

165

Clemens Deilmann, Maja Lorbek,
Milena Martinsen (Eds.)

Single-Family Homes under Pressure?

Workshop, November 2015



Leibniz-Institut
für ökologische
Raumentwicklung

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Table of Contents:

Introduction	1
Session 1: UK and Italy	
Donald Houston: Regional Demographic Change and Housing in the UK	7
Darja Reuschke: Changes in the Use of Homes	9
Chiara Merlini, Federico Zanfi: Framing the Family-House Stock in Contemporary Italy Construction, Situations, Evolution Patterns	17
Session 2: USA and Netherlands	
Bernadette Hanlon: Changing Suburbs and the Single-family Home in a U.S. Context	23
Roland Füss: The US Single-Family Housing Market: Drivers and Challenges with a Spatial Focus on Local Differences in House Price Inflation	25
Huibert A. Haccou, Theo de Bruijn: Emerging Trends; Their Demographic Origins and their Effects on Housing in the Netherlands	33
Session 3: Japan	
Akito Murayama: The Recent Trend of Single-Family Residential Areas in the Shrinking Cities in Japan – Case of Yokosuka City, Kanagawa Prefecture	49
Hiroyuki Shimizu: Population Decline and Single House Management in Japan	51
Session 4: Spain and Germany	
Montserrat Pareja Eastaway: Trajectories, Dimension and Current Role of Single-Family Housing in Spain.	53
Josefine Korbel, Christina Simon-Philipp: Single-Family-Housing-Areas from the 1950s - 1970s – Strategies und Projects for Sustainable Development	71
Wolfgang Maennig: Price Decreases of Single Family Houses in Germany: Structure or Location? Or No More Topical?	85
Session 5: Preliminary research results	
Topic 1 – market developments and single-family homes	
Oliver Lerbs, Markus Teske (ZEW): Price Formation of Single-Family Homes in the Presence of Vacancies	89
Carolin Fritzsche, Lars Vandrei (ifo Dresden): The German Land Transfer Tax: Evidence for Single-Family Home Transactions	91
Topic 2 – Building stock and user typologies	
Clemens Deilmann, Maja Lorbek, Milena Martinsen (IOER):Single-Family Housing Stock: A Material and Cultural Resource at Risk?	93
Esther Schietinger, Immanuel Stieß (ISOE): Single-Family Home: Pluralization of Lifestyles, Shifting Preferences and Emerging New User Groups	103
Andrea Berndgen-Kaiser, Tine Köhler (ILS): Survey Results – Pressures on detached and semidetached Housing Areas and Measures to deal with them	109
Summaries group discussions	
World Café Discussions	111
Program	117

Introduction

Single-Family-Homes - First Insights from International Perspectives

C. Deilmann, M. Lorbek, M. Martinsen

The interdisciplinary research project “Homes-uP?” hosted a two-day international expert meeting at Leibniz Institute of Ecological Urban and Regional Development in Dresden on future opportunities and risks of single-family homes in industrialized countries. Together with thirteen invited experts from USA, the Netherlands, Japan, Italy and UK (Scotland), the national research partners (IÖR, ifo, ZEW, ISOE, ILS) scrutinized challenges to single-family housing stocks arising from demographic change, changing user preferences and market mechanisms out of an interdisciplinary perspective. The international meeting offered the opportunity to give a picture of the situation in the individual countries, exchange experience and discuss research approaches (and provide feedback for preliminary results from the ongoing German research project).

In many countries, single-family homes (SFH) constitute the majority of residential buildings. In Germany 66% of the residential building stock is made up by SFH. According to Eurostat, the share of people living in **detached** houses peaked in Croatia (73.0 %), Slovenia (66.6 %), Hungary (63.9 %) and Romania (60.5 %); Norway also reported high share (60.7 %) of their population living in detached houses. The highest propensity to live in **semi**-detached houses was reported in the United Kingdom (60.9 %), the Netherlands (60.0 %) as well as Ireland (59.0 %)¹. Traditionally there is great demand for SFH. In 2011, more than 50% of the population in Europe lived in SFH. Detached houses constitute about 60% of the housing units in Japan as well as in the USA. For some time already, increasing indications can be found, that this segment of the housing stock is under pressure. Economic and financial crises, demographic and social structural change, and changes in user preferences, are raising new challenges. Outside core regions of economic growth, stagnating or dropping prices, difficulties in selling, and even vacancies, are no longer a rarity in this segment in many regions. In prosperous and growing urban areas, rising property prices and a high share of housing costs out of disposable income are a challenge to potential new buyers of single-family homes.

The ongoing research project analyses these challenges from different disciplinary viewpoints. Homes-uP? is supported by the Leibniz Association as part of the Leibniz Competition 2015 - funding line ‘National and international networking’.

Day one of the expert meeting collected the different perspectives onto the single family home. There are country specifics, which emerge from housing structure, tenure, solidity / age of construction. Within each country, there are regional differences, which play an important role.

Donald Houston (University of Glasgow), who opened the meeting, described the market situation in UK, which varies a lot between North and South. Vacancy may occur predominantly in very small terraced houses, which are not popular anymore. Recent trends affecting the single-family house market include growth in private renting, promotion of asset-based welfare, intergenerational wealth transfer, the retirement of baby boomers and reurbanisation, but also acute shortage in the single-family homes segment in some regional housing markets.

Houston also discussed the terms “single-family home” and “single-family house” in different language contexts. In British English, the term Single-family home is not common. Instead, the terms “terraced, semi-detached and detached house” describe houses with a single dwelling unit.

¹ Eurostat, source: http://ec.europa.eu/eurostat/statistics-explained/index.php/Housing_conditions, assessed on March 12, 2016

Darja Reuschke (University of St Andrews) presented results from an ongoing research project “Work and Home”, funded by the European Research Council. This project explores the increasing importance of work and workspace at home. While traditional models of homes during the twentieth century excluded paid work at home, changes in the production sector and employment schemes led to the “resurgence of homeworking and home-based self-employment” in developed countries. Reuschke’s presentation, demonstrated the increasing overlap of work and housing over time. 5-15 % of European workforce today is home based. For home-based work, single-family houses offer several advantages flexible use, provide an equity for business credit. Home-workers in single-family homes are not restricted by property owners with regard to noise, layout changes, etc. According to Reuschke, home ownership on one hand facilitates entrepreneurship and enables flexible working conditions. On the other hand, the boundary between work and leisure, particularly in detached homes, is becoming increasingly blurred.

Federico Zanfi (Politecnico die Milano) presented Italian traditions in single-family housing and an analysis of three case studies. The presentation was prepared in cooperation with Chiara Merlini. In Italy, freestanding small houses are not necessarily inhabited by a single core family, but by an extended, multigenerational family with different household structures. Therefore, the number of two-family houses is high compared to other countries. Zanfi referred to three case studies from different Italian regions (Lombardy, Marche and Puglia) to illustrate the phenomenon of “diffuse urbanisation” and arising challenges: SFH in industrial zones, SFH in tourist area and self-built low-cost houses in areas of endogenous growth in small suburban centres.

In her presentation, Bernadette Hanlon (Ohio State University) analysed recent changes in US suburban areas. In US suburbs, which used to be middle-class and white, the Black, Asian and Hispanic population is on the rise. According to a survey by Arthur Nelson, there is a significant change in preferences of house seekers. Walkability, urban amenities and smaller lot size are becoming increasingly important for different generations (Millenials and boomers.) Bernadette Hanlon also described changes in existing suburban areas; these include demolition and rebuilding of larger homes (“mansification”) as well as densification through infills. Future challenges affecting suburban homes include possible deterioration in “suburbs of color”, possible gentrification and increasing suburban stratification.

Roland Füss (University of St. Gallen and ZEW) conducted a study on house price inflation and monetary policy in the US single-family housing market. The study explored the correlation of monetary instruments on private housing market. Existing research on this topic is contradictory. His findings indicate that land shortage affects the supply side of the housing market while population growth affects the demand side. According to Füss, interest’s rates determine the house prices. Moreover, local factors determine monetary policy impacts. Füss concluded with evidence in favor of monetary policy, which takes into account local factors and additional measures such as counter-cyclical capital buffers.

Huibert A. Haccou (Saxion University of Applied Sciences) presented an overview of demographic and societal trends and their influence on the housing sector in the Netherlands. He and his co-author Theo de Bruijn emphasized the impact of single households on the housing market, leading to a growing demand for smaller homes. Haccou and de Bruijn identified a growing mismatch in the building stock, including surplus schools on one hand, and a lack of care facilities for the elderly. There is a growing vacancy risk for row houses in rural areas, due to decreasing popularity of this type of housing. The transformation of office space (17% vacancies) to apartments could generate 7 Million dwellings, leaving empty single-family houses behind. Asylum seeking refugees could, according to Haccou and de Bruijn, increase the demand for housing, including the single-family home sector.

Three researchers from Japan, Akito Murayama, Hiroki Tanikawa and Hiroyuki Shimizu explored the subject of single-family homes from different angles. According to Akito Murayama (The University of Tokyo), Japan shares similar demographic trends as Germany. However, the solution to shrinking single-family housing demand is unlike durable and robust house construction in Germany, based on construction with a very short life-span. German homes are built for a life span of one hundred years.

In Japan after 30 years the value of a house decreases towards zero (from point of finance), while the lot retains its value. Murayama described urban shrinkage as a complex process of transformation.

Hiroyuki Shimizu (Nagoya University) explored the topic of population decline in the context of Japanese basic landscape types. In the long-term perspective until 2050, population decrease in some landscape types will be dramatic, in urban type and urban paddy field type even up to 75-80 %. In Satoyama landscape type, this poses enormous risks for both traditional residential areas as well as to the highly transformed, artificial landscape. A specific is the extreme mountainous geography of Japan. Many suburbs are difficult to access for elderly. Shimizu also addressed the topic of life cycle and waste reduction based management of single-family homes. From this viewpoint, there are generally two possible solutions for this problem. One possible solution is the construction of durable houses with long lifetime spans, which would also need the promotion of markets for second-hand homes. The second option is to choose limited lifespan of single-family homes based on the cradle-to-cradle principle.

Hiroki Tanikawa (Nagoya University) analysed the housing stock with the Material Flow Analysis approach. Light weight wooden construction (200 kg/m²) are replaced by metal frame and concrete constructions (500 kg/m²). The average age of homes is 27 years and life expectancy is about 65 years. The critical phase of house production in Japan was the 50ies. Most of those houses are replaced by now. Data on single-family homes need to be extracted from statistics and combined with the material flow of building activities and of technical infrastructure. Tanikawa presented research findings, which illustrate the heavy weight (importance) of technical infrastructure within the material accounting.

Christina Simon-Philipp and Josefine Korbel (Stuttgart University of Applied Sciences) showed results from two research projects for the Wüstenrot foundation oriented towards actions taken at present in “stressed” SFH-areas. Both projects deal with the 1950s to 1970s segment of the single-family housing stock, which will be highly affected by the aging of the baby boom generation. The first project raised awareness for this problem but also developed possible field of action for municipalities with large shares of single-family homes in this age class. The second project is based on case studies in selected municipalities and will identify transferable strategies and successful instruments and measures in practice.

Wolfgang Maennig (University of Hamburg) addressed the issue of uncertainty and inaccurate past prognoses and demographic projections. Despite all uncertainty – based on the present population – deaths will exceed births by over 500 000 inhabitants per year in Germany from 2030 onward. Maennig emphasized the effect of housing vacancies on the economy as 87 % of assets are real estates and 51% of household wealth is stored in buildings. Maennig's investigation revealed that decreased house prices are due to the more remote location, but less due to the structure of SFH.

Montserrat Pareja-Eastaway (University of Barcelona) could not participate in person at the conference, however, she made her presentation available for publication. She explored current role of single-family housing in Spain, taking into account urban layout, the specifics of second homes in the country due to large touristic sector, housing boom prior to financial crises and uneven distribution of single-family housing in parts of the country. Pareja-Eastaway developed four scenarios with the goal to explore the future of single-family housing.

The second day of the meeting was dedicated to the presentations of the German research team and the final round table discussion. The results of these final discussions are also included at the end of this Workshop Documentation.

Markus Teske and Oliver Lerbs' (ZEW) ongoing research uses data from single-family house transactions and the hedonic regression method to explore the correlations between price development and vacancies in Germany. Preliminary results confirm the hypothesis of price-depressing effects of vacancies in the neighborhood of individual single-family homes clearly. Values of SFHs selling prices are on average lower in municipalities with higher vacancy rates, even after controlling for main object char-

acteristics, location quality and municipality variables. Since this general result is robust across different German states, ZEW aims at extending the analysis to other EU countries.

Caroline Fritzsche and Lars Vandrei (ifo Dresden) also use data on single-family house transactions with the goal to explore the impact of land transfer taxes on transactions on the single-family house market. They conclude on base of their research that the increase in the land transfer tax results in massive anticipation effects. Consequently, shortly after a tax increase, the number of transactions of single-family homes decreases dramatically. However, there is also a long-term effect: Due to the higher tax rate, transactions become less profitable for buyers and sellers and therefore fewer transactions take place in the long run.

Clemens Deilmann and Maja Lorbek (IÖR) presented their classification of German single-family housing stock according to predetermined crucial features and type definitions from literature. Well-known building types already described and classified by architectural historians were complemented by additional “vernacular” house types. In further steps, methods used in studies of vernacular architecture as well as visual methods will be applied in order to typify these not yet classified, yet significant part of the single-family housing stock. Additionally, the “field” of single-family housing was analysed.

Esther Schietinger presented first conclusions from the socio-cultural perspective. On the one hand she focused on the overarching process of “reurbanisation”. This process is mainly based upon a shift in area preferences in the age cohort 30 to 45 towards more central areas. The corresponding housing preferences apart from the location preferences, for single-family homes or multi-dwelling units, need further exploration. The often mentioned re-migration of the empty nesters and “woopies” (well-off older people) to the nearby cities remains a discursive phenomenon with little statistical evidence so far. On the other hand Schietinger presented preliminary findings on old and new SFH-user-groups. While the traditional single-family house milieus are shrinking for demographic reasons, “younger” lifestyle milieus are supposed to have different housing preferences, their potential as new user-group in the SFH-housing stock is to be explored. Foreigners and citizens with migration-background can be identified as another new user-group, on which little research has been done yet. These findings will be a basis for further empirical explorations.

Andrea Berndgen-Kaiser and Tine Köhler presented the findings of a survey of German municipalities carried out in 2015. One quarter of the participating municipalities expects changes regarding detached and semi-detached housing areas, more than a third of municipalities cannot yet assess it. Out of the qualifying measures for SFH areas – as suggested in the survey –, the creation of elderly-friendly housing and a stock-oriented settlement development was assessed as most reasonable. The two most commonly applied measures included the barrier-free design of public space and the stimulation of demand through cadastral mapping of residential vacancies. ILS will investigate five municipalities with declining population in further detail (structured interviews with municipal experts).

On day two of the meeting, world-café discussions were conducted and participants at the three sessions discussed the following topics (see resume at end of document):

- Between market and intervention
- Phenomena and challenges
- Future risks and potentials

To conclude: First insights from international perspectives were presented at this meeting in November 2015. One of the most important insights from the conference is that the single-family housing markets in different countries are highly diverse and housing surplus is, except for Germany and Japan, limited to remote areas and/or unattractive parts of the stock. One further important finding from joint discussion was the realisation that vacancies not only pose a threat for municipalities and house owners – e.g. in terms of threatening “wealth for care” models –, but also bear the potential of greater

affordability for the less affluent. However, in shrinking regions with declining municipal income, the maintenance of social and technical infrastructures will be a serious challenge in the future. In order to keep SFH settlements livable, attractiveness for different user groups (“mixed uses”), the walkability and access to public transport seem to be critical issues.

The meeting in Dresden in November 2015 was the first one in a series of three conferences on the topic of ‘Single Family Homes under Pressure’. Next international conference is planned for October 2016. In 2017 an international scientific as well as a transfer conference will be hosted at IÖR in Dresden.

Regional Demographic Change and Housing in the UK

Donald Houston

Urban Studies, University of Glasgow

Definitions, Terminology and Language. In different parts of the world, and in different languages, 'Single Family Homes' translates somewhat differently. The term refers to a stand-alone residential dwelling usually occupied by a single family or household. In the UK, the term Single Family Home is not used at all. The closest translation of 'Single Family Home' in the British context would be 'detached house'. In the USA, the occupancy by only one family or household is often a legal condition of planning consent to the construction of the dwelling, meaning that the occupancy of the building forms part of the definition as well as its physical construction. The 'Single Family Home'/'Detached House' distinction goes beyond linguistic differences, but also reflects contrasts in the housing stock between Britain and North America. In the UK housing stock, detached houses often do not form a particularly distinct housing sub-market, but together with semi-detached houses act as a relatively homogenous 'family' segment of the housing market.

Demographic transitions. Although the UK of course is experiencing profound ageing of its population structure along with most developed nations, its overall population is growing, and growing quite strongly in the south, especially the southeast and London. Population growth is driven by immigration, with the birth rate remaining below 'replacement'. Population growth is compounded by declining average household size leading to rapidly rising numbers of households and demand for housing. Not-for-profit and municipal landlords have shrunk in the face of subsidy cuts and homeownership accounts for two-thirds of the housing stock, with the remaining third split evenly between private and social landlords. There is a housing shortage and affordability crisis in many parts of the UK, particularly the south, compounded by low levels of housebuilding due to a slow planning system and large-scale commercial housebuilders' vested interests in managing supply to maintain high house prices. Housing shortages are particularly acute among the 'single family homes' segment of the housing market.

During the second half of the twentieth century, cities and, in the 1980s in particular, the whole of northern Britain, experienced population decline or shrinkage. In the 1950s and 1960s, city shrinkage was driven by the demolition of low-quality and overcrowded tenements (a traditional style of apartment block). Population was moved to new housing, often in New Towns beyond the large industrial cities. In the 1980s and 1990s there was demolition of terraced housing and modernist high-rise blocks that had high vacancy rates. Population shrinkage and demolition were managed by landlords running up void rates in blocks and estates for some time ahead of demolition, and then rehousing existing tenants. The small number of homeowners in these run-down inner-city neighbourhoods were moved through Compulsory Purchase Orders. Many of these areas were unpopular and had concentrations of poverty, social deprivation and social problems. Even during times of population shrinkage and housing demolition across whole regions, there was never a surplus of single family homes.

Changes in the Use of Homes

Darja Reuschke

University of St Andrews, Department of Geography and Sustainable Development



Meanings/functions of home

Depres (1991)	Somerville (1992)	Mallett (2004)
Material structure	Shelter	House
Permanence, continuity	Hearth	Ideal
Security and control	Heart	
Refuge	Paradise/Haven	Haven
Status	Abode	
Family, friends	Privacy	
Reflection of self		Expression or symbol of self
Centre of activities	Roots	Being-in-the-world
Place to own		

Source: Blunt, A. and Dowling, R. (2006), p. 10

The home as place for business and self-employed work



Photo courtesy of Ivan Raszl



Photo courtesy of Frances Holliss

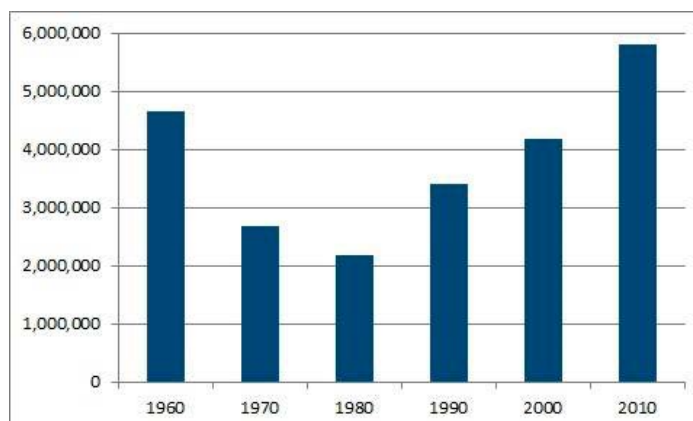


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3

The resurgence of homeworking

Number of homeworkers in the USA, 1960-2010



Source: Reuschke, 2015, p. 7

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4

Context of change

- Globalisation, deregulation, flexibilisation
- Organisational, sectoral and occupational restructuring
 - Horizontal integration of firms
 - New industries and occupations, e.g. internet economy, business services and personal services
 - Project-based work, secondary workforce
- Technological change
 - Fast, cheap and ubiquitous ICTs
 - E-commerce
- Social and demographic changes
 - Female labour market participation
 - Ageing population
 - Work-life balance

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5

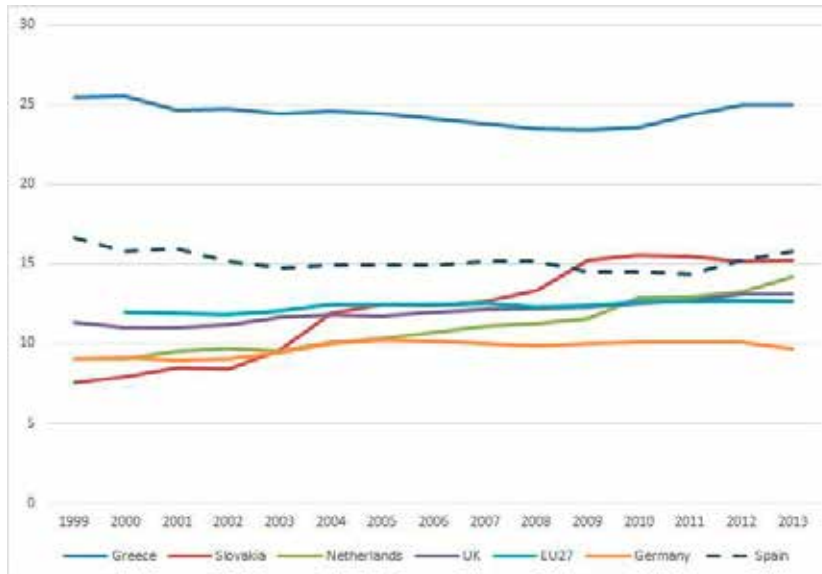
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5

Non-farm self-employment

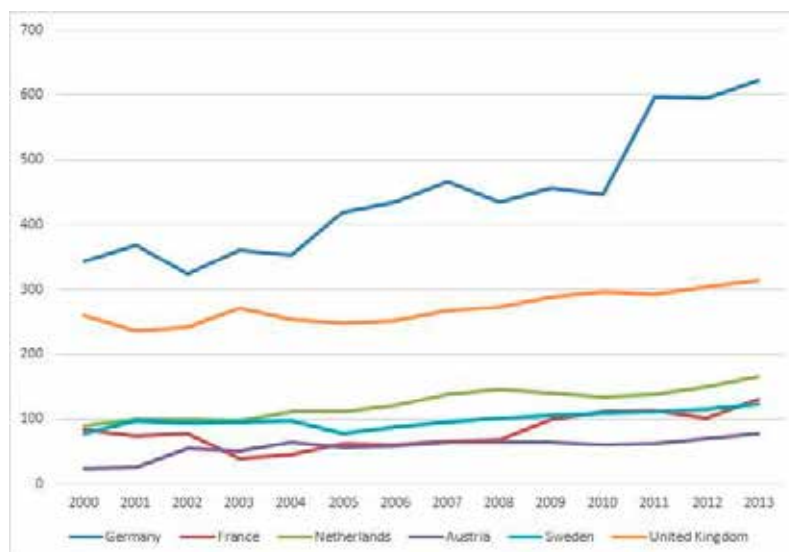


Source: Reuschke, 2015, p. 6

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6

Self-employment as secondary employment



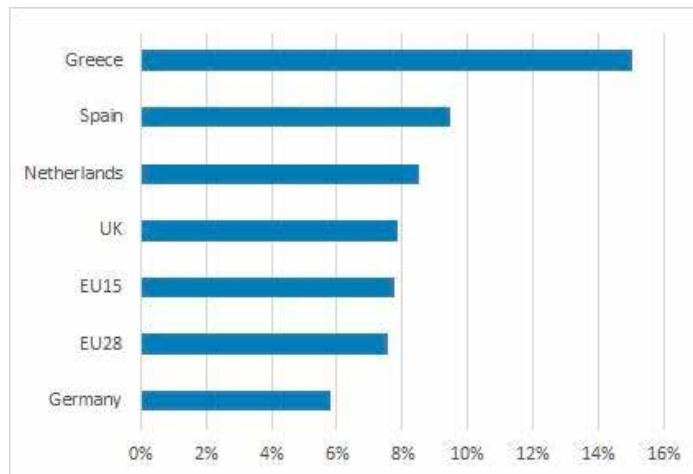
Source: Reuschke, 2015, p. 9

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7

Home-based self-employment

Estimates of proportion of workforce, excludes agricultural workers



Source: Reuschke, 2015, p. 7

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8

Housing and home-based self-employment

- Physical structure of home
 - Size and layout, e.g. spare room
 - Attached premises in semi-/detached houses, e.g. garage, hut in garden
 - Ground level v upper level (flat)
- Housing tenure
 - Flexible use in homeownership
 - Restrictions in social housing (in UK)
- Housing equity as financial resource for businesses/start-ups
 - House sale
 - Security of loan/overdraft on owned home

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9

The UK context – empirical study

- UK Household Panel Studies 1991-2011
- Entry into home-based self-employment
- Endogeneity of housing tenure to employment
 - Treatment effect approach
- Random-intercept logistic regression model with fixed effects for the coefficients x_{ij} and an individual-specific random effect ζ_j
- Controls:
 - Age, sex, highest qualification, equivalized monthly gross household income, presence of children in the household, whether respondents were in paid employment prior to the self-employment entry
 - Residential move
 - Father's and mother's employment status at the respondent's age of 14
 - SIC
 - Time dummies
 - Series of area variables

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10

The UK context – Housing effects

Home-based self-employment

House type

- **Detached house** is facilitator
- **Flat** is hindrance

Large dwelling space (person-per-room)

Housing wealth

- Living in expensive house
- No effect of increase in housing equity

Outright ownership

- No difference between mortgage owners, private renters and social renters
- Not flexibility in using space but reduced housing costs

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11

Conclusions

- Blurring of work and home, particularly in detached houses
- Meanings/functions of home
 - Incubator
 - Financial security to experience with self-employment
 - Facilitator of work-life balance, flexibility, adaption



<http://hoffice.nu/en/find-or-start-a-hoffice-group/>

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12

Future research

- Demographic change and under-used houses as hoffice?
- Employment and work outcomes of housing systems and housing structures across countries
- House design, architecture and planning for home businesses and homeworking
- History and culture of home businesses
- Relationship between residential and housing choices and home business



Source: Holliss, 2015, 36

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13



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Framing the Family-House Stock in Contemporary Italy Construction, Situations, Evolution Patterns

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Department of Architecture and Urban Studies, Politecnico di Milano

census data processing and maps by

Viviana Giavarini and Fabio Manfredini

LADEC/Laboratory of Data Analysis and Mapping Department of Architecture and Urban Studies, Politecnico di Milano

Introduction

We could begin spending a couple of words about the reason why we prefer to adopt the term *casa di famiglia* – family-house –, instead of “single-family house”. In the Italian context, detached houses standing on single private plots of land have mainly been – and in many cases are still – inhabited by more than one generation within the same “extended family”. In other words, this building type used to be inhabited by different households of relatives, whose size and age might change during time, and which shared the spaces of the same building in a regime of intergenerational and mutual aid.

Such practices are rooted in the “individualistic mobilization” processes at the origin of the widespread urbanization that marked Italian landscapes since the 1970s (the so-called *città-diffusa*). Processes in which family-houses have been the principal building material, leaning on and re-using pre-existing rural networks (roads, canal, ditches) in different territorial contexts, and therefore generating different built patterns and landscapes.

A hypothetical geographical framework

First, we could attempt to locate this housing stock within the peninsula by referring to the most recent census data available at the Municipal scale.

If we only consider the Municipalities in which the percentage of residential buildings including one or two lodgings is above 50% of the total housing stock, holes will appear on the main Provincial Capitals (Turin, Milan, Genoa, Bologna, Florence, Rome, Naples, Palermo) whose major growth took place mainly between 1950s and 1960s, through denser and more compact building types and fabrics.

Then, if we discard smallest municipalities (whose resident population is <2,000 inhabitants), we will see disappearing from the map most of internal and mountainous areas, where rural and pastoral economies were located, and which – since the 1950s – underwent severe depopulation processes.

We do so, basically, because we are interested in a geography that is eccentric with respect both to the main urban cores, both to the places of abandonment and population exodus.

Thirdly, we cross this geography with the construction period of buildings, in order to highlight those municipalities whose building growth was more intense after 1961, that is to say whose growth mainly took place within the waves of “diffuse urbanization” that we have already mentioned, in which family-houses have been the main bricks.

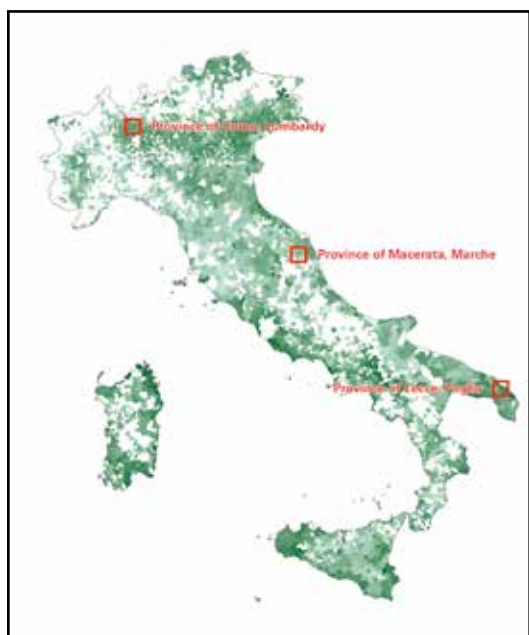


Fig 1:
Location and intensity of the family-houses in Italy, with the three studied areas. Colour depth corresponds to the percentage of buildings constructed after 1961 (0-100%) on the total housing stock. (map by the authors with Viviana Giavarini and Fabio Manfredini at LADEC/Laboratory of Data Analysis and Mapping Department of Architecture and Urban Studies, Politecnico di Milano)

Three 25x25 kilometres samples

We can now explore three situations, belonging to three very different contexts – Lombardy, Marche and Puglia Region – in which family-houses represent a considerable share of the total housing stock, and have interweaved with very different socio-economic dynamics.

Lombardy

The first sample focuses on the northern sector of the Milanese urban region, and falls mostly within the Province of Como. Since the late 19th century, this area has been one of the most dynamic ones of the whole country, and its dense network of rural paths has offered – especially after WW2 – the pre-condition for a pervasive and scattered urbanization.

In this frame, the role played by family-houses has been twofold:

On the one side they have embodied the endogenous growth in pre-existing rural settlements, due to the decline of agricultural activities and the rising of a multi-sectorial industrial manufacturing. In situations like the one of Lurate Caccivio you can see fabrics of family-houses surrounding old centres, frequently including productive clusters, where the street space is often the unique and banal public space, and where the features of the buildings tell us about cheap self-promoted construction processes that are increasingly needing maintenance.

On the other side, family-houses in the same region answered to a demand coming from the urban middle-classes (and upper-middle-classes) that from the 1970s on began to leave the congested main metropolitan core and looked outside – within a radius of 30–40 kilometres – for living solutions able to meet the desire for a healthier and safer environment. In situations like Carimate (a private housing development with a rather exclusive character, which also includes a golf course) you can see family-houses meeting a quite typical suburban consumption model, with an emphasis on landscape solutions and privacy issues.

Both these situations do not seem to constitute attractive options for younger generations, maybe for shifts in professional careers or lifestyle that imply different housing choices, and the search for more compact dwellings located in more central situations. There's a quite clear trend towards aging, as we move towards the census blocks where the presence of family-houses is stronger. It seems – anyhow – that these houses are not affected by filtering processes, and that they didn't lose too much of their value (at least, this is true when they are located in centres with some amenities, like in Lurate Caccivio, or when they are located in prestigious – or formerly prestigious – situations, like in Carimate).

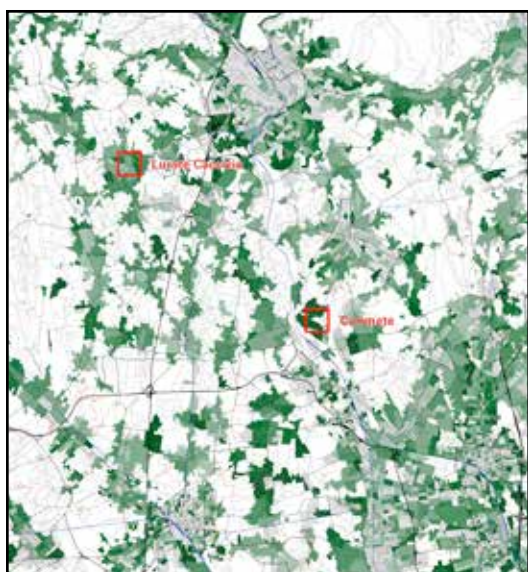


Fig 2:
Lombardy, Province of Como, sample 25x25 km. Infrastructural grid and urbanization patterns based on 2011 census blocks. Colour depth corresponds to the percentage of family-houses (50-100%) on the total housing stock (map by the authors with Viviana Giavarini and Fabio Manfredini at LADEC/Laboratory of Data Analysis and Mapping Department of Architecture and Urban Studies, Politecnico di Milano).

Marche

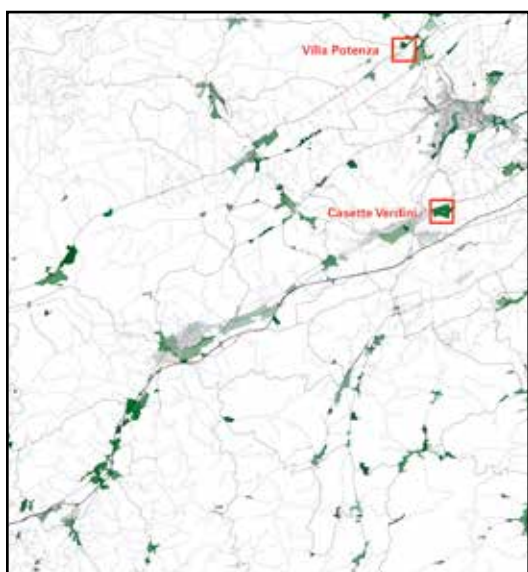


Fig 3:
Marche, Province of Macerata, sample 25x25 km. Infrastructural grid and urbanization patterns based on 2011 census blocks. Colour depth corresponds to the percentage of family-houses (50-100%) on the total housing stock (map by the authors with Viviana Giavarini and Fabio Manfredini at LADEC/Laboratory of Data Analysis and Mapping Department of Architecture and Urban Studies, Politecnico di Milano).

The second sample focuses on Marche Region, and falls mostly in the Province of Macerata, including a portion of the linear urbanization that grew along the valley of river Chienti. It offers a quite typical example of the “peripheral growth” that affected central and north-eastern sectors of the country from the 1970s on, following the model of the so-called “industrial districts”. The territorial outcome of this development model features scattered clusters of light industries and residential buildings with a marked presence of small enterprises ran by single families, whose living and working space are strongly integrated.

In such situations, family-houses are almost inseparable from working spaces – being them warehouses, shops or handicraft laboratories – and let emerge two main localization patterns.

Sometimes, as in Villa Potenza, houses hold spontaneously and directly to the main Provincial road connecting the Adriatic coast with inland centres, and result from the metamorphosis of previous rural buildings or properties, which have been turned into small productive units.

In other cases, as in Casette Verdini, family-houses are located inside planned industrial areas, next to pre-fabricated sheds. It's interesting to note that building regulations admit the presence of family-houses in industrial areas, thus replicating – within a more rational layout – the integration between home and workspace that elsewhere had been spontaneously generated.

Both these situations are being put under pressure as the classic model of the “industrial district” is being stressed by globalization processes, and is being restructured according to concentration processes tending to group scattered activities in larger industrial clusters, better connected with major infrastructures and served by basic facilities.

In this frame, family-houses like the ones in Casette Verdini and Villa Potenza – dating back to the first “wave” of industrial districts development – don’t seem to have many chances. Maybe because of their peripheral locations, or because of the low quality contexts in which they are located, it seems that they’re not attractive for younger households: they show a presence of foreign inhabitants, which is slightly above the average of the Province, and their value is not high.

Puglia

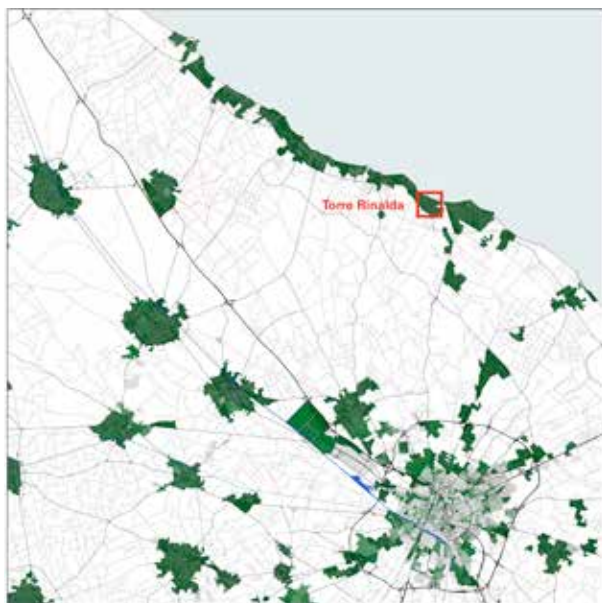


Fig 4:
Puglia, Province of Lecce, sample 25x25 km.
Infrastructural grid and urbanization patterns based on 2011 census blocks. Colour depth corresponds to the percentage of family-houses (50-100%) on the total housing stock (map by the authors with Viviana Giavarini and Fabio Manfredini at LADEC/ Laboratory of Data Analysis and Mapping Department of Architecture and Urban Studies, Politecnico di Milano).

The third and final sample focuses on Puglia region, and falls mostly in the Province of Lecce. As in the most part of Italian *Mezzogiorno*, the economy here is largely based on agricultural activities and tourist sector. The latter has fostered, since 1970s, an aggressive and intensive urbanization along the coasts, taking advantage of small pre-existing defensive settlements, which became the cores for larger allotments.

In this process – almost entirely unauthorized – family-houses played the major role, assuming the ambiguous role of “*doppia residenza*”, or “*residenza secondaria*” (secondary house).

People living in Lecce, or in the small towns located 10 kilometres inland, started putting their savings in the construction – often self-construction – of a house by the sea: a house which had at least three meanings.

First, this asset testified the achievement of a certain level of wealth; second, it was a sort of extension of the primary house in town, in which a part of the family could spend the hot summer months; third, it was a space that could be rented during the tourist season, providing a supplementary income for the family economy.

Although disordered and initially lacking all kind of infrastructure, settlements of this type have represented

– and mostly still represent – the main backbone of the tourist economy of Southern Italy, where the building type of the family-house hosts and overlaps familiar practices with touristic businesses.

In any case, the general low quality of the buildings – often constructed by fathers and grandfathers in a hurry, on the cheap, and within a collective imaginary that was quite different from the one of the grown children today – as well as the enduring lack of public infrastructure – a decent paved road, or a sewerage network preventing the sea from being over-polluted during the touristic peaks – raise serious questions about the capacity of such sites to compete in a Mediterranean scenario where nearby countries are proposing cheaper and more qualified holiday destinations.

This increasing difficulty is maybe partially highlighted by the low value of houses, while the figures concerning population over 65 and foreign residents in the entire 25x25 km. sample do not show particular trends, as family-houses are by far prevailing not only on the coast, but also in the small towns inland, and a closer reading to select only certain census blocks will be necessary.

Provisional conclusions

As a provisional conclusion, we emphasize the need – at least in a country like Italy, which includes extremely different territorial frameworks – to study family-houses framing them into specific dynamics of social and economic transformation. We proposed to look at this building type at least through three of its main inflections:

First, the family-house that embodies the endogenous growth of small centres, and the simultaneous escape from the main metropolitan areas in the richest (and more congested) region of the country;

Second, the family-house nested in “peripheral” industrial district economies, which are now experiencing profound reorganization;

Finally, the family-house that is the outcome of a self-organized tourist sector now suffering from competition with other Mediterranean countries.

In perspective, it would be interesting – within the transformation parables that we have briefly sketched – to investigate family-house considering it not only as a burden that is not easy to manage, or else a source of conflict between generations. A pragmatic reflection in a moment of crisis and insecurity on future welfare provisions may suggest to look at these houses as potential resources – often the only resource available – and therefore it would be urgent to understand at which conditions – which tenure innovations, which performance improvements, which typological adjustments – we can assume to go on using them.

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Changing Suburbs and the Single-family Home in a U.S. Context

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Single-family housing development is prevalent in the United States. Federal policy and subsidies for homeownership have been very important in the evolution of the single-family suburban home. In the 1930s, the U.S. federal government subsidized mortgage insurance, resulting in the evolution of the 30-year mortgage coupled with a standard 20 percent down payment, that made homeownership possible for many households who previously would never have been able to afford to buy a home. The federal government overwhelming insured mortgages for loans to purchase single-family housing in the suburbs, much of which was standardized and mass-produced. The government-sponsored entities of Fannie Mae, Freddie Mac and Ginnie Mae stimulated the secondary mortgage market and mortgage lending primarily to purchase new single-family homes. Tax breaks to homeowners with mortgages further encouraged the demand for this type of housing in the suburban fringe.

States and local governments have attempted to limit the growth of single-family housing on the suburban fringe. Beginning in the 1990s, proponents of Smart Growth provided incentives for developers and local jurisdictions to produce housing at higher densities and closer to the traditional urban core. Smart Growth communities are in many respects synonymous with New Urbanist developments. Similar to Smart Growth advocates, New Urbanists focus on changing the physical design of neighborhoods to make them more walkable and inclusive of different housing styles with a mix of land uses. One of the latest ways that New Urbanism attempts to change the urban environment is through suburban retrofitting. Advocates of suburban retrofitting focus on increased housing density through the introduction of apartment complexes and townhouses to the suburbs. They advocate for less construction of the traditional single-home with a large lot. At the same time that local and state planning agencies are trying to densify suburbs, the need for single-family homes with large lots is on the decline as household size shrinks and the number of seniors aged 65 and over increases. Suburbs are becoming increasingly dense in response to changing demand. Yet the extent of suburban densification is currently unknown.

In a study of suburbs in Baltimore, Maryland, we found evidence of a shift towards the construction of apartment complexes by developers rather than single-family housing. This is a product of market trends, developer decisions and actions by the local planning agency. In the context of urban planning, Baltimore County Department of Planning has put in place different policy initiatives to encourage redevelopment particularly of its older suburbs. The county has had an urban growth boundary since 1967, preventing large-scale expansion of single-family housing in the northern portion of the county. In addition, the county has been active in seeking ways to prevent decline among its older suburbs. During the 1990s, the county, through the creation of an Office of Community Conservation, invested heavily in its older suburbs and this investment has continued, leading to the development of townhouses and mixed-use development with private developers leading the charge. The county has created more flexible zoning regulations to encourage more dense development.

Yet, at the same time that developers are building new, denser projects, reinvestment by individual homeowners in single-family housing is still significant. In our study of Baltimore, we found considerable reinvestment in the housing stock in historic districts with Arts and Crafts housing built in the early 1900s. In other types of suburbs, old postwar housing is being torn down and new much larger housing is built in its place, a process often referred to as mansionization of McMansion infill. So, while there is evidence of construction of mixed-use projects and smaller townhouses and apartments in the suburbs, the single-family is still an important feature of the American suburb.

The US Single-Family Housing Market:

Drivers and Challenges with a Spatial Focus on Local Differences in House Price Inflation

Roland Füss

University of St. Gallen and Centre for European Economic Research

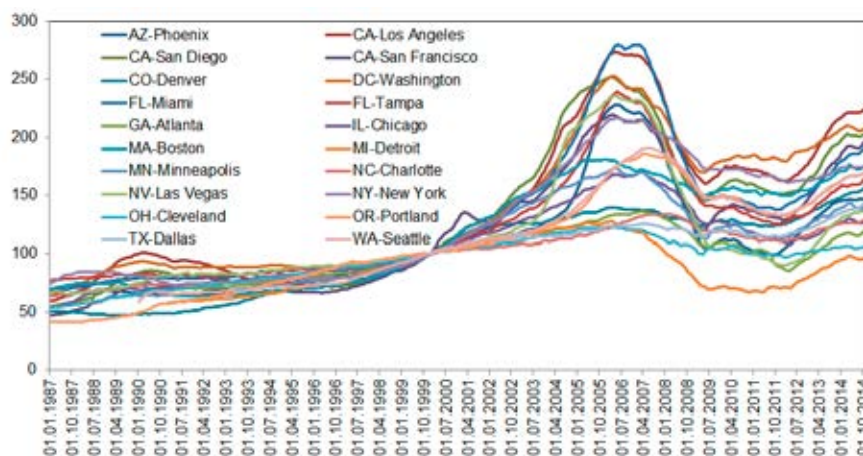
Joachim Zietz

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Motivation

- **Run-up in House Prices Prior to 2006**

- ▶ 1980Q1 to 1998Q4: Boston +74%, Los Angeles +10%, Chicago +11%, whereas Dallas -21%, and Houston -38%
- ▶ 1999Q1 to 2005Q4: Boston +83%, Los Angeles +123%, Chicago +42%, but only Dallas +12% and Houston +19% (*Wheaton & Nechayev, 2008*)



Source: Case-Shiller House Price Index (seasonally-adjusted).

Motivation

- **Dispersion and Correlation in House Price Inflation**
 - ▶ house price dispersion substantially increased since 1970, mainly in upper tail of distribution (*Glaeser et al., 2005*)
 - ▶ increasing correlation of house price growth across U.S. states due to geographic integration of banking sector
 - ⇒ highly integrated financial markets (*Kallberg et al., 2013*)

but:
level of house price changes differs significantly (*Landier et al., 2013*)
- **Central Question:**
 - ▶ *Why did we see very different house price inflation rates across MSAs?* (MSAs are subject to the same federal funds rate)
- **Assumption:**
 - ⇒ differences in price inflation at MSA level related to differences in local demand/supply conditions
 - ⇒ monetary policy has different consequences at local level

Motivation

- **Main Results**
 - ▶ local **population growth** is key *demand side factor*
 - ▶ percentage of **undevelopable land** is primary *supply side factor*
 - ⇒ MSAs with large percentage of undevelopable land and strong population growth are more prone to experience house price inflation from lowering federal funds rate
 - ▶ **quality of life** moderates the impact of a change in federal funds rate

Monetary Policy and House Prices: A Review

- **Strong Role of Expansionary Monetary Policy on House Price Inflation:**

- ▶ relationship between rents and prices is determined by costs of borrowing money
 - ⇒ house prices strongly react to changes in interest rates (*Poterba, 1984*)
- ▶ housing market is an important channel through which monetary policy affects economy (*Leamer, 2007*)
- ▶ short-term interest rate was too low compared to Taylor Rule during period 2002 to 2005 (*Gordon, 2009; Calomiris, 2009*)
 - ⇒ loose monetary policy is tied to housing bubbles (*Taylor, 2007, Allen & Carletti, 2009*)

Monetary Policy and House Prices: A Review

- **Weak Role of Expansionary Monetary Policy on House Price Inflation:**

- ▶ interest rates can only explain one-fifth of increase in house price appreciation from 1996 to 2006 (*Glaeser et al., 2010*)
- ▶ house price bubble triggered by rising use of innovative mortgage instruments and lax underwriting standards/lending practices (*Bernanke, 2010*)

Monetary Policy and House Prices

- **Transmission of Expansionary Monetary Policy to House Prices is heterogeneous:**
 - ▶ regional housing market conditions respond differently to monetary policy shock (*Fratantoni & Schuh, 2003; Christidou & Konstantinou, 2011*)
 - ▶ significant variation among MSA regions in the response of employment to monetary policy shocks (*Francis et al., 2011*)
 - ▶ interest rate shocks are state-dependent, i.e. occur in states with low land supply elasticity (*Vansteenkiste, 2007*)
 - ▶ national and local factors result in different annual changes in MSA housing stocks and house prices in locations of different types (*Saks, 2008*)

Contribution to Literature

1. **Extensive Set of Demand and Supply Variables**
 - ▶ broad range of local demand and supply factors, which do not differ much over time, but vary widely across MSAs
2. **Extension of Sample Period**
 - ▶ sample includes increase as well as subsequent decrease of house price inflation and covers period after great recession
 - ⇒ analysis of expansions and contractions
3. **Extension of Estimation Methodology**
 - ▶ explicitly incorporate local demand and supply factors via interaction terms
 - ▶ capture issues of non-stationarity, pre-existing trends, and omitted variables
 - ⇒ **multivariate state space model**: specification of flexible underlying stochastic trend
4. **Several Robustness Checks**
 - ▶ different types of data sets
 - ▶ different types of estimation approaches

Econometric Model

- **Multivariate State Space Model:**

$$\begin{bmatrix} y_1 \\ y_2 \\ \vdots \\ y_N \end{bmatrix}_t = \begin{bmatrix} 1 \\ 1 \\ \vdots \\ 1 \end{bmatrix} \mu_t + \begin{bmatrix} a_1 \\ a_2 \\ \vdots \\ a_N \end{bmatrix} x_{t-k} + \begin{bmatrix} w_1 \\ w_2 \\ \vdots \\ w_N \end{bmatrix}_t, \quad (1)$$

with state equation:

$$\mu_t = \mu_{t-1} + v_t, \quad (2)$$

where dependent variable vector in Equation (1) consists of observations on N different MSAs ($i = 1, \dots, N$) for each time period t

- ▶ dependent variable is decomposed into three parts:
 - i. an unobserved stochastic trend common to all N MSAs, which we identify by (μ_t) ,
 - ii. an exogenous policy variable (x_t) operating at the national level, and
 - iii. an MSA-specific white-noise error term (w_{it})

Econometric Model

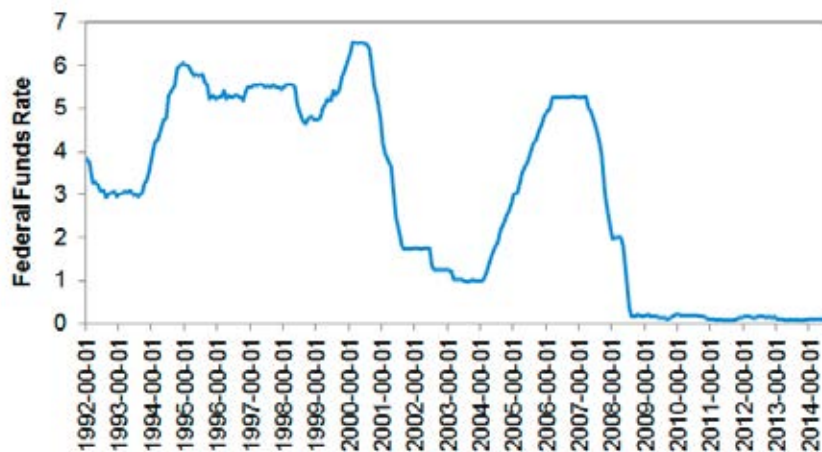
- **Multivariate State Space Model:**

$$\begin{bmatrix} y_1 \\ y_2 \\ \vdots \\ y_N \end{bmatrix}_t = \begin{bmatrix} 1 \\ 1 \\ \vdots \\ 1 \end{bmatrix} \mu_t + \begin{bmatrix} \beta \\ \beta \\ \vdots \\ \beta \end{bmatrix} x_{t-k} + x_{t-k} \begin{bmatrix} z_{1,1} & z_{2,1} & \dots & z_{p,1} \\ z_{1,2} & z_{2,2} & \dots & z_{p,2} \\ \vdots & \vdots & \ddots & \vdots \\ z_{1,N} & z_{2,N} & \dots & z_{p,N} \end{bmatrix} \begin{bmatrix} b_1 \\ b_2 \\ \vdots \\ b_p \end{bmatrix} + \begin{bmatrix} w_1 \\ w_2 \\ \vdots \\ w_N \end{bmatrix}_t, \quad (3)$$

where interaction terms between variable x , measured at time $t - k$, and the elements of a matrix z consists of N elements

Data

- ▶ Case-Shiller monthly seasonally adjusted house price indices for 19 MSAs from 1992:06 to 2014:12 (in log difference)
- ▶ effective, seasonally unadjusted monthly federal funds rate (in log form)
- ▶ note: local interest rates and mortgage market variables are unlikely exogenous



Data

• Time-Invariant Demand and Supply Variables

MSA	ud	wr	se	ql	pop9508	inc9508	pop0813	inc0813
Atlanta	0.0430	0.03	1.94	175	2.7	3.6	1.3	0.7
Boston	0.3406	1.67	0.65	45	0.4	4.9	0.9	2.0
Charlotte	0.0519	-0.53	2.59	123	2.8	3.7	1.7	1.6
Chicago	0.4028	0.01	0.73	81	0.6	4.0	0.3	1.2
Cleveland	0.4054	-0.18	0.90	128	-0.2	4.4	-0.2	1.6
Denver	0.1656	0.81	1.18	26	2.0	4.4	1.8	1.6
Detroit	0.2458	0.07	1.04	217	-0.1	3.2	-0.2	1.6
Las Vegas	0.3627	-0.68	1.82	152	4.8	3.5	1.2	-0.7
Los Angeles	0.5342	0.50	0.57	15	0.6	4.6	0.7	1.8
Miami	0.7691	0.94	0.57	39	1.4	4.0	1.3	0.7
Minneapolis	0.1932	0.38	1.18	174	1.2	4.3	0.9	1.6
New York	0.4051	0.67	0.64	51	0.5	4.6	0.6	1.5
Phoenix	0.1523	0.60	1.29	72	3.1	4.1	1.4	0.6
Portland	0.3646	0.26	1.01	37	1.7	3.7	1.3	1.5
San Diego	0.6363	0.44	0.68	8	1.1	5.2	1.2	1.8
San Francisco	0.7239	0.78	0.59	4	0.7	5.0	1.3	2.4
Seattle	0.4288	0.93	0.78	22	1.4	4.9	1.5	1.5
Tampa	0.4219	-0.24	1.03	87	1.6	3.8	0.9	1.2
Washington, D.C.	0.1450	0.21	1.28	122	1.5	4.7	1.8	1.0

- ▶ *pop9508* and *pop0813* are the compound annual growth rates of population between 1995/2008 and between 2008/2013, respectively, from the Bureau of Economic Analysis
- ▶ *inc9508* and *inc0813* are the corresponding growth rates for per capita personal income from the BEA
- ▶ *ql* is the (adjusted) *quality of life ranking* (Albouy, 2012)
- ▶ *ud* and *se* stand for the share of *undevelopable land* and the *housing supply elasticity* (Saiz, 2011)
- ▶ *wr* is the *Wharton Residential Land Use Regulatory Index*

Empirical Results

• Multivariate Estimates with Multiple Interaction Terms

	Model (1)		Model (2)		Model (3)		(Model 4)	
	coeff	s.e.	coeff	s.e.	coeff	s.e.	coeff	s.e.
<i>lag 8:</i>								
ln FFR	-0.3179***	0.096	-0.2871***	0.097	-0.1718*	0.096	0.0256	0.101
ln FFR × ud					-0.2006***	0.032	-0.3889***	0.043
ln FFR × se	0.0837***	0.018	0.1462***	0.023				
ln FFR × wr	0.0623***	0.014	0.0578***	0.014	0.0418***	0.012	0.0096	0.013
ln FFR × ql			-0.0007***	0.000			-0.0010***	0.000
ln FFR × pop9508	-0.0366***	0.010	-0.0414***	0.010	-0.0265***	0.010	-0.0186*	0.010
ln FFR × pop0813	-0.0097	0.016	-0.0424**	0.017	-0.0057	0.016	-0.0515***	0.017
LLikelihood	18880		18890		18889		18910	
<i>lag 12:</i>								
ln FFR	-0.1853*	0.099	-0.1576	0.099	-0.0233	0.099	0.1629	0.103
ln FFR × ud					-0.2178***	0.033	-0.3960***	0.044
ln FFR × se	0.0936***	0.018	0.1513***	0.023				
ln FFR × wr	0.0865***	0.014	0.0644***	0.014	0.0450***	0.012	0.0146	0.013
ln FFR × ql			-0.0006***	0.000			-0.0010***	0.000
ln FFR × pop9508	-0.0508***	0.010	-0.0550***	0.010	-0.0393***	0.010	-0.0315***	0.010
ln FFR × pop0813	0.0028	0.016	-0.0275	0.017	0.0077	0.016	-0.0360**	0.017
LLikelihood	18889		18897		18898		18917	
<i>lag 16:</i>								
ln FFR	-0.2362**	0.098	-0.2101**	0.098	-0.0720	0.098	0.1083	0.103
ln FFR × ud					-0.2216***	0.032	-0.3948***	0.044
ln FFR × se	0.0955***	0.018	0.1512***	0.024				
ln FFR × wr	0.0707***	0.014	0.0670***	0.014	0.0468***	0.012	0.0173	0.013
ln FFR × ql			-0.0006***	0.000			-0.0010***	0.000
ln FFR × pop9508	-0.0589***	0.010	-0.0629***	0.010	-0.0470***	0.010	-0.0396***	0.010
ln FFR × pop0813	0.0115	0.016	-0.0177	0.017	0.0163	0.016	-0.0257	0.017
LLikelihood	18898		18905		18907		18924	

Empirical Results

• Robustness Check

- ▶ quarterly FHFA indices for 94 MSAs from 1992Q3 to 2014Q4
- ▶ univariate state space model and **panel data approach**

$$\begin{aligned}
 & \begin{bmatrix} y_{1,1} \\ y_{2,1} \\ \vdots \\ y_{T,1} \\ y_{1,2} \\ y_{2,2} \\ \vdots \\ y_{T,2} \\ \vdots \\ y_{T,N} \end{bmatrix} = \begin{bmatrix} \lambda_1 \\ \lambda_1 \\ \vdots \\ \lambda_1 \\ \lambda_2 \\ \lambda_2 \\ \vdots \\ \lambda_2 \\ \vdots \\ \lambda_N \end{bmatrix} + \vartheta \begin{bmatrix} 1 \\ 2 \\ \vdots \\ T \\ 1 \\ 2 \\ \vdots \\ T \\ \vdots \\ T \end{bmatrix} + \theta \begin{bmatrix} 1 \\ 2^2 \\ \vdots \\ T^2 \\ 1 \\ 2^2 \\ \vdots \\ T^2 \\ \vdots \\ T^2 \end{bmatrix} \\
 & + a \begin{bmatrix} x_1 \\ x_2 \\ \vdots \\ x_T \\ x_1 \\ x_2 \\ \vdots \\ x_T \\ \vdots \\ x_T \end{bmatrix} + \theta \begin{bmatrix} x_1 z_{1,1} & x_1 z_{2,1} & \cdots & x_1 z_{p,1} \\ x_2 z_{1,1} & x_2 z_{2,1} & \cdots & x_2 z_{p,1} \\ \vdots & \vdots & \vdots & \vdots \\ x_T z_{1,1} & x_T z_{2,1} & \cdots & x_T z_{p,1} \\ x_1 z_{1,2} & x_1 z_{2,1} & \cdots & x_1 z_{p,2} \\ x_2 z_{1,3} & x_2 z_{2,1} & \cdots & x_2 z_{p,2} \\ \vdots & \vdots & \vdots & \vdots \\ x_T z_{1,2} & x_T z_{2,1} & \cdots & x_T z_{p,2} \\ \vdots & \vdots & \vdots & \vdots \\ x_T z_{1,N} & x_T z_{2,N} & \cdots & x_T z_{p,N} \end{bmatrix} \begin{bmatrix} b_1 \\ b_2 \\ \vdots \\ b_p \end{bmatrix} + \begin{bmatrix} w_1 \\ w_2 \\ \vdots \\ w_T \\ w_{T+1} \\ w_{T+2} \\ \vdots \\ w_{2T} \\ \vdots \\ w_{NT} \end{bmatrix}, \quad (4)
 \end{aligned}$$

Empirical Results

• Impact of FFR on Annual House Price Inflation Rate

	(1) No Interaction Term Multivariate	(2) Models with Interaction Multivariate	(3) Interaction Terms Univariate	(4) Panel	(5) Average of (1)-(3)
Las Vegas	-7.14	-6.91	-11.30	-9.19	-8.45
Miami	-5.54	-5.50	-12.29	-8.47	-7.78
Phoenix	-6.37	-2.82	-7.61	-5.84	-5.60
San Francisco	-2.98	-4.88	-8.66	-7.29	-5.51
Seattle	-5.57	-3.03	-7.63	-6.19	-5.41
San Diego	-4.77	-4.41	-7.05	-6.83	-5.41
Atlanta	-3.77	-3.81	-7.33	-7.54	-4.97
Tampa	-4.89	-4.55	-5.39	-7.23	-4.95
Minneapolis	-3.35	-4.12	-7.37	-7.79	-4.95
Los Angeles	-5.60	-3.38	-4.76	-5.78	-4.58
Washington, D.C.	-4.17	-2.80	-5.89	-7.25	-4.29
Denver	-5.59	-1.68	-5.47	-5.08	-4.24
Detroit	-2.26	-4.42	-4.93	-7.87	-3.87
Boston	-1.88	-2.04	-7.56	-5.36	-3.83
Portland	-2.85	-3.27	-5.25	-6.06	-3.79
Charlotte	-3.18	-3.63	-4.18	-6.85	-3.66
Cleveland	-3.19	-4.00	-2.49	-6.73	-3.23
Chicago	-2.85	-3.47	-3.35	-6.19	-3.22
New York	-1.98	-2.79	-4.81	-5.72	-3.19
mean	-4.10	-3.76	-6.49	-6.80	-4.79
std.dev.	1.56	1.22	2.48	1.09	1.42
max	-7.14	-6.91	-12.29	-9.19	-8.45
min	-1.88	-1.68	-2.49	-5.08	-3.19

Conclusion

• Results

- ▶ local conditions play a key role in observed differences in house price inflation rates
 - ▶ population growth is key demand side factor
 - ▶ percentage of undevelopable land is key supply side factor
- ⇒ local factors determine how national monetary policy impacts house price appreciation
 - ▶ we offer a flexible, data driven way to capture the impact of unobserved and unknown variables which may significantly impact the estimates and policy conclusions

• Implications

- ▶ housing markets are local: instruments of monetary control and financial markets supervision must be adjusted accordingly
- ▶ monetary policy must be accompanied by other regulatory instruments such as counter-cyclical (regional) capital buffer

Emerging Trends; Their Demographic Origins and their Effects on Housing in the Netherlands

Huibert A. Haccou, Theo de Bruijn

Kom verder. Saxion.

- **Huibert A. Haccou**

- Professor of environment and planning, Saxion University of Applied Sciences

- **Theo de Bruijn**

- Professor of sustainable development, Saxion University of Applied Sciences
- Managing Director, IAA Urban Design and Landscape



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Synopsis

Emerging trends touch upon lifestyle changes , demographic – and other housing relevant trends with a closer look on the Netherlands.

A shifting composition of the population; population growth in the urban areas and a tendency for shrinkage in rural areas make up a differentiated picture, when it comes to population development. A dominant characteristic being the increase in demand in number of dwellings despite a far lower growth of inhabitants. The existing housing stock does not match the more differentiated demand for housing. Moreover, given the ageing of the population there will be a huge surplus in for instance school and a shortage in buildings for healthcare. Momentarily we experience a threat for empty single family (row) houses in rural areas because single family (row) houses are not favoured by the younger generation opting for city life. A trend that might be reversed due to the influx of refugees seeking asylum.



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Content

- Demography and other housing relevant emerging trends.
- A closer look at The Netherlands.
- Inconsistencies and new developments to be researched



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Demography and other emerging trends relevant for housing issues

Demography

- Today: 1 on 5 American have a disability.
- By 2030: 1 on 5 American (Europeans!) will be over the age of 65.
- Life expectancy will increase from 76 years in 1993 to 82,6 years in 2050.
- The number of Americans over 85 years of age will triple from 5.4 to 19 million in 2050.



*) Source Mitchel Silver's key note IFHP Centennial Congress London 2-8 June 2013

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Demography and other emerging trends relevant for housing issues

- By 2025 the number of single person households will equal family households.
- By 2050 the overwhelming majority of households will be single.
- The rise of the unwed birth. In the year 1960 5.3% In the year 2009 41% and rising!
- Recently the fast growing numbers of refugees / immigrants.



*) Source Mitchel Silver's key note IFHP Centennial Congress London 2-8 June 2013

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The most relevant emerging trends for our planning focus are:

- Ageing and the changing of family life into single parent families.
- Their consequences for housing, mobility, critical mass for essential amenities, economy

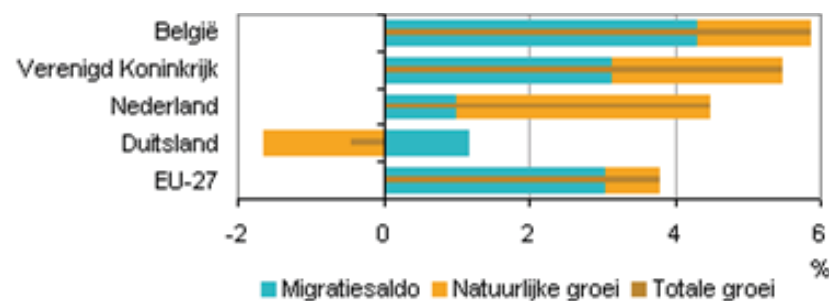


*) Source Mitchel Silver's key note IFHP Centennial Congress London 2–8 June 2013

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A closer look at the Netherlands in the European context

Population growth and migration in Europa 2000 – 2010



Source CBS 06.07.2011 / Stephan Netsch et al ppt 20-03-2012

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A closer look at the Netherlands

Population growth prognoses

Kerncijfers van de bevolkingsprognose, 2004 - 2050

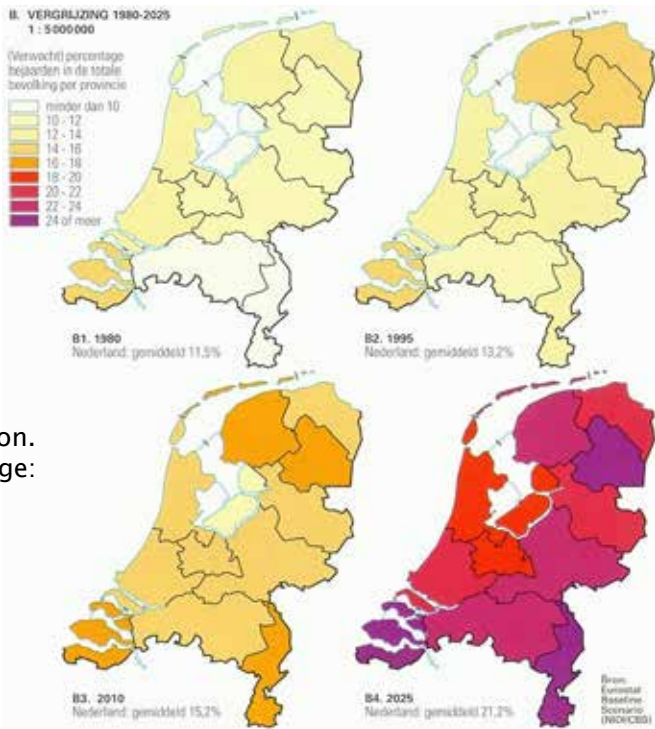
	Perioden	2007	2012	2017	2022	2027	2032	2037	2042	2047	2050
Bevolkingsomvang		16 360 820	16 534 260	16 706 540	16 857 480	16 975 470	17 040 730	17 044 000	16 997 480	16 935 920	16 905 910
0 tot 20 jaar	absoluut	3 976 352	3 893 238	3 814 973	3 737 592	3 716 938	3 766 916	3 819 564	3 830 905	3 812 624	3 800 855
20 tot 65 jaar		10 036 229	10 011 697	9 889 402	9 810 431	9 643 574	9 393 590	9 183 500	9 208 377	9 324 611	9 408 654
65 jaar en ouder		2 348 243	2 629 321	3 002 165	3 309 460	3 614 962	3 680 233	4 040 934	3 958 197	3 798 690	3 696 403
% 0 tot 20 jaar	%	24,3	23,5	22,8	22,2	21,9	22,1	22,4	22,5	22,5	22,5
% 20 tot 65 jaar		61,3	60,6	59,2	58,2	56,8	55,1	53,9	54,2	55,1	55,7
% 65 jaar en ouder		14,4	15,9	18,0	19,6	21,3	22,8	23,7	23,3	22,4	21,9
Demografische druk		63,0	65,1	68,9	71,8	76,0	81,4	85,6	84,6	81,6	79,7

bron: CBS

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A closer look at the Netherlands

Shifting composition of the population.
Percentage of elderly >65 years of age:
11% in 1980
21% in 2025

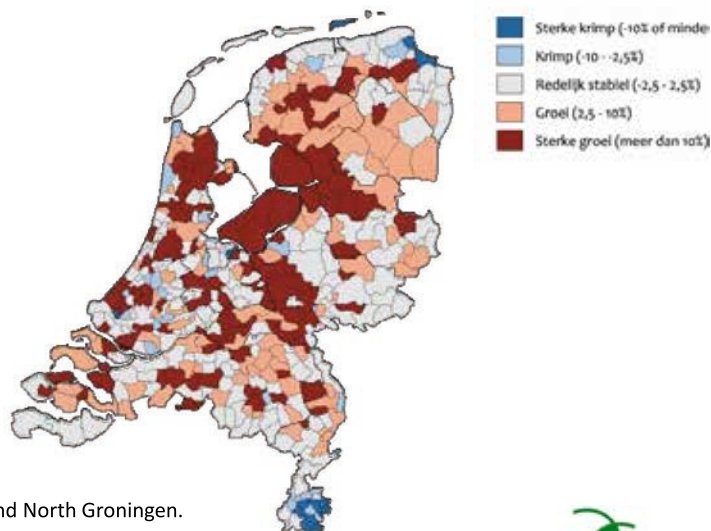


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A closer look at the Netherlands

1998 - 2008

Regional Entities



- Striking shrinkage in Limburg and North Groningen.
- Stable especially in the periphery.



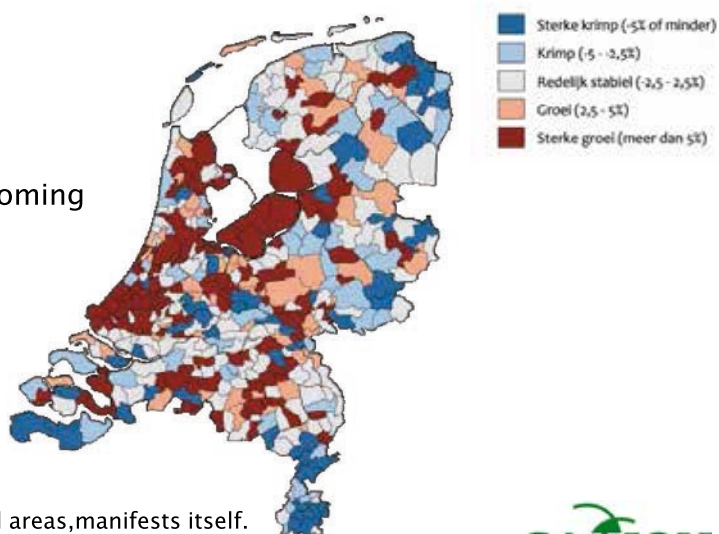
*) Source CBS 10-01-'12/ Stefan Netsch, et al. Ppt 20 March 2012

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A closer look at the Netherlands

2008 - 2025

Regional entities are becoming more differentiated...



- Shrinking in the peripheral areas, manifests itself.
- Concentration in the Randstad notably in Amsterdam, Rotterdam, Utrecht and Almere;



*) Source CBS 10-01-'12/ Stefan Netsch, et al. Ppt 20 March 2012

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A closer look at the Netherlands

Growth in Randstad and shrinkage in peripheral areas

In the last 15 years (1997–2012)

10% of all the of the municipalities has shrunk >2,5 %

In the coming 15 years (2012–2027)

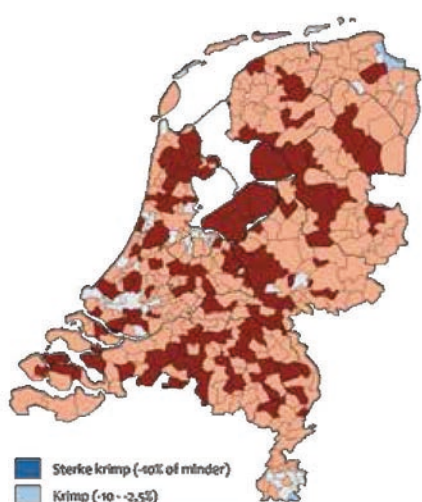
25% of all the municipalities will shrink with >2.5 %



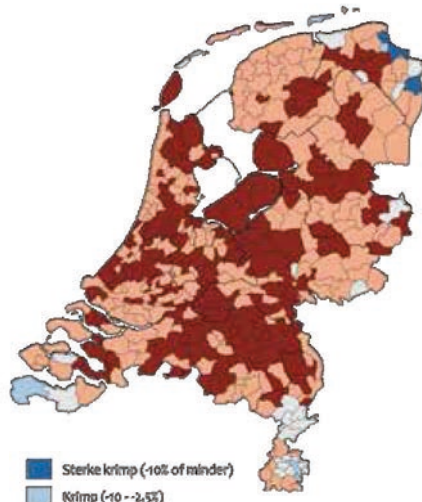
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A closer look at the Netherlands.

Growth in numbers of households. More (single) house holds: 1980 2012 2040
millions 4,9 7,5 8,5



1998 - 2008



2008 - 2025



*) Source CBS 10-01-'12/ S. Netsch, et al.
20 March 2012

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A closer look at the Netherlands

Conclusions:

- Overall, no shrinking in the Netherlands in the near future!
- Demographic change, however hits in every city and asks for a strategy on micro level.
- Increasing numbers of greying population.
- Increase in number of households.
- Decreasing population in Limburg, Groningen and Zeeuws-Vlaanderen.
- Re-Urbanisation and growth in the Metropolitan areas.



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A closer look at the Netherlands

Development of the supply side of housing



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A closer look at the Netherlands

Vinex wijken



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A closer look at the Netherlands

Restructuring of harbour – and industrial areas



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A closer look at the Netherlands

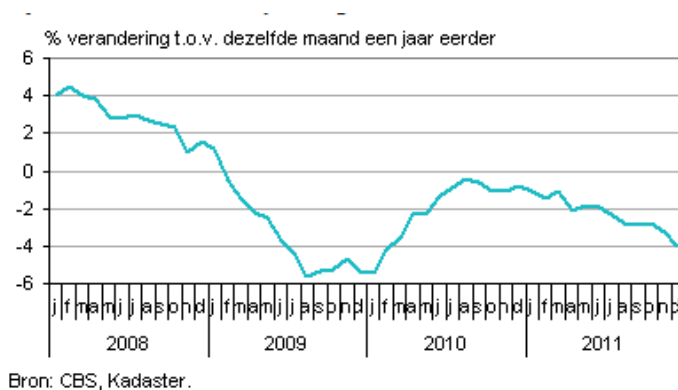
Transformation of empty office space (17%!) into housing



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A closer look at the Netherlands

Sales prizes existing housing stock 2008 – 2011



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A closer look at the Netherlands

Prize changes existing housing stock before 2008 are caused by

- Increasing numbers of inhabitants 1970 – 2000 with 20%
- Increase in size of plots of about 60%
- Increase in number of households with 70%
- Increase with 300% in prizes 1991 – 2001

Due to tax regimes and economic boom



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A closer look at the Netherlands

Conclusion

- The Netherlands does not decline in numbers of inhabitants.
- Immigrants and birth rates give stability.
- Housing market does not react to changing housing demands and continues to develop in a traditional way.
- Shrinkage is a local and regional problem in the periphery of the Netherlands.
- Caused by the departure of the younger generation and the increase of the elderly.



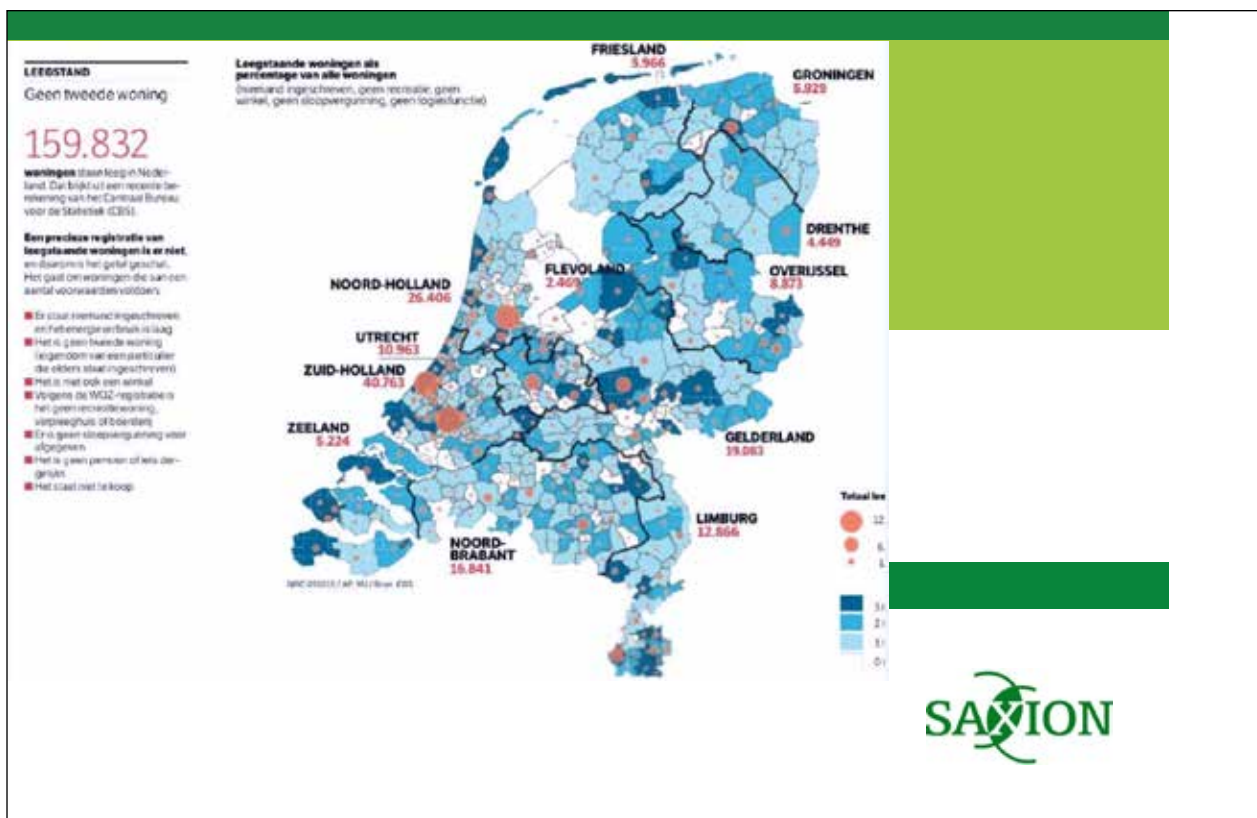
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Inconsistencies and recent developments further researched

Per October 2015 there are **159.832** empty houses in the Netherlands (Source CPS)

Definition Empty house

- No one is registered there and there is a low energy use
- The house is not a second home
- It is not a shop
- It is not a recreation house or farmhouse or house for the elderly
- There is no permit for demolishing
- It is not on sale



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Inconsistencies and recent developments further researched

Empty houses in the Randstad provinces

. North Holland (Incl. Amsterdam)	26.406
. South Holland (Incl. The Hague and Rotterdam)	40.763
. Utrecht (Incl. Utrecht)	10.963
	-----+
Total to	78.132



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Inconsistencies and recent developments further researched

Empty houses in the rural provinces

. Noord Brabant	16.841
. Limburg	12.866
. Gelderland	19.083
. Overijssel	8.873
. Drenthe	4.449
. Groningen	5.929
. Friesland	5.966
. Flevoland	2.469
. Zeeland	5.224 +
Total to	81.700



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Empty single family houses in the Netherlands

In the Netherlands, in the average, 65 % of all the dwellings are single family (row) houses. (source CBS)

Meaning that per October 2015 **103.890** single family houses are empty houses according to the definition.



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Refugee housing

- The Asylum Seekers Centres are overloaded, caused in part by the fact that for 13.000 status refugees, municipalities seem not to be able to find regular houses.
- Whereas in terms of numbers, empty houses could, easily provide for housing for all refugees.



Thank you

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The Recent Trend of Single-Family Residential Areas in the Shrinking Cities in Japan – Case of Yokosuka City, Kanagawa Prefecture

Akito Murayama, Ph.D.

Associate Professor, Urban Land Use Planning Unit, Department of Urban Engineering, School of Engineering, The University of Tokyo

The analysis of the recent trend of single-family residential areas in Yokosuka City, Kanagawa Prefecture, a depopulating city in the suburb of Tokyo Metropolitan Region, implies that shrinking cities in Japan are transforming itself in a complex manner. Some older residential areas with lower quality infrastructure and land constraints are declining with vacant houses and lots, regardless of their proximity to urban centers or public transit nodes. This reality questions the ideal “compact” and “networked” urban form concept often promoted by governments. There are also possibilities of some newer residential areas with high quality infrastructure declining in the coming decades.

Contemporary issues for Japanese cities include decline of working population, hyper-aging, economic stagnation, widening disparity, governments' financial difficulties, intensification of environmental problems (climate change, energy, food, water, etc.) and frequent occurrence of disasters (major earthquake, tsunami, typhoon, isolated rain, volcanic eruption, etc.). Under these circumstances, the questions to be answered in the field of urban land use planning are: What is happening to the physical environment of cities and communities? What is happening to people's living? In particular, single-family homes built in the era of rapid growth should be examined as all baby-boomers become 75 years old in 2025.

Yokosuka City was the most depopulating city in Japan in numbers in 2013 and its population continues to decrease. According to calculations, population in 2034 can be contained in the urban area in 1974. But urban growth is irreversible and the urban area will not shrink like a balloon. Then, what is the emerging urban form in the age of depopulation?

Many vacant houses and lots can be observed in less attractive valley areas in Yokosuka City. The New York Times article (August 23, 2015) explains about the situation in Yokosuka City as “These ghost homes are the most visible sign of human retreat in a country where the population peaked a half-decade ago and is forecast to fall by a third over the next 50 years.” Two months later, the first private vacant home in Japan demolished by a city government was in Yokosuka City. In the next several decades, there is a high possibility of depopulation even in the planned residential areas with high quality infrastructure in Yokosuka City as they are the permanent homes for the aging baby-boomers.

Our analysis focused on the recent change of population, households, aging, building coverage, vacant lots in neighborhoods in Exclusively Low-Rise Residential Zone and Mid/High-Rise Oriented Residential Zone (in reality, low-rise oriented). Neighborhoods were categorized based on land use zone, condition of modern infrastructure (streets and parks) and change of population and number of household (2000-2010).

The key points are as follows:

- There are various categories of residential areas based on land use zone, condition of modern infrastructure and population/household change.
- Some neighborhoods are still experiencing population/household growth even if the city as a whole is depopulating.

- Many neighborhoods are experiencing population decline (due to separation of households) followed by the decrease in number households. Population decline might be related to the decrease of multi-family homes (small apartments) in some declining neighborhoods (relative preference of single-family homes)
- Building densities are not necessarily decreasing with more vacant lots.
- The older neighborhoods in valleys or mountainous areas with low quality infrastructure are already under pressure of decline.
- Even the newer neighborhoods with high quality infrastructure will be under pressure of decline as baby-boomer residents become 75 years old in 2035.
- City is not shrinking physically like a balloon, but rather transforming itself in a complex manner. Further investigation is needed.

Population Decline and Single House Management in Japan

Hiroyuki Shimizu, PH.D.

Professor, Graduate School of Environmental studies, Nagoya University

Japan consists mostly of steep sloped land, and has a few flatlands in which most of the population is living.

The Japanese population has matured, and began to decline in 2008. Japan is now confronting strong population shrinking and aging. In the population changes between 1975 and 2010, the increase exceeded reductions in all land gradient areas. In the population changes between 2005 and 2010, however, reductions exceeded increases in all land gradient areas¹. According to the population estimation for 2050 made by the Japanese government², almost all parts of Japan's land except a very few spots around big cities like Tokyo, Osaka, Nagoya, Fukuoka, Hiroshima and Sendai, will confront very strong population declines.

In our previous research by using a land use dataset of 1 km meshes³ in 2009, the Japanese basic landscape types can be classified into seven types, i.e. urban type, urban paddy field mixed type, paddy field type, other field type, paddy field Satoyama type, other field Satoyama type and nature type. The urban type, urban paddy field mixed type, and paddy field type develop in flatlands. Other field types develop from the flatland to the gentle sloped land. The greatest issue of concern of the land use in the flatland is the widely developed urban paddy field mixed type, i.e. wide urban sprawls. Many single houses are distributed in not well controlled urban peripheries among scattered and small divided paddy and other fields.

The Satoyama is a uniquely Japanese landscape which consists of a paddy and other fields, secondary forests and a small dwelling among them in sloped countrysides. The paddy field Satoyama type is a kind of Satoyama landscape with rich paddy fields, and the other field Satoyama type is another kind of Satoyama landscape with dominant other fields. In these landscape types, most of the population has been living in traditional single family houses with multiple generations.

By the observation of the Nagoya wide region consisting of Aichi, Gifu and Mie prefectures, most of the population is concentrated in big cities like Nagoya, Okazaki, Toyota, Toyohashi, Gifu and so on. The urban and paddy field mixed landscape expanded in large areas between the urban types and the paddy field types among big cities. The other urban wide regions around Tokyo, Osaka and so on show the same tendency. These areas are relatively newly developed areas after World War II, and the single family houses with nuclear families, i.e. parents and children, are dominant among other dwelling styles.

According to estimates for the years between 2010 and 2050, the population decrease will occur in all landscape types. In the urban type and urban paddy field mixed type, the population in 2050 will be just 75 to 80 percent of the population in 2010. In the paddy field type and other field type, the reduction level increases to 35 percent. And in the paddy field Satoyama type and other field Satoyama type, the reduction level will reach 50 percent. Under such an enormous reduction, sustainability of a single house in every landscape type would be in high risk. Especially in the Satoyama landscape types, many traditional residential areas are vanishing. Already in many Satoyama landscapes, the vacancy of traditional single family houses has become a local big issue.

¹ Land use tertiary mesh data, National Land Numerical Information Download Service, Ministry of Land, Infrastructure, Transport and Tourism, <http://nlftp.mlit.go.jp/ksj-e/index.html>

² Ibid.

³ Ibid.

On the other hand, the change of farmlands into housing sites hasn't stopped yet in the peripheries of urban areas even though there is a shrinking population, i.e. urban sprawl hasn't stopped yet. In these areas, adequate public transportation has failed, and people depend much on private automobiles for transportation. Most of the families in single family houses are nuclear families, and after the generational change, the vacancy of these houses is a potential problem.

Population change and land use change are related to each other. Especially urban land use and population are strongly related. In our previous research, both relations are considered as integrated changes. That is "Shrinking 2" as the population decreases and urban land use decreases, "Shrinking 1" as the population stabilizes and urban land use decreases, "Scattering 2" as the population decreases and urban land use increases, "Scattering 1" as the population decreases and urban land use stabilizes, "Expanding 2" as the population increases and urban land use increases, "Expanding 1" as the population stabilizes and urban land use increases, "Compacting 2" as the population decreases and urban land use decreases, and "Compacting 1" as the population decreases and urban land use stabilizes.

Recently a phenomenon has developed that, in the center of cities, compacting is progressing, but in periphery areas, all kinds of integrated changes appear next to each other, even though shrinking and scattering trends become stronger.

As mentioned above, under the coming strong decrease in population, Japanese single family houses are confronting the fear of unsustainability. This unsustainability is accelerated with the legal durable years of Japanese houses. The number of durable years of a wooden constructed personally used single family house is 33 years. Metal construction is 28 - 51 years. Most of Japanese single family houses are constructed by wood, and partially by metal and reinforced concrete.

The very short legal durability of wooden houses is a big matter of concern from the viewpoint of the secondhand real estate market. Japanese people regard a house as a durable consumption good and tend to rebuild it in each generational change. The housing market also tends to organize their construction and material of houses with short durable terms.

Under such conditions, the following two alternatives of Japanese housing are considered. One is the promotion of well managed limited durability as durable consumer goods with a good recycling system. And the other is promotion of high durability of housing construction systems with a well-developed used house market.

Trajectories, Dimension and Current Role of Single-Family Housing in Spain.

Montserrat Pareja Eastaway

University of Barcelona



This is where I live...



Outline

- ✓ Dimension
- ✓ Criteria (age, tenure, location, use, developer, others,...)
- ✓ Scenarios
 - The rural scenario
 - The coast/tourist scenario
 - The urban scenario and its metropolitan periphery
 - The peripheral urban scenario and the wealthy
 - The peripheral urban scenario and the poor
- ✓ Pathways, opportunities and risks

3

SINGLE FAMILY HOUSING IN SPAIN

DIMENSION

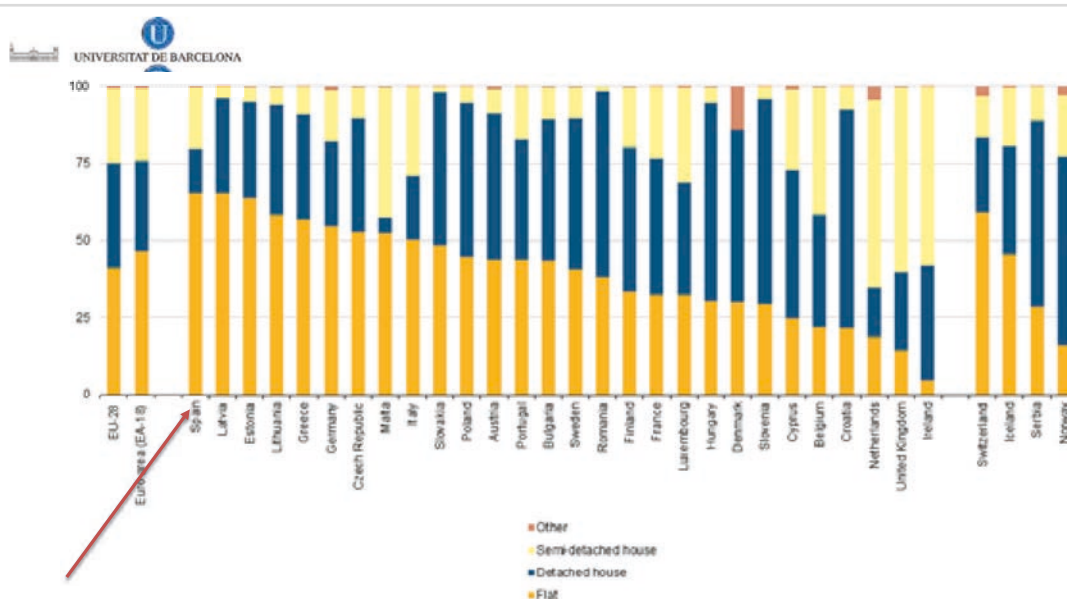
4



Single family housing in Spain

- Spain is one of the countries with higher multi-family dwellings
- Diverse country and landscape
- Affected by housing boom and crisis
- From deteriorated units to luxurious ones
- Changing function along time

5



Source: Eurostat (online data code: ilo_nh001)

In 2013, 41.1 % of the EU-28 population lived in flats, just over one third (34.0 %) in detached houses and 24.1 % in semi-detached houses. The share of persons living in flats was highest across the EU Member States in Spain (65.4 %), Latvia (65.3 %) and Estonia (63.8 %).

6



In 2001 there were 6,864,265 single-family units of housing in Spain. In 2011, there were **7.701.066**.

In absolute terms, the highest number of single-family properties can be found in the most **rural municipalities**, especially in the 6,948 that have less than 5,000 inhabitants. In these areas there are 2,904,830 single-family units of housing, 42% of the total. These are followed by municipalities that have populations ranging from 5,000 to 19,999 inhabitants, a total of 841 municipalities, which hold 28.7% of the total of single-family properties.

Therefore, the group of municipalities whose population is below 20,000 inhabitants has 71% of single family housing in Spain

(Moliní & Salgado, 2010) 7



SINGLE FAMILY HOUSING IN SPAIN

CRITERIA

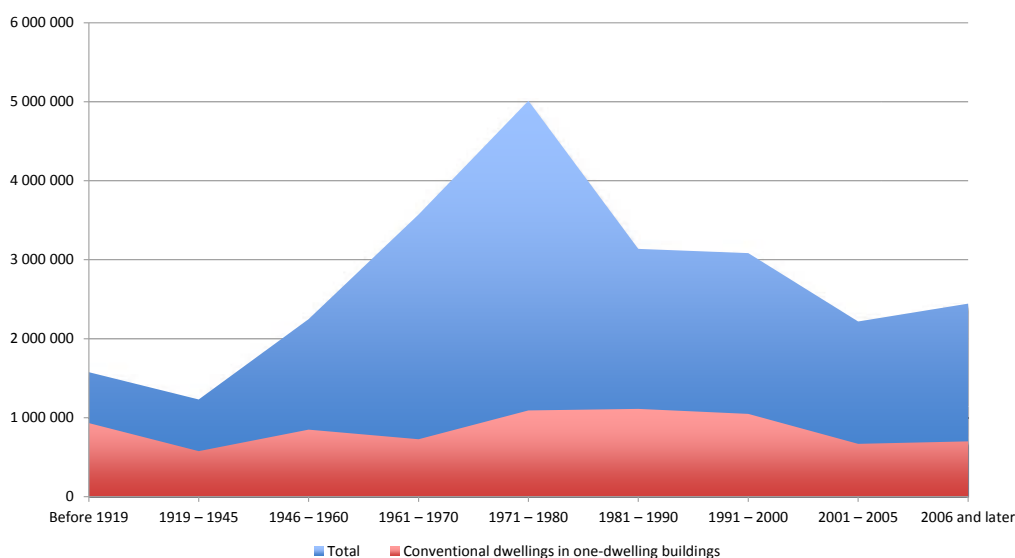


- **Age/ Date of building**
- **Tenure**
- **Location** (inner city vs. periphery) (rural vs. urban) (touristic area vs. non-touristic)
- **Use** (First use and subsequent transformations: from second home to main residence,...)
- **Developer** (self-building, private developer,...)
- **Others...**(environmentally friendly, collective housing, ...)

9



SINGLE FAMILY DWELLINGS BY PERIOD OF CONSTRUCTION



10



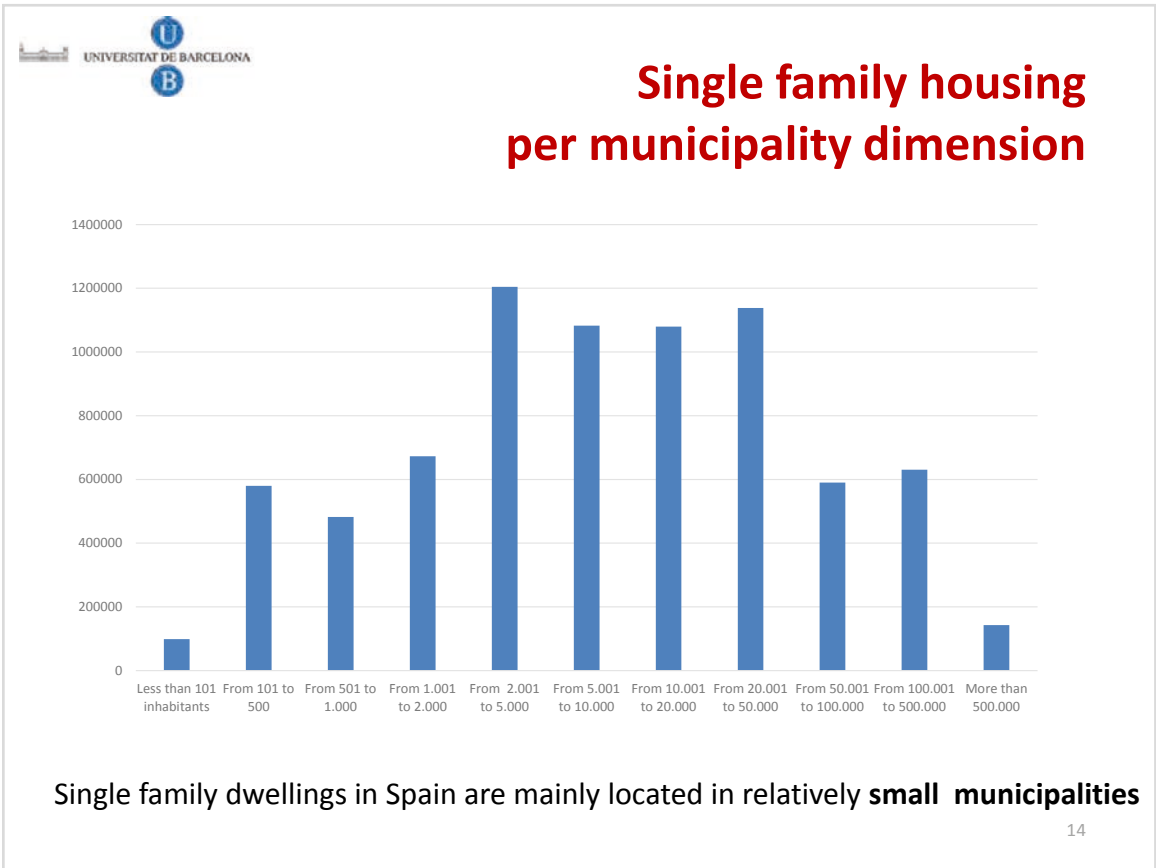
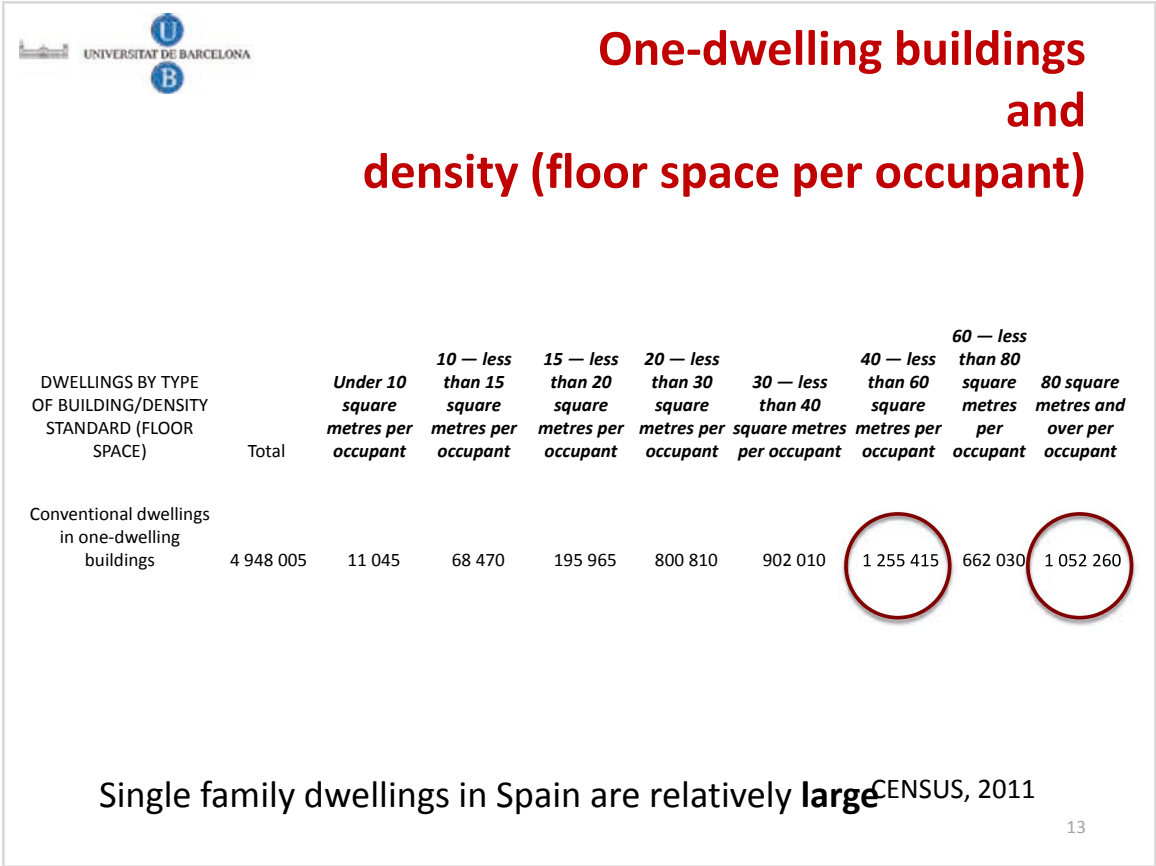
UNIVERSITAT DE BARCELONA

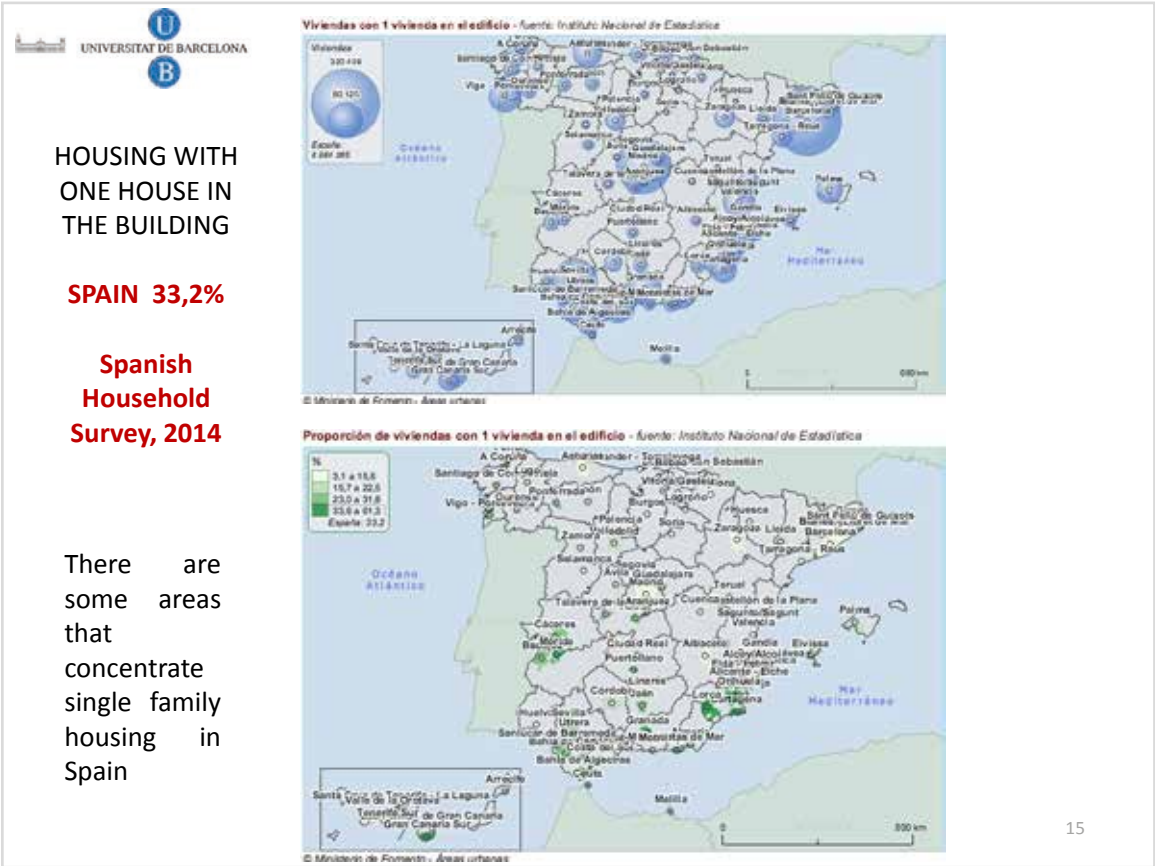
Housing units, per tenure, Spain

	TOTAL	SINGLE FAMILY DWELLING
Total	18 081 595	4 948 005
Owner-occupied dwellings	14 273 385	4 213 460
Dwellings in cooperative ownership	0	0
Rented dwellings	2 438 435	271 500
Dwellings in other types of ownership	1 369 775	463 045

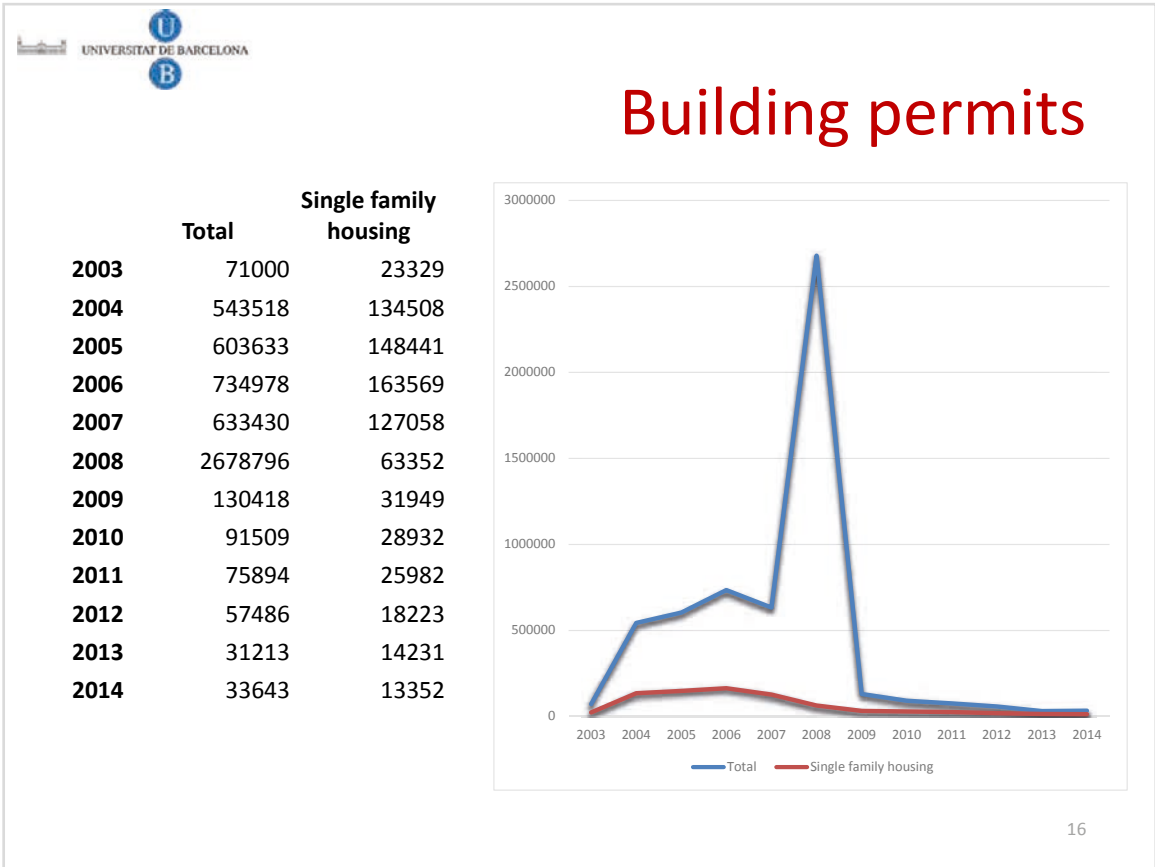
CENSUS, 2011

12

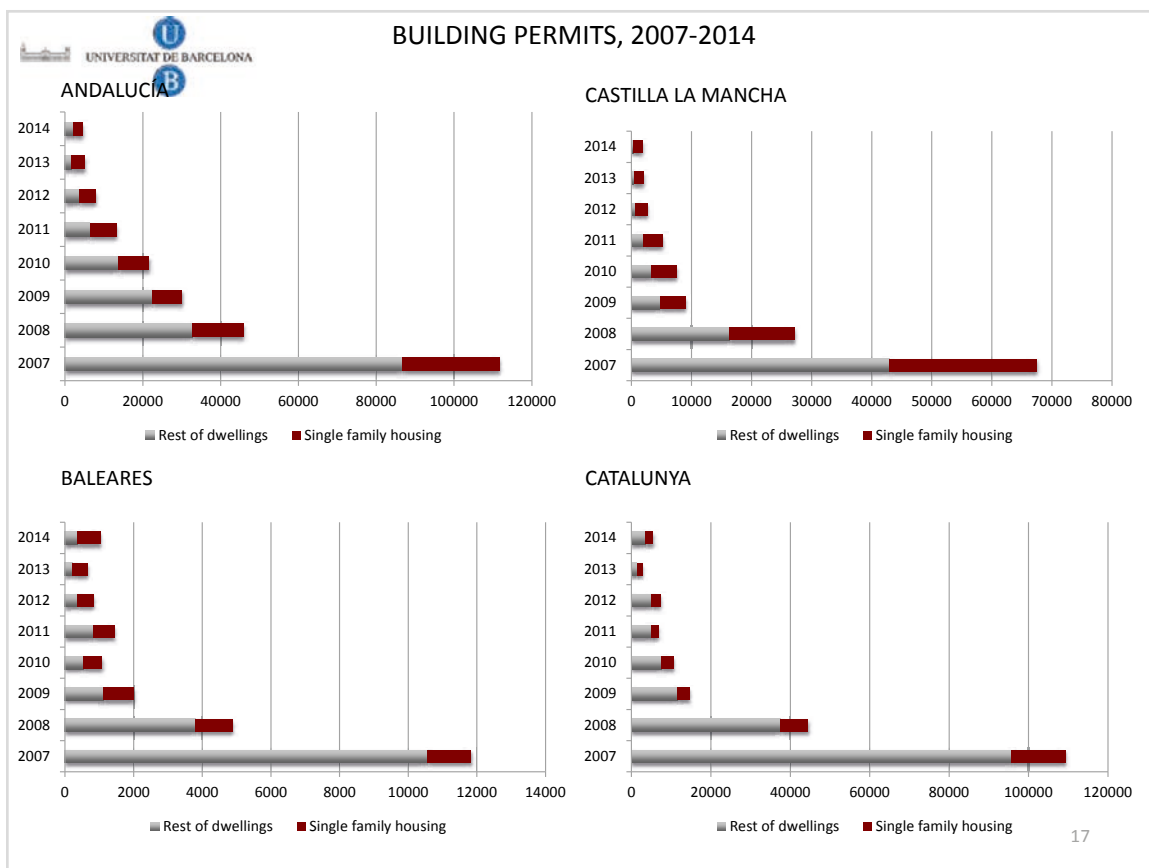




15



16



- Location matters for new permits of single family dwellings!
- Single family dwellings starts were more stable in general during the housing boom
- But they also followed the positive context for profitability

SINGLE FAMILY HOUSING IN SPAIN

5 SCENARIOS

19

1. THE RURAL SCENARIO

- Past: Main residence for inhabitants.
- Industrialisation period: Migration to large cities (Barcelona & Madrid): abandonment and deterioration.
- Once immigrants reach a stable economic position (and had kept the property): some single-family housing shifted its role to second home destination. Improvements and rehabilitation.
- Some other remains abandoned
- Once immigrants retire, they might go back to the rural area to live there.

20



Albaycin neighbourhood, Granada

21

2. THE COAST/ TOURIST SCENARIO

- Second homes in the seaside
- Very sensitive to housing boom/housing speculation
- Huge amount of vacancies and unfinished housing after the crisis
- Diverse typology: rehabilitation of dwellings in historical centres of touristic areas and new developments

22



Menorca

23



Menorca

24



3. THE URBAN SCENARIO AND ITS METROPOLITAN PERIPHERY

- Past: Second homes/Main for those living in the city. Usually highly sustainable.
- The improvement of transport improve connectivity and reduce commuting time.
- Medium and high income families move out of the city looking for green environments.
- Prices are NOT cheap...
- Huge improvements and adequacy to all-year living.

25



Sitges, Barcelona

26



Valldoreix, Barcelona

27

4. THE PERIPHERAL URBAN SCENARIO AND THE WEALTHY

- Upper income districts with available land have seen new high quality/high price construction developments during the last decades, with a particular strength during the housing boom
- Smart, sustainable...not very inclusive
- In some cases, reinforcement of gated communities
- Sometimes, change of use (i.e. hotels, residences for the elderly,...)

28



El Perelló, Tarragona

29

5. THE PERIPHERAL URBAN SCENARIO AND THE POOR

- Past: usually self-construction in the periphery of large cities
- Use to accommodate low income workers arrived to the city during the industrialisation
- Not very good quality, begin of housing career in the city, as soon as possible, households move out of these dwellings
- There is a high turnover, lately immigrants/low income people have settled in these dwellings

30



Santa Coloma Gramanet, Barcelona



Sacromonte, Granada



SINGLE FAMILY HOUSING IN SPAIN

PATHWAYS, OPPORTUNITIES AND RISKS

33



IDENTIFICATION OF TRAJECTORIES

From abandonment → holiday home → main residence
(maintenance and rehabilitation)

From second home ← → main residence
(rehabilitation)

From shelter to national immigrant workers → shelter
for foreign immigration
(deterioration, bad quality dwellings)

From residential use → hotels/ B&B/residences for the
elderly/...

34



OPPORTUNITIES AND RISKS

Scenarios	Opportunities	Risks
The rural	Revival of the rural Creation of new uses for the dwellings New business (rural tourism)	Isolated developments Lack of services 'Aldeas abandonadas' Real Estate Agency
The coast/touristic	Target for profitability Search for authenticity New business (hotels)	Unsustainable development – sprawl Massive developments Divide between newcomers and autochthonous Part-time occupancy
The urban metropolitan periphery	Target for profitability Rediscovery of traditional dwellings	Transport conflict Increase of housing prices because of high demand (no correspondence with quality)
The peripheral urban rich	No 'new' opportunities More involvement of household in housing design	Related to financial capacities of households Gentrification
The peripheral urban poor	Gateway to the city	Deterioration Deprived neighbourhoods

35



Single-Family-Housing-Areas from the 1950s - 1970s – Strategies und Projects for Sustainable Development

Josefine Korbelt, Christina Simon-Philipp

Hochschule für Technik Stuttgart

UNIVERSITY OF APPLIED SCIENCES
 INSTITUTE OF APPLIED RESEARCH (IAF)

Single-Family-Housing-Areas of the 1950s - 1970s

Strategies and Projects for a Sustainable Development

2 Research Projects of the Wüstenrot Foundation

Homes-uP - International Meeting Dresden 22.11.2015 - 24.11.2015
 Josefine Korbelt – Christina Simon-Philipp

Situation

Every third residential building is a single-family-house built between 1949 and 1978



More than every fifth residential unit is arranged in a single-family-house of the 1950s-1970s



Only every second German inhabitant lives in a traditional family (parent + child)

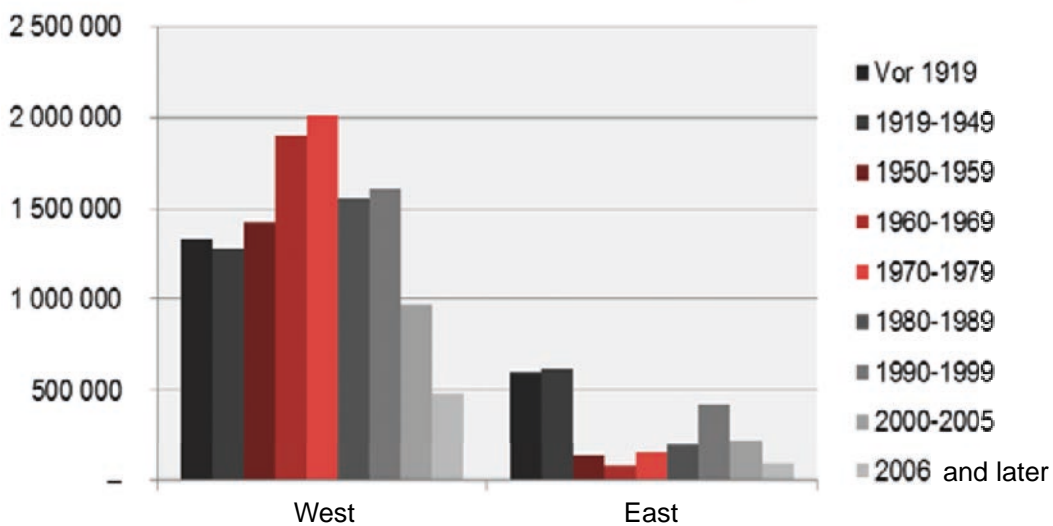


Less experience in research and practice in dealing with this type of area

It has been running successfully up to now, but what about the future?

Importance of the 50s, 60s and 70s

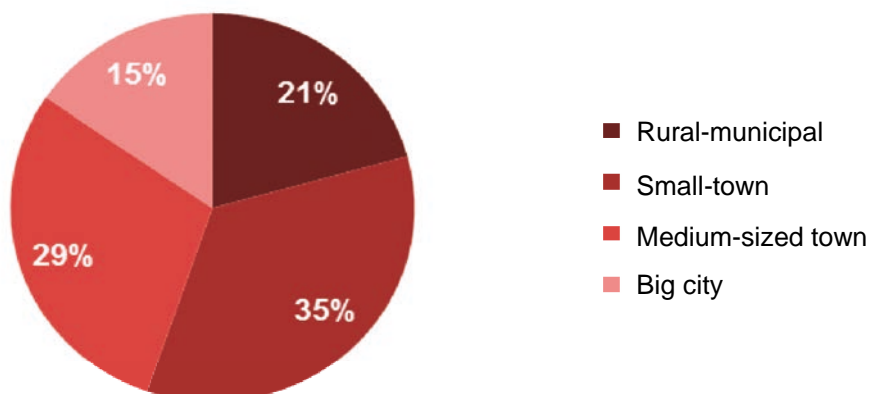
Stocks of single-family- and semidetached-houses (in age groups)
Comparison of western and eastern Germany



Quelle: Direkte Anfrage beim Statistischen Bundesamt durch Josefine Korbelt 12/01/2015. Datenauszug des Zensus 2011

Age groups and town size

Stocks of single-family- and semidetached-houses from the 1950s-1970s
Classified in types of town size



Quelle: Direkte Anfrage beim Statistischen Bundesamt durch Josefine Korbelt 6/2014, Datenauszug des Zensus 2011

Questions and goals

- Which regions are affected above-average?
- What is the current market situation for single-family-houses of the 1950s-1970s?
- How does the change of generations take place?
- Which meaning do single-family-houses have for a municipality? Are there already any approaches?
- Which measures can lead to a sustainable development?
- Adaptability of single-family-housing areas regarding a changed demand
- Opportunity to qualify these areas
- Options for action with sufficient possibilities to control for the municipality



Structure of the first research project

General analysis of the framework

Analysis of secondary statistics on a district and municipal level

Characterization at the level of areas and individual buildings

Case studies

Analysis of
municipal
data

Site visits

Interviews
with
municipal
experts

Interviews
with
property
experts

Qualitative
surveys of
inhabitants

Recommendations for action

Various scenarios of development

Case studies



beteiligte Gemeinden

Raumentypen

Prägung

ländlich
teilweise städtisch
überwiegend städtisch

Lage

sehr peripher
peripher
zentral
sehr zentral

gemeinsame Gebiete

Datengrundlage: BBSR, ROB 2010



Municipalities	Inhabitants 12/09
Kassel (HE)	194.800
Arnsberg (NW)	74.800
Garbsen (NI)	61.800
Erkrath (NW)	46.000
Backnang (BW)	35.400
Meppen (NI)	34.800
Mosbach (BW)	24.600
Sulzbach-Rosenberg (BY)	19.800
Beverungen (NW)	14.300
Lauterbach (HE)	14.000
Rehau (BY)	9.500
Bad Sachsa (NI)	7.700
Gundelsheim (BW)	7.200
Pressig (BY)	4.200

The existing single-family-house...

...as „blind spot“ in the planning practice of municipalities

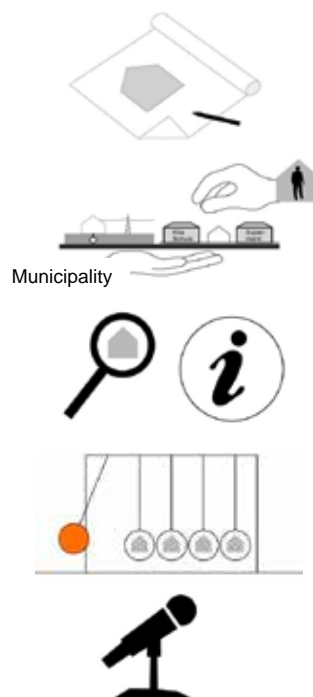
„There is no focus on the topic ‘single-family-houses’. That’s not a problem with a high currency yet. But we’ve seen that there is a process approaching.“ (Interview 2010)



Role of the municipality

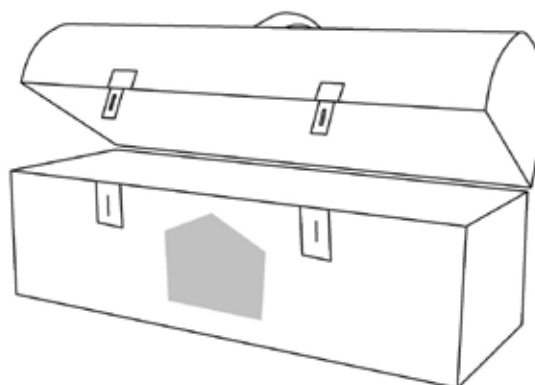
ACTIVE > < PASSIVE

1. Planning and regulating
2. Supplying and offering
3. Observing and advising
4. Initiating and promoting
5. Moderating



Components

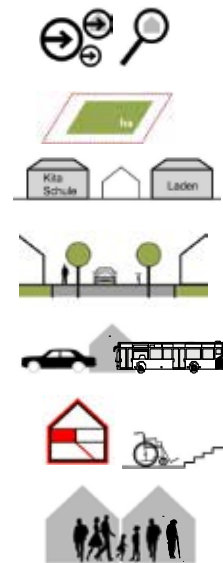
- There are various possibilities for municipal action
- The courses of action depends on specific conditions or problems in municipalities
- The recommendations are practically relevant but must be tested in practice first
- Effort and depth of engagement differ very much



Fields of action

Municipal fields of action:

1. Strategic urban development + monitoring
(Analysis of residential stocks, integrated development concepts)
2. Inner development + land management
(inter-municipal concepts, vacant lots, activation of brownfields)
3. Infrastructure + local supply
(Adaptation of social and technical infrastructure, living and care)
4. Open space + cityscape
(preservation of residential areas defining the cityscape)
5. Traffic + mobility
(flexible mobility concepts)
6. Estates + living area
(Adaptation of the living area, support for the change of generations)
7. Inhabitants + participation
(Activation of neighbourhood-networks, life in a residential quarter)

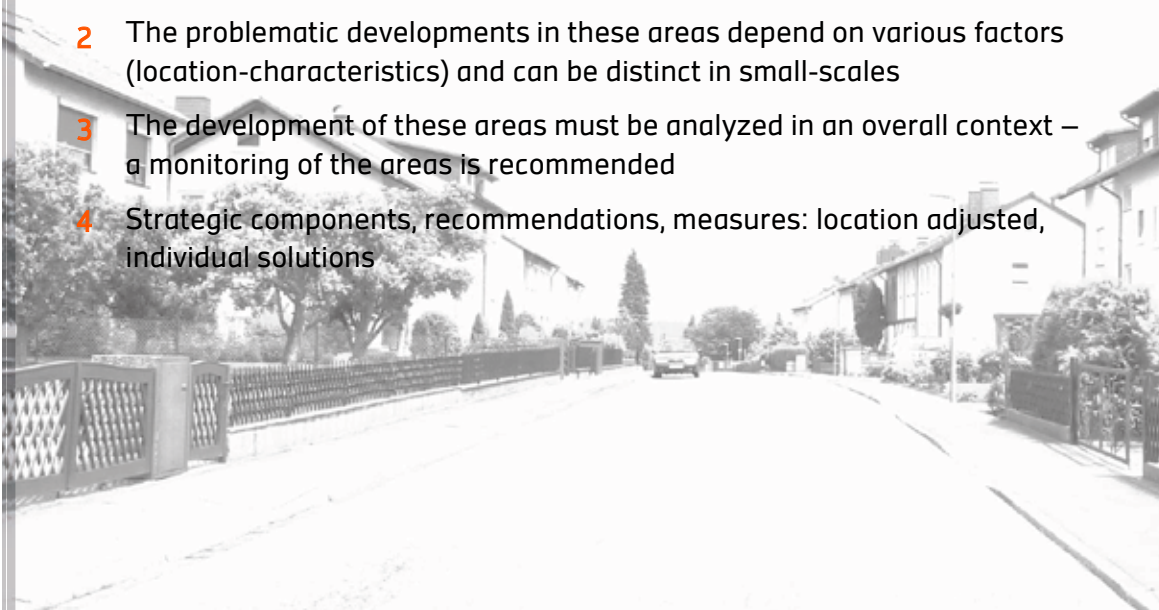


Instruments of building law

Options for action at a higher level

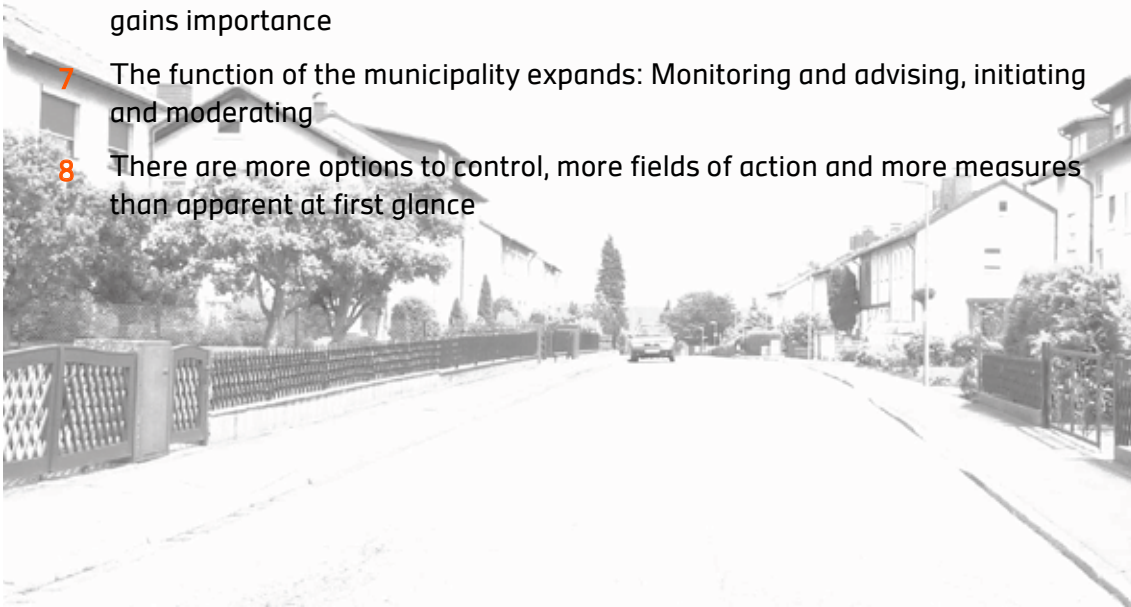
Results of the publication 2012

- 1 Development of these areas hasn't been a main theme in local politics and city councils yet. This changes right now due to the affect of sociodemographic changes in these areas
- 2 The problematic developments in these areas depend on various factors (location-characteristics) and can be distinct in small-scales
- 3 The development of these areas must be analyzed in an overall context – a monitoring of the areas is recommended
- 4 Strategic components, recommendations, measures: location adjusted, individual solutions



Results of the publication 2012

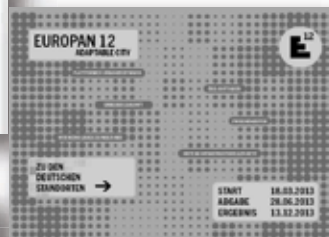
- 5 Comprehensive reconstruction and transformation processes are not conceivable for a high amount of these stocks
- 6 There is no definition of a binding threshold to intervene. Preventive action gains importance
- 7 The function of the municipality expands: Monitoring and advising, initiating and moderating
- 8 There are more options to control, more fields of action and more measures than apparent at first glance



Currency of the topic

Confrontation becomes a local issue

- Press / media
- Concepts, competitions
- Funding programmes
- Initiatives for dealing with vacancy
- Consultation programmes



Research issues

Questions

- Which problems are connected to these areas and how do municipalities react? (strategies, instruments, projects)?
- Which measures and instruments can lead to a sustainable adaptation and development regarding the changed frameworks?
- Are there any proven and transferable strategies? („Software“ und „Hardware“)?



Research approach

Goals

- Identification of strategies dealing with these stocks of single-family-houses
- Developing a guidebook/planning tool for municipalities

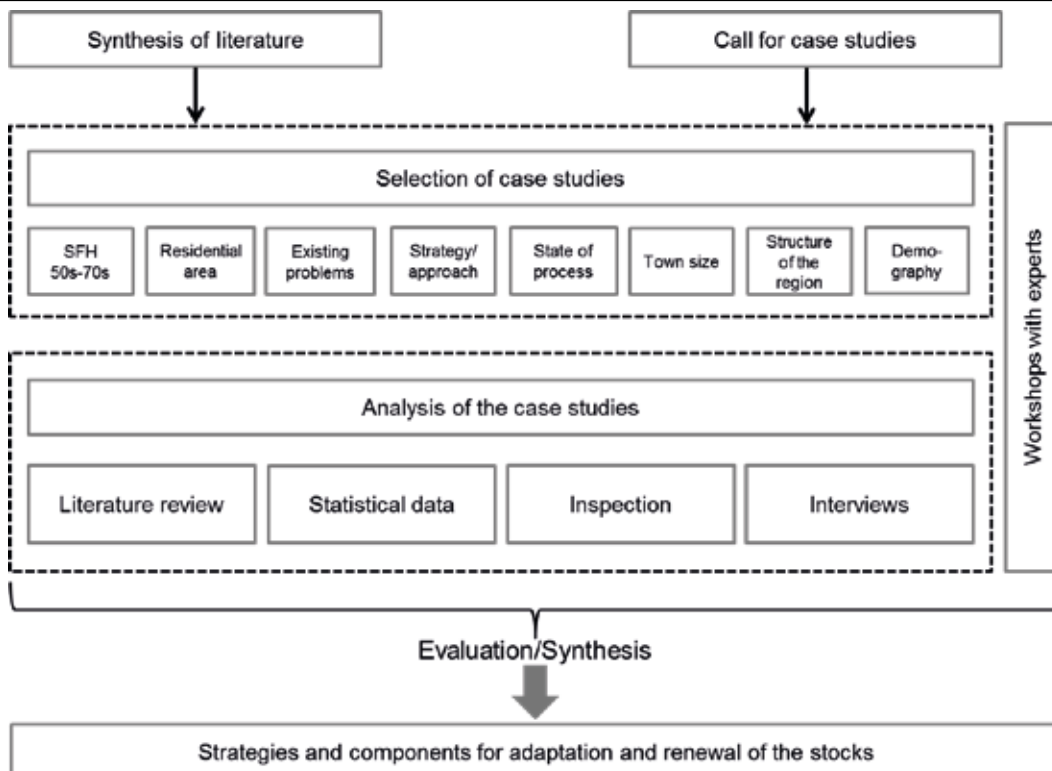


Work steps

- Nationwide evaluation of case studies, synopsis
- Inventory, interviews
- Convertible strategies for adaptation and renewal
- Pointing out action fields and instruments for urban development



Structure of the research project



Search for case studies

I. Nationwide call for projects

Feedback: 73

Feedback and case study: 38

II. Parallel: Evaluation of literature and requests to experts

III. Selection of case studies

Closer selection: 32

Favourites: 9

Further examples: 16

Further interesting approaches: 6

KONTAKTBogen

Kennen Sie ein Gebiet, ein Projekt oder eine Strategie zum Umgang mit Einfamilienhausgebieten der 1950er bis 1970er Jahre, die zu unseren Untersuchungen passen würden? Möchten Sie an unserem Erfahrungsaustausch teilnehmen?

Falls ja, bitten wir Sie, diesen Kontaktbogen auszufüllen und per Post, Fax oder Mail bis zum 31.03.2014 an uns zu senden.

Name der Stadt: Wierbeck, Pfloms, Dorsten, Moerkirchen etc.

Name des Gebietes: REGIONALE 2016

Bundesland: NRW

Notiz: verschiedene Initiativen zum Thema im Rahmen des Projektauftrages "Innenleben - neue Qualitäten entwickeln"

GESPRÄCH MIT Frau Prof. Simon-Philipp am 26. November 2013

Kontakt:

Organisation: REGIONALE 2016 AGENDUR

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E-Mail: carolin.luecke@regionale2016.de

Bitte in Druckbuchstaben ausfüllen

Search for case studies

Feedback/ expressions of interest:

Exclusively from the old federal states



Search for case studies

Federal state	
North Rhine-Westphalia	9
Lower Saxony	4
Hesse	1
Schleswig-Holstein	2
Saarland	1
Baden-Württemberg	4
Bavaria	6
Rhineland Palatinate	4
Hamburg	1

Search for case studies

Town size	
Big city	7
Medium-sized town	12
Small-town	9
Rural-municipal	2
Demographic development (stat. Ämter)	
Light shrinkage	10
Shrinkage	7
Stabil	2
Fluctuation	2
Light growth	2
Growth	8

Search for case studies

Initiative/Programme	
Federal government	
KfW Energy	5
KfW transformation of older people's house (model-project)	2
ExWost model-projects	3
Federal government/state	
Renewal-programme/-measures	2
State	
Regionale2016	4
Revitalisation of SFH (model-project Bavaria)	3
Municipality	
„Jung kauft Alt“ (Young buys old)	1
„Wohnlotsen“ (residential- guides)	2
Development concepts	9
Planning instruments	6
EU	
EUROPAN	3
Others	
Measures for energetic renewal/Consulting	4

Search for case studies

Approach	
Consulting and information	15
Participation (Survey)	8
Individual funding	3
Structural realization (envisaged)	16
Competition	3
Planning instruments (densification, zoning plan, design-guideline)	5
Concepts /implementation proposals	20
Reference level	
Area	22
- city as a whole	8
- district	2








Nine selected case studies in western Germany

Case studies

- One case study as part of the "Regionale 2016" programme, also took part in the architecture competition EUROPAN
- One case study in a model project of the federal state Bavaria „Revitalisierung von Einfamilienhausgebieten“
- Two case studies in the field of restructuring consulting
- One case study considers energetic / age-appropriate redevelopment and consulting
- Four case studies focus on planning instruments / building law / urban design



Goals and action fields of urban development

Crosscutting theme	Goals and action fields of urban development	Instruments (legal character)	Financing, funding
Communication and Connection	 <p>Appropriate adaptation of existing buildings</p>	<p>Competition, participation and consulting (informal)</p> <p>Integrated urban development concept (informal)</p> <p>Quarter development concept, participation (informal)</p>	<p>Initiative of a federal state, Regionale2016, EUROPAN, Baukultur NRW</p> <p>EU, municipality, county (Landkreis)</p> <p>Initiative of a federal state, model project</p>
	 <p>Densification and extension of living space</p>	<p>Design plan and regulations to protect the design (informal/formal)</p> <p>Zoning plan (formal)</p>	<p>Municipality</p> <p>Municipality</p>
	 <p>Energetic restructuring of a quarter</p>	<p>Quarter development concept, consulting, funding (informal)</p>	<p>ExWoSt, KfW</p>
	 <p>Activation of and coping with vacancy</p>	<p>Funding (informal)</p> <p>Consulting (informal)</p>	<p>Municipality</p> <p>Start-up financing: ExWost, municipality, today financed by privates, funding through municipality is planned</p>
	 <p>Protection of design and building culture</p>	<p>Design guideline, funding (informal)</p>	<p>BMVBS, ExWoSt, municipality</p>

Further steps

- Synopsis and evaluation
- Work out/elaborate transferable strategies and tools proven in practice
- Compilation of instruments and approved fields of action for the adaptation and renewal of the estates
- Preparation of a guidebook



Quellen

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- S. 17, 18, 19, 24, 25: Hochschule für Technik Stuttgart im Auftrag der Wüstenrot Stiftung 2015

Hochschule für Technik Stuttgart

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Price Decreases of Single Family Houses in Germany: Structure or Location? Or No More Topical?

Wolfgang Maennig

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Key words: Single family houses, Germany, population, ageing

Version: November 2015

JEL: R12, R2, R58

Abstract

Demographic projections display an ageing and decreasing German population, with less families and children. The 13th coordinated population projection (Statistisches Bundesamt 2015) projects a decrease of the number of persons living in Germany from some 82 mio. to some 68-73 mio. persons in 2060 (see figure 1).

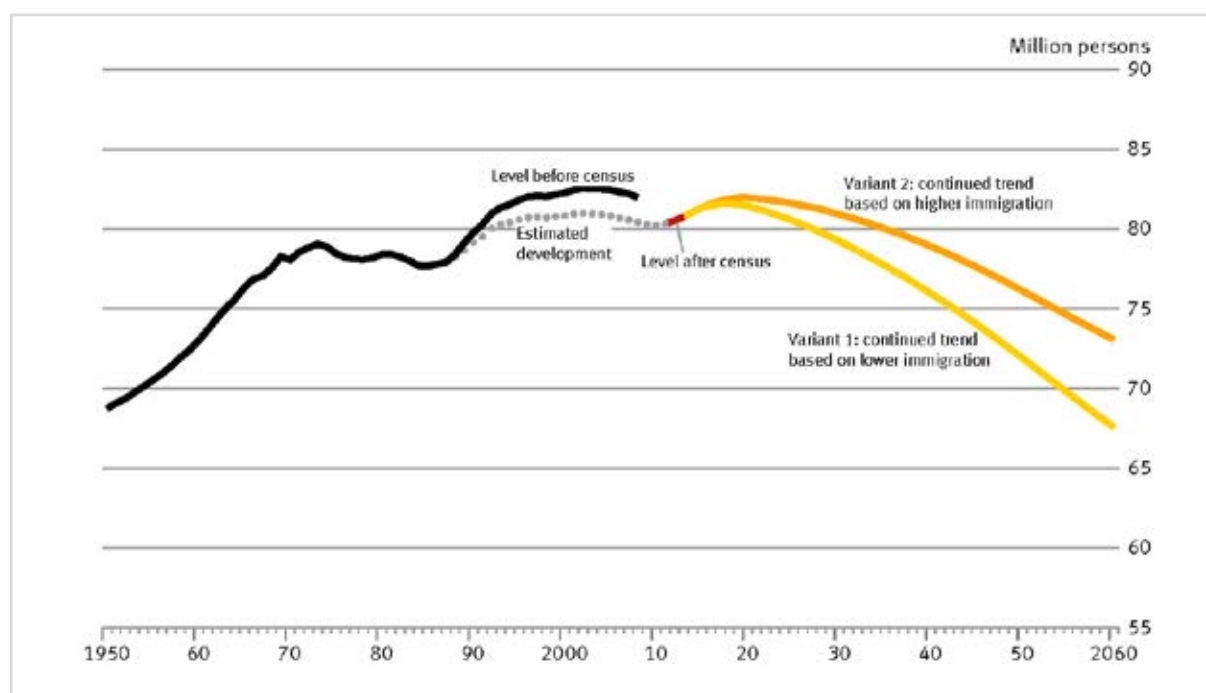


Figure 1: German Population Numbers from 1950 to 2060 [Source: Destatis (2015a)]

In Germany 2015, 14,6 mio. persons of age <20 years are living (18% of population). Projections of Destatis (2015b) for 2016 imply a decrease to 10,9 mio. young persons (16% of 2020 population) (fig. 2).

This may imply losses in population especially concentrated in rural areas, whereas urban areas may be subject to increasing populations for a longer time (Maennig and Ottmann 2011), a tendency which evolved already in the last decade (fig. 3) (Bundesinstitut für Bau-, Stadt- und Raumforschung (2015)).

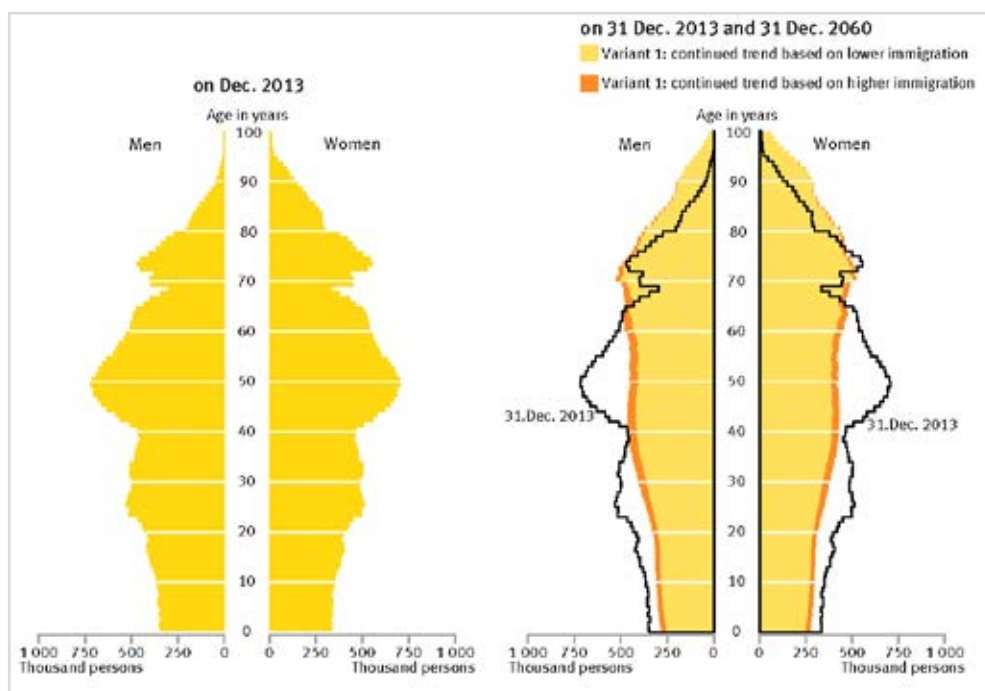


Fig. 2:
Age Structure of the Population
in Germany, 2013 versus 2060
Source: Destatis (2015a)

Due to typical central european way of construction and the resulting „downward inelastic“ supply, this may lead to substantial price decreases of single family houses (SFH), especially in rural areas, but possibly also in urban areas. Such price decreases must not be mirrored by price increases in areas with growing population, due to a (medium-term) elastic supply. As real estates are the most important asset in portfolios of typical German households, this may have substantial consequences for consumption and economic growth (Dust and Maennig 2008).

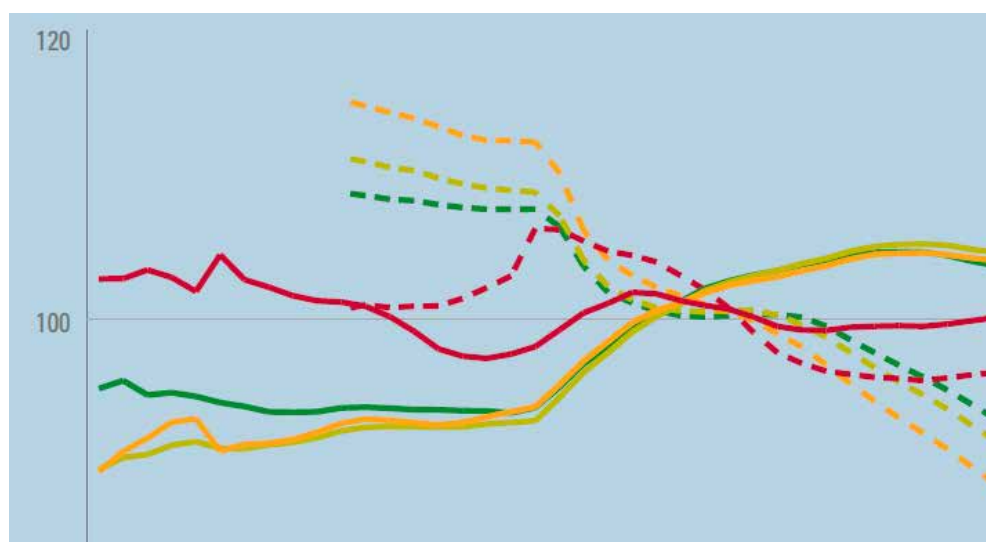
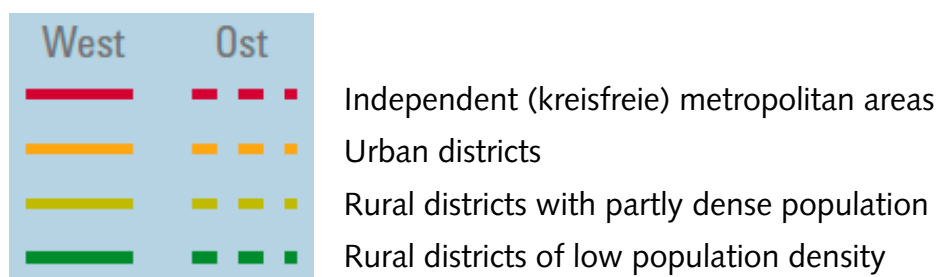


Fig. 3:
Demographic Development in
Germany from 1970 to 2013
Index, average population 1980
to 2013 = 100
Source: Bundesinstitut für Bau-,
Stadt- und Raumforschung (2015)



First tests whether the perceived price decreases for single family home are mostly due to the more remote location, but less due to the structure of SFH, did not support such a „location hypothesis“. As a case study, Fig. 4 demonstrates that in Berlin since 1990, prices of SFH developed less favourable than those of apartments – with small signs of a reversion since 2007. Similar conclusions hold for similar comparison of SFH and apartments in non-central location Berlin, or for comparison in former West-Berlin.

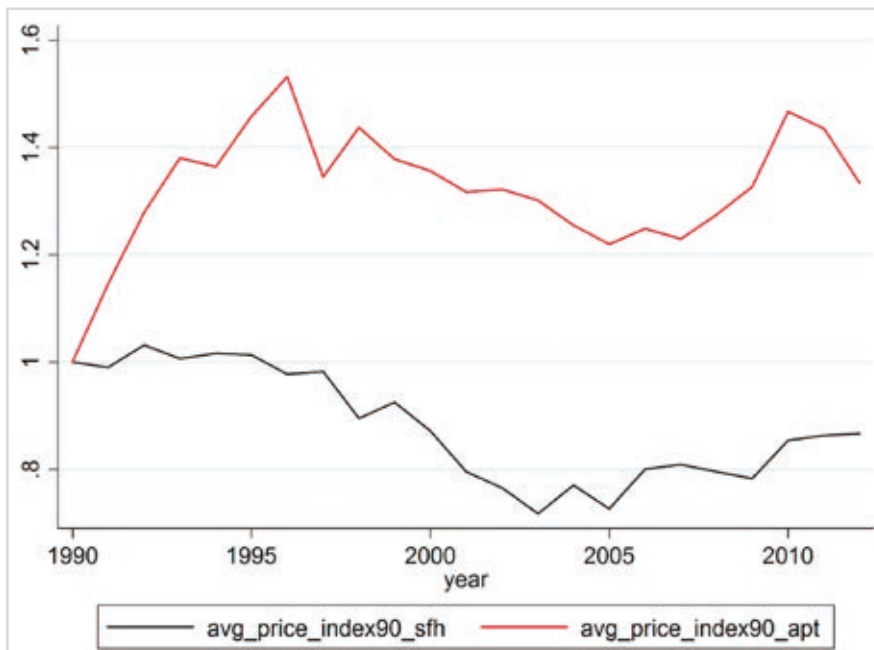


Fig. 4:

Average prices for single family homes and apartments in Berlin, 1990-2012. Index 1990 = 1

Compiled with data from Kaufpreissammlung Berlin

Earlier population projections did not show a convincing ex-post validity, and mostly underestimated the real population numbers, mostly due to biased assumptions of (a too high) mortality and (a too low) net migration (Bretz 2001). Recent migration, due to refugees may have led to a record net migration of more than 1,4 mio. people, far beyond the assumptions of 100.000 or 200.000 in the 13. Coordinated population projections. The pessimistic view on the development of SFH prices may thus be challenged in the future.

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Price Formation of Single-Family Homes in the Presence of Vacancies

Oliver Lerbs & Markus Teske (ZEW)

In many German cities and municipalities, the housing vacancy rate is on the rise, especially so in rural and peripheral areas. First, this implies an increase in the market supply of dwellings. Second, because of negligence or even vandalism, negative externalities may arise from vacant dwellings. In sum, increased competition and spillovers suggest that residential vacancies adversely influence property values, even if properties are not vacant themselves.

Using a unique dataset on more than 7,000 single-family homes (SFHs) transactions in three different German states in 2011, the work by ZEW employs hedonic regression methods to test this hypothesis while controlling for a broad range of property- and neighborhood-level characteristics. A robust negative link between aggregate (municipality-level) residential vacancies and individual home prices is found: a doubling of the vacancy rate decreases selling prices of SFHs by about eight percent in all three states.

The work by ZEW is based on theoretical models such as Wheaton [1990], who proposes a search and matching model that suggests strong theoretical relationships between vacancies, expected sales time and selling prices in the housing market. A higher share of vacant units among the group of properties that potential buyers perceive as possible substitutes decreases the probability of sale and increases expected sales time, which may render sellers to accept lower offer prices more quickly. Because of the abundance of alternative properties in regions with high vacancy rates, potential sellers have a lower bargaining power. Since greater vacancy in the relevant market increases time on the market and lowers reservation prices, selling prices in markets with higher vacancies will eventually be lower in the short- as well as in the long-run. In a recent model by Piazzesi et al. [2015], the housing market is partitioned into heterogeneous submarkets by assuming that agents on the demand side are inhomogeneous. Verifying this hypothesis empirically, they find that individual houses are cheaper in areas or segments where houses take long time to sell due to many alternatives, which they call a “liquidity discount”.

Recent related research has mainly investigated the effects of foreclosures on values of nearby properties in the US, finding substantial adverse price effects. However, foreclosures do not necessarily lead to vacant homes. Due to a lack of comprehensive vacancy data in the US and other countries, the implications of vacant dwellings per se are under researched. Fortunately, the German Census 2011 provides highly disaggregated data in this regard, up to the level of municipalities, which are roughly comparable in size to US Census Block Groups for certain German states.

ZEW has obtained transaction price data of single-family homes and their main building characteristics from the Superior Committees of Valuation Experts of the three German states Rhineland-Palatinate, Saxony-Anhalt and Lower Saxony. For the first two, all SFH transactions of 2011 were provided and in the latter case a random 26 percent sample. The average transaction price amounts to around 206,000 Euro, 84,000 Euro and 149,000 Euro, respectively. While the average living space ranges from 115 to 142 square meters, the average lot size is slightly above 500 square meters in Rhineland-Palatinate, around 715 square meters in Saxony-Anhalt and 775 square meters in Lower Saxony.

With regard to the socio-demographic characteristics of their resident population, the two West German states differ from Saxony-Anhalt in a variety of ways. The per capita income in Lower Saxony and Rhineland-Palatinate is approximately 50 percent higher. In Saxony-Anhalt, 97 percent of all municipalities register a declining population, whereas this is the case for only 56 percent of all municipalities in Rhineland-Palatinate and only 37 percent of all municipalities in Lower Saxony. Furthermore, the average vacancy rate in municipalities with observed single-family home transactions in the latter two states is 4.7 and 3.9 percent, respectively, compared to 8.2 percent in Saxony-Anhalt.

The hedonic regression model employed by ZEW researchers explains the observed variation in house prices by building characteristics as well as by municipality-level variables, including variables like population size, density or per capita purchasing power. Two-layered structure of the dataset is accounted for by clustering standard errors at the municipality-level. To account for the potentially disturbing price effect of location quality, which is expected to strongly correlate with the local vacancy rate, the publicly registered land value¹ is included in the regressions as another explanatory variable, which helps to avoid spurious correlation. The regression models are successful in explaining about two thirds of the overall variation in house prices.

As main result, the inverse relationship between vacancies and single-family home prices can be observed in Figure 1. The graph relates the predicted house prices from the hedonic models – this means that prices are already adjusted to differences in size, age, installments, or quality of their micro location – to the vacancy rate:

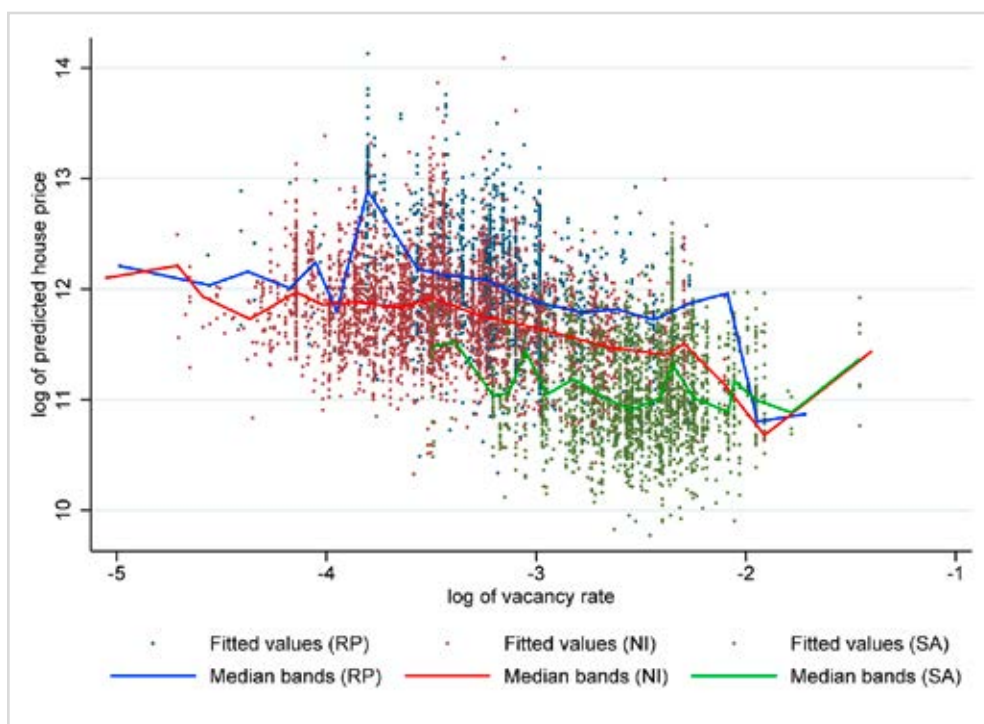


Fig 1:
Relationship between predicted house values and the vacancy rate (both in log terms) in analyzed municipalities in Rhineland-Palatinate (RP), Lower Saxony (NI) and Saxony-Anhalt (SA)

In view of the negative correlation over many different ranges of vacancy rates, the hypothesis of price-depressing effects of vacancies in the neighborhood of individual single-family homes is clearly supported. Values of SFHs are on average lower in regions with higher vacancy rates, even after controlling for main object characteristics, location quality and municipality variables.

Since this general result is robust across different German states, ZEW aims at extending the analysis to other EU countries.

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¹ „Bodenrichtwert“ in German.

The German Land Transfer Tax: Evidence for Single-Family Home Transactions

Lars Vandrei and Carolin Fritzsche

Executive Summary

Our study uses recent data to study the effects of the German land transfer tax. We estimate the impact of the land transfer tax on the number of transactions. We investigate tax increases in different German states for the period from 2005 to 2014. On the one hand, a tax increase may lead to a long-term reduction in real estate transactions. On the other hand, there may be a shift in transactions as buyers and sellers anticipate the higher tax rate and try to avoid it. Our goal is to separate the short-term anticipatory effect from the long-term effect on real estate transactions. The results of our study indicate that an increase in the transfer tax is negatively correlated with the number of transactions that take place on the market for single-family homes. We estimate that a one percentage point higher transfer tax goes along with 11% fewer transactions.

In the real estate market, not only prices influence the number of transactions but also transaction costs. Transaction costs generally include legal and insurance fees, a mortgage application, inspection costs, broker's fees and land transfer taxes. The latter are quite common in most countries and may represent a relatively large share of all transaction costs. However, little is known about their impact on the real estate market: How do they affect the decision of buyers and sellers? And what is the impact of transfer taxes on the frequency of transactions? We look at the impact of transfer taxes for the case of Germany by exploiting tax increases in selected German states. Thereby, we focus on single-family homes: These dwellings have a high rate of owner-occupation and therefore mainly private transactions are included in the sample; commercial transactions could bias our results as commercial buyers are entitled to set the land transfer tax off against the tax liability.

In Germany, real estate transfer taxes amount to about 46% of the average transaction costs – including broker's fees [RWI (2012)]. Generally, everything that needs to be spent in order to purchase the property is subject to the land transfer tax: The purchase price, encumbrances on the property, usage rights, abatement costs and broker fees. The term 'property' also includes the fractional share of property, land rights (such as leasehold) and condominiums. Next to the land itself, everything that is an inherent part of the property is taxable, i.e. also a house built on the land. Transactions up to the value of € 2,500, inheritances and transfers within families are exempted from the tax. In 1983, a standardization of the land transfer tax took place and at the same time the tax rate has been set to 2%. In 1997, this rate was raised for all German states to 3.5%. Since 01.09.2006, the tax rate can be set by the German states individually. Today, it ranges between 3.5% and 6.5%. Every state with the exception of Bavaria and Saxony has increased the land transfer tax in different stages and none has decreased it. Around 3.7% of all tax revenues at the state level were due to the land transfer tax in 2014. Usually, the increased taxation is justified with the consolidation of budgets. As a change in the transfer tax has to be passed by the respective state parliament, it is usually announced several months in advance.

The effect of a change in the land transfer tax can be separated into a long-term effect and an anticipatory effect. Concerning the latter, if the change in the tax is announced some time in advance, buyers and sellers may reschedule the transaction in order to profit from lower tax rates. While BEST and KLEVEN (2015) noticed that some transactions have been brought forward to still take place during a tax holiday in the UK, SELMROD et al. (2013) do not find a significant anticipatory effect for their empirical analysis of transactions in Washington D. C. With regard to the long-term effect, empirical evidence is clearer: DACHIS et al. (2012) and SLEMROD et al. (2013) observe a decline in sales after an increase in the transfer tax. Furthermore, BESLEY et al. (2014) find that more housing transactions took place during a land transfer tax holiday in the UK. For the case of Germany, there are no empirical studies so far.

We follow the theoretical framework presented by SLEMROD et al. (2013) regarding the economic effect of a change in the land transfer tax. If a tax increase is announced for that point in time, it may be profitable to bring the transaction forward if the saved tax amount compensates the utility loss from the time deviation. We state the following hypotheses:

Hypothesis 1: More transactions take place just before the tax increase.

Hypothesis 2: Less transactions take place right after the tax increase.

Assuming that the tax incidence lies on both sides of the market, the sale of a property yields less utility as only lower prices can be obtained after a tax increase. At the same time, buying a property also yields less utility as higher prices need to be paid. Therefore, the number of transactions decreases after the tax increase not only due to the anticipatory effect but also because it becomes less attractive to buy or sell a property in the long run:

Hypothesis 3: The higher the transaction tax, the less transactions take place.

In order to empirically test these hypotheses, we apply different econometric estimations. Our dataset consists of transactions of single-family homes from the year 2005 to 2014 which have been provided by the respective Property Valuation Committees of the German states included in our sample. We included the states Berlin, Brandenburg, Bremen, Saarland and Saxony-Anhalt where in total ten tax increases took place over the past ten years.

The monthly number of transactions within states are explained by the anticipatory effect, the transfer tax levels and control variables. The anticipatory effect is measured with the help of three dummy variables for the months before the tax increase and again three dummy variables for the months after the tax increase. The long-term decrease in transactions is captured by the transfer tax level while controlling for the anticipatory effect. We estimate a fixed effects panel regression and find that a one percentage point increase in the land transfer tax goes along with 11% fewer transactions. The 11% can be split into an anticipatory effect and a long-term effect on transactions. The anticipatory effect results in 38% more transactions right before the tax increase and 31% fewer transactions right after the tax increase. The long-term effect on transactions is estimated to about 6% less transactions for a one percentage point higher transaction tax. We conclude that the increase in the land transfer tax results in massive anticipation effects. As a consequence, shortly after a tax increase, the number of transactions of single-family homes decreases dramatically. However, there is also a long-term effect: Due to the higher tax rate, transactions become less profitable for buyers and sellers and therefore fewer transactions take place in the long run.

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Single-Family Housing Stock: A Material and Cultural Resource at Risk?

Clemens Deilmann, Maja Lorbek

In Germany, there are nearly 13,5 million single-family homes (SFH) (Statistisches Bundesamt 2014). In the future, demographic change and shifting life-style models will alter the demand for this type of housing, possibly resulting in vacancies and affecting the provision of technical and social infrastructures in local communities. The knowledge on the material and spatial composition of this building stock is limited. Previous analyses have scarcely investigated the heterogeneous nature of the stock of SFHs and its institutional underpinnings. The IOER sub-project will address the knowledge gap on the single-family housing stock as a material and cultural resource, by categorising the diverse building typologies and locations. At a later stage, we will develop scenarios for determining multiple possible outcomes and with the aim of outlining adequate strategies for municipal stakeholders. The presentation focused on chosen methods and planned tasks with the aim to reassess our objectives and approaches from an interdisciplinary viewpoint.

From “housing question” to spatial disparities in housing supply

Throughout the 20th century, housing policy in Germany aimed for provision of affordable dwellings for low-income groups. Single-family homes, as a specific form of dwelling, were an important contribution to solving the “housing question” in the inter-war era (Weimar republic and the Third Reich) (Kornemann 1996) (Kuhn 2001). The production of mass housing, including single-family homes after WW II in the Federal Republic of Germany remained an important policy issue until the end of 1960s (Beyme 1999) (Durth and Gutschow 1998) (Harlander 1996). Housing policy in West Germany also promoted home ownership. A large number of privately owned detached or semi-detached homes was built because of generous subsidies and tax exemptions. Although social housing was deprived of funding at the beginning of the 1980s, the owner-occupied home allowance was only abolished in 2006. In German Democratic Republic (GDR), housing construction relied on the production of pre-fabricated apartment blocks. The construction of single-family homes was accepted after 1971, but remained an exception. After the reunification, there was an accelerated process of suburbanisation in Eastern Germany. Between 1989 and today, first shopping centres and then a substantial amount of new single-family homes were built on city fringes. This development was classified as “sprawl without growth” (Schmidt 2011), which later slowed down (Schmidt, Fina, and Siedentop 2015). While housing demand in metropolitan agglomerations and core cities is on the increase (both for multifamily and single-family housing), smaller towns and rural areas experience an increasing risk of mismatch between demand and supply (Berndgen-Kaiser et al. 2014). The regional disparity of spatial resources in housing stock is crucial for analysing future development of single-family homes.

The “Housing question” was beside socio-political aspects and state interventions furthermore dealing with the question of how - by innovations in design and construction - the affordability for low-income groups could be secured. This topic dominated both the discourse and practice of cultural facilitators such as architects and urban planners during the 20th century. The second Congrès Internationaux d'Architecture Moderne (CIAM) was devoted to the question of minimal dwelling. Minimalist detached and terraced houses were developed for the working class and a substantial effort was put into standardisation and typisation of building processes and building components both in the inter-war and in the post-war era (Ekici 2008) (Vossoughian 2014). The majority of German single-family homes built in the 20th century followed the ideal of scarcity and were largely of modest dimensions until the end of 1960s. Our preliminary analysis of building types and floor layout shows a significant increase of useful floor area in single-family housing during the boom era in the Federal Republic of Germany.

Single-family home: housing sector and vacancies

Today, 40 % of the German population lives in single-family homes, with 30 % share of total dwellings (see table 1). In European comparison, the share of German population living in the specific type of detached single-family houses is 26,6%, which is lower than the EU-28 average of 33,7%. The share of population living in two-family homes (semi-detached houses) is -27,7%- slightly higher than the EU-28 average of 25,6% (Eurostat 2014). The majority of dwellers in single-family and two-family homes live in smaller municipalities. In municipalities with less than 20.000 inhabitants, the share of population living in single-family homes amounts up to 57,5% of total population. Also 60 % of inhabitants in two-family homes can be found in these small municipalities (see table 2).

Dwellers in SFH East-/ West Germany			
	Germany total	West-Germany (without Berlin)	East-Germany (with Berlin)
Total Population	80,2 Mil.	64,3 Mil.	15,9 Mil.
Dweller in SFH/TFH/MFH	74,4 Mil.	59,7 Mil.	14,6 Mil.
Single Family Home	30,1 Mil.	25,1 Mil.	5,0 Mil.
Two Family Home	11,5 Mil.	9,9 Mi.	1,5 Mil.
Multi Family House	32,8 Mil.	24,7 Mil.	8,1 Mil.
Population in SFH	40 %	42 %	34 %
Ratio of dwellings in SFH / all dwellings	30 %	32 %	24 %

Table 1: Dwellers in single-family homes, source: Census 2011, Banse IOER 2015

Vacancies¹ today still more often affect flats (multi-family homes) than single-family homes. While vacancy rate in West-Germany is relatively low both in multi-family homes (4,1 % of the total dwellings) and in single-family homes (2,0 % of total dwellings), the share of unused dwellings in Eastern Germany in multi-family homes remains high at 8,6 % of all flats in multi-family homes and is also higher in the single-family housing stock (3,2% of all dwellings). With regard to building age class, as shown in table 3, the highest percentage of vacancies can be found in the historic part of the building stock, built prior to 1918. 5,8 % of dwellings of this age class in single-family homes in Eastern Germany are vacant. The number of vacant dwellings in this age class in Western Germany is only slightly lower (5,3%). Affordable single-family homes, however, can attract households currently living in multi-family homes, as property acquisition, particularly purchase of single-family homes remains popular in Germany (Held and Waltersbacher 2015). In comparison to EU-28, Germany has the lowest rate of home ownership. Only 53.2 % of population in Germany owns their dwelling (Statistical Office of the European Communities 2014). In 2013, every fourth German household lived in privately owned single-family home (Destatis, n.d.) As ownership rate is relatively low, households in multi-family homes can thus be seen as potential homebuyers in the future. Table 4 shows the relation between

¹ **Germany.** A dwelling is considered to be unoccupied if it is neither let nor used by its owners and was not a leisure holiday home at the date of the survey. Thus dwellings that are temporarily vacant are included in this category (Dol and Haffner 2010).

households currently living in blocks of flats and vacant dwellings in single-family homes along the federal states of Germany. In Saarland e.g. one vacant single-family home might be of the interest to 18 households presently living in a multi-residential Building.

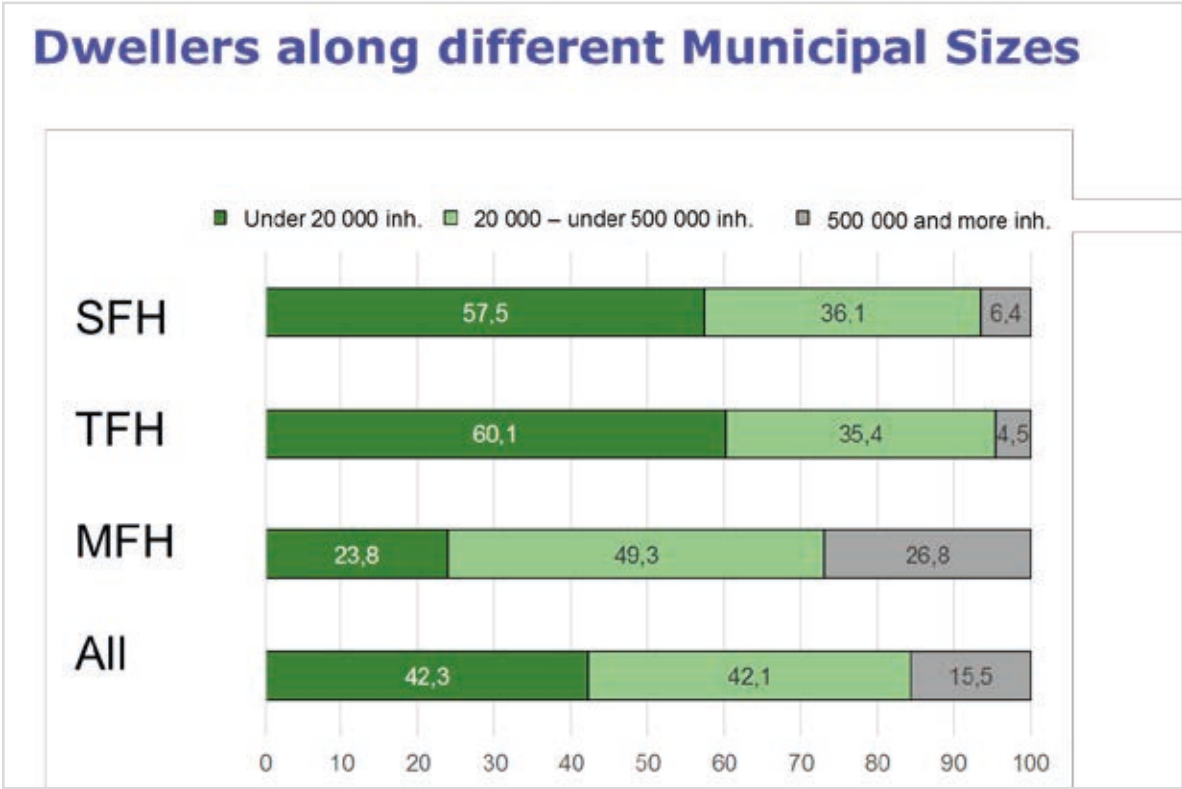


Table 2: Dwellers along different municipal sizes, source Census 2011, Banse IOER 2015

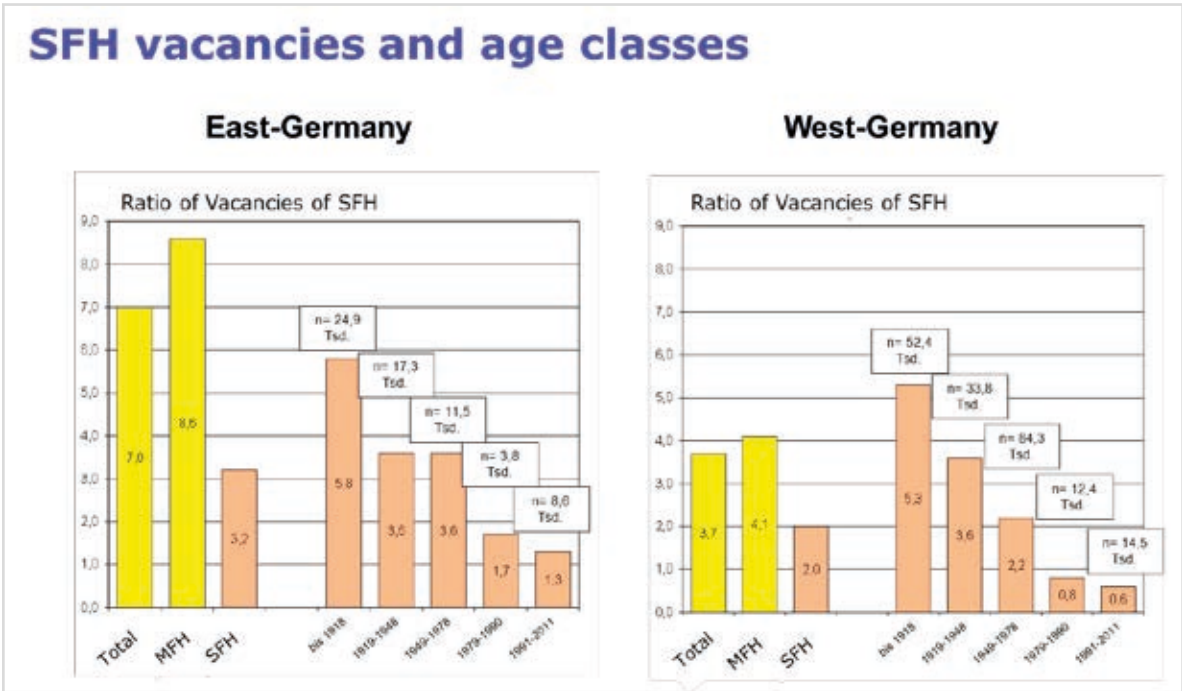


Table 3: Vacancies and age classes in single-family housing stock, source: Census 2011, IOER 2015

Vacant SFH per 1.000 HouseHolds in MFH

(Federal States without City-Sates)

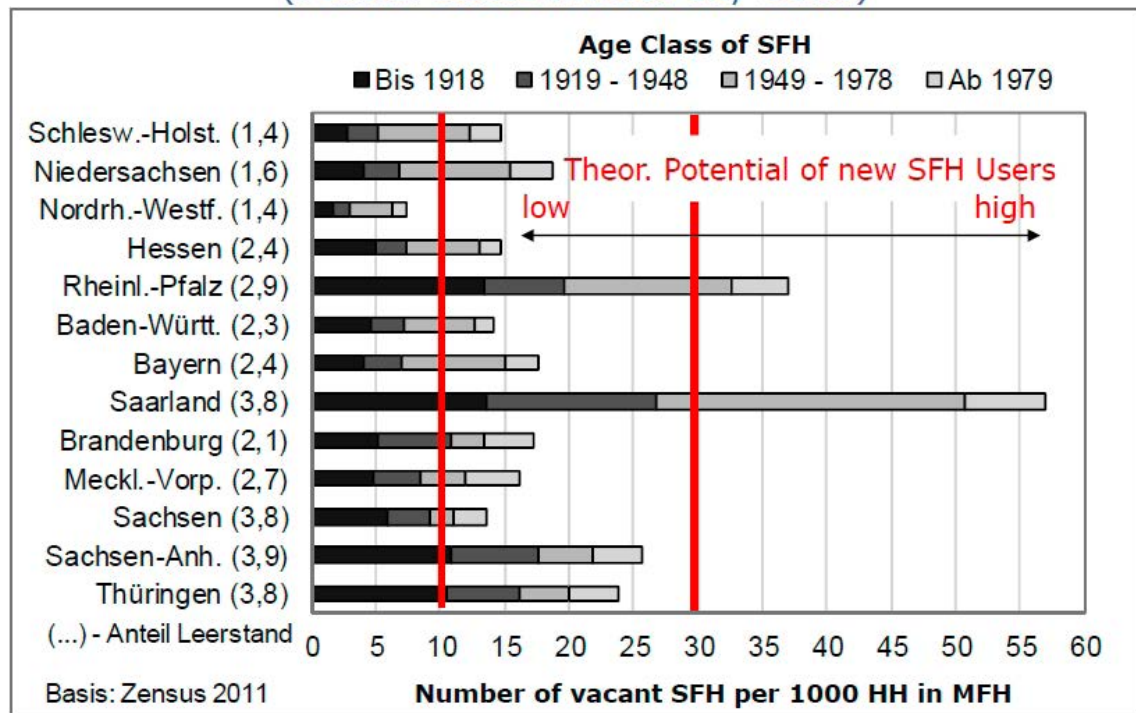


Table 4: Vacant single-family homes per 1000 households in multi-family homes, source: census 2011, IOER 2015

Spatial resources in single-family housing stock

As table 5 shows, there is a significant reserve of useful floor area contained in single-family housing stock. Spatial resources are almost evenly across all age classes. The largest share of useful living area is contained in the age class 1948-1968. Large portions of spatial reserve are contained in the historic, pre-war segment of the single-family housing stock as well as in the period between 1969 and 1978. New construction of single-family homes after 1994 remains at a high level.

	Before 1918	1919-1948	1948-1968	1969-1978	1979-1983	1984-1994	1995-2001	2002-2009	Total	Proportions, %
SINGLE FAMILY HOUSE										
Useful living area (Mm²)	206	173	348	213	111	148	152	114	1465	43%
Number of dwellings (1000s)	1880	1720	3390	1930	940	1230	1250	880	13220	34%
TERRACED HOUSE										
Useful living area (Mm²)	43	91	133	78	47	66	62	37	557	16%
Number of dwellings (1000s)	470	960	1340	760	400	590	540	310	5370	14%
MULTI-FAMILY HOUSE										
Useful living space in Mm²	125	134	328	109	69	76	119	41	1001	29%
Number of dwellings (1000s)	1660	1920	4800	1500	990	1060	1600	510	14040	36%
LARGE MULTI-FAMILY HOUSE										
Useful living area (Mm²)	10	17	115	127	39	84			392	11%
Number of dwellings (1000s)	180	260	2020	2480	570	1290			6800	17%
TOTAL										
Useful living area (Mm²)	384	415	924	527	266	374	333	192	3,415	
	11%	12%	27%	15%	8%	11%	10%	6%		
Number of dwellings (1000s)	4190	4860	11550	6670	2900	4170	3390	1700	39,430	
	11%	12%	29%	17%	7%	11%	9%	4%		

Table 5: Report D2.1a Survey on the energy needs and architectural features of the EU building stock „Inspire“ project, based on „TABULA“ project, p.:88, Source: http://www.inspirefp7.eu/wp-content/uploads/2014/08/WP2_D2.1a_20140523_P18_Survey-on-the-energy-needs-and-architectural-features.pdf

However, long term prognosis on the impacts of demographic change on the housing stock in Germany (as shown in table 2 and 3) predicts that the production of new single-family homes will gradually yet also significantly decrease in both Eastern and Western Germany by 2060 (Effenberger, Banse, and Oertel 2014).

Eastern Germany	2011-2020	2021-2030	2031-2040	2041-2050	2051-2060
Dwellings in (1000s):					
MULTI-FAMILY HOUSES	80	60	60	50	40
SINGLE-FAMILY AND DUPLEX HOUSES	120	90	70	70	60
TOTAL	200	150	130	120	100

Table 6: Prognosis on new dwellings in Eastern Germany between 2011 and 2060. Source: Effenberger, Banse, Oertel 2014, p. 21

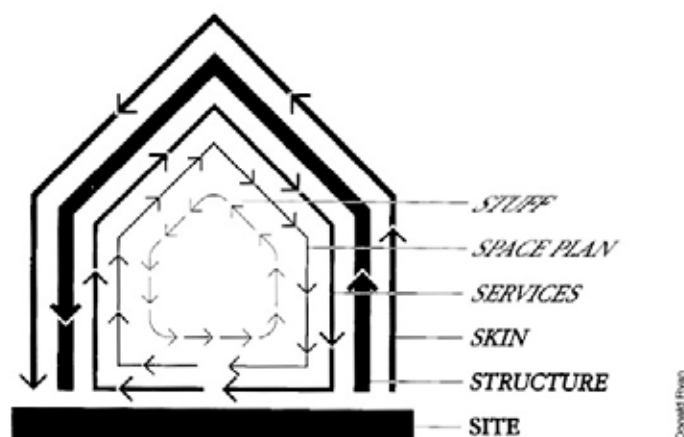
Western Germany	2011-2020	2021-2030	2031-2040	2041-2050	2051-2060
Dwellings in (1000s):					
MULTI-FAMILY HOUSES	850	600	550	500	400
SINGLE-FAMILY AND DUPLEX HOUSES	750	600	550	500	450
TOTAL	1600	1200	1100	1000	850

Table 7: Prognosis on new dwellings in Western Germany between 2011 and 2060. Source: Effenberger, Banse, Oertel 2014, p. 22

Systemic analysis of single-family homes

Architecture remains a system-based discipline not aiming for hypotheses and calculability. Its canon includes traditional concepts, craftsmanship-based and corporal techniques and physical imitation of models (Hassler 2015). The knowledge on ideal types, on how they evolved and how they continue to shape the production of architecture and the existing building stock is therefore essential for the development of any long-term transformation strategies for different parts of the building stock. This also applies to single-family homes. With the exception of architectural icons, which were thoroughly investigated by architectural historians, there is little research on the material and spatial composition and main characteristics of the single-family housing stock. Further research is needed in order to classify different building types contained in the single-family housing stock of Germany. Housing stock typologies, developed with the intention of estimating and predicting energy consumption, do not address the theme of adaptive re-use, crucial for attracting new user groups and changing living habits. Further knowledge on adaptability, the condition and possible technical obsolescence of the stock is also required in order to assess life-cycle options and material resource implications for the different, and highly heterogeneous parts of the stock.

The idea of modern single-family home is interrelated to the principle of nuclear family. The dwelling itself, from the beginning of the 20th century until late 1960s, is reduced to living and reproduction. Architectural handbooks containing ideal programming of a single-family home (for the working class) and villa (for middle classes and the wealthy) exclude rooms for paid work. The inner - material - composition of the house is depicted in Steward Brands' well-known diagram "shearing layers of change" (see Figure 1). Each of the layers corresponds with different wear out period (Brand 1994).



SHEARING LAYERS OF CHANGE. Because of the different rates of change of its components, a building is always tearing itself apart.

Figure 1: Shearing layers of change. Source: Brand 1994, p. 13

However, single-family homes are entrenched into larger contexts. There are further shearing layers beyond the boundaries of the lot.

The emergence of single-family homes on urban fringe is closely related to the availability of public transport at an early stage and later on to car mobility. While in the beginning the single-family home is largely autonomous, today, the detached house is very much dependant on technical support from material support structures and infrastructures (water supply, electric power, garbage disposal, sewage and road structure and increasingly, informational infrastructures). The single-family home is, due to increasing rate of female employment, also more and more dependent on social services such as kindergartens and elderly care (Häußermann and Siebel 1996). When the concept of the single-family home was first established, but also in times of crisis and food shortage in the post-war periods, garden use contributed to a form of subsistence economy through provision of home-grown food (fresh produce, small animal husbandry). Gradually, kitchen gardens were turned into flower gardens with areas for car parking. The households became dependent on local supply, either in core cities where the workplace of inhabitants is located or in shopping centres on the periphery. The emergence and production of single-family homes is also the result of the activities of cultural, commercial and administrative facilitators. Architects (Richard Riemerschmid, Hermann Muthesius, Heinrich Tessenow, Martin Wagner, Bruno Taut etc.), Garden City activists (Karl Schmidt) and landscape architects (Leberecht Migge) all promoted the construction of single-family homes and settlements of small houses ("Kleinhaussiedlungen") as an ideal living form for the working class. It was not until 1960s that this form of living, which led to suburbanisation and sprawl, was critically re-assessed by planners. Commercial facilitators (builders, contractors, credit institutes) emerged as early as at the turn of the 19th century. "Terraingesellschaften" (site companies) can be seen as an early form of developers. These companies bought large plots of land ("Terrain"), which they subdivided into smaller lots and built villas for sale. Later on, when single-family housing demand increased among low-income groups, due to severe housing shortage in cities, plots of land were sold, and dwellers constructed their own home through do-it-yourself practices and essentially as a true "growing house", in several stages, according to their financial means and time (Kuhn 2006). Administrative facilitators, as the third major external actor, influenced the production of single-family homes by designating building sites and providing necessary technical and social infrastructures as well as local regulations. Another layer, which supports and shapes the system of the single-family house, are changing modes of industrial production. The process of industrialisation enabled the emergence of single-family homes for the masses, by providing paid work in cities and by establishing a new kind of consumer, predominantly in the period of classical welfare state after WW II. With changing modes of production since late 1970s (post-fordism, just-in-time production, decentralisation of value chain), beginning at the end of last century atypical employment is on the rise where the boundary between leisure and work is becoming increasingly blurred (teleworking, ICT). Current research by one of the members of our research networks, Darja Reuschke, moreover shows beneficial effects of housing assets on entrepreneurship and growth of small businesses (Reuschke and MacLennan 2014).

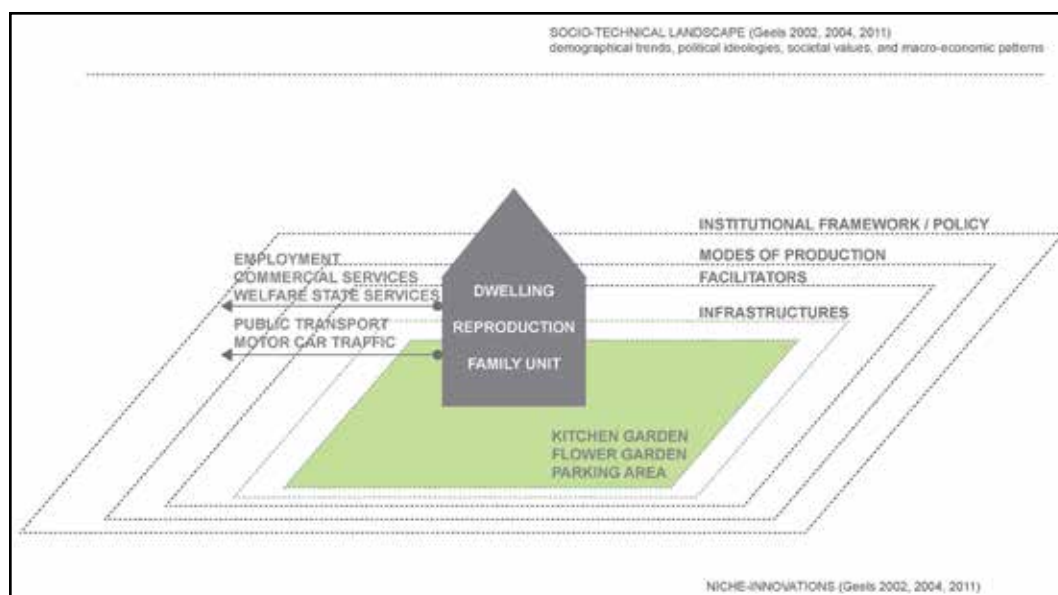


Figure 2: Outer shearing layers of single-family homes. Source: Maja Lorbek, IOER

Looking at single-family homes from a broader perspective, the institutional framework and policy is the most far-off layer that affect the system of the single-family house regarding physical form of houses, but the most influential on the process of production. In this sphere, the legislative framework for single-family homes is located, such as zoning and building regulations but also the prescribed standards and norms. The latter are no longer determined by the national state but rather by European Council. This predominantly applies to standards of energy efficiency and quality of building components as prescribed by EU energy directives and norms. National housing policy influenced the German single-family home through subsidies for construction, tax reductions and specific instruments of state intervention such as commuter allowance. Some of the subsidies were already abolished.

Further research

Currently, we are classifying German single-family housing stock. We already identified several different building types, by detecting crucial features on one hand, and by adapting type definitions from literature on the other. For this ongoing work, assessment and building type definitions by architectural historians are being analysed. Several building type definitions by architectural theory and three crucial typomorphological approaches are being assessed and adapted. Literature and methods used in studies of vernacular architecture will be used in order to classify single-family homes, which were produced in a “vernacular”² way. This type of production includes all houses that were built through self-help and personal contribution of dwellers, but also houses built by local contractors and developers. By identifying different kinds of production of single buildings and settlements, we will be not only able to categorize and describe different kinds of urban tissue but also define specifics of locations. Classification of single-family homes (as building types) and categorisation of larger entities (urban tissues and locations) is the base for later evaluation of impacts on material flows and portfolio-based

² Research on vernacular architecture, which traditionally focused upon documentation and understanding of the historical, rural and pre-industrial building heritage, now defines the vernacular as a process (Asquith and Vellinga 2006) Some authors also include developer-built suburban housing in the concept of “contemporary vernacular” particularly when dwellers’ individualization of features and components is present (Oliver 2006).

life cycle assessment of the stock. Building types will also be analysed with regard to their compliance with emerging and traditional user groups and changing user preferences.

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Single-Family Home: Pluralization of Lifestyles, Shifting Preferences and Emerging New User Groups

Esther Schietinger, Immanuel Stieß

Demographic and social developments and changes in user preferences alter the way of housing and pose new challenges to the SFH housing stock. In particular, the pluralization of lifestyles, the change of gender relations, increasing professional expectations of mobility and continuing immigration are affecting societal housing models and residential needs in Germany. To understand these emerging challenges and in a long-term perspective develop coping strategies, a better understanding of the actual and potential inhabitants of the housing stock is needed. Which raises the question: How will traditional SFH user-groups develop against the background of demographic change? Which effects will new patterns of living and new residential concepts have on future user preferences and the emergence of new user groups for single-family homes (SFH)?

The preliminary results from a literature study, which are presented here, provide first insights into the societal housing trends in Germany. This research step shows the state of the art on user typologies regarding housing and provides the basis for our upcoming qualitative research phases and the development of a SFH user typology.

First of all, we would like to present our theoretical framework. A short input on reurbanization provides an orientation of the overall scientific discourse as well as of the societal trends in which our research is embedded. We will then present our preliminary research results on lifestyles, housing situations and preferences and will close with an outlook on potential new user-groups in the SFH-segment.

To answer our research questions we apply a comprehensive theoretical perspective. We draw on different approaches including (1) *socio-structural analysis* (economic status, socio-demography), (2) *phase of life analysis* (familial status, live events) – as well as (3) *lifestyle analyses* (basic orientations and housing orientations)¹.

This broad perspective is needed, because all three theoretical approaches provide critical knowledge on housing situations and housing preferences. These three dimensions particularly affect the following aspects of housing situations and preferences: *location*, *characteristics of residential property* and *neighborhood*. The aspect of what we call housing arrangement will be of special interest in this research. This last aspect gained some acknowledgment in research done on community housing in multi-dwelling-units (MDU). Adapting this research angle to SFH we expect further insights into the SFH segment and its inhabitants. By including the aspect of housing arrangements we can focus on decision-making processes, cooperation, sharing and division of household labor. It also provides a better insight into the phase of life dimension, allowing to distinguish between familial situations and housing arrangements, two concepts which often coincide in research on housing and phases of life (Schneider/Spellerberg 1999: 276). This last aspect is particularly relevant in order to understand new user groups for whom familial status and housing arrangements aren't automatically congruent. The actual situation and preferences within the different dimensions can contradict each other. Therefore, it is relevant to find out what the actual housing situation looks like, which preferences are a priority on an individual level and which societal trends can be identified on a meta-level.

¹ As Götz and Ohnmacht with regard to Pierre Bourdieu's work put it: "Lifestyles can be understood as latent constructs comprising an individual's attitudes, values and orientations. They are expressed, for instance, in differing tastes and preferences that influence everyday behavior and daily practices." (Götz/Ohnmacht 2009: 92). In the case of housing we have different meanings which are assigned to housing, for example housing as shelter or housing as self expression

The housing model of SFH has long been associated with a suburban way of life. But in the recent debate on reurbanization it is argued that this model is beginning to crumble. The discourse on reurbanization provides a more comprehensive perspective on the overall societal housing trends and especially on trends concerning location preferences, providing a background for our research questions. Reurbanization is discussed as an overall change in migration patterns and a shift in location preferences. On the one hand, prosperous, mainly metropolitan regions show a demographic growth, which correlates with positive developments on the labor market (Jessen et al. 2012: 206). A closer look into these migration patterns of metropolitan regions shows an absolute gain of interregional migration for 18 to 30 year olds tending towards city central quarters. Some of the older inhabitants move from city centers to city quarters a little more on the outskirts. The city outskirts still loose inhabitants to the suburbs, especially in the age cohort 30-45, but the number of households staying in the city in this cohort is increasing (Jessen et al. 2012: 206). On the other hand reurbanization and demographic change lead to loss of population in structurally weak, mainly rural regions. From a statistical perspective, reurbanization means an increase of 18-30 year olds and a relative population growth for city centers compared to city outskirts and suburbs. This overall statistical growth of many metropolises in Germany is reinforced by a decline in migration movements from city to suburb of the 30-45 age cohort in their family phase (Herfert/Osterhage 2012: 409).

Another part of the discourse on reurbanization is focusing on the generation 50plus – the empty nesters and the woopies (well of older people) – and their potential to re-migrate from suburbs to the city. Until now, this remigration mostly stays a discursive phenomenon which provides little Germany-wide statistical evidence (BBSR 2011; Braun 2008; Herfert/Osterhage 2012: 409). However, some major cities – which are perceived as attractive residences for senior citizens – already generate a population surplus in the generation 50plus. In Germany those cities are for example Potsdam, Freiburg, Jena, Regensburg or Dresden (Jessen et al. 2012: 209; Herfert/Osterhage 2012: 106). However, these gains result from interregional migrations and not from intraregional suburb to city re-migration (Herfert/Osterhage 2012: 106). For the future, it is expected that due to changing lifestyles and living preferences, decreasing familial solidarity and growing challenges with regard to care work for the elderly – for example due to dementia – residential areas with a good social infrastructure will become more attractive for older suburbanites (Herfert/Osterhage 2012: 10; Jessen et al. 2012: 211). Yet, the re-migration potential of the 50plus cohort shouldn't be overrated. It rather raises the question of how social and cultural infrastructures on the one hand and medical infrastructures on the other must adapt to be able to serve the needs of an aging population.

This reurbanization – respectively the decline in suburbanization, combined with a preference for more central locations – is likely to have an impact on the housing preferences and demands for SFH by old and new user groups in cities, in suburbs as well as in rural areas, which needs further exploration.

From the overarching demographic perspective of reurbanization, we now zoom in on the lifestyle and housing situation and preferences of the inhabitants. Most research on housing and user groups focuses on the socio-structural and/or phase of life dimension. Other researchers, as for example Schneider and Spellerberg, have argued, that lifestyle analysis can provide new insights to the understanding of housing situations and preferences (Schneider/Spellerberg 1999: 77ff.). Based on empirical investigation, one can demonstrate that housing situations and preferences are shaped by lifestyles and basic orientations (Jost 2015, Schneider/Spellerberg 1999; Stieß et al. 2009: 7).

Lifestyle analyses show that the dream of home ownership – combined with specific lifestyles and corresponding basic orientations – is still alive throughout all milieus but has been declining in recent years (Schneider/Spellerberg 1999; Jost 2015). This dream can't always be realized, especially due to economic constraints. And it is contradicted by other critical housing preferences like for example the one for central, urban locations or good local employment options. Switching from housing preferences to the actual housing situation, the overall ownership rate in Germany stands at almost forty-six percent (Jost 2015). The following findings on lifestyle and single family homeownership are derived

from a study by the vhw – the federal association on housing and urban development (Jost 2015)².

The study is based on the so called Sinus-Milieus as underlying lifestyle segmentation (Figure 1)³. The segmentation used here has 11 milieus, which are gradually defined on a socio-economic level, and a grade of basic orientation – traditional orientation on the left, individualistic orientation on the right. Studies on a nationwide scale show that especially middle-class and traditional milieus live in their own SFH (here marked with red and green houses).

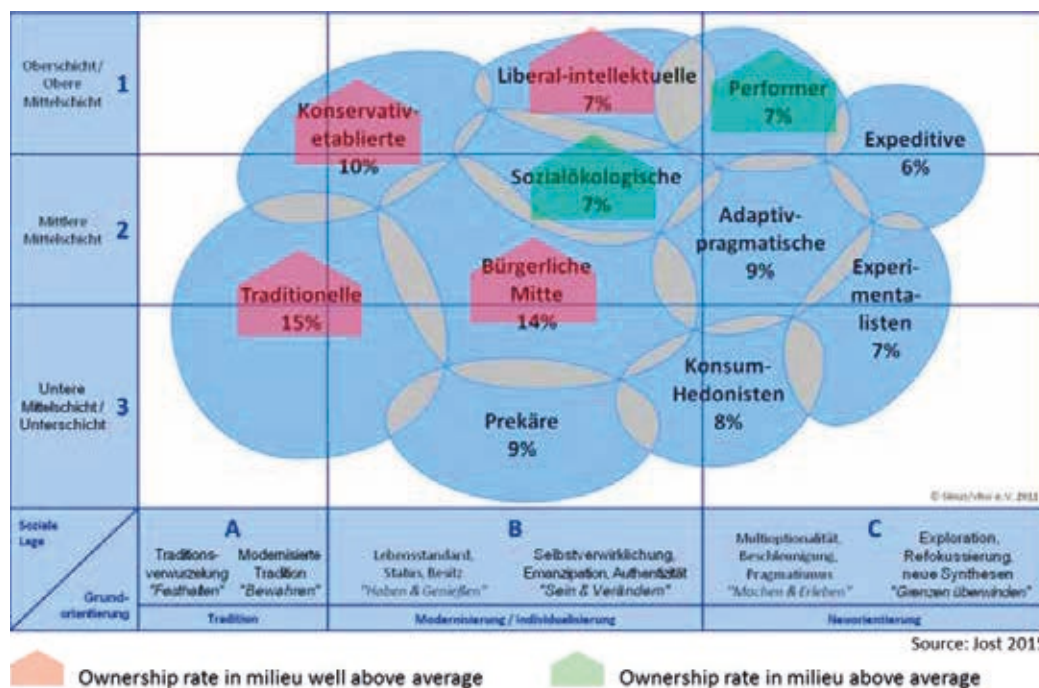


Figure 1:
Sinus-Milieus for Germany
2011 with focus on Single
Family Homeownership,
Jost 2014.

Taking a closer look at the home owning milieus, the differentiation by municipal size reveals a clear distinction among the milieus. The home owning members of "middle-class", "traditional" and "precarious" milieus live disproportionately often in small, peripheral mainly rural municipalities with up to 5.000 inhabitants. The home owning members of "conservative established", "performer", "adaptive-pragmatic" and "hedonistic-consumer" milieus live disproportionately often in small-towns with 5.000 to 20.000 inhabitants (Jost 2015).

The home owning milieus also show differences with regard to net-income. Compared to the other home owners, the net-incomes of "traditional" and "precarious" milieus are well below average. The home owners of the "middle-class" milieu show a slightly lower-than-average net-income. With regard to age, the milieu segmentation shows a sharp distinction. In total, 40 percent of SFH-owners are older than 60 years. With 94 percent of the „traditional“, 56 percent of the „precarious“ and 45 percent of the „conservative-established“ SFH-owners who are older than 60 years, these milieus range far above average. 38 percent of the „middle-class“ SFH-owners are over 60 years old, which is almost average. On the other hand, the home owners of the other milieus are mostly far younger than 60 years (Jost 2015).

² The vhw is an association of municipalities, municipally owned companies as well as real estate companies or financial institutions. For further information see <http://www.vhw.de/>

³ Sinus is a market and social research institute especially known for their lifestyle or as they call it milieu segmentation. In Germany this segmentation gained a lot of acceptance from practitioners, from companies as well as from public institutions, from municipal to state level and plays a big roll in the real estate market. Though it is not without critique, especially due to their reticence on their methods and economic interests, work on lifestyle in Germany can't ignore the sinus milieu concept.

In Germany home ownership often is part of the individual pension planning. Therefore, especially the declining milieu of „traditional“ and „precarious“ SFH-owners with little money to invest in refurbishment measures, are more likely to rely on their houses as part of their pension planning (Jost 2015). Consequently some home owning milieus are more likely to be affected by demographic changes and the negative effects of reurbanization than others. Municipalities – especially smaller ones in rural areas with high rates of “traditional” and “precarious” homeowners – will face new challenges due to this nexus of housing, retirement planning and care work. Typically, the more traditional lifestyles that are associated with SFH are declining, the younger lifestyle groups become more relevant as potential user groups and they have different housing preferences.

Finally, some preliminary insights and considerations about emerging new user groups in the SFH segment derived from our literature-research. This part of the paper is to be understood as a work in progress. Currently, literature provides only little statistical evidence, yet we expect that our upcoming qualitative research in this area will provide deeper in-sights and a basis for a Proto-SFH-User-Typology that reflects these new user groups.

As a first group we can identify younger precarious milieus, households with lower in-come. For them, home ownership becomes accessible for example in structurally weak regions and/or dwellings with low overall or ecological standards capitalizing on their own craftsmanship. Statistics show that some of the home owners from the precarious milieu already live in those niche product houses (Jost 2015).

Another potential user group consists of foreigners and German citizens with migration-background. A majority of foreigners only starts to generate property once their legal status is finalized⁴. An average immigrant lives under poorer housing conditions. However, depending on the economic capabilities as well as differing lifestyle segments, significant differences are discernible (Beck/Perry 2007). From a qualitative research on the housing biographies of “Gastarbeiter” from Turkey we can gain more insight into the matter (Günes 2007). The first generation lived in apartments with an overall standard well below average. The second generation grew up in those homes and started generating property in their adult life within the SFH and MDU segment (Günes 2007). Especially immigrants and citizens with migration background coming from „ambitioned“ and „middle-class“ milieus with a higher in-come, are likely to generate more property in the future (Beck/Perry 2007).

Other emerging new user groups can be characterized by their housing arrangement. We describe collective housing referring to the research done in the MDU segment. Collective housing is described as a comparative closeness of the inhabitants on the basis of negotiated claims and mutual assistance. Typical for those living arrangements are deliberate decision-making process regarding the aspects of collective living, division of household labor and care work as well as principals of solidarity (BBSR 2014: 17).

In this regard, we can focus on a collective housing arrangement in a single SFH. The Single family home was never a housing concept just for single families, even though the name suggests otherwise. Persons participating in shared housing concepts like the renowned “Studenten WG” (students’ living community) occasionally appear as renters or even as owners in the SFH-segment. And other collective housing arrangements have already become reality in SFH: Senior citizen living communities, intergenerational housing with elective affinities and joint housing of small families or single parents. Apart from some case studies, there is little scientific research available on user groups living in these collective, cooperative and/or solidary housing arrangements in the SFH.

Regarding our last potential new user group which we identified from the literature research, the upcoming qualitative research has to show whether persons living in intra-neighborhood collective

⁴ For example permission for permanent residence in EU, citizenship by naturalization as well as on the other side the individual process of accepting Germany as their home.

housing arrangements can be described as a more or less homogeneous group or whether this concept should rather be regarded as a potential coping strategy. The idea of collective housing arrangements on a neighborhood level is derived from extended collective housing concepts in the MDU segment. New collective arrangements in SFH neighborhoods can profit from those kinds of projects, transferring collective housing concepts from the MDU segment to SFH areas, from altitude to longitude. Some community oriented cooperative concepts were developed and established in SFH neighborhoods in the last few years (e.g. county of Germersheim; the initiative “Wir sind Dorf” (We are village); transition town concepts).

Summing up, we present some conclusions from our desk research. (1) Reurbanization in the age cohort 30 to 45 constitutes a shift in area preferences towards more central areas. Whether those users request SFH or MDU still needs to be explored. (2) The re-migration of the empty-nesters and woopies to the nearby cities remains a discursive phenomenon with little statistical evidence so far. (3) The traditional milieu is shrinking for demographic reasons. Since they own a big proportion of the houses in small, rural municipalities this might create a mismatch in supply and demand, because other milieus show different housing preferences. (4) Foreigners and citizens with migration-background can be identified as new user groups. Here, some milieus are especially keen on generating property. However, for most of them SFH ownership only becomes an option, when their legal status is finalized. (5) Emerging new collective housing concepts in the MDU provide a wide range of innovations, which might be transferred to SFH neighborhoods.

In the next stage, these first insights on qualitative changes of the structure of SFH user groups, will be further be refined to develop a preliminary prototypology of SFH users providing a basis for further empirical explorations.

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Survey Results – Pressures on detached and semidetached Housing Areas and Measures to deal with them

Andrea Berndgen-Kaiser, Dr. Tine Köhler

The ILS presents the findings of a survey of German municipalities carried out from July to September 2015. The survey should evaluate the possibilities and measures of municipalities to deal with depopulation and should give a first hint for triggers for actions.

The survey was supported by the German Association of Cities (Deutscher Städtetag) and the German Association of Towns and Municipalities (Deutscher Städte- und Gemeindebund). It was an online survey by which we queried 1,550 municipalities. According to the instructions of the German Association of Towns and Municipalities the ILS could solely survey municipalities with more than 10,000 inhabitants, representing approx. 14% of all German municipalities. However, the most affected municipalities are small ones with less than 10,000 inhabitants. Unfortunately, they couldn't be questioned. This has to be kept in mind when regarding the following results.

There were great differences in the size of municipalities in the different federal states. For example there are 2,306 municipalities in Rhineland Palatinate (Rheinland-Pfalz), but only 43 (2%) with more than 10,000 inhabitants. In North Rhine-Westphalia (Nordrhein-Westfalen) we have only 396 municipalities, 339 (86 %) of which have more than 10,000 inhabitants. The response rate was 26%.

Most of the federal states with decreasing population in our survey are located in the Eastern part of Germany and in North Rhine-Westphalia. The respondent federal states with growing population are situated in the South of Germany and in the North (Schleswig-Holstein). The five states with the highest population decrease are Saarland, Thuringia, Saxony-Anhalt, Saxony, North Rhine-Westphalia (in order of concernment).

On the district level one third of the districts show a decreasing population, 13% stagnation. In only one quarter of the districts the population is increasing.

The future employment development is assessed quite positively – mostly growing or stagnating, particularly in municipalities with partly urban structure. Predominantly urban municipalities vote the same share for growing employment and for stagnant employment. But even in rural municipalities employment is mainly judged as growing or stagnant.

The municipalities were asked whether they judge measures against stagnation and shrinkage as necessary. Nearly 90% assessed them as necessary. 70% have already taken action against shrinkage or are preparing them. 14% cannot take action for lack of funds. Only 16% don't see any required action, because they are growing.

Asked about need for action concerning infrastructure the most important facilities named are public transport, shopping facilities, medical doctors, retirement centers and nursing homes.

Regarding the shrinking municipalities it is remarkable that still many of them carry out new designation of building land in order to generate an influx of new inhabitants. This strategy may also be described as „building against vacancy“, but raises vacancies in existing neighborhoods and causes high cost burdens for the municipalities. On the other side just as many municipalities do not designate new building land, but practice qualified brownfield development.

Only one quarter of the participating municipalities expects changes regarding detached and semidetached housing areas, more than a third cannot yet assess it.

In the survey qualifying measures to apply in detached and semidetached housing areas have been suggested. The participating municipalities assessed as the most reasonable measures the creation of elderly-friendly housing and a stock-oriented settlement development. The most often already applied

measures are the barrier-free design of public space, followed by the stimulation of demand through empty-site land registers.

The ILS has encouraged municipalities in the survey to get in touch as a case study and has chosen the following municipalities with different sizes and located in different states, but all declining: Ibbenbüren in North Rhine Westphalia, Neustadt am Rübenberge and Clausthal-Zellerfeld in Lower Saxony, Illingen and Saarbrücken in Saarland and Lohr am Main in Bavaria. The ILS will conduct guided interviews with municipal experts to become more familiar with the specific problems in the municipalities.

World Café Discussions

Participants at the first “Homes-uP” international workshop come from different disciplines, including urban planning, economy, architecture and social science. In order to initiate inter- and transdisciplinary dialogues concerning the main risks and potentials of single-family housing stock, we organised group discussions in a world café setting. This specific approach, which was developed by Brown and Isaacs, enables large groups to engage in discussions and share collective knowledge in an informal setting (Brown and Isaacs 2005) (Cassidy and Fox 2013) (Jorgenson and Steier 2013). According to Ruppert Winkel et. al., World Café is particularly suitable for integrating knowledge in early stages of transdisciplinary research (Ruppert-Winkel et al. 2014). In setting the World-Café discussions, we followed the seven design rules as prescribed by the World Café Community Foundation. These design rules are: (1) set the context, (2) create hospitable space, (3) explore questions that matter, (4) encourage everyone’s contribution, (5) connect diverse perspectives, (6) listen together for patterns and insights and (7) share collective discoveries (‘Design Principles’ 2016). At the planning stage, we defined three main topics to be discussed in World Café groups, all connected to the main theme: the future of single-family homes: identifying risks and potentials. The three main topics ie. World Café tables were:

- a. Between market and intervention (host and co-host: Andreas Blum and Oliver Lerbs)
- b. Phenomena and challenges (host and co-host: Milena Martinsen and Tine Köhler)
- c. Future risks and potentials (host and co-host: Maja Lorbek and Immanuel Stieß)

Procedure:

Each of the topic-groups was moderated by a host and a co-host. Before starting the World Café discussions, the principles of this approach were explained to participants. Then, the participants were asked to contribute to each of the three topics and pay a visit to each of the three tables. At each table, contributions of the first session were graphically recorded on the paper, participants of the second session added additional insights or questioned some of the statements by complementing to graphic recordings. Finally, participants of the third session ranked the insights and statements, by marking the highly relevant or highly contested statements on the paper. When the three session were finished, table hosts (in the absence of participants) discussed the results and prepared a presentation of each topic, which were then presented for all discussants. In the following, the World Café discussions are summarized, according to graphic recordings.

Phenomena and challenges

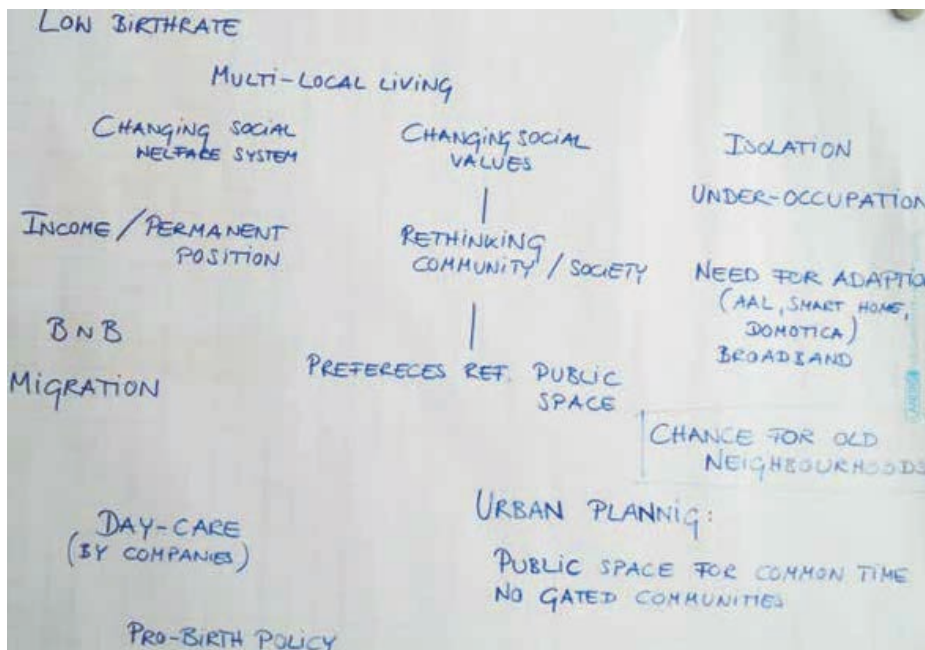
(host and co-host: Tine Köhler and Milena Martinsen)

Participants discussed different phenomena and challenges shaping the future of single family houses. Demographic change and new work and life models emerged as key issues for an expected decline of the traditionally main user group for single family houses. The increase of both the temporary employment accompanied by insecure incomes and the demand of individual flexibility in terms of residence (multi-local living) affect low birth rates and the dwelling models (ownership versus rent). These developments may cause significant vacancies and under-occupation in single family housing stocks especially in structurally weak regions. Facing a growing part of elder inhabitants, aspects like accessibility or housing-related services will become more relevant.

Against this background and the need of adaption the question arises how flexible the existing housing stock is and how single-family-dwellings can adapt to altering demands. Linked to this questions

participants discussed the divergence of single-family-dwellings since the potential adaption depends on building- and location-related issues. As an example was considered if the specific characteristics of single-family-house-settlements dating from the early postwar period offer more opportunities to urban-oriented user groups (due to their location close to the city centres but also with regard to the quality of public spaces) than later sub-urban areas which are typically characterised by maximum land utilisation to the disadvantage of public space.

In summary, the need of adaption in some cases seems to be a chance for development to the participants e.g. in terms of improving the public space for common time. However, they do not refer this development to planners and architects only, but to politics and (companies') policy also.



Between market and intervention

(host and co-host: Andreas Blum and Oliver Lerbs)

Market:

Participants pointed out, that SFH markets besides vacancy in some European regions also show supply shortages. For example for the UK housing supply in general was characterised as being difficult: Market stopped during crisis. Also developers seem to restrict supply to keep prices high; sort of monopoly power. For other markets (e.g. US) it is reported, that foreign investors are buying property unseen: For speculation and "mansionisation", i.e. tearing down smaller SFH and erecting considerably bigger ones ("McMansions")

Externalities in SFH markets can be a reason to justify policy intervention. Externalities arise because neighboring house owners do not coordinate their actions. Participants pointed out that externalities must not be negative, e.g. if vacant houses are privately redeveloped.

Intervention

In terms of intervention participants from Japan underlined the role of civil society driven intervention: e.g. Neighbourhood associations caring for vacant property.

Quite impressive examples are reported from Detroit: Remaining residents buy or just occupy neigh-

boring lots (“blotting”) for private or public uses (neighbourhood park, car parking, urban gardening ...). From an Interview on blotting in Detroit: Q: “So why put all this effort into land you don’t own?” A: “Cause we live next door to it”

To underline the social responsibility connected to ownership, furthermore taxation on vacancy was discussed, but also examples of public funding for vacancy demolition.

Some German municipalities have conceptual and funding programmes “Young buys Old” in place, trying to make property searching households engage in the (historic) building stock. Often such approaches are also accompanied by restricting land supply.

For Japan also resettlement of people into vacant housing is reported.

Participants from the US noted that municipalities have intervened by establishing so-called land banks to deal with the recent foreclosure crisis. Land banks are quasi-governmental entities that acquire, hold, and manage foreclosed or abandoned properties with the goal of maintaining or redeveloping vacant buildings, e.g. by waiving back property taxes or resolving and transferring property rights.



Future risks and potentials

(host and co-host: Maja Lorbek and Immanuel Stieß)

Participants in the first and second session identified a whole range of risks and potentials of single-family houses. Participants of the third session were asked to rank the potentials and risks. Affordability was identified as one the most important potential, while cost of technical and social infrastructures was classified as the factor with the highest risk potential. Declining house price create the potential of higher affordability for less affluent parts of the population. The cost of infrastructure affects municipalities, however, it is hard to downsize infrastructures.

The potential for housing refugees was led to some controversy. While some of the participants considered single-family homes as well suited as refugee housing, others questioned the assessment of this potential. Many under occupied or vacant single-family homes are located in suburban or even peripheral rural areas. This contradicts the strategy for housing refugees in central and urban areas in

order to foster integration and enable access to job market. Yet there are some interesting examples of refugee communities also in rural areas. The resilient and adaptable structure of single-family homes in comparison to apartments (e.g. for home office, mixed use, accommodating new kinds of social interaction) received high ranking as a potential. Crucial risks identified by participants included uncertainty of future (small scale demographic, economic etc.) developments, lack of long-term strategies in particular related to the maintenance of technical and social infrastructure. Spatial concentration of older people ("aging boomers") in single-family housing areas was highlighted as another risk. Car dependency of single-family homes and lack of walkability were acknowledged as further factors with risk potential, particularly for older inhabitants. Under occupation and vacancies in single-family homes, above all visible signs of neglect can lead to spillover effects in the non-housing building stock and overall decline of the area and region. Nevertheless, despite risk factors, participants emphasized several potentials, which can be activated in single-family housing. These include the potential for strong communities, the possibility of mixed use and subletting as well as the prospective for do-it-yourself and for re-enactment of local handicraft related to maintenance and refurbishment of single-family homes.

Overall, the discussions confirmed the well-known risks of under occupancy and vacancies in single-family homes. They also created new insights, highlighting the high potentials of the single-family housing stock, in particular related to the affordability and adaptability of single-family homes, which need to be further explored.

RISKS:

- not necessarily suitable for refugees
- car dependency
- * better integration of refugees in urban areas
- spillover effects from vacancies
- no investment & decline
- budget decrease for municipalities
- hard to sustain some infrastructures
- * maintenance of urban infrastructure
- vacancies in non-housing part
- visible signs of neglect
- symbolic dimension
- * CRAFTMANSHIP

POTENTIALS:

- stronger community
- DIY
- self-help
- informal economy
- the "internet cottage"?
- subletting
- forming
- existence of forming public organic & healthy lifestyle
- resilience / more adaptable than apartments
- impact of epidemics
- clustering
- rethink capacity
- Jobless people

FUTURE POTENTIALS & RISKS

Risks

- * specific locations (winners & losers)
- * low energetic standards (high costs for refurbishment)
- * contribution of technical infrastructure to sustainability
- * Aging boomers
- isolation of older people !!!
- Vacancies
- lack of long-term strategies
- * uncertainties
- lack of walkability & public transport
- lack of social infrastructure (e.g. day care, shops, library, etc.)
- Community: each person

Potentials

- * hosting refugees
- shrinking of space
- low density housing
- * better affordability
- * new kind of social network
- * new inhabitants
- * substance (allotted / community)
- stronger neighbourhood / community
- mixed use
- LIVEWORK
- New living models
- * smaller support
- renewal source of small towns / villages, etc. (social operation)
- BUYING ASSET
- BUYING: community
- spotting buying or selling

References:

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- Jorgenson, J., and F. Steier. 2013. 'Frames, Framing, and Designed Conversational Processes: Lessons From the World Cafe.' *The Journal of Applied Behavioral Science* 49 (3): 388–405. doi:10.1177/0021886313484511.
- Ruppert-Winkel, Chantal, Jürgen Hauber, Järmo Stablo, and Michael Kress. 2014. 'The World Café as an Instrument for Integration in Transdisciplinary Sustainability Research.' *GAIA - Ecological Perspectives for Science and Society* 23 (3): 243–52. doi:10.14512/gaia.23.3.8.

Program

Project Homes-uP – Single Family Homes under Pressure?
<http://homes-up.ioer.eu>



International meeting Dresden 2015 23rd and 24th November 2015 IOER Dresden, Weberplatz 1, 01217 Dresden

PROGRAM

Sunday, 22 November 2015

19:00 **Pre-Conference-Dinner** at "Kurfürstenschänke", Dresden, An der Frauenkirche 13

Monday, 23 November 2015 at IOER Dresden:

09:00 – 09:30 **Welcome** (IOER Director Prof. Dr. Dr. h.c. Bernhard Müller)

- Project Homes-uP presentation: Concept and objectives (Prof. Clemens Deilmann)

09:30 – 10:55 **Presentations international research - Session 1: UK and Italy¹**

Chair: Andreas Blum (IOER)

- Donald Houston: Regional demographic shifts and housing in the United Kingdom and Scotland
- Darja Reuschke: Changes in the use of homes in the UK
- Chiara Merlini, Federico Zanfi: Framing the Family-House Stock in Contemporary Italy. Construction, Situations, Evolution Patterns

10:55 – 11:05 **Coffee break (10 min.)**

11:05 – 12:30 **Presentations international research - Session 2: USA and Netherlands**

Chair: Oliver Lerbs (ZEW)

- Bernadette Hanlon: Changing Suburbs and the Single-Family Home in a U.S. context
- Roland Füss: The US Single-Family Housing Market: Drivers and Challenges with a Special Focus on Local Differences in House Price Inflation
- Theo de Bruijn, Huibert A. Haccou: Emerging trends; their demographic origins and their effects on housing in the Netherlands

12:30 – 13:15 **Lunch**

13:15 – 14:40 **Presentations international research - Session 3: Japan**

Chair: Clemens Deilmann (IOER)

- Akito Murayama: The Recent Trend of Single-Family Residential Areas in the Shrinking Cities in Japan
- Hiroki Tanikawa: Weight of Cities. Material Stock and Flow Analysis based on spatial database overtime
- Hiroyuki Shimizu: Population decline and single house management in Japan

¹ All authors in alphabetical order, presenting authors underlined.

Project Homes-uP – Single Family Homes under Pressure?<http://homes-up.ioer.eu>**14:40 – 16:05 Presentations international research - Session 4: Spain and Germany (85 min.)***Chair: Andrea Berndgen-Kaiser (ILS)*

Monserat Pareja Eastaway: Trajectories, dimension and current role of single-family housing in Spain

- Josefine Korbel, Christina Simon-Philipp: Single-family-housing-areas from the 1950s - 1970s – strategies und projects for sustainable development
- Wolfgang Maennig: Price decreases of single-family houses in Germany: structure or location - or no more topical?

16:05 – 16:15 Coffee break**16:15 – 16:45 Preliminary comparative diagnosis**

- Discussion

ca. 16:45 End of meeting, day 1**19:00 Conference dinner, Carolaschlösschen, Dresden, Querallee 7 (Großer Garten park)**

Project Homes-uP – Single Family Homes under Pressure?<http://homes-up.ioer.eu>**Tuesday 24 November 2015****09.00 - 09:15 Welcome and summary first day** (Prof. Clemens Deilmann)**09.15 - 10.30 Presentations international research - Session 5: Preliminary research results***Chair: Michael Schröder**Each contribution: 15 min. presentation, 15 min. discussion*Topics: market developments and single-family homes

- Oliver Lerbs, Markus Teske (ZEW): Residential vacancies and the price formation of single-family homes
- Carolin Fritzsche, Lars Vandrei (ifo Dresden): The German Land Transfer Tax: Liquidity, Timing and Tax Incidence on the Market for Single-Family Homes

10:30 – 10:45 Coffee break**10:45 – 12.00 Presentations international research - Session 6: Preliminary research results***Chair: Andreas Blum**Each contribution: 15 min. presentation, 15 min. discussion*Topics: Building stock and user typologies

- Clemens Deilmann, Maja Lorbek, Milena Martinsen (IOER): Single-family housing stock as a material and cultural resource
- Esther Schietinger, Immanuel Stieß (ISOE): Single-family housing: pluralization of lifestyles, shifting preferences and emerging new user groups
- Andrea Berndgen-Kaiser, Tine Köhler (ILS): Survey results – pressures on single-family housing areas and measures to deal with them

12.00 - 13.00 Lunch**13:00 - 14:45 Group discussions - Group discussions World Café (3*20 minutes)**Three Topics (all related to single-family homes, to be discussed from an interdisciplinary perspective):

13:00 - 14:00 Group discussions

- Between market and intervention (Moderation: Andreas Blum und Oliver Lerbs)
- Phenomena and challenges (Milena Martinsen und Tine Köhler)
- Future risks and potentials (Maja Lorbek und Immanuel Stieß)

14:00 - 14:15 Moderators preparing presentations, other participants networking or taking a break

14:15 - 14:45 Presentation of group discussions, each topic 5 min. presentation, 5 min. joint discussion


14:45 - 15:00 Coffee break**15:00 - 16:00 Final discussion preliminary results and state of research**

Summary

Future meetings, further collaboration

16:00 End of international workshop in Dresden





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