

Challenges in property management within the Swedish cooperative housing sector

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Abstract

Purpose - The paper investigates the challenges to property management in the tenant-owner cooperative (TOC) housing sector in Sweden which accounts for 22% of the housing stock in the country as compared to an average of 10% in the rest of Europe.

Design/methodology/approach - A qualitative descriptive approach is used in the paper in which semi-structured interviews of governing committee members in 12 TOCs; a questionnaire on operation and management strategies sent to chairpersons in 725 TOCs as well as a questionnaire on issues related to energy efficiency sent to chairpersons in 91 TOCs provide the empirical data. This is complemented by an analysis of financial reports.

Findings – The paper provides indications that most of the challenges identified are related to the lack of a long-term perspective in the decision-making due to various principal-agent related problems. There appears to be an exploitation of the TOC sector by construction companies especially in cooperatives with newly constructed buildings.

Research limitations/implications – Because of the chosen sampling method and research approach, the presented results may lack generalisability. Thus, researchers are encouraged to carry out further studies.

Practical implications - The paper highlights the need for knowledge sharing as well as enhancement of competence in procuring outsourced services.

Originality/value – This paper fulfils the need for more research into the large but rarely studied TOC sector governed by amateurs in property management.

Paper type - Research Paper

Keywords – Property management, cooperative housing, tenant-owner, multi-owner housing, Sweden

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1 Background

Cooperative housing accounts for approximately 22% of the housing stock in Sweden, considerably exceeding the average of about 10 % in other European countries (Moreau & Pittini, 2012). Inefficiencies in the rent-regulated housing market in Sweden have, through tenure conversions and new construction, contributed to a rapid expansion of the tenant-owner cooperative (TOC) sector in which decision-making is in the hands of non-professionals in property management (Bergsten & Holmqvist, 2013; Turner 1997). The tenant-owner tenure provides an indirect form of dwelling ownership through a tenancy right, *bostadsrätt*, which is tradable on the open market and is in high demand in expanding regions. Market inefficiencies in the soft rent-controlled rental housing sector (see Andersson & Turner, 2014; Elsinga & Lind, 2013; Holmqvist & Magnusson, 2014) have attracted new construction as well as led to tenure conversions making this the most expansive housing sector (Ball, 2012). The very low level of construction for the rental and the own home sectors has increased demand for cooperative housing with quickly rising prices and increased housing segregation as a result (Andersson & Turner, 2014).

Studies such as Högberg, (2011) have pointed to the need for renovation measures within the multi-family housing sector in Sweden especially in the properties constructed during the period 1965-1975 in which over 1 million dwellings were constructed in Sweden with approximately one third of them in the TOC sector (Hall & Vidén, 2005). However, the management of the common properties within housing cooperatives and the multi-owned housing sector in general is influenced by conflicts of interest and various incentive problems (see e.g. Arkcoll et al, 2013; Easthope & Randolph, 2009; Levy & Sim, 2014; Lujanen, 2010; Nilsson, 2001). Within the TOC sector the risk for neglected maintenance is judged to be greatest within TOCs that do not have professional assistance in property management and in small elderly TOCs or new ones that according to Boverket, (2002, p. 103), are located in weak markets. But, an inventory of the research field reveals that management challenges and the consequences of mismanagement in TOCs is an issue that hitherto has not received much attention in the literature.

This paper investigates the basis of decisions and measures taken by executive committees in different types of TOCs. The comparative research focuses on three research topics (RT): operation and management strategies, mortgage choices, and measures for energy efficiency. The paper examines the challenges within property management in the TOC sector from the perspective of agency theory and the governance of common properties and the main research question is:

To what extent is the concern expressed about property management in the Swedish tenant-owner cooperative housing sector justified?

In various ways the current study seeks to investigate the issue of whether there is competence problem within the TOCs in relation to property management. Competence is defined in the literature as: *“the ability to do something successfully or efficiently”* (ODO, 2013) or *“the ability and willingness to perform a task”* (Burgoyne, 1989). Seemann, et al, (2014) define it as *“the extent to which one is able to manifest one’s intent”*. The research question above is investigated through the following sub-questions:

- RQ1. What operation and management strategies are used in the TOC sector and what are the decisions taken based on?
- RQ2. How do TOCs structure their mortgage financing?
- RQ3. To what extent do TOCs carry out energy efficiency measures and how are the measures financed?

A trend of divestitures from the rental housing sector to the tenant-owner housing sector has contributed to shifting the management responsibility from corporate executives to governing committees. Since 1990 the rental housing stock within the inner city of Stockholm has decreased from 73% to 36%. During the same period the share of market-based cooperative housing has increased from 26% to 62% (Andersson & Turner, 2014). It is hypothesised that the priorities and the management decisions within TOCs in the suburbs might differ from those of TOCs within the inner city. This is based on variations in the cost of living in TOC apartments in Stockholm County as

illustrated in Netzell, (2015, p. 6) and on the reference in Boverket, (2002) to location as a factor in the property management of TOCs.

The qualitative empirical studies in this paper which utilise data collected through semi-structured interviews, questionnaires and document studies were carried out within Stockholm County as it is the largest and most dynamic region in Sweden. The interviews took place in the areas shown in figure 1 whereas the questionnaires were administered in Stockholm Municipality (survey 1) and Stockholm County (survey 2) as shown in figure 2.

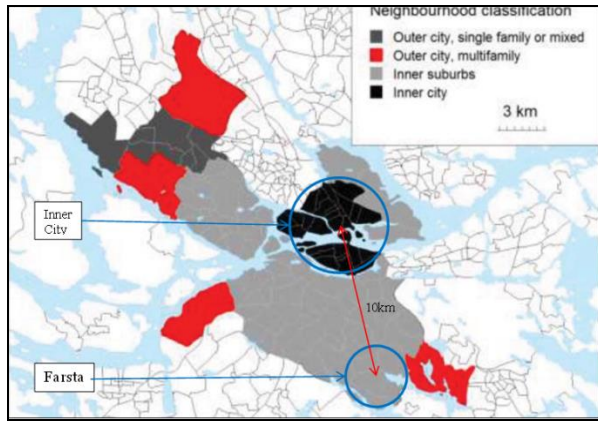


Figure 1: Stockholm city neighbourhood segments. Source: (Andersson & Turner, 2014)

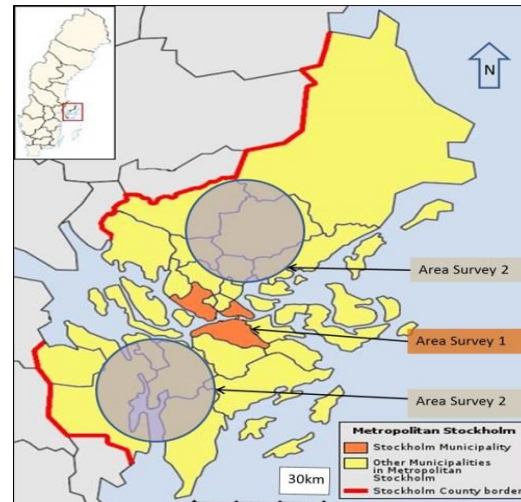


Figure 2: Stockholm County showing the surveyed areas. Source of map: (Wikipedia, 2014)

A characteristic of qualitative research based on interviews is the simultaneous collection and analysis of the data assembled whereby both jointly shape each other as the case was in this study (Maxwell, 2008).

The paper is structured in such a way that each sub-question is presented as a section on its own. Thus the remainder of the paper is as follows: Section 2 presents the TOC sector in Sweden as well as literature on challenges in managing multi-owned housing such as the case in TOCs. This is followed by sections 3 to 5 that present the method of data collection and analysis together with the results related to one sub-question each. Section 6 presents a discussion of the results from the sub-sections as well as some concluding remarks. For purposes of comparison the research is mainly focused on maintenance strategies in TOCs with aged properties.

2 Tenant-Owner Cooperatives in Sweden and earlier research

The TOC sector in Sweden

The housing market in Sweden comprises mainly of three tenure forms: owner-occupation, rental tenancy and cooperative tenant-ownership. Fifty-six percent of the dwellings in Sweden belong to the multi-family housing sector and the tenant-owner tenure, which has been described by Scanlon & Whitehead, (2004) as well as Rounavaara, (2005) as confusing, paradoxical and unique, is the largest within this housing segment accounting for 37% of the stock (Statistics Sweden, 2013). A majority of TOCs in Sweden consist of “builder-sponsor” cooperatives in which the cooperative’s members are not the initiators of the project but persons brought into the development by means of advertising and a regular sales campaign carried out by a building firm. Once membership into the cooperative has been accepted the household makes the required down-payment as well as monthly fees in order to acquire the right to occupy/dwell in given apartment that the cooperative owns (Norris & Shiels, 2004, p. 81). Another category of TOCs are the ones formed through a tenure conversion process. Only sitting tenants are eligible to form this type of cooperative. For conversion to take place the law requires that a 2/3 majority of the residents agrees to participate in the conversion. In a number of cases, dwellers in the suburbs have not managed to amass the required number of tenants who want and/or can afford to participate in the tenure conversion. TOCs also sort into two organisational

groups: the “attached ones” that belong to the two nationwide cooperative organizations *HSB* and *Riksbyggen*, and the independent ones, which are primarily those founded by building companies.

Management is through governing committees in which service is on a voluntary basis for a term of two years, after elections at the annual general meeting. The members of the TOC can take part in the decision-making through their right to vote on issues presented during general meetings. Between the meetings, the board is free to make most decisions without consulting the members. Housing cooperatives in Sweden typically own only one housing estate or apartment building with an average of 30 apartments and their business is limited to providing housing services only (Moreau & Pittini, 2012). By April 2014, there were 23,271 active TOCs in Sweden and though only about 10% of them consist of more than 100 dwellings, the ones formed during the period 1965-1975 comprise of 300 to 500 apartments each (Hitta Brf, 2014). As of January 2012, the total sum of master mortgages held by TOCs was approximately 30 billion Euros which at the time was approx. 25% of the accumulated Swedish national debt (Hullgren, 2013, p. 1; Paper 5). Bengtsson, (1992) and Victorin & Flodin , (2011) provide a good description of cooperative housing and the TOC tenure in Sweden.

Literature on challenges in managing multi-owned housing

Easthope et al, (2012) identifies the fact that many people are not aware of their responsibilities as owners to be a major issue to contend with among the many challenges in the property management of multi-owned housing (MOH) such as found in TOCs. The lack of easily accessible information that is needed by the executive committee members in order to make qualified decisions as well as their lack of formal training is another factor given that creates difficulties. Yau, (2014) finds the individual residents’ perceptions of self and group efficacies (ability to produce or achieve a desired result) to be significant determinants of their participation behaviour, which underlies free-riding. Another of the challenges identified in the literature is the fact that the members of the executive committees are volunteers that often have limited skills and few resources at their disposal, a problem that is compounded under self-management (Easthope & Randolph, (2009). Ho & Gao, (2013) note that MOH owners tend to be apathetic towards building management as they hope to benefit from others’ management efforts causing problems such as inadequate maintenance funds and management committees that have difficulties filling vacancies. They further observe that as building maintenance in MOHs is usually outsourced the members of the executive committee also face a challenge not only in having to make maintenance decisions but also in having to monitor a third party’s maintenance performance. Lam, (2008) finds a positive correlation between performance quality by professional service providers and increased monitoring.

The demographic composition of the members in multi-owned housing influences the decisions made especially when it comes to the question of whether to finance the measures through loans or sinking funds (Arkcoll et al., 2013). Muyingo, (2015) describes various incentive problems related to the governance of multi-owned properties and Levy & Sim, (2014) find that the most common reason for cooperative members’ dissatisfaction with management is the perception that committee members are acting in their own interest. Lujanen, (2010) notes that as the everyday administration and a good part of important decisions in MOHs are delegated to management agents or companies, this leaves the owners with a lack of a clear understanding of the management of the common parts and how the fees are used. The individual dwellings are often in good shape and the challenge is to keep the common parts of the buildings maintained and to guarantee that major repairs are done in time. Hendrik & Daniëlle, (2014) mention the common practise in newly constructed MOH complexes whereby the developer appoints the first professional manager. Results by Ho & Gao, (2013) indicate that building age has a negative impact on the likelihood of outsourcing the maintenance and that MOH buildings in a poor condition are less likely to have a professional manager. The degree of deterioration is influenced by the maintenance strategy applied. According to Olanrewaju & Abdul-Aziz, (2015, p. 87) preventive maintenance can reduce maintenance costs by 15% if properly introduced. However, a time-based maintenance strategy, especially in a situation of uncertainty, can lead to carrying out some measures that it would be possible to postpone and in so doing, lower the overall costs (Lind & Muyingo, 2012).

3 Operation and management strategies within TOCs in Sweden

This section deals with the first research question on how the TOCs organise the operation and management of their properties as well as the basis of the decisions made. A study that comprised of exploratory interviews of a semi-structured kind and a questionnaire was carried out in a sample of TOCs whose financial reports could easily be found through the internet, which also serves as a complimentary source of data according to Robinson, (2014).

3.1 Data collection

Semi-structured interviews in 12 TOCs

The first step of this study aimed to find out the allocation of responsibilities and decision-making routines within TOCs and the extent to which external professionals are utilised. The hypothesis was that governing committees in peripherally located housing cooperatives will, due to market dynamics, act differently from similar ones in attractive city-near locations and that there are differences based on the age of the properties.

TOCs with at least 25 apartments but not more than 150 apartments and located within 2km from Stockholm city centre and an inner suburb¹ area Farsta, which lies about 10km from the city centre, were selected for this study. Farsta has a good tenure mix and buildings of various ages and is representative of the areas of the inner suburbs. The size of the TOCs that could be in the sample was chosen so as to accommodate for the most common type of TOC based on statistics provided in Hitta Brf, (2014). TOCs with buildings that became operational after 2005 were categorised as new/young. TOCs with buildings constructed before 1991, were classified as aged ones. The number of TOCs within the geographic area of interest that could be approached was less than 100 as many of them lacked easily accessible financial reports. Furthermore many of the persons with knowledge relevant to the study could not find the time to join in the interviews. Finally a total of twelve interviews, out of 42 probable ones, with three TOCs in each of the four sample categories (inner city vs inner suburb and young/new vs aged) as shown in table 1, could be carried out in 2012 over a period of three months.

The questions were based on an interview guide covering descriptive information about the TOC such as location, size, the form of acquisition, the age of the buildings, the demographic composition of the members and the turn-over rate of the apartments. This was used to gauge efficacy and sense of collectivism in the TOC. The questions also covered the issues of collectivism, governance and competence through which data was collected about the executive board and the presence of competent persons on the board, the degree of participation by members of the TOC in decision making as well as the level of outsourcing and monitoring of service providers. The interviews were carried out with another researcher whose focus was on issues of financial management within the TOCs. Those results have been presented in Hullgren, (2013, paper 5).

Table 1: Some features of the twelve tenant-owner cooperatives that participated in the interviews.

Identifier*	Majority on board	Nr of Dwellings	Major activity during past 12 months	Planned activity during coming 12 months
CA1	Men	101 -150	Energy efficiency - ground heat	Nothing
CA2	Men	50 - 100	Energy efficiency	New dwellings in loft
CA3	Men	50 - 100	Energy efficiency	Painting stairways
CN1	Men	50 - 100	Warranty related measures	Nothing
CN2	Balanced	50 - 100	Warranty related measures	Energy efficiency - ground heat
CN3	Men	< 50	Warranty related measures	Elevator
SA1	Men	50 - 100	Changing roof	Energy efficiency - ventilation
SA2	Men	50 - 100	Elevator	Elevator
SA3	Women	50 - 100	Changing roof	Nothing
SN1	Men	> 151	Elevator	Changing roof on garages
SN2	Men	50 - 100	Elevator	Ventilation
SN3	Men	50 - 100	Cracks in Facade	Facade

CA = City Aged; CN = City New; SA = Suburb Aged and SN = Suburb New

¹ According to the description of inner suburb given in Andersson & Turner, (2014)

Survey on maintenance planning and economic evaluation

In order to enrich the study a questionnaire was administered to a sample of TOCs that were categorised as in the first part of the study. However, the category young was redefined to buildings that became operational starting in 2000 while the group, aged, was redefined to contain buildings constructed before 1981. The sample was picked from TOCs that were geographically closer than 4km from the city centre (the radius of the inner city) or further than 10km (slightly further than the approximate radius of the Stockholm municipality). The upper limit for sampling changed to 350 apartments so as to include more large-scale TOCs in the study. Of the 3409 TOCs in Stockholm municipality (see figure 2 above), 2347 (69 %) owned at least 25 apartments but not more than 350 apartments.

The survey aimed to study the degree and basis of the corrective and/or preventive maintenance carried out by the executive committees in TOCs and whether there were any location specific differences in the strategies displayed. The postulation was that executive committees in TOCs in centrally located areas with a more liquid market are more reactive in their actions and have a shorter planning horizon.

The questionnaire consisted of 20 questions in which the first six elicited information about the TOC such as location and size, the form of acquisition and age of the buildings, the reported value of the properties, and the degree of outsourcing of administrative services. The sections thereafter consisted of statements that the respondents ranked on a 5 point-scale that ranged from total disagreement (1) to full agreement (5). An inquiry into the degree of outsourcing of facility management as well as the existence of both short and long-term maintenance plans together with the degree of adherence to the maintenance plans was done. Responses were sought about the usage of economic analysis tools in prioritising between activities as well as the influence of a number of given factors on the decision making process.

A random selection set at not more than 250 cooperatives in each of the four categories produced 725 cooperatives that received the questionnaire. Two hundred and sixty six usable questionnaires that were completed producing a response rate of about 37%. Tenure conversion dominated in the aged stock especially in areas close to the city centre (74%). There were 36 responses (response rate 36%) from the new TOCs in the city; 50 responses (response rate 40%) from new TOCs in the suburb; 99 responses (response rate 40%) from aged TOCs in the city and 81 responses (response rate 32%) from aged TOCs in the suburb. All of the TOCs in the category inner city as well as all of the ones with newly constructed buildings in the inner suburbs received the questionnaire. A reminder sent out after two weeks added to the initial response rate.

3.2 Results:-

The interviews

Responses to the background questions revealed that most of the respondents had served more than 5 years on the executive board and were knowledgeable about the workings of the committee. All of the members on the committees in the 12 TOCs had achieved college education and the boards had on average eight members with a majority being men except in two cases. The inner-city TOCs had a higher degree of persons with managerial responsibilities at their places of work than those in the suburb. However, this did not appear to create any advantages as the roles and responsibilities of the members of the executive committee did not appear to be delegated according to ability. The average size of the dwellings appeared to have an influence on the composition of the executive committee. The responses revealed that the decision-making process and low degree of participation by the cooperative's members in collective action (on average only 30% are active) is not location specific and nor did the number of units under management appear to be a factor. The difficulty in recruiting board members or the size of the remuneration paid to the board members was not geographically divergent and it was often in the form of an annual dinner or symbolic cash gratuity equivalent to about US\$ 700 per year and person².

² This is the equivalent of one price base amount per year for the whole committee. The price base amount is set by the government and is used for calculating different kinds of benefits in relation to general price changes. The amount of the benefit automatically changes in accordance to adjustments in the price base amount which for the year 2015 was approximately US 5,200.

There was a greater degree of discussion within the executive members before a decision concerning financial matters were taken than on technical issues with more disagreement among the inner city TOCs. However, these also appeared to utilise the help of external advisors more as they had a larger body of non-board members with specialist knowledge that could be, and who were, consulted before the board decided on certain matters. The interviews revealed a clear difference in the focus of the governing boards' activities based on whether the cooperative is young or not due in part to differences in financial indebtedness and maintenance needs. During the course of the interviews, it became clear that it was not so much the general composition of the board but the presence of a strong spirited individual or a few persons that could sway the whole board and consequently determine the management strategies.

All of the twelve cooperatives had outsourced their economic and technical execution. Five out of the six TOCs in the suburb had outsourced their services to the same entrepreneur who appeared to have a local monopoly. The inner-city TOCs had a larger number of contracts with different specialised service firms. According to an interviewee in a TOC with aged buildings in the suburb (SA2), one of the challenges encountered was that the market for facility management services aimed towards large TOCs is dominated by a few actors and is not so competitive making it difficult to switch providers. Most of the TOCs had selected the administrative service provider mainly through word of mouth, based on the quality of service and record of accomplishment and not on the fee level. Principal-agency problems appeared to be particularly common within TOCs with newly constructed buildings. Three out of the six TOCs in this category reported that they unwittingly had long-term technical service provision contracts with daughter companies to the builder-sponsor firm. According to the chairperson in one of these TOCs, (CN1):

“The TOC sector is the new sea of shark-infested waters in which it is profitable to sell newly built properties to TOC fools who are unaware of kickbacks the developer receives through various agreements with diverse contractors”.

Protracted disputes due to construction faults in situations where there were several subcontractors to the property developer were another challenge reported especially when the faults appear after the warranty period has expired. The chairperson in a suburban TOC (SN3) noted that:

“The houses are being constructed so fast and with so many subcontractors that it is a nightmare processing against invisible firms in order to get the reworks done.”

In most of the interviews, the age distribution of the members in the cooperative was given as a major factor that influenced the decision on how activities were financed. The choices are not always based on an economic analysis of what is best for the cooperative. The executive committee in a TOC located in the city (CN2) mainly had aged members, who were reluctant to take new loans to finance property management activities. The treasurer in a TOC with aged buildings and with a high apartment turnover frequency, (CA1), commented that: *“we do not adjust monthly fees as often as we would like because the members perceive this as detrimental to the selling prices of the apartments.”*

The interviewees were of the general opinion that there was a lack of professional property management competence among the board members. However, as noted by the chairperson in one of the TOCs with new buildings in the city, they saw themselves as *“good shepherds with enough sense to assess when it was time to engage qualified consultants”*, or as perceived by the treasurer in a suburban TOC with aged buildings (SA3), *“those of us on the executive committee are like good matrons who are not very business-like but make sure the pantry is well-looked after.”*

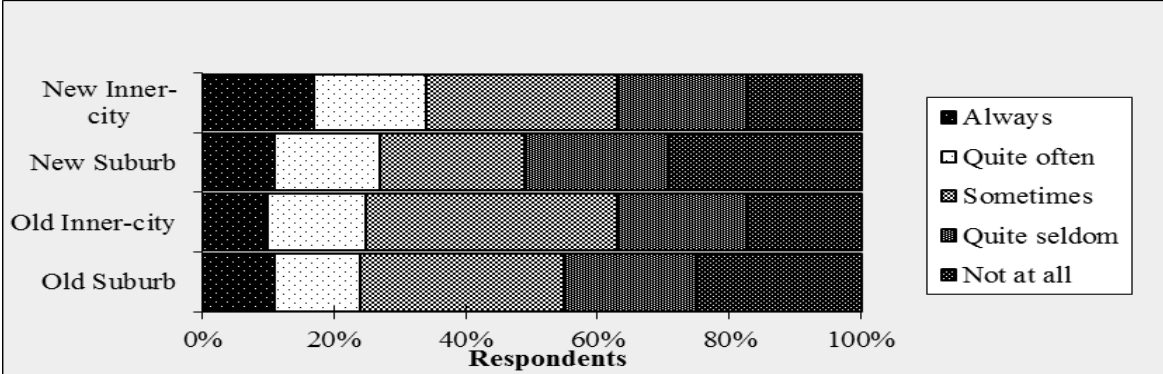
The survey

Ninety two percent of the cooperatives in the survey had wholly outsourced their financial as well as accountancy management but only 60% had outsourced activities such as the cleaning of the common rooms and space as well as grounds maintenance. These were kept in-house especially in the aged stock. The degree of outsourcing was higher in the builder-sponsored cooperatives than in the converted ones and higher in the younger cooperatives than in the older ones with the services largely outsourced to the attached mother organisations. Actions to lower operation costs were very highly prioritised in 31% of the TOCs. A majority of the measures taken in the investigated TOCs were of a simple nature such as painting the stairways, securing the main entrances to the buildings and

decisions about the grounds as compared to activities such as the installation of geothermal heating or solar panels.

Though a majority of the TOCs claimed to have a long-term maintenance plan, the most common planning period was about two years long and the young inner city TOCs had the shortest planning duration, often covering only 1 year. Twenty-five percent of all the respondents lacked a maintenance plan that covered the coming five-year period and approximately 15% of the TOCs either did not have an action plan or had one but did not follow it. A similar study carried out within the Swedish rental sector also showed differences between the private and the public sectors in adhering to set maintenance plans (Muyingo, 2009). Economic analysis was used to a higher degree within the young inner city TOCs when deciding between large-scale activities but close to 20% of all TOCs never carry out such analysis especially in the suburbs as shown in diagram 1.

Diagram 1: Utilisation of economic analysis by the executive in order to prioritise between large-scale activities



The fact that something needed to be repaired immediately was given the highest priority by 79% of the respondents when asked to rank various factors that influenced the decision to carry out a measure. Action was also taken in case a maintenance need became noticeable, such as a damaged façade. That something was wrongly constructed was a factor that was considered to be influential by only 36% of the respondents. However in the inner city, over 48 % of the respondents in the young TOCs considered this to be a very important factor as compared to only 11% with an aged stock. That the maintenance activity could be financed without raising the monthly fees was important or crucial to 56% of the respondents in the aged TOCs in the suburbs as compared to 43% of the young ones in the same location.

4 The mortgage choice of TOCs and the factors that influence the decision

This section deals with the second research question on how the TOCs organise their mortgage financing. The hypothesis was that due to various factors such as those discussed in Andersson & Turner, (2014) the composition of the governing committees in the suburbs differs from that in the inner city and that this influences the decisions taken in relation to the mortgage structure for the master debt. The aim of this part of the study was to investigate the basis of the decisions made in relation to the master mortgage and if the members of the governing committee might be seen as acting in their own interest.

The price paid for a dwelling in a TOC consists in part of the purchase sum (that can be financed through a personal mortgage) and a portion of the mutual debt held by the TOC, the master mortgage, used to fund part of the purchase of the buildings and the land (Hullgren, 2013). Dwellers in the TOC are required to contribute towards the management and maintenance of the common areas and laws and/or the statutes of the cooperative regulate the obligations (Victorin & Flodin, 2011). However, divergent interests and incentives among members of the executive as well as the individual members lead to inadequate planning for the funding of repairs and maintenance and the choice between reserves or loans (Easthope et al., 2012). Hendrik & Daniëlle, (2014) propose the use of a mandatory reserve fund that is 0.3 – 0.5% of the reconstruction value of the building. According to Lujanen, (2010), major repairs and renovations should be financed through reserve funds together with loan financing as they are of a long-term nature and this type of financing divides the costs over a longer period of time. Under Swedish law TOCs are not required to have a reserve fund.

For loan financing, a choice can be made between a fixed-rate mortgage (FRM) or an adjustable-rate mortgage (ARM). Unlike the US market, common maturities for FRMs in Sweden are 1-, 2- or 3 years and in January 2012 only 4.7 per cent of all lending from mortgage institutes constituted FRMs longer than five years (Hullgren, 2013, pp. 8, paper 5). In Sweden, rates that are fixed for a period of less than 3 months are classified as ARMs. The size of the loan (mortgage) in relation to the assessed value of the property, the loan to value (LTV) ratio, is an important factor in the pricing of mortgages and Duffy & Roche, (2005) who is cited in Hullgren, (2013 p.4 paper 5) finds that persons with high LTV ratios opt for FRMs while households with low LTV ratios choose ARMs. The average LTV ratio for TOCs in Sweden is approximately 32 % mainly due to escalating property values (Holmqvist & Magnusson, 2014, p. 243; Hullgren, 2013).

4.1 Data collection

Data collection was through 9 questions that were attached to the questionnaire described in section 3. This part of the questionnaire inquired about issues such as the source of information used before choosing a particular amortisation strategy. 680 out of the 725 TOCs that received the questionnaire above had been identified as having a mortgage and were asked to respond to the additional questions. Of the returned questionnaires 97% (258) included answers relevant to this study.

Through studying the financial reports found on the websites of various property owning companies as well as lists of tenure converted properties previously owned by the Municipality of Stockholm the TOCs could further be categorised according to how they were acquired. The descriptive statistics related to this particular section of the questionnaire have been published in Hullgren, (2013). The survey was reinforced with answers from the interviews reported in section 3.

4.2 Results

On average, the TOCs in the survey structured their mortgages in such a way that about 25% of the total mortgage sum was in form of ARMs, 50% in form of 1 to 2 year FRMs while the of the remaining 25% consisted of FRMs that had a duration longer than 3 years. This distribution was in contrast to the structure of the respondents' personal mortgages. Even with similar LTV ratios, there was a tendency towards more FRMs for the master mortgages while the private mortgage was mainly of an ARM character. In the suburbs about 50% of the young TOCs had over seventy-five percent of their mortgages as FRMs. On the contrary 62% of the older cooperatives had no FRM at all. On the other hand there was no substantial difference in the mortgage structure of the TOCs based on location. According to 84% of the respondents, the decision about the interest rate structure is in the hands of the governing committee without consultation from the cooperative's general assembly. This decision was in some cases delegated to one or two persons especially in the newly built inner city cooperatives (22%).

Major factors in determining the mortgage strategy of the TOC were given as the difference in interest rates between various term periods, the cooperative's financial risk as well as the presence of a strong-willed person on the board. However, in general the respondents did not seem to relate the TOC's financial risk directly to the LTV ratio. Further analysis of the results revealed that the converted cooperatives listened more to the advice of their external financial manager whereas the builder –sponsored ones based their choice a lot on the knowledge of individual members on the committee as well as the LTV ratio. This distinction was more pronounced between the new and old cooperatives. The assumption that inner-city TOCs had a competitive advantage in financial management due to having dwellers that hold valuable financial information through their workplaces such as banks or law firms was not confirmed (see also Hullgren, 2013, p. 13).

All of the TOCs in the survey reported that they had a maintenance reserve fund. Forty-eight percent of the respondents totally agreed to the statement that the maintenance fund (reserve fund/sinking fund) was "*an insurance against unexpected costs*": Responses given during the interviews reported in section 2 indicated that even in cases, especially in the older associations, when large-scale renovations had been carried out, the maintenance fund was rarely touched. af Klintberg et al., (2014) note that the economic status in a number of aged TOCs is such that they could afford to lower their monthly fees but have not done so.

5 The degree and type of energy efficiency measures within TOCs

Sweden has committed itself to several EU directives (see e.g. European Parliament, 2010, 2012), that aim to promote renovation measures that lead towards energy efficiency and reducing energy consumption in homes and premises. This section deals with the third research question that aims to find out to the extent to which TOCs carry out energy efficiency measures.

A large share of the approximately 1 million properties constructed during the period 1965-1975, of which 30% were in the cooperative housing sector, have been noted to have major renovation needs that among others can lead to lower energy costs (Högberg, Lind, & Grange, 2009). Executive committee members in TOCs with buildings from this period face the challenge of executing these measures in the most cost effective way. Whereas the two studies described in section 3 and 4 above focused on the age and location characteristics of the TOC, this study concentrated on the possible differences in decision-making between the builder-sponsored TOCs, many of whom are connected to HSB and Riksbyggen, and the ones formed through tenure conversion in regard to energy-efficiency measures.

Palm, (2013) lists a number of factors that support action towards energy efficiency. Among these is the organisations' perception of its capacity to improve its energy efficiency as well as the presence and involvement of an influential innovation champion. In their study on hindrances to energy efficiency measures within TOCs attached to Riksbyggen, af Klintberg et al., (2014) identify several challenges. These include the unwillingness by banks to provide cheaper financing for the energy efficiency measures and the fact that hidden short-term incentives of some tenant-owners can hinder energy-efficiency measures even when these would have positive effects for the TOC (pg. 94). Not all energy efficiency measures are economically worthwhile for a TOC, as indicated by case 1 in Muyingo, (2015). However, af Klintberg et al., (2014) points to several benefits to society that can be accrued from the sustainable environment actions within the TOC sector.

5.1 Data collection

The study investigated TOCs that own properties constructed during the period 1965-1975 and located further than 10km to the north and south of the Stockholm Municipality as these have many comparable characteristics and are outside of the highly transacted inner city market segment. A search for the relevant TOCs was made through the database Värderingsdata after which the questionnaire was sent by post to the chairpersons in all of the 91 TOCs identified. 26 responses were returned of which 19 were fully completed and usable. 14 of these were builder-sponsored. A reminder that was sent out produced only a single response.

The questionnaire that consisted of statements on a 5 point Likert scale ranging from total disagreement (1) to full agreement (5) was conducted in the autumn of 2013 and contained nine questions. These elicited information about energy efficiency measures carried out by the TOC during the period 2009 to 2012, before 2009, as well as activities planned to be carried out within 3 years (2014-2016). There were questions too on the importance of various factors that influence the decision-making, how the measures are financed, about the existence of a long-term maintenance plan as well as the competence of the members of the board in aspects of a legal, technical, as well as economic character that are essential to a proper analysis of different measures. Choosing periods close to when the survey was carried out was deemed to increase the chance that the respondents would have knowledge of the information being sought. The low response rate in this questionnaire was probably due to the character of the survey that sought historic information.

5.2 Results

Ninety-five percent of the TOCs had at least one person that had been a member of the executive committee for longer than three years who provided answers to questions related to past decisions. 70% of the TOCs in the survey had persons with economic knowhow on their governing committees as compared to 42% with technical knowhow and only 18% with legal competence. The converted TOCs had a higher percentage of persons with knowhow on various subjects on the board than in the builder-sponsored ones a majority of which are linked to *HSB* or *Riksbyggen* (Bengtsson, 1992). The responses about past activities indicated that in the short-term 45% of the TOCs had trimmed the ventilation system and 53% had done the same for the heating system. These small-scale measures

also dominated the activities that were planned to be carried out within the short-term future. In a period longer than 3 years in the past, seventy-seven percent the TOCs had switched to central district heating while 36% had also switched to 3-paned windows as a measure to reduce heating costs. A degree of neglected maintenance was evident in the sample as expected measures such as the renovation of the roof, the façade as well as the plumbing system, which are related to the shell of the building, had not been carried out by at least 38% of the TOCs investigated and they also lacked short term plans to carry out the renovations. The converted TOCs had a higher degree of utilising innovations such as relining as a measure of renovating the plumbing system than the builder-sponsored ones.

According to a majority of the respondents in this survey, the risk for acute problems was by far the most important factor that influenced the decision to carry out a measure followed by the need to lower operating costs. The concern for the environment came in third place. The effect of the energy efficiency measure on the value of the apartment was considered by 75% of the chairpersons (respondents) in the converted TOCs to influence their decision-making as compared to 43% in the builder-sponsored. All of the converted TOCs (100%) utilise the reserve fund and 75% of them also utilised the raising of fees in order to finance their energy-efficiency measures as compared to 71% respective 93% within the builder-sponsored TOCs. These relied more heavily on borrowing. In a number of cases, the converted TOCs also have a few assets such as garage space and rental apartments that can be sold to strengthen the capital base as reported by 50% of the converted TOCs. af Klintberg et al., (2014) note that many of the aged TOCs have amortised their mortgages. This provides the possibility to take up new ones, which might explain the results above.

6 Discussion and conclusions

The results in the studies above confirm much of what is presented in the literature such as the voluntary nature and time consuming character of committee duty and dominance of the males on the committees (Easthope & Randolph, 2009; Ho & Gao, 2013; Bengtsson, 1992). Newly created TOCs as well as the ones without professional assistance were a major source of the concern expressed in Boverket, (2002) as they were considered to be at risk not to carry through the necessary maintenance of their properties. The three studies reported in this paper point to a number of factors that are location and/or building age specific that present challenges to property management in the sector. There is an indication that an address in the inner city will lead to more discussion, more economic analysis and shorter planning horizons within the TOC and vice versa. On the other hand, age rather than location played a more determinant role in the choice of mortgage structure contrary to the hypothesis in section 3. Persons in tenure converted buildings appeared, to a higher degree to relate the decision to carry out energy efficiency measures to the appreciation of the property value than those in builder-sponsored ones. Two issues stand out as crucial to the discussion of whether the concern expressed about property management in the Swedish tenant-owner cooperative housing sector is justified. These are knowledge management and the problems related to principal-agent relations.

Knowledge management

The study on maintenance planning indicates a high degree of reactive actions (a lack of long-term plans), a varied but low use of economic analysis in the choice between measures and a certain reluctance to finance measures through increases of the monthly fees. Though changes in building standards and market demands call for more focus on issues related to a sustainable environment the third study finds that environmental awareness ranks after other factors as a basis for decisions on energy efficiency measures in the TOCs. The three studies together portray a sector in which decisions appear to be mostly based on a short-term perspective that aims at maintaining the status-quo. This day to day operations strategy is hinged more on economic rather than technical considerations. As service on the committee is time consuming and not fully compensated for, it is logical to assume that as little time as possible will be spent on each activity. Thus less complicated activities such as trimming the heating system will be prioritised. Decisions that are based on the cash flow are prioritised over others arrived at through the utilisation of stringent economic analysis tools in order to set long-term operation and maintenance plans. This choice of action can be due to the fact, according to the interviews, many of the investigated TOCs lack knowledge management systems that can be used by the governing committee members in order to make qualified decisions. Lind & Muyingo,

(2012) notes this to be crucial especially in a situation where maintenance plans are continuously adjusted.

Though the governing committee members appear to be well educated, the first study indicates that responsibilities are not assigned according to ability. Knowledge is likely to be lost when members are changed or when people take on duties that they are not competent to carry out. The high degree of males on the governing boards in the interviews is consistent with observations in Bengtsson, (1992). The author remarks that in reality, much of the decision-making of the attached TOCs takes the form of negotiations with the mother organisation and that the possibility that middle-aged men may be considered to be more able than young women to speak the technical and economic language of professional managers in the national organisations leads to their choice. However, this does not explain the abundance of same results in the unattached TOCs.

Principal agency problems

Most of the TOCs have outsourced their operations. However the challenge as expressed by an interviewee in the first study, is that though the members of the executive committees are capable of “*procuring the right competency when needed the most difficult task is to be specific in the procurement*”. The definition of competence given in Seemann, et al, (2014) can be interpreted as being able to display or in some other way clarify one’s objectives. A transparent decision making process with a decision support system that leads to activity plans whose results are easy to analyse would demonstrate competence. Such a system also has to accommodate for the challenges related to the observable as well as hidden incentives of the person undertaking a duty or an assignment (the agent) together with the goals of the beneficiary to the measure being undertaken (the principal). As in general, only members in the cooperative can be elected to sit on the governing committee (Victorin & Flodin, 2011, p.92), the occurrence of free-riders implies that the number of persons within the elective body that are knowledgeable, skilled in property management and are willing to serve is not so large. As Burgoyne, (1989) takes willingness to be a criterion for competence, it could be hypothesised that competence in managing TOCs can only be found in a small number of its members. The results of the interviews provide a view on competence that just enough is required so as not to make mistakes and that this seems to be a strategy that has worked well for years, a claim that is used to indicate that there is no cause to worry about property management in this sector. On the other hand, through procrastination tough decisions that could lead to mistakes can be avoided. This is one probable cause of the neglected maintenance observed in Boverket (2002). The dependency on “champions of the cause” in carrying through various measures raises concern as some of these “champions” might have hidden motives.

There is a high demand for tenant-owned apartments in expansive regions such as Stockholm and the low construction rate in the housing sector in general is pushing up the prices. Moral hazard might lead some individuals to fight to hold down the fees and the degree of investments in the commons, costs that might not be directly reimbursed in the price of the *bostadsrätt*. Other challenges faced by members of the managing committee include the time wasted in processing against various contractors in order to get reworks done (principal agency problems), the indifference of the TOC members to the committee’s work, the lack of competition among service providers for the large TOCs as well as the attached TOCs strong reliance on the services provided by the national organisations.

Concluding remarks

Most of the factors identified as challenges in property management within the TOCs, taking in to consideration the location and age based groups of TOCs studied, are related to the same issue – the lack of a long-term perspective that takes into account the turnover rate of the members of the governing committee. There is a need for long-term structure in the governance as well as maintenance planning in order to coordinate efforts and measures whereby an appropriate financing structure can be arranged. This would for example reduce the risk of TOCs with unnecessarily high monthly fees. af Klintberg et al., (2014) too notes the lack of long-term planning in the TOC sector as a major hinder in order to utilise synergies due to combining measures such as installing solar panels while renovating the roof, which would lower the overall costs of both measures. Given the large amount of capital entrusted in the hands of laypersons and lack of proper maintenance planning there ought to be more focus on the question of competent long-term decision making that does not risk the

invested capital. There is a need for TOCs to invest in knowledge sharing and management as well as information systems that can be of help in assembling historic data to provide predictions that would be useful in the decision making process. The Swedish tenant-owner cooperative sector accounts for about 40% of the multi-family housing in Sweden and is the majority tenure form in some regions such as Stockholm. Therefore, developing ways of increasing the knowledge about the risks and consequences of mismanagement such as neglected maintenance will provide the decision makers in TOCs with an opportunity to better decisions.

One important finding in this paper is that property management within the TOC sector is quite dependant on individual efforts which also influences the decisions taken and that members of the governing committees in TOCs appear to be contented with their efforts. However there are several limitations in the research such as the small number of respondents in one of the questionnaires which affect the generalisability of the conclusions. Nevertheless the challenges highlighted indicate that concern about efficiency in the property management within this sector is justified especially in view of the various principal-agent relationships that exist in a TOC. These include the relation between the TOC and the service providers as well as between the members of the governing committee (agents) and the other members of the TOC (the principal). Clear policies on how to deal with the different problems this entails are essential but this is missing in many of the investigated TOCs. Challenges such as those presented by technical innovations in newly constructed passive houses have raised the need for qualified decision-makers and property managers in this sector, if the capital invested in the highly mortgaged dwellings is not to be lost.

Based on the empirical studies above, there are a number of paths for further research in the governance and management within the TOC sector. Responses during the interviews indicated a degree of manipulation of the TOC sector by construction companies that utilise subsidiaries with long term service contracts similar to the situation mentioned in Hendrik & Daniëlle, (2014) or subcontractors so as to avoid responsibility for costly reworks. Therefore an idea for further research is to investigate the nature of and clauses in various contracts in newly constructed buildings in the TOC sector together with a mapping of how outsourced services are procured by the TOCs in a process similar to that presented in van Mossel & Straub, (2007).

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