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Sense of community and homeowner participation in housing management: A study of Hong Kong

Lack of homeowner participation in housing management (free riding) has rendered the management of many apartment buildings in Hong Kong ineffective. Proper apartment-building management depends on the voluntary contributions of individual homeowners. Individual homeowners are likely to free-ride on the management efforts of others because they consider the benefits of good housing management to be common goods. Apart from incentives such as subsidies offered by public entities and stricter law enforcement against homeowners that neglect building care, researchers have claimed that communitarian solutions may also work to tackle housing-management problems. In particular, there has been growing interest in the use of social capital, which is regarded as an asset of trust, reciprocity and cooperation, to foster a participatory culture among individual property owners. Empirical study of whether social capital plays a necessary role in housing management has been lacking. This study examines the linkage between social capital and homeowner participation in housing management in Hong Kong. The findings of this study have significant policy and practical implications. In addition to financial incentives or disincentives, public administrators can work to build a sense of community to achieve sustainable management of the existing housing stock in Hong Kong.

Key words: collective action, sense of community, housing management, resident participation, social capital

1 Introduction

In the twenty-first century, sustainable development has been written into policy agendas in almost all countries and cities around the world. Most of the concern regarding sustainable development lies in ecological and environmental issues. However, quality of the living environment should also be a major concern. As suggested by Jeroen Boelhouwer (2002) and Gideon Omuta (2004), liveability is one of the important issues to be addressed in the light of sustainable development. It is a golden rule for public administrators and urban managers that the living space must be sanitary and safe. Otherwise, occupants are exposed to various safety and health risks. In compact mega-cities such as Tokyo, Beijing, Shanghai and Hong Kong, the close connection between living environment and people's wellbeing is particularly evident. Although the compactness of these cities offers economic efficiency in terms of communal usage of facilities and utilities, problems often arise from the high population density (Lynn, 1999; Vlahov & Galea, 2002). The outbreak of Severe Acute Respiratory Syndrome (SARS) in 2003 vividly demonstrated the consequences of poorly managed residential housing in high-density urban areas. The localised, widespread transmission of SARS in Amoy Gardens in Hong Kong and Wen-Hua in Taipei created community health disasters in both cities. In spite of these lessons, the number of buildings in disrepair continues to grow, signifying an urgent need to strengthen the management of residential housing and foster a care culture for the timely renovation of buildings in these mega-cities.

The management problems related to multiunit housing are rooted in the interdependency of homeowners. Unlike single-unit housing, the management of multiunit housing inevitably involves the interaction and cooperation of homeowners and residents. Specifically, collective actions are essential for proper management and maintenance. Traditional theories of collective action, however, suggest that cooperation does not take place automatically, particularly when the number of homeowners involved is large. In those situations, there are high transaction costs to negotiate and arrive at consensus among the homeowners (Olson, 1965). Solutions that encourage collective action via the use of selective incentives (e.g., governmental subsidies) or the implementation of institutional solutions (e.g., establishing a homeowners' association) may function, but such approaches alone are insufficient. Communitarian approaches (e.g., social norms and enhanced mutual trust) are equally valid in offering more enduring alternatives. Anecdotal evidence elsewhere points to the maintenance and enhancement of social capital as a promising approach to motivating participation in building management and maintenance (Werner, 2006, 2007; Mandič, 2006). Empirical study of this dynamic is lacking in the Asian context, and thus public administrators have largely ignored the potential role of social capital in residential housing management. Like other forms of capital such as human and financial capital, social capital has an important role in maintaining a person's wellbeing. There has been renewed interest in the role that social capital plays in people's quality of life (Aldridge & Halpern, 2002; Babb, 2005).

The research reported here attempts not only to build on some important prior research but also to increase understanding of the role played in housing management by a sense of community. Specifically, I examine the linkage between sense of community and homeowner participation in housing management in Hong Kong. The problem of disrepair and mismanagement of multiunit buildings in Hong Kong is first overviewed. Then, the concepts of collectivism and social capital are introduced. Next, the methodology and findings of the empirical study are presented and discussed. Concluding remarks appear in the last section.

2 Disrepair and mismanagement of multiunit buildings in Hong Kong

Hong Kong is looked upon as one of the most vibrant cities in the world, but its communities have long suffered from the problems of building dilapidation. This problem can be attributed to the lack of a comprehensive government policy on building management and maintenance, together with ignorance of proper care among building owners. With a view toward sustainable development, the buildings in a city must be well maintained. Among the 39,000 residential buildings in Hong Kong, no less than a quarter are experiencing dilapidation and disrepair (Housing, Planning and Lands Bureau, 2005). As shown in Table 1, in 2009 the number of complaints received by the Buildings Department about building dangers has tripled since 1995. The report by the Task Force on Building Safety and Preventive Maintenance (2001) also reported that at least 101 lives were lost and 435 injuries were inflicted due to building-related accidents from 1990 to 2001.

The health and safety of occupants and the general public is at risk as long as Hong Kong's buildings continue to rapidly decay. For example, one of the contributing factors to the spread of SARS in the region in 2003 was the poor servicing of building drainage systems. Safety problems associated with residential buildings in the city generally include structural deterioration, deficiencies in fire-safety provisions and the proliferation of unauthorised building works (UBWs). As result of the high chloride content of concrete used for construction, the reinforced concrete in many buildings built from 1959 to 1965 and from 1971 to 1975 has deteriorated much more

Table 1: Reports received by the Buildings Department regarding building dangers.

Year	Dangerous adverti-sing signs	Dangerous buildings	Dangerous hillsides	Unauthorised building works	Total number of re-ports
1995	230	1,974	38	8,203	10,445
1996	165	2,567	91	9,913	12,736
1997	350	3,658	130	12,427	16,915
1998	250	3,851	53	12,577	16,731
1999	614	4,730	130	16,999	22,473
2000	260	4,280	71	13,911	18,522
2001	178	6,671	41	12,764	19,654
2002	135	5,956	52	21,844	27,987
2003	181	8,665	48	24,870	33,764
2004	303	10,407	146	21,123	32,069
2005	331	13,999	208	25,683	40,221
2006	564	6,758	183	24,861	32,366
2007	322	4,566	128	24,633	29,649
2008	563	4,412	313	24,942	31,230
2009	478	5,566	219	25,102	31,365

Source: Buildings Department (1999, 2003, 2008, 2010).

quickly than its design life of fifty years should allow (Leung & Yiu, 2004). The Buildings Department (1999) reported that ineffective repair works have further aggravated the structural deterioration of buildings. Not only is the buildings' structural stability severely affected by concrete deterioration, but concrete falling from building facades can kill passers-by (Task Force on Building Safety and Preventive Maintenance, 2001).

As is evident in Table 1, UBWs predominate the list of building dangers reported to the Buildings Department. A UBW is a building work that is constructed without prior approval and consent from the Building Authority (Yiu, 2005; Yiu & Yau, 2005). UBWs create safety hazards because their design and construction have not been examined by the authorities. In other words, their structural soundness and the quality of materials used cannot be guaranteed. UBWs undermine the structural stability and fire safety of buildings in which they are erected (Lai & Ho, 2001). The Buildings Department (2007) estimated that there were approximately 750,000 UBWs in Hong Kong, and that UBWs contributed to at least 21 deaths and 135 injuries from 1990 to 2002 (Leung & Yiu, 2004). The reasons for UBW proliferation in the city include the lack of developable land (Lai, 2003), poor building management (Lai & Ho, 2001), high legal enforcement costs (Yiu, 2005) and ambiguities in legislation (Yiu & Yau, 2005). As far as fire safety is concerned, this issue aroused wide public concern in Hong Kong after numerous tragic fires broke out in the late 1990s (Walters & Hastings, 1998). In 2008, 3,299 fire outbreaks in residential buildings were reported in Hong Kong, meaning that nine cases on average were reported every day (Fire Services Department, 2009). Major deficiencies and irregularities in terms of building fire safety include obstructed emergency exits, defective or poorly maintained fire-service installations, unsafe electrical wiring in common areas and misuse of the building (Security Bureau & Home Affairs Bureau, 1998). In most cases, the lack of proper fire-safety management and upkeep of fire-service installations account for the problems. Apart from structural and fire safety, problems associated with falling building materials have also frustrated Hong Kong's communities. Fatal incidents involving falling building materials such as aluminium windows and concrete pieces were not uncommon in recent years (Bowring, 2005; Information Services Department, 2005; Lo, 2005; Buildings Department, 2007).

3 Collectivism in residential housing management

If properly designed and constructed, buildings are typically safe when new. However, buildings, like other physical assets, are subject to wear and tear and their level of serviceability may decline over time. To save a building from continuous deterioration, maintenance and repair are indispensible (Choy, 1998). These improvement works are often hindered, particularly in common areas such as entrance lobbies, corridors, stairwells and lifts due to the co-ownership arrangement of most multi-storey residential buildings in Hong Kong. In the co-ownership system, individual homeowners enjoy the exclusive rights to use their own dwelling units and can use the building's common areas communally (Nield, 1990). All homeowners are jointly responsible for the upkeep of common areas, meaning

that management and maintenance of the building requires coordination and cooperation among individual homeowners (Bailey & Robertson, 1997; Chen & Webster, 2005).

3.1 Collective actions and free-riding in residential housing management

There is considerable qualitative and anecdotal evidence to show that resident participation has direct and positive effects on housing management and resident satisfaction (e.g., Cairncross et al., 1997; Office of Public Management, 1999). Achieving collective participation of residents in housing management, however, is typically failing rather than succeeding (Bengtsson, 1998). Individual homeowners may face difficulties in obtaining consent from all other owners for certain maintenance works that are deemed necessary and essential (Yip & Forrest, 2002). High transaction costs are often incurred in negotiation, coordination and conflict resolution to achieve a common consensus among individual owners to contribute to building improvements, and underinvestment in building maintenance is thus a likely outcome. The management of private multiunit housing, particularly those under strata title or multiple ownership, is collective in nature. The outcomes of good building management (e.g., a clean and hygienic environment, safety, and enhanced security) are public goods, but they are also non-exclusive. For example, homeowner A that has paid to provide for a public good cannot prevent or exclude homeowner B from enjoying that public good. Based on this characterisation of housing management, Bo Bengtsson (2001) put forward the notion that rational homeowners, from a game-theory perspective, are better off not co-operating in order to maximise their own pay-offs. In other words, homeowners can be driven by this rationale or selfishness to free-ride on the efforts of others in housing management.

It is clear that collective action does not take place automatically, particularly when the number of homeowners is large (Olson, 1965). When homeowners have to decide unilaterally whether to contribute to the provision of a collective good, current dynamics predict that most owners will behave opportunistically and free-ride on others' contributions (Walters & Kent, 2000; Lai & Chan, 2004). In order to create collective action, selective incentives (e.g., rewards and punishments for individuals) are necessary to motivate residents to cooperate (Olson 1965). However, this only leads to marginal, far from stable solutions to the free-rider problem (Bengtsson, 1998). Institutional solutions that regulate human behaviour with formal rules and/or informal constraints to reduce uncertainty (Walters, 2002) are more likely to only "guarantee a minimum level of collective action" (Bengtsson, 1998: 118). Whereas institutional solutions continue to need real organisation and

legitimate platforms for collective action are rare, much attention has been paid to the economic and legal devices used to tackle building-mismanagement problems. Laws and regulations have failed in some cases (Ellickson, 1991), and the transaction cost of an institutional solution is prohibitively high when the desire is to invoke constructive collective action (Walter, 2002). Much of the research implicitly assumes that an economic rationale is the underlying motivator of collective action, negating the idea that social norms may underpin rational decisions (Elster, 1989). Empirical case studies have found that "the long-run character of neighbour relations, the everyday face-to-face contacts of the local housing arena, and the limited group size may help to initiate cooperation [among residents]" (Bengtsson, 1998: 114). This suggests that a communitarian approach may offer a promising solution to the dilemma of collective action.

3.2 The communitarian approach to the dilemma in housing management

For the success of the communitarian approach, it is essential that the majority, if not all, of the homeowners share the same values regarding housing management. Management of communal areas and facilities in multiunit housing requires that homeowners take a broader perspective to see what is happening in the building or neighbourhood. Social capital plays an important role. According to the first systematic conceptualisation by Pierre Bourdieu, social capital is one of the four forms of capital (namely economic, social, cultural and symbolic), and was defined as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance or recognition" (Bourdieu, 1985: 248). Social capital can be understood as trust, concern for one's neighbours and a willingness to live by the norms of one's community and to punish those who do not (Putnam, 2000; Rothstein, 2005). As far as collective action is concerned, social capital provides the key to building communitarian solutions. Elinor Ostrom (1990) argued that social capital could raise the likelihood of cooperative behaviour in prisoner's dilemma–type problems, in the private provision of public goods and in the management of common property resources. Social capital can also help to lower the transaction costs of working together by allowing people to have the confidence to invest or participate in collective activities, knowing that others will also do so (Bengtsson, 1998).

The connection between social capital and urban management has long been explored. For example, Margit Mayer (2003) studied the role of social capital in urban social movements. David Chavis and Abraham Wandersman (1990) found that a

sense of community had catalytic effects to stimulate voluntary actions such as participation in an apartment-block association. Steven Hornburg and Robert Lang (1997) suggested that social capital be carefully considered when creating housing policy. As far as housing management is concerned, Josh Weston (2001) argued that housing quality cannot be sustained simply by conscientious maintenance. Instead, a community-building approach that is based on the concept of social capital or sense of community helps to foster pride and responsibility as well as to reinforce norms and relationships among residents. It is therefore more conducive to creating a sustainable quality housing regime. Likewise, Srna Mandič (2006) found that social capital was a major determinant of whether or not the renovation of multiunit buildings was carried out promptly, in addition to expected factors such as physical condition of the buildings and homeowners' financial status. Inga-Britt Werner (2006, 2007) has advocated the use of social capital as an analytic tool in formulating effective goals for planning management and maintenance that should be adopted by housing-management companies as an essential feature of their operations. As highlighted by Susan Saegert and Gary Winkel (1998), social capital was closely related to the physical condition of locally sponsored low-income housing in the United States. In most cases, social capital is assumed to have a positive effect on housing management, but there are still gaps in our theoretical and empirical understanding of it. Therefore, this study explores the effects of social capital on housing management in Hong Kong.

4 Research methodology and data

In this study, the residents of two similar housing blocks were studied to explore the effects of social capital on housing management.

4.1 Research design

A household survey was conducted using a structured questionnaire set. As an abstract concept, social capital is difficult to define (Coleman, 1988) and there is a need to operationalise the measurement of social capital. Julie Ann Pooley et al. (2005) suggested that social capital and sense of community are similar or overlapping concepts, and so social capital in this study was measured as sense of community. This was then evaluated using the Brief Sense of Community Index (BSCI) developed by D. Adam Long and Douglas Perkins (2003). In the BSCI, sense of community is constructed upon three building blocks; namely, social connections, mutual concerns and community values. Table 2 lists the eight questions that were asked concerning these three attributes. The respondents would answer these questions on a five-point Likert

scale (5 = strong agreement and 1 = strong disagreement). Other than sense of community, questions were also incorporated to determine the respondents' perceptions about the quality of the building and their participation in housing management.

4.2 Profiles of the case-study buildings

Two eleven-storey buildings were selected in Sai Wan, Hong Kong's western district. Building A was constructed in 1965 and had 55 domestic units, and Building B was built in 1964 and had 58 domestic units. A lift was installed in both buildings. Characteristics of the two buildings such as development scale and age were similar, and demographic variations were minimised by choosing two buildings from the same local area. No external property management company was appointed for managing these two buildings. Building management issues were dealt with by the owners' corporations (OCs) of the buildings. Based on an on-site inspection, Building A was better managed than Building B. As shown in Figure 1, the building materials and utilities were better maintained in Building A. Places inside Building A were clean and hygienic. As shown in Figure 2, defects in building materials (e.g., concrete spalling and cracked window glazing) and mismanagement of communal areas (e.g., items in the stairwell) were noted in Building B.

4.3 Profiles of the respondents

The household survey was conducted between February and March 2009. Because the target respondents were homeowners

Table 2: Questions regarding perceived sense of community.

Factor		Do you agree with the following statements?
Social connections	1.	I recognise most of the people in my building.
	2.	Most of my neighbours know me.
	3.	I have influence over what this building is like.
Mutual concerns	4.	My neighbours and I agree on building needs.
	5.	If there's a problem in the building, people living here can get it solved.
	6.	In general, people in my building watch after each other and help out when they can.
Community values	7.	It's very important to me to feel a sense of community with people in the building.
	8.	I feel a strong sense of community in the building.

Source: Adapted from Long and Perkins (2003).

(or, more precisely, owner-occupiers), the interview was ended if a respondent was found to be a renter. In total, thirty owner-occupiers (fifteen in each building) were interviewed using the preset questionnaire (26 to 27% of the homeowners in those buildings). The average length of residence of the respondents was 23.5 years. Other characteristics of the respondents are summarised in Table 3. Overall, there were no great differences in the profiles of the respondents in the two buildings. Four respondents in Building A and five in Building B were committee members of the respective OCs.

Figure 1: Physical and hygienic conditions of building A; a) front building elevation; b) electrical meters and riser; c) stairwell window in good condition; d) communal internal corridor (photo: Yung Yau).

Figure 2: Physical and hygienic conditions of building B; a) front building elevation; b) concrete spalling on stairwell wall; c) cracked glazing of stairwell window; d) items in the stairwell (photo: Yung Yau).

Table 3: Profiles of the respondents in the two buildings (%).

Characteristics	Overall sample	Building A	Building B
Sex			
Male	56.7	60.0	53.3
Female	43.3	40.0	46.7
Age			
18–24 years	6.7	6.7	6.7
25–34 years	16.7	20.0	13.3
35–44 years	36.7	33.3	40.0
45–54 years	30.0	33.3	26.7
55 years or above	10.0	6.7	13.3
Education			
Primary school or below	6.7	6.7	6.7
Secondary school	23.3	26.7	20.0
Junior college	36.7	33.3	40.0
Bachelor's degree or above	33.3	33.3	33.3
Household income			
HK$9,999 or below	0.0	0.0	0.0
HK$10,000–14,999	13.3	13.3	13.3
HK$15,000–19,999	20.0	20.0	20.0
HK$20,000–24,999	30.0	26.7	33.3
HK$25,000–29,999	26.7	26.7	26.7
HK$30,000 or above	10.0	13.3	6.7
Occupation			
Professional or semi-professional	13.3	6.7	20.0
Clerk and service worker	23.3	26.7	20.0
Production worker	3.3	0.0	6.7
Student	13.3	20.0	6.7
Housewife	16.7	13.3	20.0
Retired	10.0	6.7	13.3
Other	3.3	6.7	0.0
Unemployed	16.7	20.0	13.3

5 Research findings and discussion

The findings of the household survey are summarised in Table 4. The overall building quality perceived by the residents was higher in Building A (mean score = 3.65) than for those in Building B (mean score = 2.69). The difference was statistically significant ($p < 0.01$). This result suggests that the subjective perceptions of the respondents regarding the quality of the buildings more or less matches the author's initial inspection. That is why many studies (e.g., Galster & Hesser, 1981; Liu,

Table 4: Findings of the household survey.

Statement / Question	Building A					Building B					Overall Sample				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Residents' satisfaction															
Cleanliness and hygiene	6.7	60.0	26.7	6.7	0.0	0.0	0.0	60.0	20.0	20.0	3.3	30.0	43.3	13.3	10.0
Building materials (e.g., structure, windows)	6.7	20.0	66.7	6.7	0.0	0.0	0.0	53.3	46.7	0.0	3.3	10.0	60.0	26.7	0.0
Building utilities (e.g., plumbing, drainage)	0.0	60.0	40.0	0.0	0.0	0.0	0.0	46.7	53.3	0.0	0.0	30.0	43.3	26.7	0.0
Security	33.3	53.3	13.3	0.0	0.0	0.0	26.7	73.3	0.0	0.0	16.7	40.0	43.3	0.0	0.0
Quietness	0.0	53.3	46.7	0.0	0.0	0.0	13.3	53.3	33.3	0.0	0.0	33.3	50.0	16.7	0.0
Perceived sense of community															
I recognise most of the people in my building.	26.7	53.3	20.0	0.0	0.0	0.0	20.0	26.7	40.0	13.3	13.3	36.7	23.3	20.0	6.7
Most of my neighbours know me.	6.7	26.7	53.3	13.3	0.0	0.0	6.7	26.7	53.3	13.3	3.3	16.7	40.0	33.3	6.7
I have influence over what this building is like.	0.0	73.3	26.7	0.0	0.0	0.0	0.0	66.7	26.7	6.7	0.0	36.7	46.7	13.3	3.3
My neighbours and I agree on building needs.	0.0	86.7	13.3	0.0	0.0	0.0	20.0	53.3	26.7	0.0	0.0	53.3	33.3	13.3	0.0
If there's a problem in the building, people living here can get it solved.	0.0	40.0	60.0	0.0	0.0	0.0	6.7	26.7	53.3	13.3	0.0	23.3	43.3	26.7	6.7
In general, people in my building watch after each other and help out when they can.	13.3	66.7	20.0	0.0	0.0	0.0	13.3	46.7	40.0	0.0	6.7	40.0	33.3	20.0	0.0
It's very important to me to feel a sense of community with people in the building.	40.0	53.3	6.7	0.0	0.0	0.0	33.3	40.0	26.7	0.0	20.0	43.3	23.3	13.3	0.0
I feel a strong sense of community in the building.	53.3	26.7	20.0	0.0	0.0	0.0	20.0	53.3	26.7	0.0	26.7	23.3	36.7	13.3	0.0
Participation in housing management															
Taking part in activities organised by the OC	20.0	40.0	40.0	0.0	0.0	0.0	13.3	46.7	26.7	13.3	10.0	26.7	43.3	13.3	6.7
Giving advice or making complaints to the OC	20.0	40.0	40.0	0.0	0.0	0.0	13.3	66.7	13.3	6.7	10.0	26.7	53.3	6.7	3.3
Attending a meeting	20.0	60.0	20.0	0.0	0.0	0.0	13.3	53.3	20.0	13.3	10.0	36.7	36.7	10.0	6.7
Speaking up during a meeting	20.0	26.7	53.3	0.0	0.0	0.0	6.7	53.3	20.0	20.0	10.0	16.7	53.3	10.0	10.0
Doing work for the OC outside of meetings	20.0	13.3	66.7	0.0	0.0	0.0	6.7	33.3	20.0	40.0	10.0	10.0	50.0	10.0	20.0

Notes: Satisfaction: 5 = very satisfied, 4 = satisfied, 3 = neutral, 2 = dissatisfied, 1 = very dissatisfied; Community: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree; Participation: 5 = very frequently, 4 = often, 3 = sometimes, 2 = seldom, 1 = never.

1999) use residents' satisfaction as a substitute for building or housing quality. Other studies (e.g., Elsinga & Hoekstra, 2005; Ha & Weber, 2009) also found a correlation between physical housing quality and residents' satisfaction.

Compared with Building B (mean score = 2.67), the BSCI for the respondents in Building A was higher (mean score = 3.87), and the difference was again statistically significant at 1%. Among the three attributes (i.e., social connections, mutual concerns and community values), the disparity was the greatest in terms of community values. That may be because respondents in Building B did not regard sense of community as important to their wellbeing and thus rated the level of sense of community in their building low. At this point, it is clear that there existed positive correlations between sense of community, actual building conditions and residents' satisfaction regarding the building. Better building conditions and residents' satisfaction in Building A can be ascribed to the homeowners' more active involvement in housing management issues. With a higher degree of resident participation, building-related problems can be solved in a more efficient manner. Survey results showed that the average participation frequency of respondents in Building A (mean score = 3.92) was significantly (1%) higher than in Building B (mean score = 2.70). These analysis results imply that there was a positive relationship between sense of community and homeowners' participation in housing management. These findings, to a certain extent, confirm those of Abraham Wandersman and Gary Giamartino (1980), who found that sense of community was an important factor influencing residents' initial participation in a block organisation meeting in the United States.

Collectivism is essential for proper management and maintenance of multi-storey residential buildings in Hong Kong, and therefore homeowners' participation should be promoted. The findings of this research suggest that sense of community plays an important role in homeowners' participation in housing management in the city. In other words, housing management can be achieved by means of a communitarian approach. Regardless of whether or not coercions or economic incentives exist, homeowners may choose not to participate in housing management because they think other owners are free-riders (Bengtsson, 1998). Distrust of this type results in non-provision of the common good, which is creating a healthy, safe and pleasant living environment. The sense of community in residential buildings should therefore be encouraged. It can be achieved by means of organising social activities (e.g., outings or spring feasts) and partaking in building or housing-estate–based competitions (e.g., cleanliness contests or waste recycling competitions). Through their involvement in these social activities and events, the homeowners can get to know their neighbours better and develop a common set of com-

munity values. Homeowners will then gradually become more participative in housing-management issues. The Hong Kong government should consider taking this communitarian approach to solving contemporary problems of non-participation in housing management. The government and non-government organisations can organise or sponsor the organisation of social activities and events to build up the sense of community in different local communities.

Apart from this approach, participation in housing management can also be promoted by adapting the structure of buildings or housing estates. The design of the living environment has a significant impact on the social wellbeing of the residents. For example, as suggested by Ash Amin (2002), the creation of a public communal space could lead to the formation or strengthening of social relationships among different residents in a local community. So far, no requirements for the provision and design of such communal space in private residential building or housing estates has been made a part of building regulations in Hong Kong. The local government should consider amending the laws to require developers to provide a minimum amount of communal space in new residential developments. The communal space can be of various forms such as clubhouses, parks and lounging areas. Macroscopically speaking, the requirements for the provision of communal space should not simply be imposed on building construction. Rather, each district should have communal facilities or public open spaces with area allotment requirements not less than a certain threshold. That is why the town-planning standards in Hong Kong may also demand revision.

Finally, given the close connection between sense of community and homeowner participation in housing management, the preservation of social capital should be a focal point, not only the encouraging of social bonds within a residential area. In Hong Kong, disputes among homeowners are common, and they usually arise from building defects (e.g., water leakage) involving two or more housing units. Alternative dispute resolution (ADR) is unpopular in Hong Kong and disputants in most cases rely upon inhospitable negotiations or litigation to have disputes resolved. The relations between involved parties then deteriorate, which is detrimental to the development of a sense of community among homeowners. Amicable or non-confrontational dispute resolution methods such as adjudication or mediation could instead be applied to the arena of housing management.

6 Conclusion

Previous studies demonstrated that management of housing involving multiple homeowners exhibits the characteristics of a public good (i.e., is vulnerable to the free-rider problem).

The principles of rationality often result in non-cooperation or non-participation in housing management, and some researchers have argued that people would better cooperate as result of communitarian approaches. It is not the purpose of this study to blame homeowners for their inactive participation in housing-management affairs. What I wanted to analyse were the motivators of homeowner participation in housing management and thus determine how better management outcomes can be achieved in Hong Kong's private multiunit residential buildings. This follows Bengtsson's (1998) suggestion that not the failures, but the successful cases of collective action call for study. Using a household survey in two private residential buildings in Hong Kong, sense of community was found to be associated with the residents' level of participation in housing-management matters and the quality of the living environment.

The aim of this study was not to discount the importance of penal laws and economic incentives to motivate people to take care of their property. However, insights can be derived from empirical findings to determine how best to approach the problem of building mismanagement. If the government in Hong Kong is determined to solve the problem of building deterioration and foster a building-care culture among homeowners, attempts can be made to encourage the communitarian approach; for example, by building the sense of community. This can be achieved through a number of means. First, the government or non-government organisations can organise or sponsor the organisation of social activities that allow building residents to know one another better. Second, the creation of a public communal space could lead to social relationships being formed or strengthened. The government should consider requiring that new residential development have a minimum amount of communal space. Public open space creation should also be considered during the city-planning process. Third, social bonds deteriorate because of the poor handling of disputes between neighbours. In the absence of amicable means of dealing with conflict, relations between involved parties break down. It is important for the city government to establish new platforms for non-confrontational dispute resolution.

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Acknowledgements

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