

ePub^{WU} Institutional Repository

Richard Lang and Andreas Novy

Housing Cooperatives and Social Capital: The Case of Vienna

Paper

Original Citation:

Lang, Richard and Novy, Andreas (2011) Housing Cooperatives and Social Capital: The Case of Vienna. *SRE - Discussion Papers*, 2011/02. WU Vienna University of Economics and Business, Vienna.

This version is available at: <http://epub.wu.ac.at/3207/>

Available in ePub^{WU}: September 2011

ePub^{WU}, the institutional repository of the WU Vienna University of Economics and Business, is provided by the University Library and the IT-Services. The aim is to enable open access to the scholarly output of the WU.

Richard Lang, Andreas Novy

Housing Cooperatives and Social Capital: The
Case of Vienna

SRE-Discussion 2011/02

2011

Housing Cooperatives and Social Capital: The Case of Vienna

Richard Lang¹ , Andreas Novy²

Abstract

Drawing on the case of Vienna, the article examines the role of third sector housing for social cohesion in the city. With the joint examination of an organisational and an institutional level of housing governance, the authors apply an interdisciplinary, multi-level research approach which aims at contributing to a comprehensive understanding of social cohesion as a contextualised phenomenon which requires place-based as well as structural (multi-level) solutions. Using a large-scale household survey and interviews with key informants, the analysis shows an ambiguous role housing cooperatives play for social cohesion:

With the practice of “theme-oriented housing estates”, non-profit housing returns to the traditional cooperative principle of *Gemeinschaft*. However, community cooperatives rather promote homogenous membership and thus, encompass the danger to establish cohesive islands that are cut off from the rest of the city. Furthermore, given the solidarity-based housing regime of Vienna, fostering bonding social capital on the neighbourhood level, might anyway just be an additional safeguarding mechanism for social cohesion.

More important is the direct link between the micro-level of residents and the macro-level of urban housing policy. In this respect, cooperative housing represents a crucial intermediate level that strengthens the linking social capital of residents and provides opportunity structures for citizen participation. However, the increasing adoption of a corporate management orientation leads to a hollowing out of the cooperative principle of democratic member participation, reducing it to an informal and non-binding substitute.

Thus, it is in the responsibility of both managements and residents to revitalise the existing democratic governance structures of cooperative housing before they will be completely dismantled by market liberalization and privatization. In contrast to other European cities, third sector housing in Vienna has the potential to give residents a voice beyond the neighbourhood and the field of housing.

Keywords

Social Housing, Third Sector Housing, Housing Cooperatives, Social Cohesion, Social Capital, Governance

¹ RiCC – Research Institute for Co-operation and Co-operatives, Vienna University of Economics and Business, Augasse 2-6, 1090 Vienna, Austria. Email: Richard.Lang@wu.ac.at

² RUW - Institute for the Environment and Regional Development, Vienna University of Economics and Business, Nordbergstrasse 15, 1090 Vienna, Austria. Email: Andreas.Novy@wu.ac.at

Introduction

Although they are often only covering a niche segment, social economy initiatives in the field of housing are considered increasingly important for social cohesion in European cities. First, they fill the gap left by the withdrawal of the state in providing affordable housing. Second, newly established, small cooperatives are associated with participatory planning approaches and a bottom-up culture of collective action (Cameron et al., 2009; Somerville, 2007; Forrest and Kearns, 2001). In contrast to the anonymous member relations in professional housing cooperatives, community cooperatives strongly build on *Gemeinschaft* conditions, meaning strong social bonds and a shared place identity among their members (Nilsson and Hendrikse, 2011; Lang and Roessler, forthcoming). These cooperative initiatives can thus be seen as major contributors to the production of cohesive urban neighbourhoods (Kennett and Forrest, 2006; Blokland, 2003).

Nevertheless, recent empirical research has come to contradictory results about the role of housing cooperatives as community builders in urban contexts (Schulte-Eckel, 2009; Flint and Kearns, 2006; König, 2004). Flint and Kearns (2006) suggest that contextualised research approaches are needed to deliver a more realistic picture of the capacity of third sector housing organisations. They point to the importance of embedding housing organisations in their respective institutional context in order to enhance our understanding of their potential for fostering social cohesion.

In contributing to fill this research gap, this article aims at answering the following research question: *How do housing cooperatives contribute to social cohesion?*

In order to answer our research question, we examine the governance capacity of third sector housing by applying a multi-level research approach and by mobilising the concept of social capital in its multiple meanings. Furthermore, the article draws on empirical evidence from Vienna where the non-profit housing sector has emerged as the main provider of new social

housing in recent years. In Vienna, 60 per cent of inhabitants live in subsidized apartments of which about 136,000 are owned and managed by cooperatives, and 220,000 by the municipality (Förster, 2005). Given this strategic role of third sector housing for urban development, it is argued that the Viennese case can provide important lessons for the potential of cooperative housing organisations in fostering social cohesion.

In Vienna, similar to other European cities, the withdrawal of the municipality from a provider role, in building new social housing, into a steering role, of mainly allocating funds and subsidies, has moved the third housing sector into the spotlight. However, in contrast to the European mainstream, the Viennese model of cooperative housing has a rather broad focus, as it does not only target lower-income classes, but aims at providing affordable housing for the middle class too (Bauer, 2006). Nevertheless, in the political discourse on social cohesion in Vienna, social and non-profit housing often take a centre stage, as they are connected to themes such as contested multiculturalism, fragmented social networks and social polarisation.

We develop our argument in this article as follows: In a first step, we look at social cohesion in the context of the residential neighbourhood on which the urban policy debate is still focused. Here, we come across the key concept of social capital and discuss it in its multiple meanings. In the next step, we bring third sector housing into the debate and look at how cooperative governance is related to social capital on the neighbourhood level. To enhance our understanding of the governance capacity of non-profit housing organisations for social cohesion, we need to draw on analytical concepts that are context-sensitive, helping us to catch the institutional conditions in a specific place which are enabling residents to act and organise collectively (Lang and Roessler, forthcoming). Thus, within the framework of a multilevel analysis, cooperative housing organisations will be embedded within their institutional and historical context to unveil the role of social capital for their governance.

Furthermore, zooming into the organisational level, we analyse how this structural role of social capital is reflected in the relationships between management and residents, and among residents. Finally, based on the findings of our multi-level analysis, the paper derives a set of conclusions on the contribution that third sector housing makes to social cohesion taking into account the constraints and opportunities arising from the institutional context.

Social Cohesion in the Neighbourhood Context: The Role of Social Capital

The new importance housing cooperatives are gaining in the debate on social cohesion is related to urban development policies which have seen similar patterns across Europe in recent years. In many European cities, the neighbourhood has become the preferred scale for policy interventions to foster social cohesion (Moulaert et al., 2010; Atkinson and Carmichael, 2007). The goal is to initiate community building processes which are seen as both the cause for the crisis of social cohesion and the key for achieving social inclusion in the city.

Underlying these localised development approaches is an understanding of social cohesion that primarily focuses on residents' social networks and their potential benefits for the individual and the community as a whole (Morrison, 2003). According to Forrest and Kearns (2001: 2130) "it is these residentially based networks which perform an important function in the routines of everyday life and these routines are arguably the basic buildingblocks of social cohesion — through them we learn tolerance, cooperation and acquire a sense of social order and belonging." Against this background, the concept of social capital has emerged as a key notion in both the policy and the academic discourse on social cohesion (Flint and Kearns, 2006; Mayer, 2003; Forrest and Kearns, 2001).

Residents' social networks are grouped into three types of social capital, according to horizontal and vertical relationships between individuals. On the horizontal level, an important distinction can be made between bonding and bridging social capital. Whereas

bonding social capital connects residents with similar socio-demographic characteristics, *bridging social capital* concerns the connections of residents with different social class and ethnic backgrounds (Middleton et al., 2005; Putnam, 2000; Gittell and Vidal, 1998). The latter concept has provided a powerful argument in favour of social mix policies for neighbourhood estates.

While the concept of bridging social capital already takes into account power aspects in residential networks, it ignores that local communities are unable to realise substantial benefits from social capital without having access to the places where key decisions are made (OECD, 2001; Woolcock, 2001). Thus, the concept of *linking social capital* has been introduced into the policy discourse, referring to the vertical ties between residents and people in positions of influence and power in different societal fields.

Similar to other European cities, social capital has become an influential concept within social housing policy in Vienna (Wohnfonds Wien, 2009). In order to contribute to social sustainability in housing neighbourhoods, landlords are encouraged to adopt a more active role in fostering residents' social networks, thus, going beyond core housing management activities. A closer look at the policy recommendations, however, reveals rather diverse and sometimes also contradictory goals related to the different types of social capital, such as identity and community building, but also the strife for a social mix, and the focus on tenant participation in subsidized housing estates (Wohnfonds Wien, 2009: 1). This ultimately leads to the question of the right balance between bonding and bridging capital in housing neighbourhoods.

Thus, while social capital has become a powerful concept in Vienna's social housing policy, at the same time, it highlights the character of social cohesion as a problematic, pointing to the opposite aspirations of belonging and differentiation in society (Novy, 2011). What is the contribution that housing cooperatives can make here?

Cooperative Housing Organisations and Social Capital: Between *Gemeinschaft* and *Gesellschaft*

In the literature, cooperative housing organisations are actually given the potential to contribute to all three forms of social capital: bonding, bridging and linking. Cooperative governance is seen as a potential advantage over other types of housing provision when it comes to community building, social inclusion and even resident participation (Pestoff 2009; Gonzales, 2007; Somerville, 2007; Reed and Stanley, 2005).

While approaches within New Institutional Economics (Williamson, 2005; Bonus, 1986) present cooperative transaction relationships in a socially disembodied perspective (Moulaert and Mehmood, 2009), a range of authors have highlighted the distinct normative nature of cooperative governance, referring to concepts such as trust, reciprocity or social capital (e.g. Valentinov 2004; Adler 2001; Roessl 1996). Following this argumentation, we can define housing cooperatives in realistic but still abstract terms, as being both at the same time, membership organisations and business firms. The membership organisation emphasises *Gemeinschaft* attributes, meaning resident relations characterized by trust and closeness, or in other words the existence of *bonding and linking social capital* within the organisation. In contrast, *Gesellschaft* refers to anonymous member interactions and weaker ties between individuals which can be associated with the concept of *bridging social capital*. As the concepts of *Gemeinschaft* and *Gesellschaft* are opposing each other, there is an inherent conflict in cooperative organisations between member organisation and the cooperative business enterprise (Nilsson and Hendrikse, 2011; Tönnies, 1963; Draheim, 1952).

Nevertheless, each cooperative governance model implies a different combination of *Gemeinschaft* and *Gesellschaft* attributes, and thus, also a specific articulation of the different forms of social capital (Nilsson and Hendrikse, 2011; Roessl et al., 2007). In the UK, housing cooperatives are often associated with community-based, participatory planning approaches

and a bottom-up culture of collective action, suggesting that *Gemeinschaft* attributes prevail in these organisations (Roberts, 2008; Somerville, 2007). In contrast, the third housing sector in Vienna is dominated by professional, board-managed cooperatives, suggesting that *Gesellschaft* attributes predominate.

These differences in the cooperative governance culture can only be explained by referring to the institutional context of cooperative housing. The concrete combination of *Gemeinschaft* and *Gesellschaft* attributes in cooperative housing organisations is influenced by the historical trajectories of non-profit housing institutions in a specific place (Moulaert and Ailenei, 2005; Moulaert and Nussbaumer, 2005). While in Liverpool, community cooperatives such as the *Eldonians* fill the gap of the missing state in a liberal housing regime, in Vienna's corporatist housing regime, professional cooperatives have become the main vehicle for state-led social housing provision (Förster, 2005). Thus, the institutional context favours certain types of housing cooperatives and thus, also influences their potential for social capital building.

This insight leads us to a multi-level analysis of cooperative governance, integrating a territorial, institutional perspective with an organisational view. Cooperative housing organisations evolve in a historically and geographically situated way and in return also shape the institutional framework through their practices. Furthermore, the intermediary level of organisational practices connects the micro-practices of residents to the institutional context of third sector housing (Moulaert and Mehmood, 2009; Healey, 2004, DiMaggio and Powell, 1991; Giddens, 1984). To enhance our understanding of housing cooperatives' capacity for building social capital, in the following section, we analyse the institutional conditions for third sector housing in Vienna which are enabling residents to act and organise collectively.

The Institutional Context of Third Sector Housing in Vienna: Organisational Fields and Governance Cultures

The combination of *Gemeinschaft* and *Gesellschaft* attributes in today's housing cooperatives, and thus also the structural role of social capital in these organisations, cannot be understood without considering the historical and institutional context of social housing in Vienna.

Table 1 shows a periodisation of social housing policy in Vienna and the identification of conjunctural moments which refer to shifts in the power relations between the local government and the cooperative housing movement (Jessop, 2008). These conjunctural moments have shaped the governance culture of the third housing sector in Vienna with certain institutional elements implemented about 100 years ago still persisting (Bauer, 2006).

Table 1. Periodisation of social housing policy in Vienna and corresponding governance culture of the third housing sector

Period	Red Vienna (1918-1933)	State-centred corporatism (1945-2000)	Liberal governance (since 2000)
Conjunctural moments	<ul style="list-style-type: none"> • Grassroot housing reform • Municipalization of the settlers' movement 	<ul style="list-style-type: none"> • Nationalisation of housing regulation 	<ul style="list-style-type: none"> • Revision/Liberalisation of national housing legislation
Governance culture of the third housing sector	<ul style="list-style-type: none"> • <i>Gemeinschaft</i> conditions • social rationale of governance: reciprocity and participation • homogeneous and value-based membership 	<ul style="list-style-type: none"> • <i>Gesellschaft</i> conditions • bureaucratic rationale of governance: professionalism and hierarchical authority • larger and more diversified membership base 	<ul style="list-style-type: none"> • <i>Gesellschaft</i> conditions • market rationale of governance: efficiency and customer management • heterogeneous and instrumental membership
Dominant type of non-profit housing organisation	<ul style="list-style-type: none"> • Community cooperatives 	<ul style="list-style-type: none"> • Professional cooperatives 	<ul style="list-style-type: none"> • Limited-profit corporations

The analysis identifies three key phases in the evolution of the third housing sector. Each of these can be associated with an organisational field (DiMaggio and Powell, 1983) and a respective governance culture of non-profit housing:

The community cooperatives of Red Vienna

The first non-profit housing organisations in Vienna were founded around 1870. Benefitting from early welfare legislation, there was a first wave of cooperative housing activity between 1908 and 1912. Nevertheless, their impact was very marginal as they could not substantially change the devastating housing conditions of poor and working class people in Vienna (Ludl 1999). It was only after World War I, that cooperative housing, based on the principles of self-help and collective owner, became a powerful social force. It has its roots in the settler's movement which was tackling the urgent housing problem after the dissolution of the Austro-Hungarian Empire in 1918 and the following deep economic crisis. Within a revolutionary atmosphere, the settlers organised a series of mass demonstration. Under this pressure, the local government gave in and offered the purchase and development of land for cooperative housing settlements (Förster, 2005). From 1918 to 1923 a considerable number of cooperative settlements were built in this way, with settlers contributing to 55 per cent of new public housing in 1921 (Novy, 1993). These early cooperative housing estates were not just settlements of individual single family houses but represented a unique space for developing and strengthening a socio-cultural *Gemeinschaft* of settlers. Conceptualised as an architectural antithesis to the working class 'palaces' of Red Vienna, to a certain extent, they reflect the ideas of the cooperative Garden cities movement at the turn of the 19th century in the UK and Germany (Ludl 1999). Social and architectural innovations were combined to build 'small villages' with numerous communal facilities. However, from the mid 1920s on, step by step, the cooperative settler movement lost its dynamic and the internal struggle within social

democracy. It was finally incorporated into 'Red Vienna', a successful bureaucratic model of state-led reformism and top-down housing provision (Novy et al., 2001; Novy, 1993).¹

While some of these traditional community cooperatives have meanwhile transformed into larger professional cooperatives, there is still a small group of these member-based organisations to be found in Vienna. Their housing estates are typically situated at the peripheral districts of the city. Not least because of their typical terrace house dwellings, these estates have ensured a distinct community character and identity. The average length of tenancies is relatively long with houses often handed on to the next generation within the family.

State-centred corporatism and professional housing cooperatives

The way in which the governance culture of housing cooperatives develops, is partly determined by the way in which supervision and control of the third sector is organised (Boelhouwer, 1999). After 1945, cooperative housing was more professionalised and primarily regulated at the national level. Thus, the newly established Austrian Federation of Limited-Profit Housing Associations became the umbrella organisation and main regulatory body for both cooperative housing organisations and limited-profit housing companies. At the same time, the local government slowly reduced its activity as the main provider of social housing in Vienna and moved into a steering role, focusing on allocating central government funding (Förster, 2005; Ludl, 1999). Together with the municipally-owned housing stock, cooperatives emerged as the major allocation tool for public promotion of social housing. Both the ruling Social Democrats and the Conservative Party – coalition partners in the central government – were associated with a range of professional housing cooperatives. As a consequence, public subsidies were also traded for political support and large parts of the cooperative housing sector were embedded into a corporatist form of clientelism (Matznetter, 2002; Novy et al. 2001; Novy 1993).

Cooperative housing as a vehicle for state-led housing provision fundamentally transformed the governance culture of the third sector. As a consequence, cooperatives took on more *Gesellschaft* attributes while *Gemeinschaft* norms were slowly squeezed out. With an expanding membership base and organisations became more heterogeneous but also grew larger and thus, took on bureaucracy attributes when administrative authority replaced self-help organisation. Furthermore, in professional, board-managed housing cooperatives, there is a clear division between the member organisation and the business firm (Mändle, 2001). Over the decades, professional cooperatives have also broadened their scope of activities to managing different types of housing estates and tenures. The increasing introduction of buy options for subsidized rental apartments weakens the cooperative principle of collective ownership. Furthermore, professional cooperatives also engage in non-member focused activities, such as developing and managing public infrastructure.

Towards liberal governance and housing corporations

The corporatist housing regime was basically maintained until the year 2000 when the central government became a right-conservative one. While main parts of housing regulation in Austria were again decentralized to the regional level since the 1980s (Reinprecht, 2007), cooperative housing was still subject to national legislation and only in the second place regulated by provincial governments (Förster, 2005). As the incoming central government launched a major neoliberal revision of housing regulation, it created better access for non-profit housing organisation to private capital markets (Eckhardt, 2006; Novy et al., 2001). At the same time, public subsidies for housing were drastically reduced, a process which had already started in the mid-1990s (Matznetter, 2002). The deregulation efforts made it also more profitable for private investors to enter the Viennese housing market, thus changing the competitive environment for housing cooperatives (Reinprecht, 2007; Eckhardt, 2006). Furthermore, direct production of housing by the municipality of Vienna finally lost

importance compared to non-profit housing (Novy et al., 2001). In Vienna, the shift towards liberal governance in urban development does not only refer to neoliberal elements in economic policies but at the same time to a stronger emphasis on residents' personal freedom. While the central government failed with a complete neo-liberal overhaul of the third housing sector, some companies lost their limited-profit status and a market rationale of governance slowly gained ground, reflecting a wider European trend in social housing (Czischke, 2009; Priemus et al., 1999). The bureaucratic rationale of governance, which dominated after 1945, was consolidated during the 1990s and 2000s ongoing concentration processes within the third sector, leading to the formation of affiliated groups and strategic alliances. Thus, the total number of non-profit housing associations, especially of those legally incorporated as cooperatives, was reduced, while at the same time, the group of limited-profit companies became more dominant within the sector. These are usually larger corporations with a number of subsidiaries of different legal form. Especially, since the liberalisation of national housing regulation in 2001, these limited-profit housing corporations increasingly engage in commercial housing activities besides subsidized housing (Eckhardt, 2006; Förster, 2005). Thus, there is an ongoing process of 'economization' of housing cooperatives in Vienna, associated not only with stronger hierarchical governance but also with an increasing corporate management orientation, scaling back members' interests so that cooperatives gradually resemble typical corporate organisations.

The relevance of social capital for different organisational fields

The analysis on the institutional level shows that the cooperative governance culture of non-profit housing in Vienna is characterised by a move away from *Gemeinschaft* to *Gesellschaft*. In a first step, the incorporation of housing cooperatives into the public housing system in Vienna has led to an emphasis on hierarchical governance elements. In a second step, the liberalisation of national housing legislation and a changing competitive environment caused

a further economisation of cooperative governance. What does this mean for the structural role of social capital in today's non-profit housing sector?

Social capital as the main resource of community cooperatives generally loses its importance in the *Gesellschaft* type of cooperatives where it is replaced by public funding and market revenues. A members-based housing cooperative mobilises its resources mainly through the coordination mechanism of reciprocity between its members. However, when cooperative housing associations become more similar to public and for-profit housing organisations, bottom-up collective action is replaced by state-centred redistribution and market-based transaction (Enjolras, 2009; Valentinov, 2004; Polanyi, 1957). Thus, we would also assume that the internal logic of professional housing cooperatives and limited-profit housing corporations does not require them to invest into the social capital of their members.

Nevertheless, the analysis of the institutional context can also be read differently: First, public promotion of third sector housing requires non-profit housing organisations to actively contribute to wider housing policy goals in Vienna, such as the social sustainability of neighbourhoods, and thus also to social capital building among residents (Wohnfonds Wien, 2009). Second, an increasing corporate management orientation in cooperative housing leads to non-institutionalised social capital building in the form of customer relationship management (Priemus et al., 1999). Third, as the member base gets more heterogeneous in professional housing organisations, the potential for creating bridging social capital in housing neighbourhoods increases, compared to community cooperatives which are typically based on the bonding social capital of a smaller, homogenous member base.

Nevertheless, access of migrants to third sector housing is still hindered, mainly because of informal barriers. Thus, it seems that non-profit housing organisations contribute to socially mixed housing estates but not necessarily to more ethnic mixing. As empirical evidence shows, migrants are still spatially segregated and concentrated in the low quality private

housing market in Vienna (Wukovitsch, 2009; Giffinger, 1998). Only recently, there have been cooperative housing projects explicitly focusing on migrant integration (Ludl, 2003).

The next section will look at how this ambivalence plays out in current governance practices of non-profit housing organisations in Vienna. Therefore, we contrast the findings from the historical institutional analysis with empirical evidence from a social capital study on the organisational level.

Empirical Research Design and Methodology

The empirical research reported here was conducted between 2010 and 2011. It consisted of a number of stages: The analysis of the institutional context has led to the identification of three organisational fields within Vienna's third housing sector: (1) the remaining niche of community-based cooperatives², (2) the shrinking segment of professional cooperatives, and (3) the group of limited-profit housing companies. Each organisational field reflects a distinct governance culture which has been shaped by the respective institutional relations of social housing.

From the 56 non-profit housing organisations active in Vienna, 29 are cooperatives and 27 are limited-profit corporations (GBV, 2010). From each organisational field, a random sample of 2 or 3 housing organisations were selected for further analysis. Qualitative interviews were conducted with executive board members and management representatives of the selected housing organisations in order to analyse governance structures and practices, and their relation to social capital building among residents.

Furthermore, the management perspective was contrasted with the views of residents on neighbourhood social capital. Therefore, from the subsidized rented stock of each analysed organisation, a 'typical' housing estate³ was selected for a comprehensive household survey. Based on the qualitative interviews, these housing estates were identified as "neighbourhoods that work" without serious problems (Middleton et al., 2005: 1721f.). In this respect, the

housing managements' view was later supported by the tenants' perspective, retrieved from our household survey.⁴ Furthermore, the selected housing estates showed low rates of fluctuation with the majority of tenants being with their landlord since completion of the estate.⁵

In total, 547 household interviews were conducted across the three organisational fields.⁶ The survey reached a sufficient number of interviews to be representative for each housing estate, and also to derive general conclusions about each organisational field. In order to avoid refusals, and for reasons of data protection, the interview involved the administration of a drop-off questionnaire with a limited number of open-end questions. The questionnaire was given to the person identified as head of the household or other responsible adult who filled it in by themselves and put it in a neutral envelop. Respondents could ask the interviewer for support in case of technical or comprehension problems with the questionnaire. Afterwards the interviewer collected the finished questionnaire. Alternatively, residents were given the possibility to send the questionnaire back by post.

51 per cent of respondents were female with the lowest proportion of male respondents in the group of professional cooperatives (45 per cent), compared to 50 per cent male respondents in both the group of community cooperatives and housing corporations. 33 per cent of respondents belonged to the age groups 21 to 35 years, and 36 to 50 years. 19 per cent of respondents were between 51 and 60 years old and 14 per cent older than 65. Only 1 per cent of respondents were younger than 20. The highest proportion of respondents aged 51 to 65 and older than 65 were residents from community cooperatives (25 and 36 per cent), while respondents from professional cooperatives showed the highest proportion of respondents in the age group 21 to 35 (43 per cent).

As far as the socioeconomic background of residents is concerned, our survey results support literature assumptions (e.g. Wukovitsch, 2009) that non-profit housing in Vienna is mainly a

middle-class phenomenon. Thus, 73 per cent of respondents reported a monthly household income between 1,000 and 3,000 Euro with households from community cooperatives more likely to have a higher income.⁷ Looking at the educational background of residents, the survey delivers a picture of socially mixed neighbourhoods with 49 per cent of respondents having lower or medium education levels, and no significant differences in these results between the three organisational fields.⁸ In contrast, the ethnic mix of residents is more significantly pronounced in the groups of professional cooperatives and housing corporations with 22 per cent and 15 per cent of respondents having a migrant background, compared to only 3 per cent in the group of community cooperatives.⁹

We will see later in the paper if this socioeconomic composition of housing estates is reflected in the social capital characteristics of residents. Therefore, the household survey provided information about different types of social capital (bonding, bridging, and linking) in housing estates, and allowed for comparison between the three organisational fields as well as between different groups of residents.

Defining and Operationalizing Social Capital

While social capital can be seen as both an individual or collective asset, its theoretical roots lie in social relations (Lin and Erickson, 2008). Thus, in this article, we define social capital as the linkages between individuals that give them access to embedded resources (Lin, 1999). In contrast to a purely collective view, a social network perspective on social capital can make power aspects in the relations between residents more transparent (Lin and Erickson, 2008; van der Gaag and Snijders, 2005). In this respect, the authors see their research approach in the tradition of Bourdieu (1986) who highlights the connections between different sorts of capital and the inherent power struggles in society (Novy et al., 2009; Siisiäinen, 2000).

Considering the context of housing organisations, we further distinguish linking social capital, as the vertical linkages between residents and housing managers, from bridging and bonding social capital, referring to horizontal linkages between residents. Whereas linking social capital already encompasses power aspects of social relations, on the horizontal level, the discussion focuses on the effectiveness of bonding versus bridging ties. Bonding social capital refers to thick ties between individuals with similar sociodemographic characteristics. These personal support networks help people to 'get by'. In contrast, bridging social capital is associated with weaker ties that connect residents from different ethnic and social backgrounds, and thus, provide them with opportunities to 'get on', such as by creating employment opportunities (Woolcock 2001; Putnam, 2000; Gittell and Vidal, 1998; Granovetter, 1973).

Bridging social capital is usually associated with ties of residents beyond their neighbourhood, and measured by membership and participation in civic organisations (e.g. Putnam, 2000; Gittell and Vidal, 1998). However, confusion arises from the blurring differences between measuring linking or bridging capital when gathering evidence on participation (Middleton et al., 2005). This study, however, focuses on the social relations of

residents within their housing organisation – which is a specific type of civic organisation. Thus, by analysing bridging social capital, we look at the horizontal interactions of organisational members from different ethnic and social backgrounds, drawing a clear distinction from the other types of social capital (bonding and linking).

Housing environments are important to create opportunities from ‘bridges’ because they represent “multifaceted social meeting places” (Rothstein, 2005: 99) where individuals, early in their lives, frequently interact with people from different social and ethnic backgrounds. Furthermore, they are able to institutionalise resident networks, and link them to wider political structures to create benefits for the individual residents and local communities (Flint and Kearns, 2006; Hibbett et al., 2001). Achieving mixed housing neighbourhoods has thus also become a crucial goal of Viennese housing policy as well as the third housing sector in recent years (Förster, 2005).

Table 2 gives an overview on the measurement dimensions for social capital used in the household survey.

Table 2. Social capital domains and measurement dimensions

Social Capital Domains		Measurement Dimensions
<i>Horizontal Social Capital</i>	Social Capital Volume	<ul style="list-style-type: none"> • Relations with neighbours (Middleton et al., 2005)
	Bonding Social Capital	<ul style="list-style-type: none"> • Cooperation between neighbours • Family ties (Middleton et al., 2005)
	Bridging Social Capital	<ul style="list-style-type: none"> • income-related social capital • education-related social capital (van der Gaag et al., 2008; van der Gaag and Snijders, 2005) • intercultural social capital (Landhäusser, 2008)
<i>Linking social capital</i>	Resident Involvement	<ul style="list-style-type: none"> • Relationship between residents and housing management • Members' identification with their housing organisation • Participation in the housing organisation (Schulte-Eckel, 2009, Flint and Kearns, 2006) • Resident bottom-up initiatives (Landhäusser, 2008)
	Resident Influence	<ul style="list-style-type: none"> • Perceived influence over decision making • Desired influence over decision making (Middleton et al. 2005)

This paper now turns to studying the different types of social capital in non-profit housing organisations in Vienna, by contrasting the perspective of housing managements with those from residents.

Organisational fields and residents' social capital

Bonding and Bridging Social Capital: The Linkages between Residents

The perspective of housing managements

A cooperative governance culture of *Gemeinschaft* implies reciprocal transactions between cooperative members. The focus on members' self-help traditionally distinguishes cooperatives from organisations in the public housing sector based on the welfare principle (Jäger, 1995). Reciprocity as a cooperative principle is maybe best exemplified by the self-help activities of neighbours in community cooperatives when building their housing estates.

However, in the course of time, also in the cooperative housing sector self-help has also been replaced by public subsidizing and housing cooperatives have been transformed into vehicles of the social democratic welfare state. Nevertheless, professional housing cooperatives are rediscovering the self-help principle to distinguish themselves from competitors in urban housing markets (Schulte-Eckel, 2009). When adapting to the market changes it became increasingly difficult to adhere to cooperative principles. As they face difficulties in generating economic benefits for their members, they try to offer additional services and benefits for their members, such as assisted living.

From the qualitative interviews with non-profit housing managements, we get a rather homogenous picture across the three organisational fields as far as social capital enhancing activities are concerned. The organisation of bonding activities for residents is not seen as a core activity of housing managements with the exceptions of events such as the welcome reception for tenants of a new housing estate.

We contrasted these findings with the perception of residents, asking them if their housing managements are supporting social activities in their housing estates. Our survey results seem to confirm the low activity level of housing managements, with only 26 per cent of respondents saying that their housing managements are “rather active” or “very active” in supporting social activities in the estate. The results show no significant differences between the three organisational fields.¹⁰

Instead of directly promoting bonding activities among residents, professional housing managements rather focus on providing physical infrastructure, such as community rooms, to promote social interactions between residents. Following the example of the traditional cooperative ‘village’, architecture is seen as another way to build a common place identity among residents. Our results suggest that the distinctive architecture of a high-rise block of

flats is likely to strengthen the identification of residents with a place and their attachment to the housing community.

Housing managements see a major contribution to social capital building in maintaining a sense of safety in the estate and providing good physical quality of the property. In this respect, the role of caretakers living in the housing estate is seen as crucial. These actors have been an institution in social housing in Vienna for many decades. Formally, only responsible for the maintenance of the property, they actually represented nodal points in the resident network, and also served as information brokers between residents and housing managements. Nevertheless, these caretakers often polarised the community of residents, not least because they enjoyed certain privileges. With the liberalisation of social housing policy in Austria, caretakers have often been replaced by external facility managements who should play a more professional and neutral role within the resident community.

The resident perspective

The resident survey provides us with evidence on the existing stock of horizontal social capital in housing estates of the three organisational fields. First, we look at a general indicator for social capital which is the size of residents’ social networks within their housing estates. Therefore, we asked respondents how many of their neighbours they knew well enough to have a chat with (Middleton et al., 2005). Across the different organisational fields, only 6 per cent responded ‘none’ to this question and 22 per cent answered ‘one or two’ (see Table 3).

Table 3. Proportion of residents having relations on the estate

	none	one or two	quite a lot	almost all
Community cooperatives	0%	7%	68%	25%
Professional cooperatives	10%	33%	56%	1%
Limited profit corporations	8%	24%	67%	1%

n=546; $\chi^2=78.064$; 2df; p-value=0.000

These figures seem to fit into the results from our qualitative research, where all selected housing estates have been considered as ‘neighbourhoods that work’ by their respective housing managements. Nevertheless, the differences between the three organisational fields are highly significant (see Table 3). Thus, in the group of community cooperatives, there is not a single respondent knowing ‘none’ of his or her neighbours in the housing estate well enough to have a chat with, compared to 10 per cent in professional cooperatives and 8 per cent in housing companies. The proportion of residents who knew ‘almost all’ of their neighbours is highest in community cooperatives (25 per cent), compared to only 1 per cent in both professional cooperatives and housing corporations. However the proportion of residents who knew ‘quite a lot’ of their neighbours is by far the largest in all three groups. Here, the scores do not significantly differ between community cooperatives (68 per cent) and limited-profit corporations (67 per cent), whereas only 56 per cent gave this response in professional cooperatives.

At first sight, the results on this social capital indicator suggest that estates of community cooperatives are richer in neighbour interactions. If we take a closer look at the results, however, it becomes apparent that residents from the two groups of professional non-profit housing organisations are more polarised on this measure, with the majority of them still likely to chat with ‘quite a lot’ of their neighbours. Further analysis shows that the responses in these two organisational fields are related to age¹¹, with younger residents less likely to be connected to ‘quite a lot’ of their neighbours. This suggests that older residents have more time available for networking with their neighbours than the working younger and middle age. However, if we look again at the figures from community cooperatives, and take into account their longer lengths of residence compared to the other organisational fields, the social investments residents make in the relationships with neighbours might as well be related to the length of time people have been in the neighbourhood.

Furthermore, across the organisational fields the responses are also related to household size¹² suggesting that households with children know more neighbours. However, we found no evidence in our data that social network size on the estate was related to the socioeconomic status of residents either measured by household income¹³ or by educational level¹⁴ which supports findings from the UK context (Middleton et al., 2005). Finally, the results also suggest that residents' contact with neighbours depends on the dwelling type which is also consistent with earlier studies (e.g. Middleton et al., 1994). As in our study, the organisational field can also be seen as a proxy for dwelling type, residents from terraced property are more likely to chat to a large number of neighbours.

Although being able to chat with neighbours already requires interpersonal trust (Temkin and Rohe, 1998), it does not necessarily lead to cooperation which can be seen as a key cooperative principle, and also an indicator for bonding social capital among residents. Thus, the survey aimed at identifying the level of support among neighbours in third sector housing by asking residents if they lived in a housing estate where people help each other. Again the differences between community cooperatives and professional housing organisations were highly significant. 24 per cent of respondents from community cooperatives totally agreed with the statement, compared to only 7 per cent in professional cooperatives and 12 per cent in housing companies (see Table 4).

Table 4. Proportion of residents who felt that residents of their housing estate support each other

	totally agree	rather agree	rather disagree	totally disagree
Community cooperatives	24%	57%	15%	4%
Professional cooperatives	7%	50%	38%	5%
Limited profit corporations	12%	53%	30%	5%

n=525; $\chi^2=23.654$; 2df; p-value=0.000

Once again, the results show little difference between professional cooperatives and limited-profit corporations but again, present a polarized picture of residents' social capital. Thus, 43 per cent of respondents in professional cooperatives and 35 per cent in limited-profit

corporations ‘rather’ or ‘totally disagreed’ with the statement. In contrast to the question on network size, the responses to this question were not (significantly) related to age¹⁵, household size¹⁶ or socioeconomic status¹⁷.

Networks of close relatives are often associated with bonding social capital which helps residents to ‘get by’. Thus, in our survey, as an indicator for this type of social capital, we asked residents if they had relatives living in their housing neighbourhood. The results indicate that community cooperatives have high levels of family-based social capital in their housing estates with 42 per cent of residents reporting that they had relatives living nearby. This figure was significantly higher than in professional cooperatives (24 per cent) and in limited-profit corporations (23 per cent) (see Table 5).

Table 5. Proportion of residents having relatives on the estate

	yes	no
Community cooperatives	42%	58%
Professional cooperatives	24%	76%
Limited profit corporations	23%	77%

n=546; $\chi^2=15.838$; 2df; p-value=0.000

These results support our initial assumption that community cooperatives promote homogenous membership which is a characteristic of organisations based on *Gemeinschaft* attributes. While family-based social capital is not related to age¹⁸, we found evidence that residents with a higher level of education are less likely to have members of their family living nearby. This suggests that residents with better education show higher mobility in terms of housing. There is no evidence, however, that residents with migrant background on the estate are more likely to possess family-based social capital.¹⁹ This might be an indication that for migrants in the third housing sector in Vienna, there is a relative lack of importance of family relations when they decide where to live.

According to Granovetter (1973) and others, bridging social capital helps residents to ‘get on’ because it connects different social classes. Thus, as an indicator for bridging social capital, we asked residents if they knew households on the estate earning more than 3,000 Euro a

month. The results on this measure again differ significantly between the three organisational fields of third sector housing (see Table 6).

Table 6. Proportion of residents having relations to high-income households on the estate

	yes	no
Community cooperatives	35%	65%
Professional cooperatives	10%	90%
Limited profit corporations	15%	85%

n=512; $\chi^2=31.398$; 2df; p-value=0.000

It turns out that residents from community cooperatives are more likely to know neighbours with higher incomes than in professional cooperatives or limited-profit corporations. This might not be surprising as there are more high-income households to be found on community cooperative estates. However, in professional cooperatives and limited-profit corporations the results are significantly related to respondents’ own social status.²⁰ Thus, households from lower income classes (< 1,000 Euro and 1,000-3,000 Euro) are less likely to have ties with neighbours from higher income classes (above 3,000 Euro), suggesting a low level of bridging social capital on this measure.

Another indicator for socio-economic diversity in neighbour networks is the level of education of residents. In order to measure this education-related social capital, we asked residents if they knew neighbours holding a university degree. Again, the differences between the three organisational fields are highly significant with the group of community cooperatives reporting the highest level of education-related social capital among their residents (see Table 7). 55 per cent of residents are connected to a neighbour with a university degree, compared to 25 per cent in professional cooperatives and 33 per cent in limited-profit corporations.

Table 7. Proportion of residents having relations to neighbours with university education on the estate

	yes	no
Community cooperatives	55%	45%
Professional cooperatives	25%	75%
Limited profit corporations	33%	67%

n=522; $\chi^2=28.556$; 2df; p-value=0.000

When we look into the three sub groups of non-profit housing organisations, the results are similar to the ones on income-related social capital discussed before. Thus, on the estates of professional cooperatives and limited-profit corporations, residents with lower levels of education are less likely to be connected to academics.²¹ In community cooperatives, however, education related social capital is clearly bridging social capital as residents with lower levels of education are as likely as academics to possess education-related social capital.²²

Finally, we look into the ethnic diversity of neighbourhood networks. Therefore, we asked residents if they were acquainted with neighbours whose native tongue is not German. The survey results in Table 8 show that residents from professional housing cooperatives are most likely to have migrant contacts in their networks.

Table 8. Proportion of residents having relations to residents with migrant background on the estate

	yes	no
Community cooperatives	28%	72%
Professional cooperatives	43%	57%
Limited profit corporations	37%	63%

n=519; $\chi^2=32.650$; 1df; p-value=0.000

However, further analysis reveals that residents who are connected to neighbours with migrant background are most likely migrants themselves.²³ The evidence for low bridging social capital on this measure is most significant in professional housing cooperatives²⁴, while the strength of this relationship is greatly reduced in limited-profit corporations and community cooperatives.

So, let us summarise the findings on bonding and bridging social capital: Although estates of professional cooperatives and limited-profit corporations are socially and ethnically mixed neighbourhoods, the survey provides little evidence that residents’ social capital actually reflect this diversity. Thus, we would assume that bringing a social and ethnic mix to housing estates does not necessarily foster the bridging social capital among residents. Our findings on

income- and education-related social capital are rather consisted with Bourdieu's thesis that social classes are reproduced in the social networks of residents.

Linking Social Capital: The Relationship between Residents and Housing Managements

The perspective of housing managements

Linking social capital concerns the vertical ties between residents and housing managers. These vertical linkages are important for up-scaling existing horizontal social capital in housing estates.

Direct resident participation in the planning and management of a housing neighbourhood can be seen as a fundamental principle of cooperative organisation which distinguishes them from other housing providers. It is a consequence of the multiple roles of a cooperative member as owner, manager and client of the housing organisation (Somerville, 2007; Ringle, 1994). Drawing on evidence from our qualitative research, in community cooperatives, this principle is still set in place as these are enterprises in collective self-management. Thus, the relationship between executive board member and ordinary member is non-hierarchical and personalised, as they are immediate neighbours in the same housing estate.

With professional housing cooperatives, there is a clear shift from direct member participation to representative democracy. In larger cooperatives, member organisation and business enterprise are separated and tend to be in constant conflict (Mandle, 2001). Housing management representatives report that member interests often collide with those of the management which increasingly has to operate according to corporate governance principles.

As a consequence, in professional cooperatives, resident participation is basically reduced to the voting right in the annual general meeting.

In the field of limited-profit corporations, there is not even a legal obligation to resident participation. Similar to the private housing sector, resident's status is simply one of a client,

closed out from management and strategic decision making. Nevertheless, following the logics of client-oriented, corporate management, most limited-profit housing corporations have set up tenant representatives or advisory committees (*Mieterbeiräte*) to give residents a say in the management of their estates.

On the one hand, a clear message that comes out of our interviews with housing managements is that resident participation complicates the management in professional housing companies. Management representatives agree that not every decision has to be questioned and agreed upon by members. The following statement of a board director exemplifies this view: “If we let them (the residents) vote on every new manhole cover, our organisation would stand still.” It reflects the institutionalised conflict between member and business interests within non-profit housing organisations.

On the other hand, there is consistent evidence in our data that the attitude of housing managements is also influenced by the low response from residents on participatory initiatives. Even in community cooperatives, management representatives admit that there is no broad member participation in managing the estate. It rather comes down to a handful of committed residents. These results might point to what Jäger (1991) and Novy (1983) describe as the growing ‘tenant mentality’ (*Mietermentalität*) among members of housing cooperatives. Intensifying competition on the housing market provides the middle-class with greater choices, so they voluntarily pull back from the ownership into the client role in cooperative organisations. Furthermore, managements also see a shrinking identification among residents with their housing organisation, as well as less committed to invest time and money into linking social capital. Drawing on Hirschman (1970), we can conclude that residents of third sector housing increasingly rely on the exit option while the voice mechanism is becoming less attractive for them, but at the same time, is also limited by cooperative housing managements.

In the following section, we contrast the management perspective on linking social capital with the perceptions of residents.

The resident perspective

Referring back to our institutional analysis, we first look for empirical evidence for the assumption on a hierarchisation of the relationship between residents and housing managements in the third sector. Thus, we asked respondents if they personally know a representative of their housing management. Based on the literature, and also highlighted in our qualitative data, the hierarchisation of housing cooperatives goes hand in hand with the shrinking identification of members with their provider organisations. Thus, we additionally asked respondents if they feel committed to their housing organisation. The evidence coming from our household survey, displayed in Tables 9 and 10, clearly reflects the differences between the governance cultures of *Gemeinschaft* and *Gesellschaft*.

Table 9. Proportion of residents personally knowing representatives of their housing management

	yes	no
Community cooperatives	59%	41%
Professional cooperatives	10%	90%
Limited profit corporations	33%	67%

n=543; $\chi^2=82.094$; 2df; p-value=0.000

Table 10. Proportion of residents identifying with their housing organisation

	very much	quite a lot	rather not	not at all
Community cooperatives	27%	47%	21%	5%
Professional cooperatives	3%	34%	40%	23%
Limited profit corporations	6%	33%	39%	22%

n=540; $\chi^2=60.796$; 2df; p-value=0.000

Thus, personalised relationships between residents and management representatives are more pronounced in community cooperatives (see Table 9). Furthermore, the member identification with the housing organisation is also significantly stronger among residents in community cooperatives (see Table 10). Interestingly, residents in limited-profit corporations are more likely to know their housing managers personally than those of professional cooperatives²⁵, although the resident is only in a customer role compared to the cooperative member who is a co-owner.

While low hierarchy in organisations might promote linking social capital, according to the literature (Middleton et al., 2005), we additionally need to look at residents' perceived influence over decision making as evidence for existing linking social capital. Thus, we asked respondents: "Do you think residents have sufficient influence over decision making in their housing estate?" The results on this question deliver a polarised picture of housing estates in the third sector. As shown in Table 11, residents of community-based cooperatives report a significantly higher influence over decision making than residents in professional cooperatives and limited-profit corporations.

Table 11. Residents' perceived influence over decision making in their housing estate

	very much	quite a lot	rather no	not at all
Community cooperatives	24%	51%	20%	5%
Professional cooperatives	10%	34%	46%	10%
Limited profit corporations	10%	37%	41%	12%

n=540; $\chi^2=31.627$; 2df; p-value=0.000

However, the lower levels of linking social capital reported in board-managed cooperatives and limited-profit companies could either be interpreted as an indicator for satisfaction with the existing management, or that respondents just do not care much about resident participation (Middleton et al. 2005). Thus, we further asked residents if they would like to be more involved in decision making.

Table 12. Proportion of residents' who would like to be more involved in decision making

	definitely yes	rather yes	rather no	not at all
Community cooperatives	37%	36%	21%	6%
Professional cooperatives	39%	36%	23%	2%
Limited profit corporations	39%	40%	20%	1%

n=529; $\chi^2=1.118$; 2df; p-value=0.572

On this question, there were no significant differences between the three organisational fields (see Table 12). Regardless of the governance model, more than 70 per cent of respondents in each group said they would like to have a bigger say in how their housing neighbourhood is managed. These figures suggest that contrary to what the literature says about the

phenomenon of ‘tenant mentality’, residents still seem to be committed to invest in linking social capital in non-profit housing.

The survey data also gives us an insight into further potential for resident involvement in their housing organisations. If we look at the existing participation patterns, the differences between the different governance models are highly significant (see Table 13). Residents of professional housing cooperatives are much less likely to participate in their housing organisations. Although the general assembly presents them with an annual opportunity, 61 per cent of members in professional cooperatives never participate, compared to 11 per cent in community cooperatives and 32 per cent in limited-profit corporations.

Table 13. Resident participation in the housing organisation

	definitely yes	rather yes	rather no	not at all
Community cooperatives	37%	36%	21%	6%
Professional cooperatives	39%	36%	23%	2%
Limited profit corporations	39%	40%	20%	1%

n=534; $\chi^2=105.989$; 2df; p-value=0.000

Participation is related to the age of residents.²⁶ This suggests that working young and middle age residents have less time to engage in their housing organisation although, as we have seen earlier, it is important for them to have their say. However, if we just focus on residents of professional housing cooperatives, the relationship between age and participation is not significant²⁷, suggesting that the low participation rate does not relate to a particular age group among residents.

Finally, we asked residents if they have ever taken part in a resident initiative in their housing estate (Landhäusser, 2008). The results on this question suggest that residents from professional cooperatives and limited-profit corporations are not likely to be involved in bottom-up initiatives which would bypass the formal participation structures of their housing organisations. As Table 14 indicates, 77 per cent of residents in professional cooperatives and 62 per cent in limited-profit corporations have never taken part in a tenant initiative, while the

same figure is significantly lower in community cooperatives (39 per cent). The results also confirm the management perspective that even in community cooperatives, there seems to be not too much enthusiasm among residents about taking the initiative to change something in their neighbourhood. The responses to this question were again related to age²⁸, with increasing participation rate across the age bands, and with those over 65 most likely to have taken part in bottom-up initiatives.

Table 14. Resident bottom-up initiatives

	always	often	rarely	never
Community cooperatives	10%	14%	37%	39%
Professional cooperatives	2%	4%	18%	77%
Limited profit corporations	7%	8%	23%	62%

n=529; $\chi^2=44.738$; 2df; p-value=0.000

In contrast to the phenomenon of ‘tenant mentality’, reported in the literature, our results from the household survey show that residents are interested in participating in their housing organisations and in the management of their neighbourhoods. Interestingly though, the formal participation structures of professional cooperatives are not something that residents seem to care passionately about. In contrast, our survey results suggest that both the governance culture of community cooperatives, which relies on personal relationships, and the facultative participation modes used in the corporate field of third sector housing, seem to be more appreciated by residents.

Discussion and Conclusions

In this article, we have analysed the governance capacity of third sector housing for safeguarding social cohesion in Vienna. Therefore, the authors applied a multi-level framework referring to the interplay of an institutional and an organisational level of third sector housing.

The historical analysis has shown that the cooperative housing movement has substantially shaped the institutional context for social housing in Vienna through its practices. As a

consequence, the solidarity aspect of cooperative housing has become institutionalised within the regulatory framework for social housing. In other words, social capital has been transformed into institutional capital (Gualini, 2002) as most non-profit housing organisations are still strongly embedded in the political networks of Vienna. In contrast to many other European cities, the third housing sector in Vienna is able to play a stabilising role as far as rent prices, and consequently, household incomes are concerned (Springler, 2010; Bauer, 2006), and thus, also serves as a firewall against social conflicts, taking place in other European cities (Czasny, 2004).

While cooperative ideas might have been institutionalised on the macro level, our empirical evidence suggests that this is in stark contrast to the reality of self-administration, self-help and solidarity on the micro-level of non-profit housing organisations and their resident networks. The strategic partnership between the local government and the third housing sector might be crucial to achieve social cohesion on a city scale. At the same time, however, it led to the bureaucratisation of non-profit housing, and has considerably weakened the cooperative character of the housing organisations within the sector. Furthermore, recent liberalisation of housing policy, and the changing market conditions favour corporate management approaches and concentration processes within the sector which leads to a further hollowing out of the cooperative principles.

The paper has further provided current empirical evidence from different organisational fields within the non-profit housing sector. Here, we have contrasted the management with the resident perspective. Applying a social capital perspective, we have analysed how non-profit governance cultures are reflected in the social networks of housing organisations. Thereby, the authors incorporated recent critique on the usefulness of mainstream social capital approaches in housing studies (e.g. Flint and Kearns, 2006; DeFilippis, 2001). Using a network approach, we attempted to make power disparities between different groups of

residents more explicit. Furthermore, as research on social cohesion often focuses on deprived neighbourhoods, the presented empirical evidence on middle-class housing areas can be crucial for drawing comparisons (Middleton et al., 2005; Atkinson and Kintrea, 2001; Forrest and Kearns, 2001).

However, the results on the organisational level have to be read with some caution because of the causality problem to explicitly link levels of social capital as outcomes of activities of housing organisation. There are of course existing stocks of social capital among residents independent from organisational practices (Flint and Kearns, 2006).

Compared to cooperative housing in liberal contexts, such as in the UK, third sector housing in Vienna does not have to fill the gap of a missing local welfare state. Maybe this is a reason why non-profit housing organisations mainly focus on core housing functions, and see no particular need to engage in community development on the neighbourhood level. Nevertheless, professional housing cooperatives are increasingly rediscovering the traditional cooperative idea of *Gemeinschaft*, not only because it has become a central goal of urban housing policy in Vienna (Wohnfonds Wien, 2009) but also to distinguish themselves from private competitors. Given the growing demographic challenges in our society, cooperative housing might offer the most authentic concept to revitalize neighbourhood bonds and foster local communities of solidarity and self-help.

In this respect, what can professional non-profit organisations learn from traditional community cooperatives? In contrast to the anonymous member relations in large cooperatives, community cooperatives strongly build on social groups which “tend to be homogeneous in respects that are important to the members” (Nilsson and Hendrikse, 2011: 346). Thus, membership becomes almost organic to the residents, but at the same time, the governance of these cooperative organisations relies on insider-outsider distinctions (Nilsson and Hendrikse, 2011; Bowles and Gintis, 2002). While group solidarity and reciprocity might

reduce transaction costs for the individual members (Dasgupta, 2000), and foster cohesion on the estate level, the organisation might suffer from the missing social diversity of their member base which constrains its capacity to benefit from wider resource access (Bowles and Gintis 2002). Furthermore, the accentuation of local autonomy and identity through these cooperative initiatives may also risk widening existing disparities in a place, and thus, also weaken social and territorial cohesion. Our empirical evidence suggests that community cooperatives have preserved their bonding social capital but over decades moved it to higher social status (from working class to middle-class estates).

Traditional community cooperatives which solely focus on individual member advantage are limited in their contribution to broader urban development goals, such as creating a social mix in neighbourhoods. Although community cooperatives are not likely to become a mainstream concept within Viennese non-profit housing, there are nevertheless lessons to be learned from this cooperative governance model for the recent wave of new *Gemeinschaft* projects carried out by professional cooperatives and supported by the local government. These so called “theme-oriented housing estates” connect residents under certain, in advance defined topics (e.g. car-free housing estates) (Brech, 2003). Nevertheless, as these projects mainly attract people with a similar mindset, they encompass the inherent danger to become gated communities or cohesive islands that are cut off from the rest of the city.

The biggest challenge for non-profit housing in safeguarding social cohesion in Vienna, however, can be seen in countering the sustained spatial segregation of low-income migrant groups (Giffinger, 1998). Here, the third housing sector can contribute through improving the accessibility for migrant households into their housing stock, and subsequently their integration. The lack of bridging social capital and language skills are still informal barriers for migrants to access housing in the non-profit sector. It this group of residents, however, which is today in a strikingly similar situation to the pioneers of the cooperative housing

movement in Vienna. Bounded to private landlords, charging them expensive rents for low-quality apartments, provision of affordable and qualitative housing is most needed for them.

When respondents in our survey reported that they live in third sector housing because of the comparatively smaller number of migrant residents there, it is an alarming indicator for both the missing ethnic diversity and integration. It also fits into the picture that recent municipal election results showed the extreme right gaining ground in non-profit housing areas. Furthermore, it is also evident from our survey results that third sector housing to a large extent has actually become a middle-class phenomenon.

It remains to be seen if good practice examples of “theme-oriented housing estates” which focus on building bridging social capital between different ethnic groups will develop into mainstream practice (see for example Ludl 2003 on the housing project “interethnische Nachbarschaft”). In this respect, our survey results suggest that professional non-profit organisations might have achieved social – and to a smaller extent – also ethnic diversity in their housing estates. However, this does not necessarily mean that the social networks of residents are also becoming more diverse. The non-profit housing sector of today does not only have to revitalize traditional cooperative principles of solidarity and self-help on the estate level, but combine it with social and ethnic diversity.

Nevertheless, when it comes to social capital building on the horizontal level, among residents, we maybe have to accept that keeping a certain distance in social relations with neighbours is something natural to protect private space. This should not be mixed up with less cohesion in the neighbourhood (Beetz, 2007). The only contribution housing organisations can realistically make, and should make, is providing multiple spaces for social interaction.

For social cohesion in the city, micro-level cohesion, in the form of social support networks among neighbours, might only be an additional safeguarding mechanism, given a solidarity-

based housing regime on the macro-level (Kesteloot et al., 2006; Czasny, 2004). Crucial though is a direct link between the micro-level of residents, and the macro-level of housing regimes, in order to provide opportunity structures for citizen participation and collective action of residents, not necessarily restricted to housing policy (Novy et al., 2009; García, 2006; Rowlands and Dekker, 2006). In this respect, cooperative housing organisations represent a crucial intermediate level to foster linking social capital of residents. As our analysis has shown, the cooperative business model of collective ownership has proven to be an effective governance framework to foster empowerment and participation of residents, and bottom-linked social innovations in the past.

However, corporate management approaches and increasing concentration processes within the sector are hollowing out the fundamental cooperative principles of democratic member participation and collective self-management. As a result, residents are no longer able to effectively influence the governance of their housing organisations (Eckhardt, 2006). With the shift from cooperatives to limited-profit corporations, participation is reduced to an informal and non-binding substitute of the democratic institutions of cooperative housing.

Our empirical evidence suggests that housing managements are weary of participatory approaches which in their view complicate professional housing management. While residents of non-profit housing still show keen interest in participation, our survey, however, does not find much enthusiasm for the traditional participation structures of cooperative housing. Even in community cooperatives, membership has become rather instrumental, focusing on price and the consumption of core housing services. Respondents neither seem to feel as owners of their housing organisations, nor as being part of a broader social solidarity movement. These findings are consistent with results from a recent study on the cooperative housing sector in Germany (Schulte-Eckel, 2009).

As a consequence of its strategic partnership with the local government, the third housing sector in Vienna has, over the years, adopted the top-down, bureaucratic model of governance which limits the room for participatory strategies, similar to other policy fields (see e.g. Novy and Hammer, 2007). Thus, compared to the early cooperative movement, non-profit housing managements are today tentative to experiment with providing new spaces for bottom-linked participation, not only decentralized on the estate level. This would be necessary especially to reach out to younger residents.

Compared to third housing sectors in other European cities, the Viennese model actually offers a huge potential for linking social capital, which would facilitate the necessary up-scaling of residents' collective action and social innovations (Novy et al., 2009). While our findings point to higher levels of linking social capital in community cooperatives, the potential for linking residents to the institutional level of housing is greater in the group of professional cooperatives and limited-profit companies. Here board members and management representatives are often closely connected to the local government and the ruling social democratic party, where the key decisions on social housing policy are taken.

It is in the responsibility of both managements and residents to revitalise the existing democratic governance structures of cooperative housing before they will be completely dismantled by market liberalization and privatization. In contrast to other European cities, third sector housing in Vienna has the potential to give residents a voice beyond the neighbourhood and the field of housing. This reminds us of the crucial role third sector housing should have in all three dimensions of social cohesion: the economic, the socio-cultural, and the political.

References

- Adler P S (2001) Market, Hierarchy and Trust: The Knowledge Economy and the Future of Capitalism. *Organization Science* 12: 215–34.
- Atkinson R, Kintrea K (2001) Disentangling area effects, evidence from deprived and non-deprived neighbourhoods. *Urban Studies* 38: 2278-98.
- Atkinson R, Carmichael L (2007) Neighbourhood as a new focus for action in the urban policies of West European states. In: Smith I, Lepine E and Taylor M (eds.) *Disadvantaged by Where you Live? Neighbourhood Governance in Contemporary Urban Policy*. Bristol: Policy Press, 43-64.
- Bauer E (2006) Gemeinnütziger Wohnbau in Österreich. Zu Geschichte, Funktion und künftiger Perspektive. *Kurswechsel* 3: 20-27.
- Beetz S (2007) Wohnungsgenossenschaften und Nachbarschaften. *Informationen zur Raumentwicklung* 4: 241-49.
- Blokland T (2003) *Urban Bonds*. Cambridge: Polity Press.
- Boelhouwer P (1999) International comparison of social housing management in Western Europe. *Netherlands Journal of Housing and the Built Environment* 14: 225-40.
- Bonus H (1986) The cooperative association as a business enterprise: a study in the economics of transactions. *Journal of Institutional and Theoretical Economics* 142: 310-39.
- Bourdieu P (1986) The Forms of Capital. In: Richardson J G (ed.) *Handbook of Theory and Research for the Sociology of Education*. Westport, CT: Greenwood Press, 241-58.
- Bowles S, Gintis H (2002) Social Capital and Community Governance. *Economic Journal* 112: 419-36.
- Brech J (2003) Ohne Fremde keine Stadt. Integration durch Stadt- und Wohnbauplanung. In: Ludl H (ed.) *Das Wohnmodell inter-ethnische Nachbarschaft* Wien: Springer, 29-46.
- Cameron S, Gilroy R and Miciukiewicz K (2009) Housing, Neighbourhood and Health: Research Review. *Social Polis Survey Paper* EF3.
- Czasny C (2004) *The Importance of Housing Systems In Safeguarding Social Cohesion in Europe: Final Report*. Vienna: SOCOHO Final Report.
- Czischke D (2009) Managing Social Rental Housing in the EU: A Comparative Study. *European Journal of Housing Policy* 9: 121-51.
- Dasgupta P (2000) Economic progress and the idea of social capital. In: Dasgupta P, Serageldin I (eds.) *Social Capital: A Multi-faceted Perspective*. Washington, DC: The World Bank, 325-424.
- DeFillipis J (2001) The myth of social capital in community development. *Housing Policy Debate* 12: 781–806.

- DiMaggio P J, Powell W W (1991) Introduction. In: Powell W W, DiMaggio P J (eds.) *The New Institutionalism in Organizational Analysis*. London: University of Chicago Press, 1-38.
- DiMaggio P, Powell W W (1983) The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review* 48: 147-60.
- Draheim G (1952) *Die Genossenschaft als Unternehmungstyp*. Goettingen: Vandenhoeck & Ruprecht.
- Eckhardt J (2006) Zukunftssicherung gemeinnütziger Wohnbaugenossenschaften in Österreich. *Zeitschrift für das gesamte Genossenschaftswesen (ZfgG)* 56: 19-25.
- Enjolras B (2009) A Governance-Structure Approach to Voluntary Organizations. *EMES European Research Network Working Paper* 09/01.
- Flint J, Kearns A (2006) Housing, Neighbourhood Renewal and Social Capital: The Case of Registered Social Landlords in Scotland. *European Journal of Housing Policy* 6: 31-54.
- Forrest R, Kearns A (2001) Social cohesion, social capital and the neighbourhood. *Urban Studies* 38: 2125-2144.
- Förster W (2005) *80 Years of Social Housing in Vienna*, <http://www.wien.gv.at/english/housing/promotion/pdf/socialhous.pdf>, consulted 6 September 2010.
- García M (2006) Citizenship practices and urban governance in European cities. *Urban Studies* 43: 745-65.
- GBV (Austrian Federation of Limited-Profit Housing Associations) (2010) *Mitglieder des Verbandes*, <http://www.gbv.at/Mitglied/Index>, consulted 18 September 2010.
- Giddens A (1984) *The Constitution of Society*. Berkeley: University of California Press.
- Giffinger R (1998) Segregation in Vienna. Impacts of market barriers and rent regulations. *Urban Studies* 35: 1791-1812.
- Gittell R, Vidal A (1998) *Community Organizing: Building Social Capital as a Development Strategy*. Thousand Oaks, CA: Sage.
- Gonzales V (2007). Social enterprises, Institutional Capacity and Social Inclusion. In: A. Noya A, Clarence E. (eds.) *The social economy: Building Inclusive Economies*. Paris: OECD.
- Granovetter, M. (1973) The Strength of Weak Ties. *American Journal of Sociology*, 78, 1360-1380.
- Gualini E (2002) Institutional capacity building as an issue of collective action and institutionalisation: some theoretical remarks In: Cars G, Healey P, Madanipour A, and de Magalhaes C (eds.) *Urban Governance, Institutional Capacity and Social Milieux*. Aldershot: Ashgate, 39-44.

- Healey P (2004) Creativity and urban governance *Policy Studies* 25: 87–102.
- Hibbett K, Jones P, and Meegan R (2001) Tackling social exclusion: the role of social capital in urban regeneration on Merseyside - from mistrust to trust? *European Planning Studies* 9: 141–61.
- Hirschman, A O (1970) *Exit, Voice, and Loyalty. Responses to Decline in Firms, Organizations, and States*. Cambridge, Mass.: Harvard Univ. Press.
- Jäger W (1991) *Genossenschaften – Eine Chance für die Zukunft*. Münster
- Jäger W (1995) Wohnungsgenossenschaften zwischen Gemeinwohl und Gruppenegoismus, *Genossenschaftswissenschaftliche Beiträge des Instituts für Genossenschaftswesen der Universität Münster*, Heft 40.
- Jessop B (2008) *State Power: A Strategic-Relational Approach*. Cambridge: Polity.
- Kennett P, Forrest R (2006) The Neighbourhood in a European Context. *Urban Studies*, 43(4), 713-718.
- Kesteloot C, Murie A and Musterd S (2006) European cities: neighbourhoods matter. In: Musterd S, Murie A and Kesteloot C (eds.) *Neighbourhood of Poverty: Urban Social Segregation and Integration in Europe*, Basingstoke: Palgrave Macmillan, 219-238.
- König B (2004) *Stadtgemeinschaften: Das Potenzial von Wohnungsgenossenschaften für die soziale Stadtentwicklung*. Berlin: Edition Sigma.
- Landhäuser S (2008) *Communityorientierung in der Sozialen Arbeit: Die Aktivierung von sozialem Kapital*. Wiesbaden: Verlag fuer Sozialwissenschaften.
- Lang R, Roessl D (forthcoming 2011) Contextualizing the Governance of Community Cooperatives: Evidence from Austria and Germany. *Voluntas: International Journal of Voluntary and Nonprofit Organizations, Special Issue: Governance in CSOs*.
- Lin N (1999) Building a Network Theory of Social Capital. *Connections* 22: 28-51.
- Lin N, Erickson B H (2008) Theory, Measurement, and the Research Enterprise on Social Capital. In: Lin N, Erickson B H (eds.) *Social Capital: An International Research Program*. Oxford: University Press, 1-24.
- Ludl H (1999) *Housing co-operatives in Austria: Structure - principles - economic importance*. Wien: GBV.
- Ludl H (2003) *Das Wohnmodell Inter-Ethnische Nachbarschaft*. Wien: Springer.
- Matznetter W (2002) Social Housing Policy in a Conservative Welfare State: Austria as an Example. *Urban Studies* 39: 265-82.
- Mayer M (2003) The onward sweep of social capital: causes and consequences of for understanding cities, communities and urban movements. *International Journal of Urban and Regional Research* 27: 100-132.

- Mändle M (2001) Marktschwächentheorie und Entwicklung der Wohnungsgenossenschaften. In: Ebert G, Grosskopf W, and Bach H (eds.) *Kooperative Wirtschaft – Theorie und Praxis: Eduard Mändle zum 65. Geburtstag*, Landsberg/Lech, 289-98.
- Middleton A, Baggett J, Loftman P et al. (1994) *The regeneration of the Highgate Estate: the view from the community*. Report for Birmingham City Council by The Faculty of the Built Environment, University of Central England in Birmingham.
- Middleton A, Murie A, and Groves R (2005) Social Capital and Neighbourhoods that Work. *Urban Studies* 42: 1711-38.
- Morrison N (2003) Neighbourhoods and Social Cohesion: Experiences from Europe. *International Planning Studies* 8: 115-138.
- Moulaert F, Ailenei O (2005) Social Economy, Third Sector and Solidarity Relations: A Conceptual Synthesis from History to Present. *Urban Studies* 42: 2037-53.
- Moulaert F, Mehmood A (2009) Spatial planning and institutional design: What can they expect from transaction cost economics? In: Geyer H S (ed.) *International Handbook of Urban Policy, Volume 2: Issues in the Developed World*. Cheltenham: Edward Elgar, 199-211.
- Moulaert F, Nussbaumer J (2005) Defining the Social Economy and its Governance at the Neighbourhood Level: A Methodological Reflection. *Urban Studies* 42:2071-88.
- Moulaert F, Martinelli F, Swyngedouw E and González S (2010) *Can Neighbourhoods Save the City? Community Development and Social Innovation*. London: Routledge.
- Nilsson J, Hendrikse G (2011) Gemeinschaft and Gesellschaft in Cooperatives. In: Tuunanen M, Windsperger J, Cliquet G, and Hendrikse G (eds.) *New Developments in the Theory of Networks*. Heidelberg: Physica, 339-52.
- Novy A (2011) Unequal diversity – on the political economy of social cohesion in Vienna. *European Urban and Regional Studies* 18: 239-53.
- Novy A, Hammer E (2007) Radical Innovation in the Era of Liberal Governance. The Case of Vienna. *European Urban and Regional Studies* 14: 210-22.
- Novy A, Redak V, Jäger J and Hamedinger A (2001) The End of Red Vienna: Recent Ruptures and Continuities in Urban Governance. *European Urban and Regional Studies* 8: 131-44.
- Novy A, Hammer E, and Leubolt B (2009) Social Innovation and Governance of Scale in Austria. In: MacCallum D, Moulaert F, Hillier J, Vicari Haddock S (eds.) *Social Innovation and Territorial Development*. Surrey, GB: Ashgate, 131-48.
- Novy K (1983) *Genossenschaftsbewegung – Zur Geschichte und Zukunft der Wohnreform*, Berlin.
- Novy K (1993) Beiträge zum Planungs- und Wohnungswesen. In: Stadt Wien (ed.) *Beiträge zur Stadtforschung, Stadtentwicklung und Stadtgeschichte Band 41*. Vienna: Magistrat der Stadt Wien.

- OECD (Organisation for Economic Co-operation and Development) (2001) *The Well-being of Nations: The Role of Human and Social Capital*. Paris: OECD.
- Pestoff V (2009) Towards a paradigm of democratic participation: Citizen participation and co-production of personal social services in Sweden. *Annals of Public and Cooperative Economics* 80: 197-224.
- Polanyi K (1957) *The great transformation*. Beacon Hill: Beacon Press.
- Priemus H, Dieleman F, and Clapham D (1999) Current developments in social housing management. *Netherlands Journal of Housing and the Built Environment* 4: 211-23.
- Putnam R (2000) *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.
- Reed H, Stanley K (2005) *Co-operative Social Enterprise and its Potential in Public Service Delivery*. London: Institute for Public Policy Research.
- Reinprecht C (2007) Social housing in Austria. In: Whitehead C., Scanlon K (eds.) *Social Housing in Europe*. London: School of Economics and Political Science, 35-42.
- Ringle G (1994): Cooperate Culture: In Genossenschaften „gelebte“ Werte. *Hamburger Beiträge zum Genossenschaftswesen* Heft 14, Hamburg.
- Roberts P (2008) Social innovation, spatial transformation and sustainable communities: Liverpool and the ‘Eldonians’. In: Drewe P, Klein J-L and Hulsbergen E (eds.) *The Challenge of Social Innovation in Urban Revitalisation* Amsterdam: Techne Press, 117-34.
- Roessl D (1996) Selbstverpflichtung als alternative Koordinationsform von komplexen Austauschbeziehungen. *Zeitschrift fuer betriebswirtschaftliche Forschung* 48: 311–34.
- Roessl D, Fink M, Kraus S (2007) Netzwerk, zwischenbetriebliche Kooperation und Genossenschaft - Entwicklung eines integrativen Begriffsverständnisses. *Zeitschrift für das gesamte Genossenschaftswesen (ZfgG)*, 57: 222-30.
- Rothstein B (2005) *Social traps and the problem of trust*. Cambridge: University Press.
- Rowlands R, Dekker K (2006) Improving social cohesion. In: Van Kempen R, Murie A, Knorr-Siedow T and Tosics, I (eds.) *Regenerating Large Housing Estates in Europe: A guide to better practice*. Utrecht: RESTATE.
- Schulte-Eckel K (2009) *Zukunftsstrategien für Wohnungsgenossenschaften vor dem Hintergrund sich wandelnder Rahmenbedingungen*. Nürnberg: Forschungsinstitut für Genossenschaftswesen.
- Siisiäinen M (2000) Two Concepts of Social Capital: Bourdieu vs. Putnam. *ISTR Fourth International Conference "The Third Sector: For What and for Whom?"* Trinity College, Dublin, Ireland.
- Somerville P (2007) Co-operative Identity. *Journal of Cooperative Studies* 40: 5-17.

- Springler E (2010) Finanzkrise und die steigende finanzielle Belastungen [sic!] der Haushalte durch Wohnkosten. *Kurswechsel* 1: 67-75.
- Temkin K, Rohe W M (1998) Social capital and neighbourhood stability: an empirical investigation. *Housing Policy Debate* 9: 66–68.
- Tönnies F (1963) *Gemeinschaft und Gesellschaft*. Darmstadt: Wiss. Buchgesellschaft.
- Valentinov V (2004) Toward a social capital theory of cooperative organisation. *Journal of Cooperative Studies* 37: 5-20.
- Van der Gaag M P J, Snijders, T A B (2005) The Resource Generator: social capital quantification with concrete items. *Social Networks* 27: 1-29.
- Van der Gaag M P J, Snijders T A B, and Flap, H D (2008) Position Generator Measures and Their Relationship to Other Social Capital Measures. In: Lin N, Erickson B H (eds.) *Social Capital: An International Research Program* Oxford: University Press, 27-49.
- Williamson O E (2005) The Economics of Governance. *AEA Papers and Proceedings* 95: 1–18.
- Wohnfonds Wien (2009) Beurteilungsblatt 4-Säulen Modell.
<http://www.wohnfonds.wien.at/download/lgs/beurteilungsblatt.pdf>, consulted 25 October 2010.
- Woolcock M (2001) The Place of Social Capital in Understanding Social and Economic Outcomes. *ISUMA Canadian Journal of Policy Research* 2: 11-17.
- Wukovitsch F (2009) Neujustierung des lokalen Sozialstaats: Umbrüche der Wohnungspolitik in Berlin und Wien. *Kurswechsel* 1: 62-70.

¹ Novy (1983) points to the ‘myth’ that the early cooperative housing movement would have been able to grow and expand significantly through self-help, given their inherent scarcity of economic capital, compared to other cooperative sectors.

² There are a small number of community-based housing projects in Vienna which are historically not linked to the third housing sector and its umbrella organisation, the Austrian Federation of Limited-Profit Housing Associations. Thus, they have not been included in the analysis.

³ Community cooperative housing estates are typically terraced house dwellings, situated at peripheral districts of the city. The typical housing stock of professional cooperatives and limited-profit corporations refers to higher density, flatted housing estates, across the city. For the latter two organisational fields, housing estates have been selected from districts 10, 11 and 23.

⁴ 87 per cent of respondents “rather agreed” or “totally agreed” that people in their housing estates get along well together. There were no significant differences in these results between the three organisational fields (n=535; $\chi^2=0.982$; 2df; p-value=0.612).

⁵ The average length of tenancies is the longest among residents of community cooperatives.

⁶ Community cooperatives: n=115; professional cooperatives: n=197; limited-profit corporations: n=235

⁷ n=468; $\chi^2=8.422$; 2df; p-value=0.015

⁸ measured by the level of education of the head of the household; N=536; $\chi^2=2.867$; 2df; p-value=0.238

⁹ measured by the native language of the head of the household; N=539; $\chi^2=21.218$; 2df; p-value=0.000

¹⁰ n=501; $\chi^2=0.776$; 2df; p-value=0.678

¹¹ n=420; $\chi^2=19.780$; 4df; p-value=0.001

¹² n=533; $\chi^2=23.007$; 7df; p-value=0.002

¹³ n=485; $\chi^2=4.017$; 4df; p-value=0.404

¹⁴ n=535; $\chi^2=9.881$; 5df; p-value=0.079

¹⁵ n=511; $\chi^2=10.009$; 4df; p-value=0.040

¹⁶ n=512; $\chi^2=10.632$; 7df; p-value=0.156

¹⁷ for education level: n=512; $\chi^2=6.248$; 5df; p-value=0.283; for income: n=467; $\chi^2=3.914$; 4df; p-value=0.418

¹⁸ n=532; $\chi^2=8.809$; 4df; p-value=0.066

¹⁹ n=538; $\chi^2=0.154$; 1df; p-value=0.695

²⁰ measured by income: n=397; $\chi^2=24.321$; 4df; p-value=0.000

²¹ n=412; $\chi^2=31.954$; 5df; p-value=0.000

²² n=101; $\chi^2=6.609$; 5df; p-value=0.251

²³ n=413; $\chi^2=26.946$; 1df; p-value=0.000

²⁴ n=191; $\chi^2=22.338$; 1df; p-value=0.000

²⁵ n=429; $\chi^2=30.717$; 1df; p-value=0.000

²⁶ n=521; $\chi^2=62.319$; 4df; p-value=0.000

²⁷ n=189; $\chi^2=0.577$; 4df; p-value=0.966

²⁸ n=517; $\chi^2=32.958$; 4df; p-value=0.000



Institut für Regional- und Umweltwirtschaft
Wirtschaftsuniversität Wien
Institutsvorstand : ao.Univ.Prof. Dr. Franz Tödting
Nordbergstraße 15
A-1090 Wien, Austria
Tel.: +43-1-31336/4777 Fax: +43-1-31336/705 E-Mail: ruw@wu.ac.at
<http://www.wu.ac.at/ruw>