accommodate somebody. Accordingly, *housing functionings* refer to acts or states of residing, such as living in adequate housing, renting a flat for mobility, and residing with dignity and respect. Extending the definition of capability (Sen 1985, 2009) to the housing context, *housing capability* (interchangeably, *the capability for housing*) can be defined as a combination of various housing functionings from which people can choose according to their values, or the potential to achieve the valued housing functionings. The study in this chapter defines housing capabilities as *real opportunities to reside in the way that a person has reason to value*, by centring on the value of freedom in the capability approach.

For measuring housing capabilities, researchers first need to explore how to resolve the problem that capability is not directly observable. In poverty and well-being measurements, one of the main approaches to cope with this challenge is to compile a list of observable functionings that people value—given that capability can be defined as the alternative combination of valued functionings—and then measure deprivations or achievements in those functionings. The same approach can be considered to measure housing capabilities: we could seek to identify dimensions of housing functionings that people value (e.g. Frediani 2007b) or basic housing functionings that society should value (e.g. attributes of adequate housing), and then measure the overall score of their achievements as a proxy of housing capabilities (e.g. Coates, Anand, and Norris 2015; Navarro and Ayala 2008; Ulman and Ćwiek 2020). Despite this approach has strengths in enriching our understanding of plural residential values and basic wellbeing in housing, there are a number of critical limitations as below.

Clearly, measures of basic housing functionings are limited in indicating why some people are deprived in those functionings whereas others do not. They do not inform whether some groups have no other choice than living in inadequate housing, and what kind of disadvantages have constrained their housing choices.

In addition, defining a set of housing functionings for a scaled measurement unavoidably diminishes the heterogeneous values of people to some extent, because the ways of residing that people value are exceedingly plural and non-static in reality. The characteristics of residency that people value vary by different combinations of numerous residential attributes, such as dwelling types/design, tenure types, neighbourhoods, locations, and desired length of residency at that location. Each of those variables has multiple options, and the choice of valued options again varies by multiple factors, such as personal perception of the meaning of home, individual living conditions, life values and goals, and local notions. Furthermore, the valued option is likely to change alongside the changes in livelihoods, families, employment types, ages, incomes, lifestyles, social norms, and relevant policies.

More importantly, the focus on what people value tends to neglect that housing—acts of residing—is a process rather than a static status or one-point-event, and the inequalities occurring during this process. Individuals navigate housing strategies throughout their life courses according to changes in their living circumstances, personal values, and surrounding structural conditions in their society. Hence, housing is often discussed alongside the concepts of *housing careers* (Kendig 1984), *housing histories* (Forrest 1987), *housing pathways* (Payne and Payne 1977; Clapham 2005), and *housing transitions* (Beer and Faulkner 2011). Not all households have an ascending trajectory of housing paths (as observed in Clark, Deurloo, and Dielemann 2000, 2003). In the housing process, some groups may be entrapped in a specific housing option while others have more options to realise their desirable housing paths. For addressing inequality in housing, the crucial information is rather the difference in people's capability for navigating housing strategies and the kinds of disadvantages that constrain their choices in the housing process; this is certainly different to information about what people value.

Overall, the challenges in measuring the capabilities for housing and the limitations of the functioning-based measurement approach are derived from its exclusive focus on what people value. Thus, when resolving the non-observability problem in the capability measurements while avoiding those limitations, the measurement approaches can instead consider moving their evaluation focus from *what people value* to *what constrains people's choices* in the housing process, and leaves the question of actual choices—achieved housing functionings that people value—as the secondary evaluation focus, because which housing functioning a person realises out of the feasible options is up to individual choices. Instead of measuring what is in their basket of housing capability (a set of housing functionings), the evaluation practices may rather aim to estimate the *extent* of capability by measuring its confines, like estimating a room capacity by its surrounding structures. In other words, evaluation practices could aim to measure capability for housing by evaluating the conditions that expand or constrain real opportunities of people to choose their reasonable and valued options in the housing process. For an empirical application of this approach, the first step is naturally to identify types of conditions that shape such real opportunities for housing. The following subsection discusses the types of such conditions.

5.2.2 Dimensions of the conditions shaping the capability for housing

Various methods have been practised for defining dimensions of poverty and well-being. These range from empirical observations to informed guess, deliberative process and philosophical/theoretical reasoning, or any of their combinations (Alkire 2013; Ballon 2013; Byskov 2018; Robeyns 2003). Similar methods would be applicable for defining the dimensions of conditions that expand or constrain capability of people for housing. While the methods based on empirical studies would provide valuable insights, this study suggests starting with conceptual reasoning for identifying the dimensions, by prioritizing the best conceptual alignment of measurements with Sen's philosophical ideas about substantive freedom and capability.

By scrutinising the meaning of *capability as real opportunities* (Sen 2009) in the housing context, this study suggests that the capability of people for housing is shaped by at least three dimensions: *housing opportunity*, *housing security*, and *housing ability*. In Chapter 3, I have presented the detailed reasoning and discussion of this proposal, and here, let me just recap its main points. The core idea is as follows. While the housing opportunity (i.e. formal/informal entitlements and eligibilities) form a basic entry condition for expanding housing capability, housing security forms a low threshold of agency freedom to utilise the provided housing opportunity, and the enhancement of housing ability then raises the agency freedom for the better, thereby expanding housing capability to the maximum. All three conditions form the basic boundaries of capability for housing. Table 3.1 in Chapter 3 has provided a structured overview of these three dimensions and their concepts. Each dimension is summarized as follows.

- Opportunity: the basic entry condition for expanding housing capability that provides eligibility and entitlement to choose a valued option (e.g. opportunity to access housing information, housing finance, and participation in decision-making).

However, having such opportunities does not guarantee real housing opportunities, because their actual and effective utilisation could be hindered by other constraints.

- Security: a base platform of substantive freedom to utilise feasible opportunities for housing. People can be hindered from utilising entitlements if they foresee that it poses risk to residency security (e.g. a woman entitled to joint tenancy but unable to ask her husband out of fear of losing what she has now). To secure current housing functionings, some people can be forced to make other valued functionings insecure (or vice versa), whereas others need not consider such trade-offs. Lastly, if people have low levels of residency resilience (i.e. the extent to which they can uphold current residency or recover adequate residency after adverse effects on livelihoods), they are likely to face greater barriers than others when attempting to utilise the entitlements or to choose other life options.

- Ability: for effectively making use of available opportunities, people need to have adequate knowledge and understanding of them (e.g. housing literacy). Adding to the ability to utilise the opportunities provided by others, people also need proactive abilities to improve their own housing situations (e.g. the ability to claim rights and demand opportunities not yet in place). This dimension concerns not only what abilities people possess, but also the enabling and empowering environment that fosters such abilities.

Having a higher degree of disadvantage in these conditions means that people face more constraints in their housing decisions and are more likely to be forced to choose housing paths they do not value. Analysis of such disadvantages can highlight underpinning causes of coerced housing choices and thus, the sources of housing inequality. Meanwhile, this approach may raise questions about how the concept of these shaping conditions differs from the concept of conversion factors. While the analysis of conversion factors primarily pays attention to the conversion from resources to actual achievements, the analysis of the conditions shaping capability does not necessarily involve the conversion from resources to something else, and directly involves structural constraints that influence people’s choices and freedom.

5.3 Measurement design

The proposal above is, in practical terms, to measure multidimensional disadvantages that constrain people's choices in the housing process. In short, this study names it the multidimensional housing disadvantages (MHDs). To demonstrate how this can be done, the study measured the MHDs in the Netherlands. This section explains the measurement design. Table 5.1 outlines the proposal and how it was applied in the study.

5.3.1 Measurement method

This study adopted the AF method of multidimensional poverty measurement (Alkire and Foster 2011). Two reasons were considered for this choice: the method has properties that meet the conceptual requirements of this study' measurement approach; and the method has practical advantages in utilising a wide range of survey data. The core idea of the proposal is to estimate the extent of housing capability by measuring its confines. Thus, the measurement should be able to capture the degree of simultaneous disadvantages in those confining elements. Apparently, a higher degree of simultaneity (or, intensity) of disadvantages means that the person's housing decisions and choices are more constrained, and hence, they have a lower level of housing capability. The AF method has distinctive properties that produce an index score by factoring in the number of simultaneous disadvantages a person has. As to the second reason about data utilization, measurements of the MHDs in the capability approach needs to explore new kinds of data sources, and this requires making use of categorical data from various surveys, beyond the cardinal measures using income data (e.g. disadvantages in terms of housing cost-overburden rate, rent arrears, and household income levels). The AF method can produce a rigorous measure with ordinal and binary data (Alkire et al. 2015), and transform categorical information into a numeric score.

TABLE 5.1 Measurement design: the proposal and an application

Design elements	Proposal	This study chose:
Dimensions	Identify the conditions that expand/constrain choices in the decision process	• housing opportunity, housing security, housing ability; • by conceptual reasoning.
Measurement method	Design/choose a method that factors in the level of disadvantages and the level of their simultaneity, to estimate the extent of capability by its confines	• Alkire-Foster method of multidimensional poverty measurements; • by scrutinizing alignments between the conceptual ideas and the properties of measurement method.
Measurement theme	Choose a theme of issue to evaluate (e.g. right to security of tenure, capability for participating in housing projects, access to social/public housing)	• the constraints structured by financial terms; • by pragmatic reasoning on: features of the housing domain, study purpose, and data availability.
Dimensional indicators	Design/select indicators that discern the potential aspect of each dimension under the chosen theme	• the indicators in Table 5.2; • by scrutinizing conceptual alignments, possibility to be contextualized while being comparable, and data availability.
Unit of analysis	In case of using household as the unit of identification, distinguish the household members that could be independent but stay with other members, to reflect the latent aspect maximally	• household as the unit of identification and individuals as the unit of analysis, but defined *latent households* as a separate unit of identification; • by distinguishing the aged 18+ that parents are not legally responsible for a care for a place to stay in the Netherlands.

5.3.2 Theme of the measurement

To measure the MHDs in the three dimensions of opportunity, security, and ability, we first have to choose an evaluation theme before selecting dimensional indicators. The three conceptual dimensions can be applied to various themes of housing problems; naturally, dimensional indicators vary by chosen theme. By way of illustration, if the evaluation theme is the right to security of tenure, it needs to evaluate: in/formal entitlements for the right (housing opportunity); a system that prevents adverse effects on residency when claiming the right against lessors (housing security), and knowledge on the right and how to effectively claim the right (housing ability). Similarly, evaluating the capability for participatory slum upgrading would need to evaluate not only the entitlement for participation and eligibility for project resources (housing opportunity), but also know-how in the effective participatory process (housing ability) and a low risk to residency security during the projects or a low necessity for a trade-off between participating in the project and other basic functionings (housing security).

This study examines the theme of financial constraints, referring to the disadvantages in the housing process that are structured by financial terms (hereafter, MHDs-f), which are not necessarily the level of income and wealth, such as entitlement to housing finance programmes (e.g. mortgages), vulnerability in housing cost payments, and basic financial literacy to utilise financial programmes for housing. Three aspects were considered in this theme selection. First, although the capability approach primarily concerns non-monetary issues, we cannot overlook the fact that individual housing choices are dominantly structured in financial terms in most countries. Second, it is meaningful to compare the MHDs structured by financial terms with conventional income-based measures, to investigate what different insights this measurement approach can bring. Lastly, there are various data and surveys relevant to this theme, allowing to design new housing indicators that reflect the ideas of housing capabilities.

5.3.3 Dimensional indicators and disadvantage thresholds

Under the chosen theme, the study selected indicators based on the following selection criteria. (i) From the given datasets, which indicator can the best conform to the underpinning ideas of each dimension? (ii) Can the indicator reflect the potential aspect and latent issues, rather than the already attained state of housing situations? Finally, (iii) for to housing opportunities that are structured by in/formal institutional systems, can the indicator be contextualised in different society but still be comparable? The chosen indicators are listed in Table 5.2 with description of the definitions and thresholds. Equal weight was allocated to each dimension because, conceptually, all three dimensions are essential for expanding housing capability.

The indicator of housing opportunities measures the extent of feasible tenure options that a person has among owner-occupation, private rental, and social rental. This study computed this indicator by the key determinants of eligibility for different housing tenure options in the Netherlands, as described in Table 5.2. The indicator, therefore, tells us whether some groups are more trapped in specific housing options than others or have no options to choose. Through a life course and the housing path alongside, the most reasonable choice of tenure option is not a fixed entity as it can vary by changes in personal situations, life values, and surrounding societal conditions. Presumably, being trapped in only one option or having no option implies lower capability to choose a suitable housing path according to their life strategy than those with more options. In this measurement, the current homeowners were labelled as those eligible for private rental.

TABLE 5.2 Dimensional indicators and disadvantage thresholds

Dimension	Opportunity
Thematic dimension	Entitlements to housing tenure options

Disadvantaged if:
A person is entitled to only one or none of the following options: mortgage access for homeownership, rental housing in private sector, and social housing.

- *Mortgage access*: a person is not entitled if s/he is a non-permanent contact employer, or an self-employed/freelancer for less than three years, or having debts other than mortgages
- *Private rental housing*[1]: a person is not entitled if s/he is unemployed, or has monthly gross income less than the four times of the Rent Liberalisation Threshold (710.68 euro in 2017), or has the withdrawable savings less than three times of the Rent Liberalisation Threshold[2]
- *Social housing*: a person is not entitled if the taxable income of her/his household is higher than the social housing eligibility threshold (36,798 euro in 2017)

Dimension	Security
Thematic dimension	Resilience to risks for housing cost payments

Disadvantaged if:
A person becomes immediately vulnerable to pay housing costs (rent or mortgage) with minor shocks[3]

- When a person finds difficulties to pay the costs under the following unforeseen circumstances: suspension or reduction of social/housing benefits or pension, temporary unemployment of breadwinner, increase in rent, increase of the mortgage interest, expense for unexpected shocks such as illness

Dimension	Ability
Thematic dimension	Basic ability for financial planning for housing

Disadvantaged if:
A person has little knowledge on financial matters, or did not learn from (grand) parents how to plan budget between 12 and 16 years of age

[1] In the Netherlands, property owners generally require proofs of tenants' ability for steady rent payments, such as having regular income and having monthly gross income more than three or four times of the rent (Verberk, Warnaar and Bos, 2019). Adding to this, tenants generally need disposable savings for the first month rent, a down payment and the fee for broker agency, of which total cost is roughly the three times of the initial monthly rent.
[2] It is the initial monthly rent limit of social housing in the Dutch housing system. If the rent is higher than this threshold, housing is categorised as private rental housing. The indicator used this threshold value as a variable when computing the minimum requirements for the entitlement to the private rent.
[3] Here, minor shocks were defined in relative terms from the list of shocks in the survey question.

Regarding the vulnerability in housing cost payments, the commonly used indicator is a measure of rent arrears. However, it measures the past or existing housing situation. Instead, this study used survey data about potential payment difficulties when facing unforeseen circumstances, and assessed whether a person would become immediately vulnerable to pay the cost even with minor shocks to their livelihood. Therefore, being disadvantaged in this indicator implies that his/her state of residency is much more dependent on surrounding situations and making desirable choices regarding residency and life options could be more hampered.

For designing the indicator of basic housing ability, the study utilised the second-best guess indicator out of the available datasets. As housing is a capital intensive good, it is crucial to have knowledge to utilise various housing finance facilities/programmes and the ability for long-term financial planning. Research on financial literacy has shown its relationship with housing wealth (Lusardi, Michaud, and Mitchell 2017) and the likelihood of taking risky mortgages and mortgage delinquency (Van Ooijen and Van Rooij 2014; Zahirovic-Herbert, Gibler, and Chatterjee 2016) that can have adverse effects on residency. In addition, studies are increasingly discussing the relevance of financial literacy to capabilities (Lubis 2018; Sherraden 2013; Storchi and Johnson 2016). Existing surveys on financial literacy and budget planning ability, however, do not collect housing-specific data, and nor do housing surveys. Alternatively, the study utilised the survey data of self-assessment on general financial knowledge and experiences of learning about budget planning at early age in youth. Being disadvantaged in this indicator means that the person might not be able to effectively utilise the provided financial opportunities for housing or may make undesirable financial choices without awareness of its consequences.

The study designed one indicator per dimension in the approach of distinguished capability comparisons (Sen 1999). A partial measurement of the MHDs could be useful enough to inform about some aspects of housing inequality. Besides, it was prioritized in this study to measure the indicators that best align with the foundational ideas of freedom in the housing context, to examine how the proposed evaluation approach can be implemented practically and what new insights it can provide. In addition, developing an exhaustive list of the MHDs need to be done by accumulating knowledge from multiple studies but they are not yet in place in housing and capability research. Clearly, there exist existing datasets and research on housing disadvantages from the capability perspective. Discussion of housing capability started relatively recently; naturally, demand for capability-oriented data has been absent.

5.3.4 Datasets

The study utilised the register data from Netherland Statistics and the microdata from the DHS in 2017. The DHS data are on the financial behaviour of those aged equal to or older than 16 years. Among the sample, which consists of 2292 households (5032 individuals), only those aged 18 years or older were analysed. Datasets were selected by examining: whether they have the variables that the study can use to design indicators from, that best meet the concept of each dimension and capability; and whether data are linkable to register data to supplement the variables that the subject-specific surveys might not cover.

5.3.5 Unit of analysis

When defining unit of analysis, the study differentiated the household members who could be independent households but stay with other household members (I label them *latent households*; i.e. those aged 18 years or over in the Netherlands) from the household heads and their un/married partners (I label them as *current households*). Typical cases of latent households are members of non-family base households (housemates) and youths living with parents. Some latent households may voluntarily live with others even though they can move out, but some have no choice but to live with others. So far, information on those latent households has been hidden, because housing indicators are mostly measured at the household level. By differentiating the latent and the current households, measurements can better reflect the constraints on latent housing choices.

The study used the current and latent households as the unit of disadvantage identification, and individuals as the unit of analysis. For the indicators of housing security and housing ability, only partial data on latent households were available, because the survey did not collect data from all household members. As a pragmatic compromise for the best guess, the study allocated the value of their household to the latent households having no data; for example, if at least one of the current household members (head or his/her partner) was in an advantaged position, the measurement defined the latent household member as advantaged by assuming a mutual share of advantages within the household. Although accurate measurement is not possible, a systemic application of a compromising rule can provide enough meaningful information for *comparing* the level of disadvantages within the target population.

5.4 Results and discussion

This section first overviews the general outcome of the MHDs-f measurement, and compares the provincial rankings by the MHDs-f and conventional measures to validate the added value of this new measurement. Then, it discusses the information on inequality that this measurement approach produces by decomposing the MHDs-f Index by regions and population characteristics.

5.4.1 Overview of the measurement outcome

Before looking at the MHDs measurement outcome, let us first grasp a general picture of the study population. Table 5.3 shows the basic raw headcount ratio in each dimension. The cases in coloured cells are those that this study identifies as disadvantaged by the indicator thresholds in Table 5.2. Overall, about 25% of Dutch adults have no or only one feasible tenure option, and 23% have a low level of basic ability for financial planning. For housing security, around 23% are at risk of falling into trouble in paying housing costs even with minor shocks to their livelihoods, such as temporary unemployment of a partner, sickness, or suspension of social benefits, although their residency is secure at this moment.

TABLE 5.3 Incidence of disadvantages in each dimension of conditions shaping capability for housing

Opportunity: Entitlements to housing tenure options	Entitled to none of the options	10.8 %
	Entitled to only 1 option	14. 4 %
	Entitled to 2 options	25.6 %
	Entitled to all options	49.2 %
Security: Resilience to risks for housing cost payments	Vulnerable to minor shocks	22.5 %
	Vulnerable to moderate shocks	27.1 %
	Vulnerable only to extreme shocks	5.6 %
	Not vulnerable to any shocks	44.8 %
Ability: Basic ability for financial planning for housing	Neither have knowledge nor learned how to budget	22.7 %
	Have financial knowledge *or* learned how to budget	50.6 %
	Have financial knowledge *and* learned how to budget	26.7 %

Table 5.3 provides a general picture that roughly one in four Dutch adults are disadvantaged in each dimension. Now, to analyse the extent to which they experience housing disadvantages simultaneously, which would indicate the extent of capability for housing, the study measured the number of disadvantages that a person had and then calculated an index score by applying the AF method. Thus, the study measured the multidimensional headcount (H) and the average number of housing disadvantages in percentage form (A), and calculated the adjusted headcount ratio (M_0) that represents the MHDs-f Index. Table 5.4 presents the measurement outcomes by different cut-off values that determine which case we consider as the person multidimensionally disadvantaged. As discussed in the previous section, being disadvantaged in multiple dimensions simultaneously means being more constrained in pursuing suitable housing choices in the housing process, thereby giving a lower level of housing capability. Therefore, if we choose k=2 as the level that society should be concerned with, this measurement outcome tells us that the Dutch population's housing capability is constrained at the level of 0.133, and that policy first needs to address problems of 19% of the population who is disadvantaged in the housing process in 2.15 dimensions on average.

TABLE 5.4 Multidimensional housing disadvantages in financial terms (MHDs-f) by different cut-offs of multidimensional disadvantage, the Netherlands 2017

		(1)	(2)	(3)	(4)
	Disadvantage cutoff (k)	MHDs-f Index (M_0 = H x A)	Multidimensional Headcount (H)	Intensity of Disadvantage (A)	Average number of dimensions disadvantaged
(1)	0	-	41.7%	-	-
(2)	≥ 1	0.264	58.3 %	0.453	1.36
(3)	≥ 2	0.133	18.6 %	0.716	2.15
(4)	≥ 3	0.026	2.6 %	n/a	3.00

5.4.2 Difference in performance ranking: Provincial comparison

The first question to test is, will this measurement approach provide different insights into the housing problems, thus leading to substantially different policy directions and solutions? In particular, would it differ much from the measures of *basic* housing functionings, like living in adequate housing? If the policy is about reducing the population living in inadequate housing, one could argue that the measures of those groups may largely represent the population intensely disadvantaged in the housing process, by assuming that people would prioritise choosing the basic housing functioning when it is feasible. However, Table 5.5 shows this assumption is questionable. If we compare the provincial ranking by the measures of the MHDs-f and the basic functioning of living in adequate housing (columns 1 and 2 in Table 5.5), it is clear that the two measures provide very different information about the housing situations of the population. The population in Utrecht and Flevoland are deprived of housing adequacy at a similar level (9th and 8th, respectively), but they have opposite levels of disadvantages in the housing process according to the MHDs-f measure (1st and 12th, respectively). The conflicting rankings by the two measures rather indicate that living in adequate housing—achievements of basic housing functionings—does not necessarily imply that the person has lower constraints in the housing process and vice versa.

TABLE 5.5 Comparison of provincial rankings by the MHDs-f, housing adequacy, income for housing, and housing satisfaction, the Netherlands 2017

Provinces of the Netherlands	1		2		3		4	
	MHD-f index (*k*=2)		Deprivation in housing adequacy [1]		Deprivation in income for adequate housing [2]		Dissatisfied with housing [3]	
	Index	ranks	%	ranks	%	ranks	%	ranks
Average	0.132	-	36.3	-	37.8	-	14.5	-
Utrecht	0.090	1	37.3	9	32.8	1	13.6	9
Drenthe	0.095	2	29.8	1	38.5	9	12.1	3
Overijssel	0.104	3	34.1	6	38.1	8	12.8	4
Noord-Brabant	0.115	4	30.6	2	36.9	4	12.9	5
Groningen	0.120	5	42.5	12	46.3	12	15.4	10
Limburg	0.124	6	30.9	3	41.2	10	13.3	8
Zeeland	0.125	7	33.1	4	37.2	6	11.4	1
Gelderland	0.147	8	33.1	5	36.4	3	13.1	6
Noord-Holland	0.147	9	41.5	11	37.1	5	16.5	11
Friesland	0.155	10	34.6	7	44.4	11	11.6	2
Zuid-Holland	0.159	11	40.3	10	38.0	7	17.1	12
Flevoland	0.161	12	36.3	8	35.7	2	13.2	7

Note: the measures of housing inadequacy and dwelling dissatisfaction referred to the data of Netherlands Housing Survey in 2018 (WoON 2018).
[1] The proportion of households having one or more problems with room density, drafts, mould and heating.
[2] The proportion of households having insufficient income for accessing adequate housing. This measure used the eligibility threshold of social housing as the socially agreed level of sufficient income for adequate housing in the Dutch context. The threshold of social housing refers to taxable household incomes, which was 36,798 euro in 2017.
[3] The proportion of households who responded as 'very dissatisfied,' 'dissatisfied,' or 'not satisfied, but not dissatisfied either' with current dwelling (out of the five-level Likert scale)

In this study, the measurement theme is the housing disadvantages structured in financial terms. Thus, it is questionable whether the MHDs-f information is in fact commensurate with income-oriented measures. In Table 5.5 (columns 1 and 3), however, we can observe the discrepancy between the MHDs-f and the income deprivation. Taking the example of Utrecht and Flevoland again, both provinces have the lowest ratio of the population deprived in the income for accessing adequate housing (1st and 2nd, respectively), but the opposite pattern in the MHDs-f. Whereas the population in Utrecht is least multidimensionally disadvantaged in the housing process (ranked 1st), that in Flevoland has the highest level of housing disadvantages (ranked 12th). This comparison shows that, even if people have decent income for accessing housing, their housing choices can be substantially constrained by other types of disadvantages—limited entitlements to different tenure options, vulnerability in housing cost payments, and/or lack of basic financial knowledge and planning ability. If a policy aims to reduce housing inequality by providing social housing for low-income people, the population of Flevoland would have the lowest policy priority, even though it is much more constrained in making choices in the housing process than the population in other provinces.

Another uncertainty is the difference between the measures of constraints and housing satisfaction, because having fewer constraints in the housing process may imply that a person has a higher chance to achieve the housing situation they value, resulting in higher satisfaction with housing. In Table 5.5, however, we again observe the notably different provincial rankings by the MHDs-f and housing satisfaction. For example, the population in Friesland has the highest level of housing satisfaction (almost the same as top-ranked Zeeland) but is one of the most multidimensionally disadvantaged groups (the 10th by the MHDs-f Index).

Provided the added value of the MHDs-f measurement, the next subsection analyses the inequality in the MHD-f between regions and sub-groups of the population. For the sake of simplicity and clarity, the following sections examine the MHDs-f of those disadvantaged in two or more dimensions (k=2 in Table 5.4).

5.4.3 Inequality between sub-groups of the population

To observe the capability of different groups for housing, the study disaggregated the measurement outcome by household types, age groups, and employment types (Figure 5.1; for detailed figures, see Table B.4). From the MHDs-f score difference between the subgroups, we can observe the level of inequality in capability for housing. In Figure 5.1, it is clear that the latent households, youths aged 18–

29 years, and those in non-standard forms of employment are most intensely disadvantaged, implying their choices are more constrained than the compared groups in the housing process. The gap between latent households and multi-person households appears especially substantial; the index score of the latent households is six times higher than that of multi-person households. The large gap between these groups especially highlights that housing problems of latent households might have been considerably underestimated in policy discussions, because these people are usually counted as members of multi-person households in measurements of a range of housing issues.

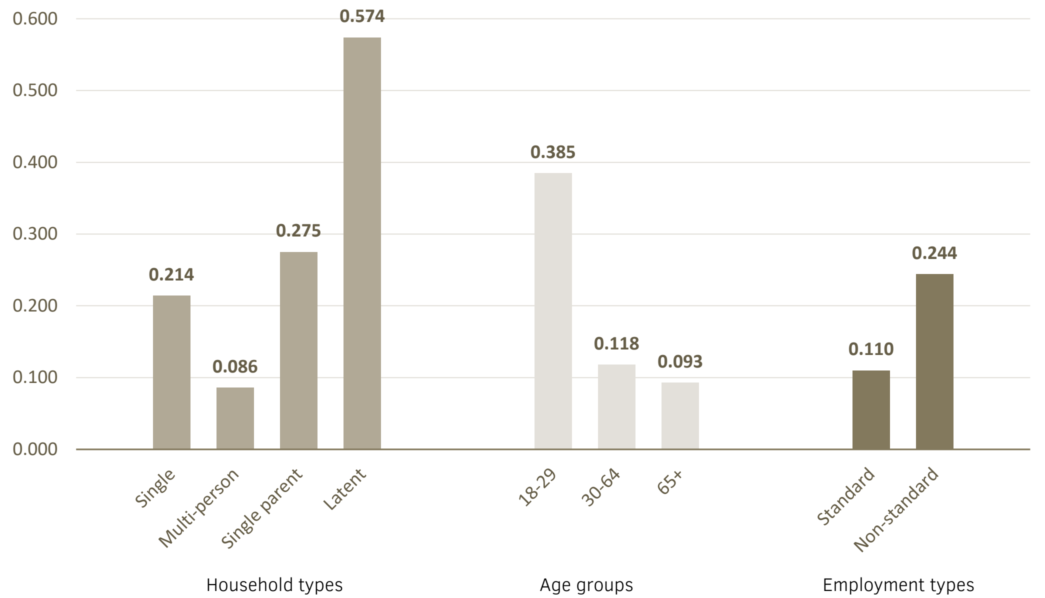


FIG. 5.1 Inequality in capability for housing: the MHDs-f by household types, age groups, and employment types, the Netherlands 2017 (*k*=2)

Note: The employment types were identified according to the contract types (either permanent contract or temporary basis contract). The temporary basis work includes stand-by-work, temping, and self-employment in this study.

If we consider that 77% of the latent households and 60% of non-standard workers are youths aged 18–29 years in this study, the group most struggling to pursue a valued housing option in the Netherlands seems to be youths. In the Netherlands as well as in other European countries, young generations tend to live with housemates or parents for a longer period than previously, presumably because of increasing barriers to securing a home independently (Arundel and Ronald 2016; Arundel and

Lennartz 2017; Bobek, Pembroke, and Wickham 2020). The results of the MHDs-f measurement clearly show that such squeezed generations in the Netherlands—young latent households with precarious jobs in this study—are much more intensely disadvantaged in the housing process. According to this information, the policy solution urgently needed for them may not be the traditional measures of social housing provision or housing benefits; it could be some measures that can reduce the obstacles by, for example, designing accessible housing finance for youths in precarious jobs or lowering the requirements of private rent.

The MHDs-f Index is the combination of headcount ratio (H) and intensity of disadvantages (A). Even if two different groups have the same score of the MHDs-f, one group may have a higher score of A than another (i.e. more intensely disadvantaged) while having a lower score of H (i.e. having fewer persons disadvantaged within the group). In this case, the former group would be the one that policy makers need to prioritise even though it has a lower number of disadvantaged persons. To draw an implication for policy priorities, the study analysed how each sub-group contributes to the national MHDs-f Index and the overall multidimensional headcount (H). Figure 5.2 visualises the results. All household types but multi-person households have a higher contribution to the multidimensional headcount ratio (H) than we would expect from their population share, and those aged 18–29 years and non-standard workers show the same pattern. Therefore, the policy needs to prioritise addressing the constraints that these groups are facing. However, these sub-groups may have different priority demands. If we compare the single households and single-parent households, according to their score of the MHDs-f (0.214 and 0.275, respectively; Table B.4 in Appendix B), it seems single-parents need to be prioritised. However, if we take into account the intensity issue, the policy priority becomes reversed; the percentage contribution of single households to the MHDs-f (dark blue bar) is higher than the contribution to the headcount ratio (H; light blue bar) while the percentage contributions of single-parent households to the two figures are at the almost the same level. This indicates that housing capability of single households are more intensely constrained, and thus, there is a more urgent need for policy measures than for single-parent households.

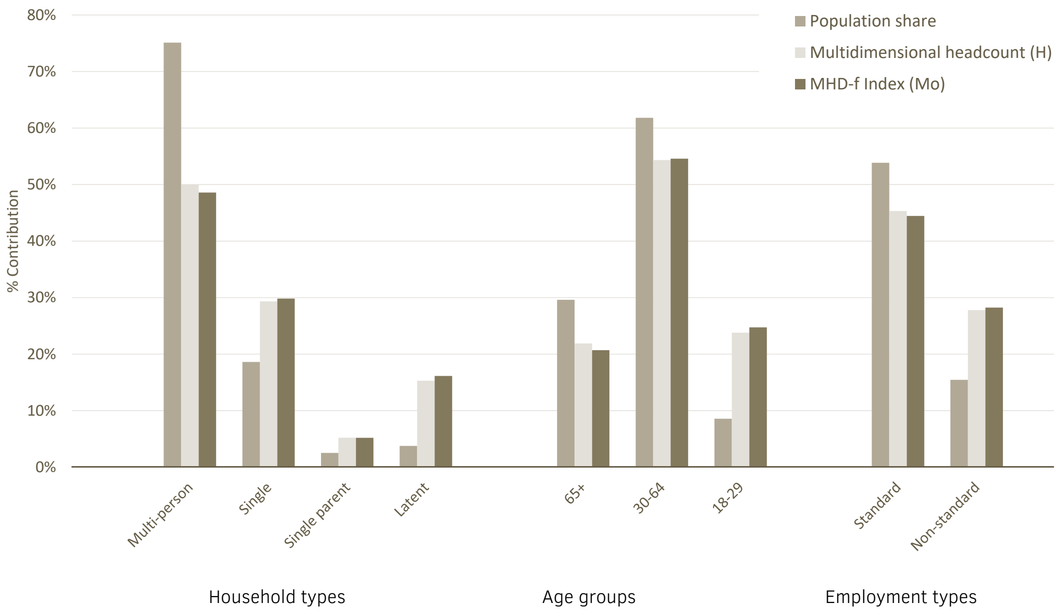


FIG. 5.2 Percentage contribution of each sub-group to national population, the Netherlands 2017 (k=2)

As illustrated, information about the level of simultaneous disadvantages is important for understanding inequality in capability for housing. Apparently, the housing situations of those disadvantaged in all three dimensions are the most likely to be coerced choices. Figure 5.3 decomposes each sub-group by the number of coupled disadvantages (for detailed figures, see Table B.5). From the graphs, the difference between forced choices and reasoned choices can clearly be observed. This difference is especially distinctive for the cases of latent households. Nearly 20% of latent households has disadvantages in all three dimensions, and 7% has disadvantages in none of the dimensions. Thus, those in the 20% of latent households very likely have no other choices than to live with housemates or other family members, whereas those in the 7% have deliberately chosen to live with others.

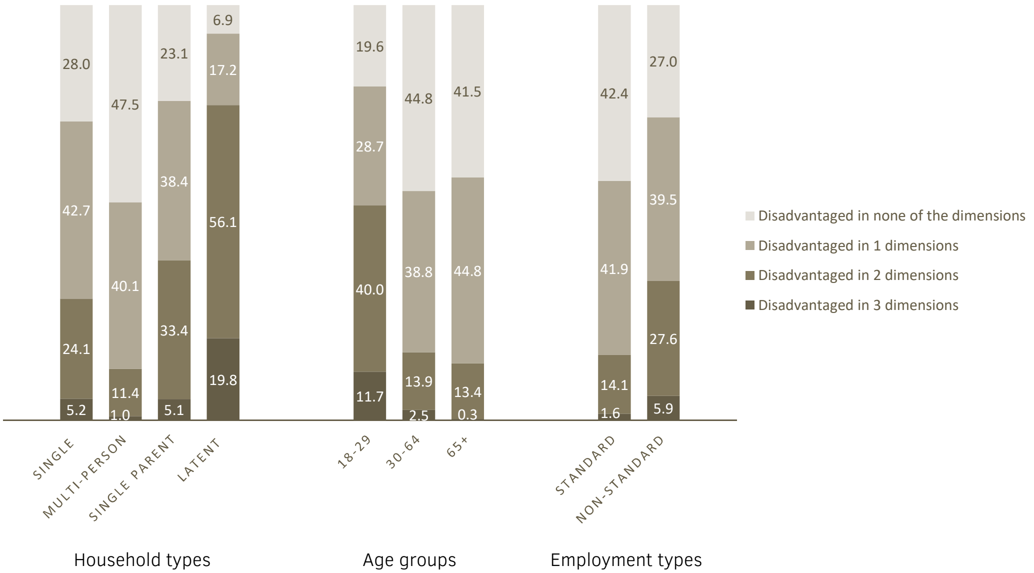


FIG. 5.3 The number of simultaneous housing disadvantages by sub-groups, the Netherlands 2017

To reduce the inequality in the MHDs-f, thus reducing the gap in housing capability, which dimensional issues would need to be addressed more urgently? Is there any specific dimension that distinctively affects the inequality in the MHDs-f? If we decompose the incidence of disadvantages in each dimension (Figure 5.4), it is noticeable that the dimensions of housing opportunity and security are the main contributors to the disparity between each group's capability for housing. In this study, being disadvantaged in housing opportunity means that the person is entitled to only one or none of the options among accessing mortgages for homeownership, renting in the private sector, and renting in social housing.

As to the security dimension, being disadvantaged means that they are more likely to fall into trouble paying housing costs (either mortgage or rent) even with a minor shock to their livelihoods, such as temporary job loss or suspension of housing and social benefits. Thus, these groups are more dependent on external factors when making choices. According to the result in Figure 5.4, policy needs to reduce the gap in the dimensions of opportunity and security to reduce overall inequality the MHDs-f. Given the indicators measured in this study, this finding indicate that necessary policy solutions are more about adjustments structural environments, such as adjusting the system that determine in/formal entitlements to different tenure options, or developing safeguard measures through, for example, a quick-bridge fund to support housing costs while the target group is recovering from temporary shocks.

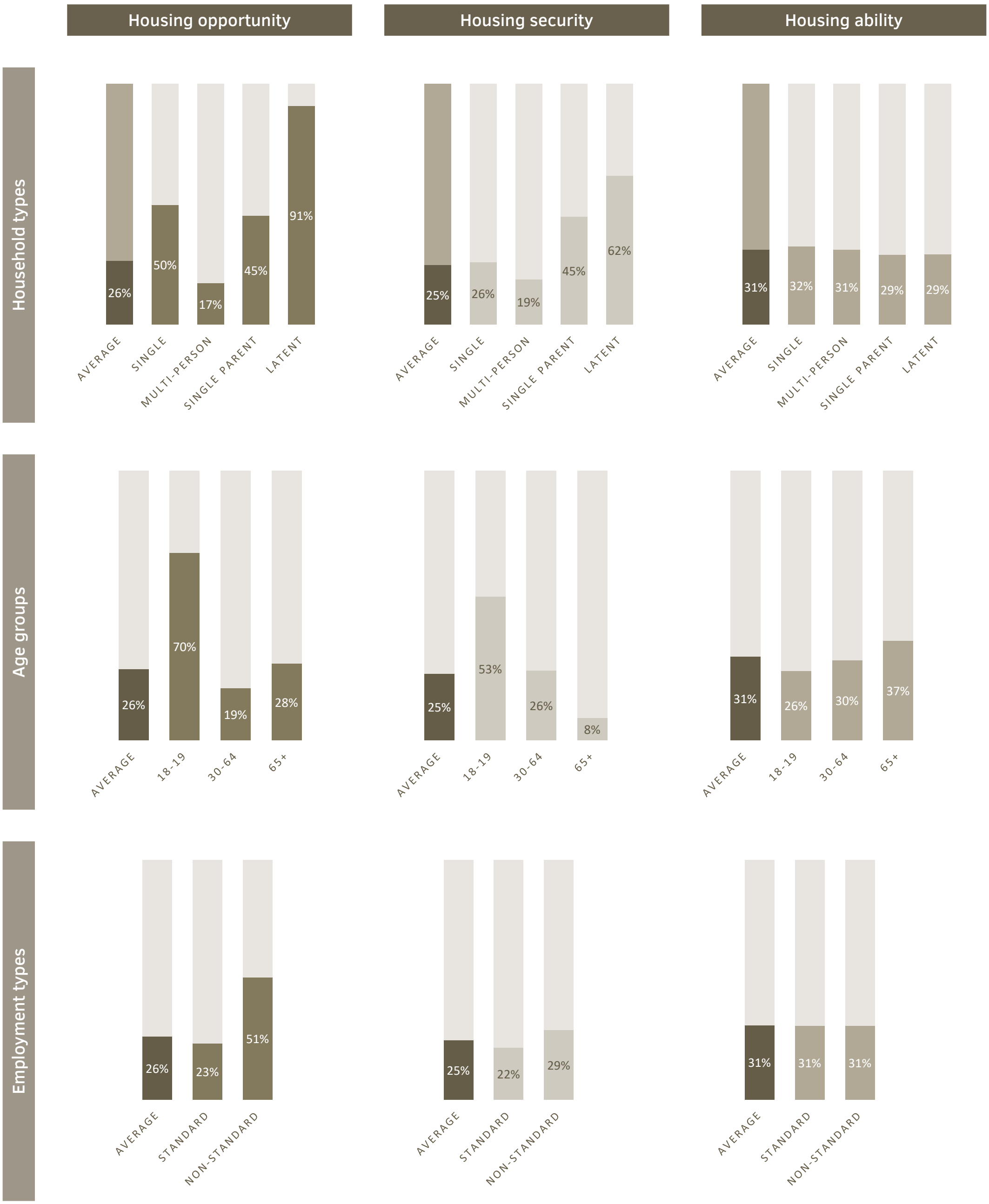


FIG. 5.4 Comparison of the incidence of disadvantages in each dimension, Netherlands 2017.

5.4.4 Regional inequality

At the beginning of this section, the study decomposed the MHDs-f Index by province (Table 5.5). The analysis has provided a general overview of which provincial population are more constrained in their housing choices at which level. Next, to further discuss implications for policy priorities, the differences in the intensity of disadvantages need to be compared alongside the score of the MHDs-f. In the same way in which the study compared sub-groups (Figure 5.2), Figure 5.5 compares how each province contributes to the national MHDs-f Index and the overall multidimensional headcount ratio (H).

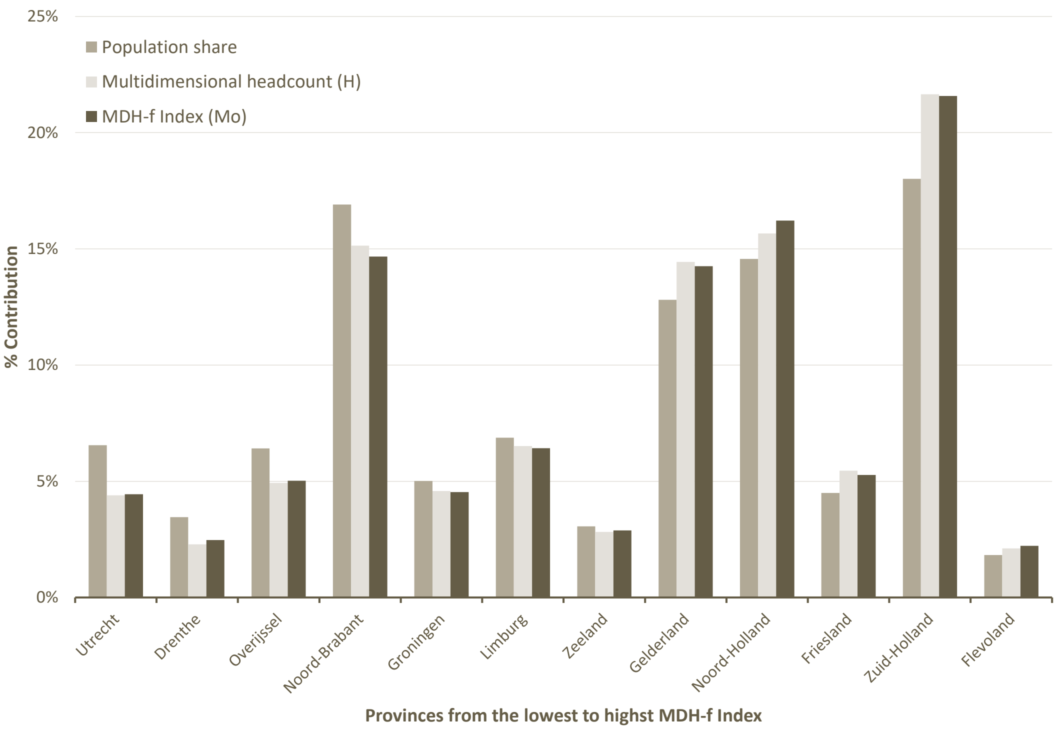


FIG. 5.5 Percentage contribution of each province to national population, the Netherlands 2017 (*k*=2)

From Figure 5.5, we can first observe that the five provinces of Gelderland, Noord-Holland, Friesland, Zuid-Holland, and Flevoland have a higher contribution to the multidimensional headcount ratio (H) than we would expect from their population share. Among these five provinces, Noord-Holland and Flevoland contribute to the MHDs-f Index more than to the headcount ratio (H). Thus, the housing choices of the population in these two provinces are more intensely constrained than those in other provinces.

The most urbanised city of the Netherlands, Amsterdam, is located in the province of Noord-Holland, and the population of Flevoland is concentrated close to Amsterdam (i.e. the city of Almere). Considering the meaning of the indicators in this study and the observation of the inequality between sub-groups, the results about Noord-Holland and Flevoland can be related to the characteristics of the urban population, such as higher rates of young people and non-standard workers. For instance, the city of Almere in Flevoland, adjacent to Amsterdam, has a higher rate of those aged under 25 years in comparison to the rest of the Netherlands (about 33% and 25%, respectively; Statistics Netherlands). Flevoland has the lowest ratio of the population deprived in income, which is actually the target group of social housing in the Netherlands, but has the most intensely disadvantaged population struggling with pursuing the desirable housing paths (Table 5.5). Similarly, Noord-Holland has a relatively low headcount ratio of the deprived income for housing (ranked 5th; Table 5.5), but a relatively high intensity of disadvantages. These measurement outcomes highlights that the key drivers of housing inequality in cities might be neither income deprivation nor housing shortages. The urgent housing agenda could be reducing the constraints measured in this study for instance, rather than building more dwelling units.

5.5 Conclusions

This study presented an approach to incorporating housing capability considerations into a measurement of housing inequality. As a way to place the value of freedom at the centre of the measurement focus, this study proposed evaluating the conditions that confine or expand the extent of housing capabilities, or in practical terms, measuring the multidimensional housing disadvantages (MHDs) that constrain people’s choices in the housing process. This study demonstrated how this evaluation approach can be empirically implemented by illustrating a measurement of the MHDs-f in the Netherlands.

The results for the Netherlands clearly show that the MHD measurements in the proposed evaluation approach can offer meaningful insights into housing inequality and policy solutions, given the following findings. First, the measurement produced a provincial ranking order different from the conventional measures of housing deprivations and the inequality therein. Second, the measures could identify whose housing choices are more constrained at which level, indicating the degree of inequality in housing capability with the value of freedom. Third, the measures could differentiate between coerced and deliberate choices. These three results have implications for the type of policy measures to be prioritised for each group. Lastly, the measurement outcome provided some results that align with existing observations in qualitative research: the results indicated that young latent households with precarious jobs appeared to be the group struggling the most to pursue their reasoned housing choices (i.e. having a lower capability for housing)

There is scope for further research regarding the list of dimensions and indicators. The list would vary with study context, and the measurement in this study was primarily to demonstrate an approach for measuring inequality in housing with the ideas of housing capabilities and the value of freedom; hence, the purpose was neither to comprehensively measure housing capability with an exhaustive list of indicators nor to claim that specific indicators must be measured. When designing the MHD-f measurement, there was a lack of data and established knowledge on housing disadvantages from the freedom-focused angle. For advancing measurements of housing inequality, more research has to be undertaken on the kinds of capability constraints that people experience in the housing process and that society should be concerned with, as well as surveys on those constraints to expand the database.

This chapter has discussed a way to estimate inequality in capabilities for housing with a focus on the value of freedoms. If measurement practices shift their conceptual ground from *what people value* to *what constrains people's choices*, the methodological strategy to measure capability may be unexpectedly straightforward. This study designed dimensions, indicators, and analysis units (i.e. units of disadvantage identification) by optimally aligning to concerns on potential, constraints, and latent choices; then, it devised an existing method of poverty measurements (i.e. the AF method) with those components. From the measurement outcome, we could obtain information about who is more constrained in the decision process and to what degree, thereby indicating the level of inequality from a capability perspective. I hope that the methodology and findings of this study can inspire further studies on evaluation practices to better inform the policy and public debates on the growing inequality in housing and also in other social domains.

6 Conclusions

This dissertation was motivated by concerns about the phenomenon that the financial and monetary value of housing became the core value of housing, and policy attention became centred on the management of financial institutions and housing markets. To place the concerns about people and moral values associated with housing and equality at the centre of housing policy discussion, this dissertation advocated for applying the capability approach to housing policy, beyond the state re-intervention and human rights-based approach, and proposed a way to incorporate the ideas of the capability approach. This chapter synthesizes the overall arguments and proposals, and discusses social and scientific implications. Lastly, it makes suggestions for future research.

6.1 Addressing the four research questions

Figure 6.1 provides an overview of the research outcomes of the four questions presented in Figure 1.1.

Proposals	Principles to guide housing policies to place people and moral values at the centre & evaluation approach	
	Research questions	Proposals and findings
Ideas Building theoretical foundation	RQ 1. What have the perspectives on good housing policies been, and what implications can be drawn from the capability approach regarding those perspectives?	**Proposal:** • **Expand evaluation focus** from material/monetary attributes of housing; housing satisfaction to people's **capabilities for housing** (or housing (relevant) functionings)
	RQ 2. What guiding principles can housing policy refer to in moving towards the goal of expanding people's capabilities for housing?	**Proposal:** • **Broad goal:** expanding people's capabilities for housing • **Sub-goal:** expanding real opportunities for housing by reducing inequalities in: *housing opportunities, securities, and abilities* (***evaluation framework***) • **Guide housing policy direction by:** continuous monitoring and comparisons
Studies for applications Measurement of housing affairs (housing inequality, deprivations, wellbeing)	RQ 3. What difference can we expect in housing policy decisions when housing affairs are measured using housing capability considerations?	**Findings:** • substantial influence on policy target group identifications • evaluation practice could become sensitive to: adaptive preference of the deprived, moral issues tied to housing, and inequality in conversion efficacy (empirical evidence of the conceptual advantages identified by RQ 1).
	RQ 4. How can a measurement of housing inequality incorporate housing capability considerations, and what new insights into housing problems and policy implications can be expected?	**Proposal: MHDs-f index as a measure of housing inequality** (Indicating whose housing situations are more constrained to what degree) • evaluation framework: dimensions of disadvantages that constrain people's choices in the housing process (the framework this study developed in RQ 2) • units of disadvantage identification: when applicable, *current and latent* households to differentiate coerced and deliberative choices • Index: use/develop a method that can reflect the intensity of simultaneous disadvantages (AF method)

FIG. 6.1 Research outcomes: contributions of the dissertation

Research Question One

Evaluative exercises in housing policies and research have greatly focused on evaluating material and monetary resources related to housing (e.g. physical dwelling conditions, income for housing costs, possession of housing property, housing prices and wealth) and housing satisfaction (e.g. fulfilments of housing preferences and satisfaction determinants). The study analysed that the current evaluation approaches lead policy goals to incline towards the increase and distribution of resources for/from housing and satisfaction (e.g. pleasure and fulfilment of the desire to own), and are fundamentally limited in directing the policy attention toward a person's actual state of residing and non-monetary/material values of housing, such as human rights to housing, meaningful lives and freedom (substantive freedom concerning agency).

As a constructive response to the problems analysed, the study extended proposals and arguments of the capability approach to housing, and suggested that good housing policies should be judged by their effectiveness in expanding people's capabilities for housing and reducing inequalities in those capabilities. In other words, *the ultimate goal of housing policy should be the expansion of people's capabilities for housing*, rather than an increase in holdings of resources for/from housing and housing satisfaction. This concept can be applied to multiple areas of research and practice. The study identified a few promising areas; they include housing policy target identifications, an evaluation framework for policy performance and specific housing issues, a housing programme design, participatory housing development, and a normative foundation for political critics.

Research Question Two

The study identified *three essential ingredients of justice theories* (characteristics of ideal institutions, metrics of justice, and distributive rules) and suggested examining them to construct basic principles of housing justice. The study examined the ideals proposed in justice theories for each question, and analysed their connections and distance to realities in housing policy practices. The study then scrutinised how the distance between the two should be managed in answering the questions of the three subjects, in order to shape guiding principles that lead to real progress towards the broad goal of expanding the capability for housing. Gaps between housing regime types and actual housing policy operation, philosophical concepts in capabilities and workable concepts in housing discussion, and ideal distribution rules and applicable rules were examined. Building on this reasoning process, *basic guiding principles of housing justice* were proposed as follows under the broad goal of the expansion of people's capabilities for housing:

TOC

- the capabilities for housing are shaped at least by the extent of *opportunity, security, and ability for housing*, of which inequality would restrict a person's housing choices in their housing process. Housing policies should aim to remove avoidable inequality (i.e. inequity) in these shaping conditions;
- traditional questions about ideal types of housing regimes to establish and ideal distribution rules for basic housing services should be considered the questions to explore desirable options given the situational factors instead of the questions to define a perfect model; the primary question should be *what changes are required for resolving the observed unjust situations and how policies should operate to make progress*;
- housing policies should be primarily *guided by continuous monitoring* of changes in unequal and unjust housing situations;
- evaluating inequalities in the shaping conditions of capabilities for housing (e.g. opportunity, security, and ability for housing) can be a way to incorporate the freedom aspect in capability considerations into housing policy discussions, which are related to the inequality in entitlements, empowerment, oppression, discriminations and other issues that constrain a person's agency in their housing process;
- an essential policy guiding tool is *comparative exercises* that compare: (i) the capabilities for housing across time and societies (communities, cities, and countries), (ii) social alternatives (e.g. policy solutions, housing programmes, and regulations) to resolve housing issues of concern (e.g. preferable alternatives to expand the capability for housing); and (iii) views in different societies on the same housing issue of justice concerns. *Comparative housing research* has an important role in *providing normative references to policy debates and the policymaking process.*

Research Question Three

The study compared the expected policy target groups identified by the capability-oriented, economic means-oriented and satisfaction indicators housing. The overlap between deprived groups for four indicators was rather limited than many would have expected from the results of their statistical correlations and regression analysis. The study showed that non-negligible proportions of the study population were: (i) living in inadequate housing (deprived of basic housing functioning) despite household income above the eligible threshold for housing welfare services (non-deprived in economic means for adequate housing), implying conversion gaps, (ii) satisfied with their housing despite living in inadequate housing, implying possible inconsistences of satisfaction-based measures with a sphere of the right to adequate housing; and (iii) financially illiterate (deprived of basic ability for housing or lacking enablement of informed decision-making) despite household income above the threshold (non-deprived in economic means) and satisfaction with housing, implying risks of overlooking the former issue when housing welfare policies are formed only on the latter informational bases.

The study empirically tested the conceptual ideas of the capability approach about conversion issues in the housing context. The results revealed clear inequality among the studied population in conversion efficacy from economic means to basic housing functioning of living in adequate housing. Tenants, youth, single-parent households, and people from non-Western backgrounds appeared to have a low conversion efficacy. The cases with this conversion gap are likely outside of current housing welfare policy targets.

Conventional measures tested in this study were the most commonly used indicators for housing welfare policies and research. Significant blind spots may have been present in identifying groups in need of societal support for housing problems from non-monetary issues, detecting inequalities in conversion efficacy from income to living in adequate housing, and considering the impact of adaptive preferences on housing satisfaction. The results empirically supported the conceptual advantages of incorporating capability considerations into measurements of housing affairs (discussed in Chapter 2) to compensate for possible blind spots.

The findings suggested that information on multiple socioeconomic disadvantages in accessing adequate housing is not likely to be summarised into an income-based measure, and information on the achievements of housing situations people value may not be summarised into a satisfaction measure. Correlations between basic economic means for housing, basic capabilities for housing, basic housing functionings, and housing satisfaction can be extensively diverse, and their measures may all be valuable sources of information for judging the state of welfare in housing. Each measure may need to be considered as a vector of multiple features of individual housing situations. Welfare policies for housing need to design more diverse and tailored programmes, beyond monetary subsidies and social housing provisions that focus on low-income households.

Research Question Four

This study developed the concept of *multidimensional disadvantages that constrain choices in the housing process*—multidimensional housing disadvantages (MHDs)—for evaluating housing inequality with capability considerations. For its empirical application, this study designed the measurement of *MHDs shaped by financial terms (MHDs-f)*, such as entitlements to different tenure options, a vulnerability in housing cost payments and basic financial literacy for housing. This empirical application

TOC

utilised the *Alkire-Foster method* of poverty measurement to produce an index score that reflects the conceptual ideas of MHDs. Data from the Netherlands were used. In designing the MHDs-f measurement, the key devices to incorporate the freedom aspect of capability consideration were: *freedom-oriented dimensions and indicators* and the units of disadvantage identification that differentiated latent households (i.e. adults living with parents, relatives, or housemates) from current households (i.e. household heads and their partners).

Having higher MHDs-f scores means having more disadvantages simultaneously, implying their housing choices were more intensely constrained than others in the dimensions of opportunity, security, and ability; thus, the current housing situations of the groups with higher MHDs-f scores are more likely to be a result of coerced choices with a lower capability for housing.

In the measurement outcome of the Netherlands, provincial performance rankings by the MHDs-f conflicted with those based on commonly used measures of housing affairs (e.g. deprivations in income for housing, adequacy in housing, and satisfaction with dwelling), implying the added value of the MHDs-f measurement for policy discussions. The MHDs-f index by household types, age groups, and employment types could inform whose housing situations were likely to be more coerced and to what degree. *Latent households, youth aged 18-29, and individuals with non-standard employment* had the highest MHDs-f scores, implying that their housing process was the most intensely disadvantaged by the constraints in entitlements to multiple tenure options, security in housing cost payments, and basic abilities in financial planning for housing. *Young latent households with precarious jobs* appeared to be the group struggling the most to pursue their reasoned housing choices (i.e. having the lowest capabilities for housing among the compared groups). This finding corresponded with the results of other studies on the housing situations of youth in the Netherlands and Europe.

Overall, the MHDs-f measurement outcome showed that some groups' main causes of housing inequality might be beyond low income and housing supply shortage. Causes may be related to structural conditions that shape entitlements to housing options and vulnerability to risks regarding housing payments, or to different abilities and knowledge to develop a long-term financial plan for housing. Policy measures should consider adjustments to such structural environments.

6.2 Synthesis of the results

To redirect housing policy attention toward people and moral values, policy discussion and research could utilise the following principles by incorporating ideas from the capability approach:

1. setting the broad end goal of housing policies as the expansion of people's capabilities for housing, and by doing so, place their central attention on what people can do to pursue their suitable housing options and how well they are actually residing;
2. expanding (and reducing avoidable inequalities in) opportunity, security, and ability for housing that shape the extent of people's capabilities for housing;
3. expanding evaluation focus in housing policies from the traditional focus on material and monetary attributes of housing and housing satisfaction to include the capabilities for housing and housing functionings that people value;
4. guiding housing policy directions primarily through continuous monitoring of unequal and unjust housing situations with a focus on real changes in people's housing situations, and utilize discussion of types of housing regimes (e.g. extent of states' intervention in the housing market) and distributive rules of basic housing services as references for exploring options to achieve desirable changes given the situational factors of the housing problem;
5. utilising comparative exercises as a tool for guiding housing policy and for facilitating public debates on policy directions. Comparative housing studies can play a role in providing normative references to policy debates among the public and policymakers. They should compare: changes in the capabilities for housing across time and societies, preferable alternatives to expand the capability for housing, and views on the same housing issue in demand for justice consideration.

The goodness of housing policies has been judged primarily based on information on material and monetary resources for/from housing, and this evaluation focus leads housing policies to set their goal as the increase and distribution of those resources and fulfilments of their possession. To steer the policy focus (and societal interests) from financial and commodity values of housing to human values of housing, people and moral concerns regarding housing inequality, a shift in evaluation focus is crucial. Changing the evaluation focus to capabilities for housing would help redirect the policy focus to the people living in the housing, i.e. how well people are residing, what they value regarding their housing, what actual opportunities they have for residing according to their values, and how they are able to make active changes in their housing affairs. This shift of evaluation focus can enable policy to be sensitive to normative issues by detecting coerced housing situations that are caused by violations of human rights to housing, oppression, discrimination, and inequity.

In the field of housing, whether and how the conceptual advantages of the capability approach can be realised in practice is as yet a greatly open question. The studies in this dissertation have provided some clues. The studies for empirical application produced the results that empirically support the conceptual advantages of the capability approach in the housing context, and showed the application could cause substantially different value judgements on priorities in policy target groups and necessary interventions. These studies do not suggest that the capabilities for housing (and housing functionings) should be the only informational bases of value judgements in housing policies; rather, the key lesson should be the need for expanding informational bases of housing policy-making, and integrating plural sources of valuable information when judging policy direction. Housing policies may refer to measures of monetary resources and the number of housing units to monitor a means of enabling people, not to montior the end goal of the policy. They may refer to housing satisfaction and its determinants to promote human values of housing, such as a sense of belonging, self-expression and tradi-tion, but not as a summary of the housing achievements because it can have inconsistencies with human rights.

One of the key areas to operationalize the capability concept is the measurements of housing inequality, well-being in housing and deprivations in housing situations. The empirical applications in this dissertation revealed some useful implications for operationaliztion methods. First, measuring and comparing distinguished capabilities can be a valuable and valid method for informing policy discussion. The study applied this approach instead of one that aims to measure a complete coverage of capabilities for housing or valued housing functionings, and the results offered substantive implications for housing policy direction. The MHDs-f were measured only with selective indicators, but it produced the measurement outcomes on youth, latent households, and non-standard employees that were aligned with other studies' observations. Second, in designing the measurements, capability considerations can be integrated into various design elements, not limited to the choice of evaluation space and design of dimensions and indicators; they also include the design of measurement methods (e.g. methods that factor in the intensity of simultaneous disadvantages) and units of analysis (e.g. latent and current households). Third, Third, when evaluation practice is to serve the needs of policy-makers and inform public debate, it should consider incorporating a counting-based assessment into the analysis to check the potential delusions of statistical correlation analysis and to provide more explicit implications for value judgements, as shown in Chapter 4.

6.3 Contributions

6.3.1 Societal relevance

Several important implications arise from this research.

1. The insights gained from this research may be of assistance to advancing discussions of the global housing agenda for setting an overarching vision, goals, and monitoring approaches. To address broader issues of housing inequalities, beyond deprivations in basic standards of dwellings required for survival and poverty avoidance, and make a human rights-based approach to housing policies tangible, the discussion of the global housing agenda could expand its agenda-setting framework to justice in housing, and place concern about people's capabilities for housing at the forefront.

2. Housing policymakers should reconsider the informational bases of their decision-making. Welfare policies for basic housing services define their target groups by household income levels (e.g. housing benefits, social/public housing, and other policies for promoting low-income housing provision). This study demonstrated that this practice could substantially undermine the housing problems and underestimate population groups in need of societal support for improving their housing situations.

3. Housing welfare policies should design more diverse and tailored programmes to address inequality in conversion efficacy between economic means to housing ends, and non-monetary disadvantages that constrain people from pursuing their valued housing options, beyond monetary subsidies and social housing provisions that focus on low-income households. Expanding informational bases to housing capabilities and integrating capability considerations into evaluation of housing affairs can help to design such tailored housing programmes.

4. Reflecting the results of MHDs-f measurement and its indicators, policy measures could include tailored adjustments to entitlements to different tenure options, public guarantee schemes that expand access to housing finance of marginalised groups, and a quick-bridge fund for housing costs when livelihoods experience temporary shocks. Programmes for enhancing financial and housing literacy and abilities for budget planning for housing can also be considered.

5 The empirical application of the MHDs-f measurement shed new light on the housing problems of young latent households with precarious jobs; in the case of the Netherlands, they appear to be the group that most struggle to pursue their reasoned housing choices. The findings further implied that the housing problems of latent households (adults living with housemates and families) might have been greatly marginalised in policy concerns, as housing data are mostly collected and analysed at the household level.

6 This dissertation contrasted different perspectives on good housing policies, approaches to justice, evaluation approaches in housing policy research, and measures of housing deprivations and inequality. The views on a desirable direction of housing policies would undoubtedly be heterogeneous, and there would exist continuous debates and disagreements. An important task is to promote an informed housing debate to build societal views on preferable policy direction. This dissertation presented comparisons of different normative ideas and the measures of housing affairs based on those ideas. Further development and expansion of these comparison exercises could serve as useful sources for both political and public debates.

6.3.2 Scholarly contributions

Anchored in housing studies, this interdisciplinary investigation integrated knowledge from the literature on housing theories, moral and political philosophy, evaluation of poverty and well-being, and their cross-cutting literature on the capability approach. This dissertation contributes to the following areas of scholarly discussion.

Application of the capability approach to housing: theories and measurements

1 This study represents one of the first attempts to rigorously examine how the idea of the capability approach can be incorporated into housing policy discussions. The findings and arguments in this dissertation contribute to discussions of: policy goal and its normative foundation, conceptualisation of the capability idea in the housing context, guiding principles for housing policies, and evaluation of housing problems that are subject to policy concerns, such as housing well-being, deprivations and inequality.

2 The focus of existing research on housing and capabilities has mostly been on extreme issues of housing, such as homelessness, slums, and informal settlements. The study

expanded the research subjects beyond severe housing situations. Through illustrations for conceptual discussions and empirical applications to measurements, this study associated a wide arrange of housing issues with capabilities, including the constrained situations of tenants, youths, women without joint tenancy, those in precarious jobs, and those with low housing literacy.

3 Among capability scholars, an ongoing question is how to incorporate the freedom aspect of capability consideration into an inequality measurement. This dissertation contributes to this research agenda with its study in the housing domain. It proposed an evaluation approach that estimates the extent of capabilities for housing by evaluating constraints on people's choices in the housing process, and demonstrated its empirical application (the MHDs-f).

4 Research on applications of the capability approach to measurements of housing affairs has almost been absent in the housing literature. This dissertation illustrated the measurement design process and pragmatic choices made when transforming the capability idea into a measurement. Insights gained from the empirical applications can be a useful foundation for future studies of operationalisation of the housing capability concept.

Housing discussion on normative theories and housing justice

1 In housing studies, there has been a tendency to divide practical and normative questions of housing issues (King 2011), and a perception that good research should remain value neutral when informing the policy-making process (Clapham 2018). The findings in this dissertation rather indicated that the normative and practical questions of housing issues are closely connected at a foundational level. Researchers choose certain types of informational bases for analysing housing issues. As presented in Chapter 2, the types of informational bases are (often implicitly) rooted in different normative positions on what is a *good* housing policy. The study suggests that a crucial task of researchers might be, rather than claiming to be neutral, scrutinising their normative stance and explicitly clarifying it when informing the policy-making process.

2 Rigorous studies on integrating broad ideas of justice theories into the housing context can help identify more specific agendas for the housing issues demanding justice considerations. However, these studies have been limited. This dissertation adds a study of Sen's capability approach to justice, with particular attention to conceptual clarification and interpretation of capability concepts in the housing context. The dissertation also provides a framework (i.e. three essential questions of social justice) to discuss base principles of housing justice.

Measurements of housing inequality

1 The MHDs measurement could be used as a new measure of housing inequality. This research developed: (i) the evaluation framework to assess the extent of capabilities for housing (i.e. dimensions of opportunity, security, and ability for housing), (ii) the MHDs measurement, and (iii) a thematic application of the MHDs-f measurement with the Alkire-Foster method. Although the MHDs-f were measured for an illustrative purpose with selective indicators, the results demonstrated the informational benefits to policy discussion in terms of informing whose housing process and situations are more intensely constrained and to what degree.

2 A feature of the MHDs evaluation framework is that it can be extended for designing the MHDs of other thematic housing issues, such as the MHDs for having the right to security of tenure, joint tenancy, and participation in housing development.

3 Several new concepts for housing indicators were developed and can be used to expand the informational bases of housing research on policies and housing problems. This includes the indicators designed for the MHDs-f measurements (Table 5.2) and the indicator concepts of residency resilience and the basic ability for financial planning for housing. This dissertation proposed the concept of housing literacy (Sections 3.3.2 and 4.3.5), on which surveys would expand a normative informational base, regarding the enablement of informed decision-making in the housing process and empowerment.

4 This dissertation suggested the concept of latent households (adults living with other household members, such as parents, relatives and housemates) to differentiate their information from that of current households (household heads and their partner) in designing the units of disadvantage identification. This design was to differentiate deliberative and coerced choices of living with other household members, as a method to integrate the capability approach's argument for distinguishing the two when evaluating well-being and inequality. This method allowed the MHDs-f measurement to reveal the issues of young latent households with precarious jobs, supporting the existing qualitative studies of young people becoming constrained and forced to stay longer with parents and housemates, or move back. Housing data has generally been collected at the household level of information, and the problems of latent households might have been greatly overlooked in the studies analysing measures of housing affairs, marginalising their issues in policy concerns.

6.4 Reflections: limitations and future research agenda

Scholarly work on the capability approach, poverty and inequality is still progressing and evolving despite its long tradition of over forty years. Housing research began discussing and using the capability approach only in the past decade, and there is yet a paucity of research to date: clearly, bringing the ideas of the capability approach into housing policies and transforming the ideas into practical applications are the tasks that require long-term and collective research efforts of knowledge-building. When starting this study of applying the capability approach to housing policy discussion, there was limited literature on which to build this study. Therefore, the research aimed to construct a literature base for future discussion. The research dedicated to building theoretical and normative foundations of new housing policy approaches with capability concepts, and insights into empirical applications, particularly for the evaluation of housing problems from the capability perspective. The scope of empirical application was to test the conceptual ideas of housing capabilities with available data and clarify ambiguous theoretical ideas through empirical tests.

The introduction chapter listed four areas of research to incorporate the capability idea into housing policy discussions. To recap, they were: (i) establishing a policy goal and its normative foundation; (ii) conceptualising capability considerations in the housing context; (iii) developing guiding principles for housing policies; and (iv) developing an evaluation approach to housing problems that are subject to policy concerns, such as housing well-being, deprivations, and inequality. The research aimed to make contributions to each of the subjects and establish grounds for further development.

At the theoretical level of research, the study focused on connecting foundational ideas of the capability approach to housing policy discourse and clarifying the complex and multifaceted capability concept in the housing context. Building on this, the study went one step further to develop new concepts and basic principles for guiding housing policies. However, this study has covered only a portion of the broad ideas of the capability approach; it focused on Sen's account (thus, slight reflection of Nussbaum's work), and ideas about substantive freedom, capabilities, and choices (thus, a little discussion on functionings that people value and conversion factors). This focus of the study naturally opens numerous research agendas to be explored.

The theoretical discussion in this dissertation introduced broad conceptual ideas, leaving room for improvement and more elaborate research. For example, the concept of the capabilities for housing and functionings relevant to housing may be further discussed based on theoretical and empirical studies (e.g. by reflecting on Nussbaum's ideas). This study only implicitly addressed differences between wellbeing-freedom and process-freedom aspects of Sen's capability concerns when scrutinizing implications of the capability approach for housing justice and inequality, which could well be a separate topic of a scholarly paper for advancing the discussion. Other subjects that this dissertation addressed, which can be further elaborated on additional research, could be 'capabilities for housing, housing functionings, and distributive rules', 'collective capabilities for housing and housing justice', 'vulnerability, capabilities for housing, and disadvantages in the housing process', 'non-/partial-/close-relations between housing regimes, welfare regimes, and housing capabilities', and many other normative subjects that were briefly sketched out in Chapters 2 and 3.

At the empirical level of research, the study focused on exploring an application to measurements of housing deprivation and inequality. The purposes of this study were to clarify tangible differences between existing measurement practices in the housing field and measurements with capability considerations, and to explore which influences on policy decisions we can expect when housing capability concepts are operationalised for evaluation practices. As such, the primary goal was not to identify what the application must look like. The studies were designed to gain insights into the next steps.

The scope of the dissertation did not include one of the major questions of the capability approach application, namely, how to define relevant capabilities and functionings. Based on the review of this topic, this research observed that there are multiple ways to answer this question. Among them, a preferable research process can be outlined as: conducting qualitative research to define important housing functionings and capabilities for housing (in varied case contexts at different scales for specific issues), particularly through participatory research (but can be combined with philosophical reasoning and any other methods), collecting data of those identified for a list of capabilities for housing or housing functionings, and defining dimensions and indicators to measure (sometimes in combination with pragmatic choices). Conducting this process of research was far beyond the scope of this research and its resources; however, this would be a promising direction for future research. Notably, the focus of this study was on evaluation and measurement issues, and the application of the capability approach is not limited to this area (additional multiple possible areas of application are suggested in Chapter 2).

The methods of the studies for empirical application were chosen based on a review of various studies and applications. This review process and comparison of different methods could not be written in this collection of papers. Each choice was connected to a broader subject. For example, the choice of the distinguished capability comparison approach was associated with Sen's reasoning about the incommensurability of information of plural features of our lives. The Alkire-Foster method was chosen out of many different types of multidimensional measurements because of its normative strengths from a capability perspective and its properties that can factor in the intensity of simultaneous disadvantages across multiple dimensions, which was a crucial condition to operationalise this study's proposal. Defining dimensions can be based on a philosophical foundation, empirical foundation, or a combination of both. This study chose to define dimensions by translating underlying ideas of the capability concept in combination with philosophical reasoning about substantive freedom in the housing context. These methods and approaches comprise some of the many methodological options; comparisons of different methods and their linkage (and distance) to evaluation practices in housing research is another valuable area of research.

This dissertation presented a journey from the rich idea of the capability approach to a particular way of its application to measurements in the specific field of housing. Some pragmatic choices were made with the scrutiny of their distance to the original idea—such as, defining a workable evaluation approach, choosing the second-best proxy indicator by making use of available data, and aiming to compare selective indicators instead of complete coverage. This process has shown some possible tensions between 'incomplete but usable for actual assessments' and 'taking in the rich ideas as fully as possible' (Section 1.4). The distance between the two in this study might simply be from the limited scope, empirical constraints yet to be resolved in the housing field, or unavoidable conflicts between them. How far should or can scholarly discussion embrace a diminishing of the original richness of the normative ideas? This could be another open question to debate among scientific researchers.

6.5 Recommendations for further development

The capability approach is multifaceted and flexible in combining with other theories, and questions of housing issues are extensive. There exist multiple ways of applying the capability idea to shape an approach to housing polices and design measurements. The proposals in this dissertation suggest one particular way of incorporating capability considerations into housing policy discussion and research. Keeping this in mind, this section focuses on how the proposals in this dissertation could be further developed by reflecting on some limitations of this research.

1. This dissertation had a focus on investigating the freedom aspect of capability considerations and its application to the issues of housing inequality and injustice. It minimally discussed the question of what kinds of housing functionings people value and their capabilities to achieve those valued housing functionings, which is another important area of research that can redirect policy attention to the human dimension of housing. Future research should investigate the kinds of housing functionings that people value and basic housing functionings that policy should aim to ensure.

2. The proposal about dimensions of shaping conditions of housing capabilities—opportunity, security, and ability for housing—were developed by conceptual reasoning, and would benefit from qualitative research on specific unjust cases of housing and may be further extended. Research may undertake a deliberative or participatory process to identify dimensions and indicators because open debates and public reasoning help reveal unjust situations (Sen 2004, 2009).

3. Motivated by concern about housing policy direction, this study focused on housing questions regarding policies, state regimes, and institutional systems. Future research could examine questions regarding the roles of civil society and communities in advancing justice in housing, and expand the dissertation's discussion on housing justice and capabilities. Future research could connect discussions of collective capabilities briefly discussed in Chapter 3.

4. One of the key challenges in this study was little established knowledge of important capabilities for housing and critical disadvantages that constrain those capabilities. Future studies on these subjects would provide a foundation for designing surveys to expand datasets.

5 The studies for empirical application utilized the data on financial literacy and experience of budget-planning learning in youth, as the second-best level of information on basic housing literacy. Research on housing literacy would benefit the further development of the studies.

6 Chapter 4 presented discrepancies between measures of housing deprivation in different evaluation spaces, and the distinctive inequality in conversion efficacy between a means for housing and an end to living in adequate housing. A possible area of future research is to investigate why such discrepancies and conversion inequality are observed in the study population, which would provide further implications for necessary policy measures.

7 The application of the latent household concept remained partial in the MHDs-f measurements, as surveys did not collect data from all household members. Future surveys and analyses of housing data should be designed to reveal information about latent households. Studies utilising existing survey data should explore how their information can be maximally reflected in the analysis.

8 The research limited the scope of the MHDs-f measurement to an illustrative purpose, with one country case of the Netherlands. Further research could extend the MHDs-f measurements with data from other cities and countries. Comparing the measurement outcomes would add to the body of comparative housing research on housing systems and their relations with housing outcomes.

9 To assist policy debates and policymaking process, comparative housing research should expand its current focus on policy instruments and institutions (e.g., housing regimes, housing systems, and welfare states) to the three areas of comparison that this dissertation proposed (Section 3.5 in Chapter 3; summarised in Section 6.2). In facilitating policy debates, the research may also compare value judgements on housing policy priorities and target groups by different evaluation approaches, as did this study.

6.6 Final statement

To contribute to an endeavour to establish a people-centred approach to housing policies, I have developed a number of proposals with ideas from the capability approach. As the foremost step, I have tried to argue for critically revisiting the taken-for-granted assumption about good housing policies and diagnosing the foundational causes of losing the housing policies' attention to people and moral values. To improve the situation, I have argued for placing our central concern on expanding people's capabilities for housing. Taking one step further, I have explored the practical difference this idea can make in housing policy directions. While the proposed ideas are conceptual, and the studies for their empirical applications remain exploratory, I have shown their application can help address the inequalities in what people can do to pursue their suitable housing options and how well they are actually residing. My argument and research are only at a beginning; their development will definitely benefit from future studies.

7 Epilogue

The text of this epilogue was published as “Author’s Reply” (Kimhur 2020a), a response to six open comments to the article presented in Chapter 2. I would like to again thank Anton Hemerijck, Susan McCallum, Angelika Papadopoulos, Beth Watts, Suzanne Fitzpatrick, Chris Foye, Deb Batterham, and Helen Taylor. Their valuable comments can be found in Housing, Theory and Society. Volume 3, Issue 3, June 2020. I was very fortunate to receive this fine collection of comments thanks to the journal editors, Hannu Ruonavaara, David Clapham and Julie Lawson.

Response to open commentaries

I am grateful for the opportunity to receive such insightful commentaries. Most of them are in fact additional contributions that enrich the discussion about the capability approach in the housing studies community rather than just comments on my argument. It has been a pleasure to read the open reviewers’ critical discussions coming from various perspectives and different research areas—from the perspective of Sen to that of Nussbaum and of Rawls, and from the research area of homelessness to the welfare state and social investment. I sincerely appreciate the editors for bringing this diversity to the discussion as well as for providing this meaningful platform to open a discussion on how to apply the capability approach in housing studies.

Given the breadth of the topics covered in the commentary articles, I will have to mainly focus on clarifying those views of mine that may have been misinterpreted or were less clear for reviewers. My paper has primarily focused on a critical review of the taken-for-granted notions in the discussion on housing policy from the capability perspective and on the question of what the end goal of housing policy should be, which is then linked to the subject of the evaluation space of well-being and housing policy. Clearly, it is impossible to discuss in one article all the foundational ideas and components of the capability approach and the critical debates surrounding it, and this is also far beyond the scope of my Focus article. For this reason, I sincerely appreciate the open reviewers’ contributions which have brought up many important aspects of the capability approach as well as the potential risks involved in applying this approach and other wider subjects connected to the approach. It would be impossible to have an invariable agreement with all the arguments in each contribution, but I have certainly learned from reading them.

Perhaps it is good to begin by responding to the concerns about the selection of capabilities relevant to housing—i.e. about how and who decides the set of relevant capabilities—because it appears to be the main concern for many reviewers (Foye, Batterham, and McCallum and Papadopoulos). This topic is indeed a vital issue for a researcher attempting to apply the capability approach in empirical research. Although it is not my intention to focus on the subject of a 'set' of capabilities and to say that the set must first be defined in order to use the capability approach, I understand that to some extent my Focus article may have given this impression. I hope that this subject does not overshadow the broader implications of the capability approach for housing studies—such as foundational perspective matters, concerns on what should be the final end goal of a policy (increasing resources? satisfaction levels? substantive freedoms?), and the other meta subjects of ethics, pluralism, human flourishing, agency, and freedoms.

In making this point, I thank Watt and Fitzpatrick for placing the discussion in the wider context of ethically informed research, analytical philosophy, and the value pluralist perspective, which the scope of my article did not permit me to address properly. I believe that it is important to see the capability approach from a broader perspective, which would allow us to have a better understanding of the approach and its implications. For the same reason, I also appreciate Hemerijck for discussing the capability approach in the wider context of concerns on the good polity, social rights, and underpinning perspectives of the welfare state as well as for his discussion on housing within this broader picture. Much of my paper elaborates on the functionings and capabilities relevant for housing, in order to articulate their concepts and implications, which can be used as a foundation for further discussion. I wish that this is read only as one part of interpretation of the capability perspective in the housing context. The foundational ideas of the capability approach are, of course, not limited to the subject of 'capabilities' and 'functionings', and my discussion on these subjects was only meant to critically unpack the notions underpinning the housing policy discussion.

Taylor and Batterham comment on the importance of connecting capabilities to justice. I fully share their concerns, and I have also been working on this subject in the context of housing studies. A topic that I would like to open up for future discussion is the matter of issues other than 'capabilities' that are relevant to housing (such as institutions, distributive patterns, principles, and/or polity) that have to be taken into account when discussing the question of justice. If I may borrow Sen's words on this matter, "[c]pabilities cannot do that work any more than primary goods can [in the Rawls' theory of justice]" (Sen 2009:299). For instance, Sen's capability perspective does not stipulate a specific formula of distribution (although this is commonly misunderstood, as it strives for an 'equality' of capabilities for justice), and thus there is always space to be partially complemented by other theorists' principles on distributive pattern rules and their reasonings.

Keeping the broader foundational ideas in mind, I will now move my response to the concern about the practicality and selection process of capabilities relevant to housing. Foye reads my paper as overselling the 'practicality' of the capabilities informational base. This is, of course, not my intention, and I actually share many of the concerns he addresses, including the risk of reproducing paternalism and majoritarianism. However, my personal stance is a bit more open to partial applications of the multiple tenets of the capability perspective. Sometimes a partial application, when accompanied by sufficient scrutiny and sound reasoning (such as the Human Development Index), can make positive contributions to producing change by merely switching the evaluation space and thus by leading us to see things from a different angle, even if the application does not perfectly align with all the foundational ideas of Sen's capability perspective. This flexible stance of mine might have been embedded in my argument in general, and I imagine that this could have created the impression of my overselling the practicality.

Batterham and Foye are worried that my article takes little consideration of the procedural and epistemological issues regarding the selection of housing capabilities and functionings. I am certain the reviewers understand that the scope of my paper does not allow me to cover the subject of justification methodologies for selecting the capabilities. Thus, in my paper, I could only briefly note that the selection matter requires more discussion in another space. In this respect, I appreciate that Foye has elaborated on the procedural issue. I agree with him that process is an important component to be considered when one applies the capability approach to housing research. As Foye and also Batterham point out, when Sen's perspective is applied, a deliberative democratic process is considered to be one of the best ways to justify a selection of capabilities and functionings. I share their concerns on the potential risks or dilemmas of a deliberative democratic procedure—not only the risk of adaptive preferences and the tyranny of the majority that both reviewers have mentioned but also the requirement of some prerequisites that enable an effective deliberative democratic process, such as certain basic capabilities or social arrangements.

The potential problems of the deliberative democratic process have been continuously debated in the capability literature. This is clearly one of the many sub-topics to examine in housing studies. It would definitely be worth exploring the multiple justification methodologies of selecting capabilities as well as how capabilitarian researchers have attempted to avoid (or minimise) the problems while adhering to the key tenets of the capability approach—such as the combination of ultimate normative theory and deliberative procedure, or the application of the concept of the 'impartial spectator', whose role Sen has emphasised. Meanwhile, I am reluctant to define the deliberative democratic procedure as the one closest to the ideal process. It appears that there is a broad spectrum of justification methodologies (each methodology having its own good reasoning) rather than a simple binary distinction between a procedural (Sen) and a normative philosophical approach (Nussbaum). The ideal process might be defined differently either at the theoretical or practical level depending on the purpose of the research. I thank the open reviewers for bringing up this important subject of the selection process, and I hope that various justification methods will now be further discussed.

I have noticed that there are a few misinterpretations of my discussion. Batterham points out that the examples of the housing capabilities in my paper are problematic because of the unclearness of their origin. And the reading of McCallum and Papadopoulos assesses that the "stance of *standing above* is evident" in my paper because they believe my discussion attempts to "diagnose", "define" (highlighted by the reviewers), and debates what housing-related functionings are important. My paper certainly does not attempt to define important functionings relevant to housing. I assume that these comments come from a simple misunderstanding about the examples I described in the text and in Table 1. The examples are only for elaborating the abstract conceptual discussion in a concrete way and should in no way be interpreted as proposing specific capabilities or functionings that everybody should look at. It might be helpful to explain here that I decided to include several examples because I had found it useful when explaining my conceptual ideas to other housing scholars who were not yet fully familiar with the concept of capabilities. At the same time, I appreciate Batterham's comment because the examples I listed should not, of course, be used as a reference in empirical research without proper reasoning. I agree that the selection of one or more capabilities (and functionings) needs a clear reasoning process, something that Batterham has highlighted by citing Alkire's words.

I sincerely welcome the comments by Hemerijck and Taylor from John Rawls' perspective and their discussion on the linkage (or complementary aspects) between the perspective of Rawls and that of the capability approach. The debates on the linkage or difference between the two are found in many books and papers within the capability community. Also, Sen himself often notes the influence of John Rawls on his work. I look forward to more such debates coming up in the housing context. Taylor argues that Rawls' metric of primary goods should not be dismissed, and I fully agree with her. In fact, Sen does not dismiss primary goods (as he always emphasises the importance of resources as well). The main concern for him has been the variations in individuals' opportunities to convert resources (primary goods) into capabilities. I think, as Batterham also suggests, this concern on the conversion aspect should be one of the key research areas in housing studies, especially concerning the role of housing policy.

I turn now to the comments about housing as a part of social policy and a good life. Taylor, Batterham, and McCallum and Papadopoulos are worried that my paper's focus on the housing domain ignores the complexity and interrelation between housing and the broader context of human flourishing, a good life, and social policy. I have perceived that there are two ways to use the capability perspective for housing policy discussion: one is to look at housing as one of several variables of a good life (housing as a means); and the second is to consider housing (i.e. residing in a way that a person has reason to value) as consisting of multiple variables (housing as an end). Because these two directions are not always diametrically opposed to each other—or because, as Hemerijck phrases it, they are "two interrelated angles"—my article does not make a clear division between them. But the general focus is indeed intended to be on the second direction, which has been examined insufficiently in the literature on both housing and capability. I certainly agree that housing is only one of the multi-dimensions of a good life and that the concerns about the complexity between them should continuously be taken into account in the discussion about housing—particularly regarding the conversion factors between housing and a good life. I would simply respond that my paper is about housing and thus the main focus is placed on interpreting the capability approach in a housing-specific context.

I might not agree with Taylor's statement that "there is nothing 'special' about housing as a policy area [and] we should not be looking to develop a framework to apply the capabilities approach in a housing-specific context". Each sub-domain of social policy surely requires more specialised and in-depth insights due to its distinctive characteristics and problems. For this reason, the capability approach is increasingly been used both at the narrowed-down level of a sub-domain, such as education, health, and employment, and at the broader level of overall well-being across various policy areas. From my perspective, a continuing attempt to interact between the housing-specific context and housing in broader contexts seems to be the best way.

It has been my pleasure to hold a discussion through this Focus article platform. I have limited my reply to a clarification of my views and intention, but there have been many topics and arguments in the commentaries that have inspired me to initiate further discussions. I once again express my gratitude to the open reviewers and editors. I have enjoyed and benefited from reading all of the commentaries.

References

Aalbers, M. (2016) *The Financialization of Housing: A Political Economy Approach.* London: Routledge.

Alkire, S. (2002) *Valuing Freedoms: Sen's Capability Approach and Poverty Reduction.* Oxford, New York: Oxford University Press.

Alkire, S. (2005) Why the Capability Approach? *Journal of Human Development* 6(1): 115–135.

Alkire, S. (2013) Choosing Dimensions: The Capability Approach and Multidimensional Poverty. In N. Kakwani & J. Silber (Eds.) *The Many Dimensions of Poverty* (pp.89–119). London: Palgrave Macmillan.

Alkire, S. & J. Foster (2011) Counting and Multidimensional Poverty Measurement. *Journal of Public Economics* 95(7–8): 476–487.

Alkire, S., J. E. Foster, S. Seth, M. E. Santos, J. M. Roche & P. Ballon (2015) *Multidimensional Poverty Measurement and Analysis.* Oxford: Oxford University Press.

Alkire, S., U. Kanagaratnam & N. Suppa (2020) The Global Multidimensional Poverty Index (MPI): 2020 Revision. *OPHI MPI Methodological Note* 49. Oxford Poverty and Human Development Initiative, University of Oxford.

Alkire, S. & J. M. Roche (2011) Beyond Headcount: Measures that Reflect the Breadth and Components of Child Poverty. *OPHI Working Paper* 45. Oxford Poverty and Human Development Initiative, University of Oxford.

Amérigo, M. & J. I. Aragonés (1990) Residential Satisfaction in Council Housing. *Journal of Environmental Psychology.* 10: 313–325.

Anderson E. S. (2010) Justifying the Capability Approach to Justice. In H. Brighouse & I. Robeyns (Eds.) *Measuring Justice: Primary Goods and Capabilities* (pp.81-100). Cambridge: Cambridge University Press.

André, S. (2017) *The Two Sides of Homeownership: Security and Insecurity: A Comparative Approach to the Effects of Housing Tenure and Housing Wealth on Political Attitudes, Political Behavior and Subjective Wellbeing.* Ede: GVO drukkers & vormgevers B.V., Ponsen & Looijen.

Arndt, C. & J. Volkert (2007) A Capability Approach for Official German Poverty and Wealth Reports: Conceptual Background and First Empirical Results. I*AW Discussion Papers* 27. Institut für Angewandte Wirtschaftsforschung (IAW), Tübingen.

Arndt, C. & J. Volkert (2011) The Capability Approach: A Framework for Official German Poverty and Wealth Reports. *Journal of Human Development and Capabilities* 12(3): 311–337.

Arundel, R. & R. Ronald (2016) Parental co-Residence, Shared Living and Emerging Adulthood in Europe: Semi-Dependent Housing across Welfare Regime and Housing System Contexts. *Journal of Youth Studies* 19(7): 885–905.

Arundel, R. & C. Lennartz (2017) Returning to the Parental Home: Boomerang Moves of Younger Adults and the Welfare Regime Context. *Journal of European Social Policy* 27(3): 276–294.

Balestra, C. & J. Sultan (2013) Home Sweet Home: The Determinants of Residential Satisfaction and its Relation with Well-being. *OECD Statistics Working Paper* 54. OECD Statistics Directorate, Paris.

Ballon, P (2013) The Selection of Functionings and Capabilities: A Survey of Empirical Studies. *Partnership for Economic Policy (PEP) Working Paper* 2013/9.

Batterham, D. (2018) Homelessness as Capability Deprivation: A Conceptual Model. *Housing, Theory and Society.* doi:10.1080/14036096.2018.1481142.

Batterham, D. (2020) The Promise and Problems of Applying the Capability Approach to Housing Policy and Research. *Housing, Theory, and Society* 37(3): 305–310.

Beer, A. & D. Faulkner (2011) *Housing Transitions through the Life Course: Aspirations, Needs and Policy.* Bristol, Portland: The Policy Press.

Bengtsson, B. (1995) Politics and Housing Markets—Four Normative Arguments. *Scandinavian Housing and Planning Research* 12(3): 123–140.

Bengtsson, B. & H. Ruonavaara (2010) Introduction to the Special Issue: Path Dependence in Housing. *Housing, Theory and Society*. 27(3): 193-203.
Berry, M. (2017) *Morality and Power: On Ethics, Economics and Public Policy*. Cheltenham: Edward Elgar Publishing Ltd.
Bobek, A., S. Pembroke & J. Wickham (2020) Living in Precarious Housing: Non-standard Employment and Housing Careers of Young Professionals in Ireland. *Housing Studies*. doi: 10.1080/02673037.2020.1769037.
Boelhouwer, J. (2010) *Wellbeing in the Netherlands: The SCP Life Situation Index since 1974*. The Hague: The Netherlands Institute for Social Research (SCP).
Bourguignon, F., A. Bénassy-quéré, S. Dercon, A. Estache, J. W. Gunning, R. Kanbur, S. Maxwell, J. Platteau & A. Spadaro (2008) Millennium Development Goals at Midpoint : Where Do We Stand and Where Do We Need to Go? *2009 European Report on Development*.
Burchardt, T. & R. Hick (2018) Inequality, Advantage and the Capability Approach. *Journal of Human Development and Capabilities* 19(1): 38–52.
Burchardt, T. & P. Vizard (2011) 'Operationalizing' the Capability Approach as a Basis for Equality and Human Rights Monitoring in Twenty-first-century Britain. *Journal of Human Development and Capabilities* 12(1): 91–119.
Byskov, M. F. (2018) Selecting Capabilities for Development: An Evaluation of Proposed Methods. In F. Comim, S. Fennell & P. B. Anand (Eds.) *New Frontiers of the Capability Approach* (pp.198–231). Cambridge: Cambridge University Press.
Chambers, R. (1989) Editorial Introduction: Vulnerability, Coping and Policy. IDS Bulletin 20(2): 1–7.
Chaudhuri, S. & M. Ravallion (1994) How Well Do Static Indicators Identify the Chronically Poor? *Journal of Public Economics* 53: 367–394.
Chiappero-Martinetti, E. (2000) A Multidimensional Assessment of Well-Being Based on Sen's Functioning Approach. *Rivista Internazionale Di Scienze Sociali* 2(2): 207–239.
Chisholm, E., P. Howden-Chapman & G. Fougere (2018) Tenants' Responses to Substandard Housing: Hidden and Invisible Power and the Failure of Rental Housing Regulation. *Housing, Theory and Society* 37(2): 139–161.
Clapham, D. (2005) The Meaning of Housing: A Pathway Approach. Bristol: The Policy Press.
Clapham, D. (2018) Housing Theory, Housing Research and Housing Policy. *Housing, Theory and Society* 35(2): 163–177.
Clapham, D. (2019) *Remaking Housing Policy*. Bristol: Taylor & Francis.
Clapham, D., C. Foye & J. Christian (2018) The Concept of Subjective Wellbeing in Housing Research. *Housing, Theory and Society* 35(3): 261–280.
Clark, K., M. Deurloo & F. Dielemann (2000) Housing Consumption and Residential Crowding in US Housing Markets. *Journal of Urban Affairs* 22 (1): 49–63.
Clark, W., M. Deurloo, & F. Dielemann (2003) Housing Careers in the United States: Modelling the Sequencing of Housing States. *Urban Studies* 40(1): 143–160.
Comim, F. (2018) Sen's Capability Approach, Social Choice Theory and the Use of Rankings. In F. Comim, S. Fennell & P. B. Anand (Eds.) *New Frontiers of the Capability Approach* (pp.179–197). Cambridge: Cambridge University Press.
Coates, D., P. Anand & M. Norris (2013) Housing and Quality of Life for Migrant Communities in Western Europe: A Capability Approach. *Journal on Migration and Human Security* 1(4): 163–209.
Coates, D., P. Anand & M. Norris (2015) A Capabilities Approach to Housing and Quality of Life: The Evidence from Germany. *Open Discussion Papers in Economics* 78. The Open University.
Cornia, G. & F. Steward (1993) Two Errors of Targeting. Journal of International Development 5(5): 459–496.
Crocker, David A. 2008. *Ethics of Global Development Agency, Capability, and Deliberative Democracy*. Cambridge: Cambridge University Press.
Dean, H., J. Bonvin, P. Vielle & N. Farvaque (2005) Developing Capabilities and Rights in Welfare-to-Work Policies. *European Societies* 7(1): 3–26.
Denulin, S. & J. A. McGregor (2010) The Capability Approach and the Politics of a Social Conception of Wellbeing. *European Journal of Social Theory* 13(4): 501–519.
Dewilde, C. & B. Lancee (2013) Income Inequality and Access to Housing in Europe. *European Sociological Review* 29(6): 1189–1200.

Dewilde, C. (2021) How Housing Affects the Association between Low income and Living Conditions-Deprivation across Europe. *Socio-Economic Review.* doi: 10.1093/ser/mwab003.
Diaz-Serrano, L. (2006) Housing Satisfaction, Homeownership and Housing Mobility: A Panel Data Analysis for Twelve EU countries. *IZA Discussion Papers* 2318. Institute for the Study of Labor (IZA), Bonn.
Drydyk, J. (2008) Durable Empowerment. *Journal of Global Ethics* 4: 231–245.
Drydyk, J. (2012) A Capability Approach to Justice as a Virtue. *Ethic Theory Moral Practice,* 15(1): 23–38.
Duncan, S. S. (1976) Research Directions in Social Geography: Housing Opportunities and Constraints. *Transactions of the Institute of British Geographers* 1(1):10–19.
Dupuis, A. & D. C. Thorns (1998) Home, Homeownership and the Search for Ontological Security. *The Sociological Review.* 46(1): 24–47.
Eurofound (2015) *Access to Social Benefits: Reducing Non-take-up.* Luxembourg: Publications Office of the EU.
Eurostat (2018) *Living Conditions in Europe: 2018 edition.* Luxembourg: Publication Office of the European Union.
Evangelista, F. (2010) Poverty, Homelesness and Freedom: An Approach from the Capabilities Theory. *European Journal of Homelessness* 4(1): 189–201.
Evans, P. (2002) Collective Capabilities, Culture, and Amartya Sen's Development as Freedom. *Studies in Comparative International Development* 37(2): 54–60.
Evans, S. (2017) What Should Social Welfare Seek to Achieve? Applying the Capability Approach. *Ethics and Social Welfare* 11(1): 19–32.
Fitzpatrick, S., B. Bengtsson & B. Watts (2014) Rights to Housing: Reviewing the Terrain and Exploring a Way Forward. *Housing, Theory and Society* 31(4): 447–463.
Forrest, R. (1987) Spatial Mobility, Tenure Mobility and Emerging Social Divisions in the UK Housing Market. *Environment and Planning A* 19: 1611–1630.
Foye, C. (2020) It's about Process: Who Draws up the List of Capabilities and How? *Housing, Theory, and Society* 37(3): 300–304.
Foye, C. (2021) Ethically-speaking, What is the Most Reasonable Way of Evaluating Housing Outcomes? *Housing, Theory and Society* 38(1): 115–131.
Fraser, N. (2003) Social Justice in the Age of Identity Politics: Redistribution, Recognition, and Participation. In N. Fraser & A. Honneth (Eds.) *Redistribution or Recognition? A Political- Philosophical Exchange* (pp.72–109). London, Verso and Frankfurt: Suhrkamp.
Frediani, A. A. (2007a) Amartya Sen, the World Bank, and the Redress of Urban Poverty: A Brazilian Case Study. *Journal of Human Development and Capabilities* 8(1): 133–152.
Frediani, A. A. (2007b) *Housing freedom, Amartya Sen and Urban Development Policies – Squatter Settlement Upgrading in Salvador da Bahia, Brazil.* PhD diss., Oxford Brookes University.
Frediani, A. A. (2009) Freedom in the Urban Arena: the World Bank, Turner and Sen. *DPU Working Paper* 136.
Fukuda-Parr, S. & A.K. Shiva Kumar (Eds.) (2003) *Readings in Human Development.* Delhi: Oxford University Press.
Galster, G. (1985) Evaluating Indicators for Housing Policy: Residential Satisfaction vs Marginal Improvement Priorities. *Social Indicators Research* 16(4): 415–448.
Gasper, D. (2004) Human Well-Being: Concepts and Conceptualizations. *WIDER Discussion Papers* 2004/06. Helsinki.
Gilabert, P. (2009) The Feasibility of Basic Socioeconomic Human Rights: A Conceptual Exploration. *The Philosophical Quarterly.* 59(237): 659–681.
Gore, C. (1997) Irreducibly Social Goods and the Informational Basis of Amartya Sen's Capability Approach. *Journal of International Development* 9(2): 235–250.
Gulbrandsen, L. (2004) Homeownership and social inequality in Norway. In H. P. Blossfeld & K. Kurz (Eds.) *Home Ownership and Social Inequality in Comparative Perspective* (pp.166–186). Stanford: Stanford University Press.
Gulcur, L., A. Stefancic, M. Shinn, S. Tsemberis & S. N. Fischer (2003) Housing, Hospitalization, and Cost Outcomes for Homeless Individuals with Psychiatric Disabilities Participating in Continuum of Care and Housing First Programmes. *Journal of Community & Applied Social Psychology* 13(2): 171–186.
Haffner, M. (2015) EU-SILC: Should We Make Do with What We Have? *Critical Housing Analysis* 2(2): 27-34.
Haffner, M. & M. Elsinga (2019) Housing Deprivation Unravelled: Application of the Capability Approach. *European Journal of Homelessness.* 13(1): 13–28.

Haffner, M., C. Lennartz & K. Dol (2012) Housing. In J. Jonker (Ed.) *Countries Compared on Public Performance: A Study of Public Sector Performance in 28 Countries* (pp.241–285). The Hague: The Netherlands Institute for Social Research, SCP.
Hamilton, L (2019) Amartya Sen. Cambridge: Polity Press.
Hatuka, T. & R. Bar (2017) Navigating Housing Approaches: A Search for Convergences among Competing Ideas. *Housing, Theory and Society* 34(3): 277–296.
Heylen, K. & K. Van den Broeck (2016) Discrimination and Selection in the Belgian Private Rental Market. *Housing Studies* 31(2): 223–236.
Hoekstra, J. (2010) *Divergence in European Welfare and Housing Systems*. Amsterdam: IOS Press.
Ibrahim, S. S. (2006) From Individual to Collective Capabilities: the Capability Approach as a Conceptual Framework for Self-help. *Journal of Human Development* 7(3): 397–416.
Ibrahim, S. S. & S. Alkire (2007) Agency and Empowerment: A Proposal for Internationally Comparable Indicators. *Oxford Development Studies* 35(4): 380–403.
Irving, A. (2021) Exploring the Relationship between Housing Conditions and Capabilities: A Qualitative Case Study of Private Hostel Residents. *Housing Studies*. doi: 10.1080/02673037.2021.1928004
Jacobs, K. (2019) *Neoliberal Housing Policy: An International Perspective*. London: Routledge.
Jansen, Sylvia. J. T. (2013) Why Is Housing Always Satisfactory? A Study into the Impact of Preference and Experience on Housing Appreciation. *Social Indicators Research* 113(3): 785–805.
Julen, J. (2018) Problems loom with interest-only mortgages [Problemen dreigen bij aflossingsvrij lenen] *Trouw,* September 26. https://www.trouw.nl/nieuws/problemen-dreigen-bij-aflossingsvrij-lenen~b34afb3fa
Jonkman, A. & L. Janssen-Jansen (2015) The 'Squeezed Middle' on the Dutch Housing Market: How and Where Is It to Be Found? *Journal of Housing and the Built Environment* 30 (3): 509–528.
Kemeny, J. (1995) *From Public Housing to the Social Market: Rental Policy Strategies in Comparative Perspective*. London: Routledge.
Kendig, H. (1984) Housing Careers, Life-cycle and Residential Mobility: Implications for the Housing Market. *Urban Studies* 21(3): 271–283.
Kimhur, B. (2020a) How to apply the capability approach to housing policy? Concepts, Theories and Challenges. *Housing, Theory and Society* 37(3): 257–277.
Kimhur, B. (2020b) Author's Reply. *Housing, Theory and Society*. 37(3): 317–321.
Kimhur, B. (2022) Approach to Housing Justice from a Capability Perspective: Bridging the Gap between Ideals and Policy Practices. *Housing Studies*. doi: 10.1080/02673037.2022.2056148.
King, P. (1996) *The Limits of Housing Policy: A Philosophical Investigation*. London: Middlesex University Press.
King, P. (2003) Housing as a Freedom Right. *Housing Studies* 18(5): 661–672.
King, P. (2009) Using Theory or Making Theory: Can There Be Theories of Housing? *Housing, Theory and Society* 26(1): 41–52.
King, P. (2011) Using Big Ideas: The Application of Political Philosophy in Housing Research. *Housing, Theory and Society* 28(2): 109–122.
Klasen, S. (2000) Measuring Poverty and Depriva Tion in South Africa. *Review of Income and Wealth* 46(1): 33–58.
Leijten, I. & K. de Bel (2020) Facing Financialization in the Housing Sector: A Human Right to Adequate Housing for All. *Netherlands Quarterly of Human Rights* 38)2: 94–114.
Lubis, A. (2018) *Exploring the Importance of Financial Literacy within the Capability Approach Framework*. PhD diss. University of Cambridge.
Lusardi, A. & O. S. Mitchell (2007) Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth. *Journal of Monetary Economics* 4(1): 205–224.
Lusardi, A., P. Michaud & O. Mitchell (2017) Optimal Financial Knowledge and Wealth Inequality. *Journal of Political Economy* 125(2): 431–744.
Maclennan, D. & J.Miao (2017) Housing and Capital in the 21st Century. *Housing, Theory and Society* 34(2): 127–145.
Madden, D. & P. Marcuse (2016) In Defence of Housing. London and NY: Verso.
Malpass, P. (2008) Housing and the New Welfare State: Wobbly Pillar or Cornerstone? *Housing Studies* 23(1): 1–19.

McCallum, S. & A. Papadopoulos (2020) Capabilities and Housing: Questions of Application. *Housing, Theory and Society*. 37(3):289–294.
Mitchell, A. & J. Macció (2021) Using Multidimensional Poverty Measures in Impact Evaluation: Emergency Housing and the 'Declustering' of Disadvantage. *Journal of Human Development and Capabilities* 22(3): 379–402.
Moroni, S. (2020) The Just City, Three Background Issues: Institutional Justice and Spatial Justice, Social justice and Distributive justice, Concept of justice and Conception of Justice. *Planning Theory*, 19(3): 251–267.
Morris, A. (2012) Older Social and Private Renters, the Neighbourhood, and Social Connections and Activity. *Urban Policy and Research* 30(1): 43–58.
Moser, C. (2006) Asset-based Approaches to Poverty Reduction in a Globalized Context. *Global Economy and Development Working Paper* 1.
Navarro, C. & L. Ayala (2008) Multidimensional Housing Deprivation Indices with Application to Spain. *Applied Economics* 40(5): 597–611.
Nicholls, C. (2010) Housing, Homelessness and Capabilities. *Housing, Theory and Society* 27(1): 23–41.
Nobel Prize Outreach (1998) The Official Web Site of the Nobel Prize. 14 October 1998. https://www.nobelprize.org/prizes/economic-sciences/1998/press-release/
Norris, M. (2016) Varieties of Home Ownership: Ireland's Transition from a Socialised to a Marketized Policy Regime. *Housing Studies*. 31(1): 81–101.
Nussbaum, M. (1988) Nature, Function and Capability: Aristotle on Political Distribution. *Oxford Studies in Ancient Philosophy Supplementary* Volume: 145–84.
Nussbaum, M. (1992) Human Functioning and Social Justice : In Defense of Aristotelian Essentialism. *Political Theory* 20(2): 202–246.
Nussbaum, M. (2003) Capabilities as Fundamental Entitlements: Sen and Social Justice. *Feminist Economics* 9(2–3): 33–59.
Nussbaum, M. (2006) *Frontiers of Justice*. Cambridge, Massachusetts: Havard University Press.
Nussbaum, M. (2011) *Creating Capabilities: The Human Development Approach*. Cambridge, Massachusetts: Havard University Press.
OHCHR, Office of the United Nations High Commissioner for Human Rights (2009) *Fact Sheet No.21: The Human Right to Adequate Housing*. Geneva: United Nations.
Oxley, M. (1991) The Aims and Methods of Comparative Housing Research. *Scandinavian Housing and Planning Research*, 8(2): 67–77.
Oxley, M. (2001) Meaning, Science, Context and Confusion in Comparative Housing Research. *Journal of Housing and the Built Environment* 16: 89–106.
Payne, J. & Payne, G. (1977) Housing Pathways and Stratification: A Study of Life Chances in the Housing Market. *Journal of Social Policy* 23(2): 125–156.
Parfit, D. (1984) *Reasons and Persons*. Oxford New York: Oxford University Press.
Perry, B. (2002) The Mismatch between Income Measures and Direct Outcome Measures of Poverty. *Social Policy Journal of New Zealand* 19: 101–127.
Piketty, T. (2014) *Capital in the Twenty-First Century*. Cambridge Massachusetts: Havard University Press.
Qizilbash, M. (2002) A Note on the Measurement of Poverty and Vulnerability in the South African Context. *Journal of International Development* 14(6): 757–772.
Rawls, J. (2001) J*ustice as Fairness: A Restatement*. Cambridge, Massachusetts: Havard University Press.
Re-InVEST (2015) Rebuilding an Inclusive, Value-Based Europe of Solidarity and Trust through Social Investment. [online] Available at: http://www.re-invest.eu [Accessed 25 July 2019].
Regan, S., & W. Paxton (2001) *Asset-Based Welfare: International Experiences*. London: IPPR.
Rex, J. & Moore, R. (1967) *Race, Community, and Conflict: A Study of Sparkbrook*. London: Oxford University Press.
Robeyns, I. (2003) Sen's Capability Approach and Gender Inequality: Selecting Relevant Capabilities. *Feminist Economics* 9(2–3): 61–92.
Robeyns, I. (2005) Selecting Capabilities for Quality of Life Measurement. S*ocial Indicators Research*. 74: 191–215.
Robeyns, I. (2006) The Capability Approach in Practice. *The Journal of Political Philosophy* 14(3): 351–376.
Robeyns, I. (2017) *Wellbeing, Freedom and Social Justice*. Cambridge: Open Book Publishers.

Robeyns, I. & H. Brighouse (2010) Introduction: Social Primary Goods and Capabilities as Metrics of Justice. In H. Brighouse and I. Robeyns (Eds.) *Measuring Justice: Primary Goods and Capabilities* (pp.1-13). Cambridge: Cambridge University Press.

Roemer, J. E. (1996) *Theories of Distributive Justice*. Cambridge, Massachusetts: Harverd University Press.

Rolnik, R. (2013) Late Neoliberalism: The Financialization of Homeownership and Housing Rights. International *Journal of Urban and Regional Research* 37(3): 1058-1066.

Ronald, R. (2008) *The Ideology of Home Ownership: Homeowner Societies and the Role of Housing.* New York: Palgrave Macmillan.

Ruggeri-Laderchi, C. (1999) The Many Dimensions of Deprivation in Peru : Theoretical Debates and Empirical Evidence. *QEH Working Paper Series* 29. Oxford.

Ruggeri-Laderchi, C. (2008) Do Concepts Matter? An Empirical Investigation of the Differences between a Capability and a Monetary Assessment of Poverty. In F. Comim, M. Qizilbash, & S. Alkire (Eds.) *The Capability Approach: Concepts, Measures and Applications* (pp.203–241). Cambridge: Cambridge University Press.

Ruonavaara, H. (2012) Homeownership and Nordic Housing Policies in 'Retrenchment.' In: R. Ronald & M. Elsinga (Eds.) *Beyond Home Ownership: Housing, Welfare and Society*. New York: Routledge.

Ruonavaara, H. (2018) Theory of Housing, from Housing, about Housing. *Housing, Theory and Society*. 35(2): 178–192.

Ruonavaara, H. (2020) Rethinking the Concept of 'Housing Regime.' *Critical Housing Analysis*. 7(1): 5–14.

Saunders, P. (1990) *A Nation of Home Owners*. London: Unwin Hyman.

Scanlon, K., J. Lunde & C. Whitehead (2008) Mortgage Product Innovation in Advanced Economies: More Choice, More Risk. *European Journal of Housing Policy* 8 (2): 109–131.

Seay, M., G. L. Preece & V. C. Le (2017) Financial Literacy and the Use of Interest-Only Mortgages. *Journal of Financial Counselling and Planning* 28 (2): 168–180.

Sen, A. (1980) Equality of What? In S. M. McMurrin (Ed.) *The Tanner Lecture on Human Values: Volume 1, 1980* (pp.197–220). Cambridge: Cambridge University Press.

Sen, A. (1985) *Commodities and Capabilities.* Amsterdam: North-Holland.

Sen, A. (1987) The Standard of Living: Lectures I and II. In G. Hawthorn (Ed.) *The Standard of Living* (pp.1–38). Cambridge: Cambridge University Press.

Sen, A. (1992) *Inequality Reexamined.* Massachusetts: Harvard University Press.

Sen, A. (1993) Positional objectivity. *Philosophy and Public Affairs* 22(2): 126–145.

Sen, A. (1999) *Development as Freedom.* New York: Knopf.

Sen, A. (2004) Capabilities, Lists and Public Reason: Continuing the Conversation. *Feminist Economics*. 10(3): 77–80.

Sen, A. (2009) *The Idea of Justice*. Cambridge, Massachusetts: Harvard University Press.

Sen, A. (2012) Value and justice. J*ournal of Economic Methodology* 19(2): 101–108.

Sherraden, M. (1991) Assets and the Poor: A New American Welfare Policy. New York: Routledge.

Sherraden, M. (2003) Assets and the Social Investment State. In W. Paxton (Ed.) *Equal Shares?: Building a Progressive and Coherent Asset-Based Welfare Policy* (pp.28–41). London: IPPR.

Sherraden, M. S. (2013) Building Blocks of Financial Capability. In J. M. Birkenmaier, M. S. Sherraden & J. C. Curley (Eds.) *Financial Capability and Asset Building: Research, Education, Policy and Practice* (pp.1–43). Oxford: Oxford University Press.

Stephens, M. (2020) How Housing Systems are Changing and Why: A Critique of Kemeny's Theory of Housing Regimes. *Housing, Theory and Society* 37(5): 521–547.

Stephens, M., S. Fitzpatrick, M. Elsinga, G. van Steen & Y. Chzhen (2010) *Study on Housing Exclusion: Welfare Policies, Housing Provision and Labour Market.* Brussels: European Commission.

Stewart, F. (2005) Groups and Capabilities. *Journal of Human Development* 6(2): 185–204.

Stewart, F. & S. Deneulin (2002) Amartya Sen's Contribution to Development Thinking. *Studies in Comparative International Development* 37(2): 61–70.

Storchi, S. & J. Susan (2016) Financial Capability for Wellbeing: An Alternative Perspective from the Capability Approach. B*ath Papers in International Development and Wellbeing* 44. University of Bath, Centre for Development Studies (CDS).

Sugden, R. (1993) Welfare,R Esources and Capabilities: A Review of Inequality Re-Examined by Amartya Sen. *Journal of Economic Literature* 31(4): 1947–1962.

Tanekenov, A., S. Fitzpatrick & S. Johnsen (2018) Empowerment, Capabilities and Homelessness: The Limitations of Employment-focused Social Enterprises in Addressing Complex Needs. *Housing, Theory and Society* 35(1):137–155.

Taylor, H. (2019) *Social Justice in Contemporary Housing: Applying Rawls' Difference Principle.* London, New York: Routledge.

Tsemberis, S. (1999) From Streets to Homes: An Innovative Approach to Supported Housing for Homeless Adults with Psychiatric Disabilities. *Journal of Community Psychology* 27(2): 225–241.

Tsemberis, S. (2010) *Housing First: The Pathways Model to End Homelessness for People with Mental Health and Substance Use Disorders.* Minnesota: Hazelden Publishing.

Ulman, P. & M. Ćwiek (2020) Measuring Housing Poverty in Poland: A Multidimensional Analysis. *Housing Studies.* doi: 10.1080/02673037.2020.1759515

United Nations (2012) *Report of the Special Rapporteur on Adequate Housing as a Component of the Right to an Adequate Standard of Living: Report on Ruling Paradigm of Housing Policies that Focus on Housing Finance.* United Nations, General Assembly, A/67/286 (10 August 2012). Available from undocs.org/en/A/67/286.

UN-Habitat (2015) *Housing at the centre of the New Urban Agenda.* Nairobi: UN-Habitat.

UN-Habitat (2016) *World Cities Report 2016 - Urbanization and Development: Emerging Futures.* Nairobi: UN-Habitat.

United Nations (2017a) *Report of the Special Rapporteur on Adequate Housing as a Component of the Right to an Adequate Standard of Living, and on the Right to Non-discrimination in this Context: Report on the Financialization of Housing and its Impact on Human Rights.* United Nations, General Assembly, A/HRC/34/51 (18 January 2017). Available from undocs.org/en/A/HRC/34/51.

United Nations (2017b) UN Habitat III New Urban Agenda, A/RES/71/256 (25 January 2017).

van Beuningen, J. K. van der Houwen & L. Moonen (2014) Measuring Wellbeing: An Analysis of Different Response Scales. *Statistics Netherlands (CBS) Discussion Paper* 2014-3. The Hague, Statistics Netherlands (CBS).

van Ooijen, R. & M. van Rooij (2014) Mortgage Risks, Debt Literacy and Financial Advice. *DNB Working Paper* 449/November 2014. Amsterdam, De Nederlandshe Bank (DNB).

van Prooijen, E. (2018) Think about your interest-only mortgage in time [Denk op tijd na over je aflossingsvrije hypotheek] *EenVaandag,* September 28. https://eenvandaag.avrotros.nl/item/denk-op-tijd-na-over-je-aflossingsvrije-hypotheek

Verberk, M., M. Warnaar & J. Bos (2019) *Inkomenscriteria voor Huurders en Kopers* [Income Criteria for Tenants and Buyers (in the Netherlands)]. Utrecht: Nationaal Instituut voor Budgetvoorlighting (Nibud).

Vitt, L. A., C. Anderson, J. Kent, D. M. Lyter, J. K. Siegenthaler & J. Ward (2000) *Personal finance and the rush to competence: Financial literacy education in the U.S.* Virginia: Institute for Socio-Financial Studies (ISFS).

Waterval, D. (2019) Interest-only mortgage is driving the elderly into a corner [Aflossingsvrije hypotheek drijft ouderen in het nauw] *Trouw*, December 12. https://www.trouw.nl/economie/aflossingsvrije-hypotheek-drijft-ouderen-in-het-nauw~b9423b00

Watts, B. & J. Blenkinsopp (2021) Valuing Control over One's Immediate Living Environment: How Homelessness Responses Corrode Capabilities. *Housing, Theory and Society.* doi: 10.1080/14036096.2020.1867236.

Wolff, J. & A. De-Shalit (2007) *Disadvantage.* Oxford: Oxford University Press.

Young, I. M. (1990) *Justice and the Politics of Difference.* Princeton: Princeton University Press.

Zahirovic-Herbert, V., K. Gibler & S. Chatterjee (2016) Financial Literacy, Risky Mortgages, and Delinquency in the US during the Financial Crisis. *International Journal of Housing Markets and Analysis* 9(2): 164–189.

Appendices

APPENDIX A

Supplemental materials

TABLE APP.A.1 Ten central human capabilities by Nussbaum (Chapter 2)

Life	Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living.
Bodily Health	Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.
Bodily Integrity	Being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.
Senses, Imagination, and Thought	Being able to use the senses, to imagine, think, and reason—and to do these things in a "truly human" way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use imagination and thought in connection with experiencing and producing works and events of one's own choice, religious, literary, musical, and so forth. Being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise. Being able to have pleasurable experiences and to avoid non-beneficial pain.
Emotions	Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)
Practical reason	Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience and religious observance.)
Affiliation	Being able to live with and toward others, to recognize and show concern for other humans, to engage in various forms of social interaction; to be able to imagine the situation of another. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.) Having the social bases of self-respect and non-humiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of non-discrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin and species.
Other species	Being able to live with concern for and in relation to animals, plants, and the world of nature.
Play	Being able to laugh, to play, to enjoy recreational activities.
Control over one's environment	Political. Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association. Material. Being able to hold property (both land and movable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure. In work, being able to work as a human, exercising practical reason and entering into meaningful relationships of mutual recognition with other workers.

Source: excerpted from Nussbaum (2011, pp.33–34)

TABLE APP.A.2 Survey questionnaires on financial literacy (Chapter 4)

Question 1.

Suppose you have 100 euros on a savings account and the interest is 2% per year. How much do you think you will have on the savings account after five years, assuming that you leave all your money in this savings account: more than 102 euros, exactly 102 euros, less than 102 euros?

1 more than 102 euros
2 exactly 102 euros
3 less than 102 euros
4 I don't know
5 I would rather not say

Question 2.

Suppose that the interest on your savings account is 1% per year and that inflation amounts to 2% per year. After 1 year, would you be able to buy more, exactly the same, or less than you could today with the money in that account?

1 more than today
2 exactly the same as today
3 less than today
4 I don't know
5 I would rather not say

Question 3.

A share in a company usually offers a more certain return than an investment fund that only invests in shares.

1 true
2 not true
3 I don't know
4 I would rather not say

Question 4.

If the interest rate goes up, what should happen to bond prices?

1 they should increase
2 they should decrease
3 they should stay the same
4 none of the above
5 I don't know
6 I would rather not say

Source: CentERdata, Tilburg University, Netherlands, 2011
Note: for a measure of basic financial literacy in Chapter 4, respondents who correctly answered to Question 1 and Question 2 were considered to have basic financial literacy.

APPENDIX B

Detailed figures

TABLE APP.B.1 Incidence of pairwise overlaps and mismatches between measures (Chapter 4)

Results with the cut-offs applied for the main analysis					
Overlaps			**Mismatch**		
Income: sufficient	— housing: adequate	62.55%	Income: sufficient	— housing: inadequate	13.61%
Income: insufficient	— housing: inadequate	7.61%	Income: insufficient	— housing: adequate	16.23%
housing: adequate	— satisfied	72.94%	housing: adequate	— unsatisfied	5.79%
housing: inadequate	— unsatisfied	5.71%	housing: inadequate	— satisfied	15.57%
Income: sufficient	— satisfied	68.62%	Income: sufficient	— unsatisfied	7.74%
Income: insufficient	— unsatisfied	3.86%	Income: insufficient	— satisfied	19.78%
Income: sufficient	— financially literate	56.32%	Income: sufficient	— financially illiterate	20.82%
Income: insufficient	— financially illiterate	9.07%	Income: insufficient	— financially literate	13.79%
satisfied	— financially literate	64.01%	satisfied	— financially illiterate	25.42%
unsatisfied	— financially illiterate	4.71%	unsatisfied	—financially literate	5.85%
housing: adequate	— financially literate	57.24%	housing: adequate	— financially illiterate	22.61%
housing: inadequate	— financially illiterate	7.53%	housing: inadequate	— financially literate	12.62%

>>>

TABLE APP.B.1 Incidence of pairwise overlaps and mismatches between measures (Chapter 4)

Results with the lowered cut-offs					
Overlaps			Mismatch		
Income: sufficient	— housing: adequate	70.19%	Income: sufficient	—housing: inadequate	5.97%
Income: insufficient	— housing: inadequate	3.16%	Income: insufficient	—housing: adequate	20.69%
housing: adequate	— satisfied	86.67%	housing: adequate	—unsatisfied	4.38%
housing: inadequate	— unsatisfied	1.96%	housing: inadequate	—satisfied	6.99%
Income: sufficient	— satisfied	72.12%	Income: sufficient	—unsatisfied	4.25%
Income: insufficient	— unsatisfied	2.16%	Income: insufficient	—satisfied	21.48%
Income: sufficient	— financially literate	65.18%	Income: sufficient	—financially illiterate	11.96%
Income: insufficient	— financially illiterate	6.86%	Income: insufficient	—financially literate	16.00%
satisfied	— financially literate	77.61%	satisfied	—financially illiterate	16.77%
unsatisfied	— financially illiterate	2.09%	unsatisfied	—financially literate	3.53%
housing: adequate	— financially literate	75.74%	housing: adequate	—financially illiterate	16.48%
housing: inadequate	— financially illiterate	2.43%	housing: inadequate	—financially literate	5.35%

TABLE APP.B.2 Assessment of inequality in conversion efficacy among subgroups (Chapter 4)

	(1) Have sufficient income for adequate housing	(2) Have sufficient income for adequate housing *and* living in adequate housing	(3) *From* basic economic means for housing *to* basic housing functioning Conversion efficacy gaps = (2)/(1) – 1
Ideal score (i.e. no discrepancy)	–	–	0.000
Total	76.15 %	62.55 %	-0.179
Urbanization			
Extremely urban	69.77 %	51.70 %	-0.259
Very urban	76.80 %	62.45 %	-0.187
Moderately urban	75.79 %	63.98 %	-0.156
Slightly urban	78.02 %	66.69 %	-0.145
Not urban	77.84 %	62.77 %	-0.194
Tenure type			
Homeowners	83.73 %	72.42 %	-0.135
Tenants	51.66 %	30.71 %	-0.405
Age group (years)			
18–29	79.51 %	61.05 %	-0.232
30–64	80.04 %	66.38 %	-0.171
65+	52.21 %	46.77 %	-0.104
Household type			
Single household	40.80 %	31.30 %	-0.233
Multi-person household	83.34 %	69.69 %	-0.164
Single parent household	57.48 %	37.61 %	-0.346
Origins			
Dutch background	74.20 %	62.53 %	-0.157
Western background; 1st generation	65.84 %	53.42 %	-0.189
Western background; 2nd generation	74.01 %	59.91 %	-0.190
Non-Western background; 1st generation	66.67 %	38.02 %	-0.430
Non-Western background; 2nd generation	62.67 %	36.00 %	-0.426

TABLE APP.B.3 Degrees of simultaneous deprivations in housing situation by subgroups (%) (Chapter 4)

	(1)	(2)	(3)	(4)	(5)
	Number of simultaneous deprivations				
	None	One	Two	Three (Three +)	Four
Total	44.63	33.22	15.92	5.32	0.91
Urbanization					
Extremely urban	36.75	31.98	20.90	8.98	1.40
Very urban	45.91	32.65	16.10	4.64	0.71
Moderately urban	46.55	32.48	13.72	6.11	1.14
Slightly urban	46.69	34.24	14.82	3.38	0.86
Not urban	42.05	35.21	16.80	5.33	0.60
Tenure type					
Homeowners	52.81	33.38	11.21	2.45	0.15
Tenants	17.96	32.70	31.30	14.67	3.37
Age group (years)					
18–29	43.25	29.49	19.79	6.82	0.66
30–64	46.34	33.86	13.77	5.12	0.91
65+	38.02	35.32	21.26	4.59	0.81
Household type					
Single household	23.16	37.89	28.68	9.21	1.05
Multi-person household	49.57	32.48	13.34	4.12	0.49
Single parent household	24.86	35.26	20.23	13.58	6.07
Origins					
Dutch background	44.86	34.63	15.39	5.13 [1]	-
Western background; 1st generation	32.37	36.69	17.99	12.95 [1]	-
Western background; 2nd generation	40.10	32.18	21.78	5.94 [1]	-
Non-Western background; 1st generation	19.86	29.08	29.79	21.28 [1]	-
Non-Western background; 2nd generation	22.03	25.42	23.73	28.73 [1]	-

[1] The observations in Columns 4 and 5 were combined into "Three +" because the number of observations in Column 4 was very low so that the households and individuals had risks to be recognized.

TABLE APP.B.4 Multidimensional housing disadvantages in financial terms (MHDs-f): Level and intensity of housing disadvantages by sub-groups (Chapter 5)

	MDH-f Index (Mo = H x A)			Multidimensional Headcount (H)			Intensity of Disadvantage (A)		
Disadvantage cutoffs (k)	k=1	k=2	k=3	k=1	k=2	k=3	k=1	k=2	k=3
Total	0.264	**0.133**	0.026	0.583	**0.186**	0.026	0.453	**0.716**	1.000
Household type									
Single	0.355	**0.214**	0.052	0.720	**0.293**	0.052	0.492	**0.729**	1.000
Multi-person	0.219	**0.086**	0.010	0.525	**0.124**	0.010	0.416	**0.696**	1.000
Single parent	0.402	**0.275**	0.051	0.769	**0.385**	0.051	0.522	**0.714**	1.000
Latent	0.631	**0.574**	0.198	0.931	**0.759**	0.198	0.677	**0.756**	1.000
Age group									
18-29	0.480	**0.385**	0.117	0.804	**0.517**	0.117	0.597	**0.745**	1.000
30-64	0.246	**0.118**	0.025	0.552	**0.164**	0.025	0.445	**0.720**	1.000
65+	0.241	**0.093**	0.003	0.585	**0.137**	0.003	0.412	**0.678**	1.000
Employment type									
Average among the employed	0.277	**0.140**	0.025	0.610	**0.197**	0.025	0.453	**0.712**	1.000
Standard	0.248	**0.110**	0.016	0.576	**0.157**	0.016	0.431	**0.703**	1.000
Non-standard	0.374	**0.244**	0.059	0.730	**0.335**	0.059	0.512	**0.728**	1.000

TABLE APP.B.5 MHDs-f: Incidence of disadvantages in each dimension by sub-group of population (*k*=2) (Chapter 5)

Dimensions		Opportunity	Security	Ability
Thematic dimensions		Entitlements to housing tenure options	Resilience to risks for housing cost payments	Basic ability for financial planning for housing
Average		26.4 %	24.7 %	31.1 %
Household types	Single	49.7 %	25.9 %	32.4 %
	Multi-person	17.1 %	18.8 %	31.1 %
	Single parent	45.3 %	44.8 %	29.0 %
	Latent	90.8 %	61.9 %	29.1 %
Age groups	18-19	69.6 %	53.3 %	25.7 %
	30-64	19.4 %	25.8 %	29.6 %
	65+	28.4 %	8.2 %	36.9 %
Employment type	Standard	23.4 %	21.7 %	30.9 %
	Non-standard	50.9 %	29.1 %	30.9 %

Curriculum Vitae

BORAM KIM
(pen name: Boram Kimhur)
www.boramkimhur.com

Prior to her PhD research, Boram Kimhur worked as a housing/urban specialist and a community architect for the issues of urban poverty and the right to housing at NGOs, bi/multilateral agencies including UN-Habitat, and a philanthropic foundation in several cities in East and Southeast Asian countries, such as South Korea, Vietnam, the Philippines, and Indonesia. During her PhD study, she extended her research to the housing issues in Western Europe. Her research interests focus on housing and urban inequality, housing policies, social justice, and evaluation approaches.

Education

PhD in Housing Studies
Faculty of Architecture and the Built Environment, TU Delft, Netherlands, 2017-2022
- Research focus: housing policy, inequality, justice, evaluation approach
- Teaching activity: "The ethics of co-production research: Tools for participatory and collaborative research with/in communities" (in collaboration with L. Vergara, I. Igor Pessoa, and P. Chan, with an award from the TU Delft PhD Kickstart Fund for a new doctoral education course)

Master of Arts in International Development: Urban Development
Global Development Institute, University of Manchester, United Kingdom, 2009-2010
- Graduated with merit, with the Urban Development Scholarship awarded from the institute
- Thesis 'Using microinsurance to adapt the urban poor to climate change: A case study of microinsurance in Gujarat, India'

Bachelor of Science in Architecture and Engineering
Inha University, South Korea, 1999-2004
- Thesis 'Urban regeneration in the socioeconomic and cultural context: A proposal for the redevelopment of the secondhand market in Hwanghak-dong along the Cheonggye Stream'

Conference and seminar activities

Paper presentations at the European Network for Housing Research Conferences, Working Group–Housing and Social Theory, 2018, 2019, and 2022.

Paper and poster presentations at the Human Development and Capabilities Association Conferences, 2018, 2019, and 2022.

Operationalizing the capability approach to measure inequalities in housing. At: 'Operationalizing the Just City' seminar, organized by the thematic group of Ethics, Values and Planning, Association of European Schools of Planning, 25 February 2022.

Lessons from struggles: An analytical reflection on three studies for operationalizing the just city (with A. Jonkman and C. Janssen). At: 'Operationalizing the Just City' seminar, organized by the thematic group of Ethics, Values and Planning, Association of European Schools of Planning, 25 February 2022.

Global agenda for climate change adaptation and urban resilience. At: 'Climate change and urban inequality: Urban resilience for all' session in the Korean Urban Forum by UN-Habitat Korea Committee, 25 November 2021.

Housing justice and capabilities: Two test-out empirical applications. At: 'The just city in practice: Operationalizing a broad and varied concept' seminar, Netherlands Environmental Assessment Agency (PBL), The Hague, 21 August 2020.

Social Justice, Capability Approach, and Housing Policy. At: 'Values and Housing' seminar, Faculty of Architecture and the Built Environment, TU Delft, 14 March 2019.

Resident communities as the main vehicle for maintaining and renovating the old public housing (Khu tap the) in Hanoi. At: International conference: Redevelopment of Old Apartment Buildings into Livable Urban Spaces, the Vietnam Institute of Construction and Urban Economics, Hanoi, 29 October 2014.

Invited talks and lectures

Community-driven slum upgrading in the Global South, in the MOOC course 'Rethink the City', 2022.

Re-examining housing policy directions from the capability perspective: What went wrong and where to head?, in the Weekly Seminar of the Institute for Housing and Urban Research (IBF), Uppsala University, 16 March 2021.

Right to adequate housing: Global housing issues and actions, in the Sustainable Habitat–Urban School, UN-Habitat Korean Committee, 5 October 2020.

Community-driven projects and the roles of architects and planners, for master's students joining fieldwork in Addis Ababa for a global housing project, Faculty of Architecture and the Built Environment, TU Delft, 22 Oct. 2019.

A community-driven slum upgrading programme in Asia: ACCA and a review on the South Korea case, Institute for Housing and Urban Development (IHS), Rotterdam, 2016 and 2018.

Viet Nam: An overview of the housing sector for the urban poor and low-income people, UN ESCAP Knowledge Dissemination Workshop on Sustainable Energy Options, Bangkok, 25 June 2014.

Key issues for establishing an urban indicator system, UN-Habitat Training Programme on Urban Indicator System, Hanoi, 15 December 2013.

Urban poor settlements in Seoul, Korea, in the field programme of International Regional Studies, Toyo University in Japan, Seoul, 22 August 2012.

People-centred development: Changes in perspectives on development and poverty, in the Academy for International Development Cooperation, Asian Bridge, Seoul, 31 May 2011.

Several mentoring talks for youth in the field of international development, at the Reshaping Development Institute (ReDI) (Seoul 22 Oct. 2015), Korea NGO Council for Overseas Development Cooperation (KCOC) (Hanoi and HCMC, 3 and 10 December 2016), School of International Development Cooperation (Seoul, 18 Feb. 2016), and the Faculty of Architecture in Inha University (22 May 2017).

Professional work experience

Architects for Society and People (ASP) | South Korea
Co-founder and Community Architect, 2012 – current
- Support communities in informal settlements for developing housing solutions, and advocate for their right to housing

Korea International Cooperation Agency (KOICA) | Vietnam
ODA Specialist in the Urban Development Sector, 2016-2017
- Technical advisor for ODA projects on housing and urban planning
- Responsibility: Project management and evaluation, project feasibly study and development, and bi/multilateral cooperation

Hilti Foundation (HF) | Indonesia and the Philippines
Urban and Housing Specialist, 2015
- Technical advisor for the Programme "Alternative building technology for housing the urban poor in Asia-Pacific", aiming at the provision of disaster-resistant, low-cost and environmentally friendly houses through alternative building technologies
- Programme evaluation, and a feasibility study and planning for the programme expansion

UN-Habitat | Vietnam
Urban and Housing Specialist, 2013-2015
- Technical advisor for urban and housing projects
- Member of the Human Right Technical Working Group in the UN Country Team
- In charge of the projects:
- Policy Dialogue "Right to adequate housing: Role of communities in the housing process"
- Support for low-income housing policy in Vietnam
- Strengthening urban observatory and statistical systems for urban evident-based development planning and policies

Hanguk University of Foreign Studies | South Korea
Part-time lecturer, 2011-2012
- Lecturer of "NGOs and Contemporary Society", for undergraduates

NGO Asian Bridge | South Korea
Programme Manager and Community Architect, 2011-2012
- Advocacy for the right to housing and the community-driven housing initiatives in the cities of South Korea and South East Asia, in collaboration with the Asian Coalition for Housing Rights

SEEGAN Architects Group | South Korea
Assistant Manager, 2008-2009

HYUNDAI Architects & Engineers Assoc. | South Korea
Assistant Architect, 2005-2008

Publications

The publications since 2020 use the pen name, Boram Kimhur.

Peer-reviewed journal articles

Published

Kimhur, B. (2022) A capability approach to evaluating well-being and equality in housing: Clear conceptual difference but unclear practical difference? *Housing Theory and Society.* https://doi.org/10.1080/14036096.2022.2149617

Kimhur, B. (2022) Approach to housing justice from a capability perspective: Bridging the gap between ideals and policy practices. *Housing Studies.* https://doi.org/10.1080/02673037.2022.2056148

Kimhur, B. (2020) How to apply the capability approach to housing policy?: Concepts, theories and challenges. *Housing Theory and Society* 37 (3): 257–277. https://doi.org/ 10.1080/14036096.2019.1706630

Kimhur, B. (2020) Author's reply. *Housing Theory and Society* 37 (3): 317–321 (response to the open comments on the article "How to apply the capability approach to housing policy?: Concepts, theories and challenges"). https://doi.org/10.1080/14036096.2019.1710397

Work in progress

Kimhur, B. (submitted to a peer-reviewed journal in 2022) Measuring housing inequality with the value of freedom in the capability approach: A proposal and a demonstration.

Book & book chapters

Geertman, S. and Kim, B. (2017) A study of informally developed housing and its role in the political arena of a post-reform communist city. In R. Rocco and J. Ballegooijen (Eds.) *The Routledge Handbook on Informal Urbanization* (pp.112–123). New York: Routledge.

Kim, B., H. Park and J. Park (2017) Changes in, and political gains of informal settlers in movements in changing state regimes. In R. Rocco and J. Ballegooijen (Eds.) *The Routledge Handbook on Informal Urbanization* (pp.270–280). New York: Routledge.

Kim, B. (2014) Urban development. In KOICA (Ed.) *Lecture on Development Studies* (pp. 206–234). Paju: Pureunsup.

Kim, B, M. Oh, and Daeyeon-wooam Community (2012) Dream of the Daeyeon-wooam community. Seoul: Joh-Eunttang.

Other publications

Working papers/ Issue briefs

Janssen, C., A. Jonkman, B. Kimhur, and J. Kramer (in alphabetical order) (2020) How the other half lives: Coronavirus, housing and justice. *Faculty of Architecture and the Built Environment*, Delft University of Technology

Talocci, G., C. Boano, and B.Kim (2014) Community-driven design of vertical housing: Lessons learnt from Borei Keila in Phnom Penh, and a possible application in Kim Lien Khu tap the in Hanoi. *Viet Nam Institute of Construction and Urban Economics*. (pp. 91-100).

Cha, E., J. Choi, M. Hong, H. Kang, B. Kim, M, Kim., and J. Yun (in alphabetical order) (2011) Korea's development experience: a new perspective. *Korea Civil Society Forum on International Development Cooperation (KoFID) and Re-shaping Development Institute (ReDI)*, Issue Brief (4).

Technical Reports

Kim, B. and M. Oh (2019) I*nformal settlements in Seoul, 2019: People's Stories.* Architects for Society and People.

Kim, B. (2014) Article 11: The right to an adequate standard of living (in Viet Nam). In Viet Nam UN Country Team (Eds.), *UN Country Team (UNCT) Viet Nam contribution to the issues raised by the ECOSOC in relation to the combined second, third and fourth periodic reports of Viet Nam*.

Kim, B. (2014) *Initial assessment of the Viet Nam indicator systems relevant to urban development* (prepared for Urban Development Agency in the Ministry of Construction of Viet Nam). UN-Habitat Viet Nam.

Kim, B. (2014) *Background paper: Enabling urban communities in the housing process as a way of realizing the right to adequate housing in Viet Nam*, prepared for the Urban Policy Dialogue. UN-Habitat Viet Nam.

Kim, B. (2014) *Report on the policy dialogue: the right to adequate housing – roles of communities in the housing process.* UN-Habitat, ACVN, ACHR & Cities Alliance.

Kim, B. (2014) Social development and green growth in Da Nang. In J. Lee and S. Park. *Green Growth City Development Strategy in Da Nang* (pp.50–57). UN-Habitat & GGGI.

Kim, B. (2011) *Urban poor settlement profile in Seoul: Vinyl-house settlements & Jokbang.* Korean Coalition for Housing Rights & Asian Bridge.

Opinion Articles

Kim, B. (2019) When Communities Transform Old Socialist Housing into Adequate Housing. *URBANET: News and Debates on Municipal and Local Governance, Sustainable Urban Development and Decentralization.*

Kim, B. (2011) Vinyl-houses in Seoul, Republic of Korea. *CityVoices.* Vol. 1, No.4, CITYNET.

22#23

Housing justice as expansion of people’s capabilities for housing

Proposal for principles of housing policy and evaluation of housing inequality

Boram Kimhur

Housing inequality is a growing concern in our society. In recent decades, this inequality has been exacerbated by the phenomenon of housing being financialized and commodified as a means for wealth accumulation. Management of financial institutions and housing markets has become the centre of attention in policy discussion. The questions of how to promote the moral values tied to housing, such as human rights, dignity and freedom, and how to better enable people to access suitable housing have been marginalized. As a way forward, the states’ re-intervention and re-distribution policies, and the human rights-based approach to housing policies are discussed, but this thesis advocates for a more ambitious paradigm shift. By extending Amartya Sen’s capability approach to housing, the thesis argues for resetting the primary goal of housing policies as expansion of people’s capabilities for housing—expanding opportunity, ability and security to lead their valued ways of residing—beyond the distribution of monetary and material resources for housing, such as housing benefits and dwelling units. This thesis presents the theoretical foundations of this argument and proposes basic principles to guide housing policies, which can serve as a normative basis of housing debates on necessary policy actions. An essential tool to guide housing policies towards this newly proposed goal is to evaluate policy outcomes and housing affairs of people—well-being, deprivation and inequality in housing—with capability considerations. The thesis suggests how this evaluation can be done and can help policies address the inequalities in what people can do to pursue their suitable housing options and how well they are actually residing.

A+BE | Architecture and the Built Environment | TU Delft BK