

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Kuo, Chin-Tai

Article

A novel condominium management mode in Taiwan

Journal of Urban Management

Provided in Cooperation with:

Chinese Association of Urban Management (CAUM), Taipei

Suggested Citation: Kuo, Chin-Tai (2020): A novel condominium management mode in Taiwan, Journal of Urban Management, ISSN 2226-5856, Elsevier, Amsterdam, Vol. 9, Iss. 1, pp. 6-18, https://doi.org/10.1016/j.jum.2019.08.002

This Version is available at: https://hdl.handle.net/10419/271372

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



ND https://creativecommons.org/licenses/by-nc-nd/4.0/



ELSEVIER

Contents lists available at ScienceDirect

Journal of Urban Management

journal homepage: www.elsevier.com/locate/jum



A novel condominium management mode in Taiwan



Chin-Tai Kuo*

Dept. of Natural Resources, Chinese Culture University, Taiwan

ARTICLE INFO

Keywords:
Property management companies
Commissioned management committee
Condominium management mode
Consultancy contract
Full-responsibility contract
Transaction costJEL classification:
K110
K120
L100

ABSTRACT

This study investigates a novel consultancy contract mode for condominium management in Taiwan by using transaction cost theory. This study finds that consultancy contracts offer property management companies lower personnel costs and a lower tax burden compared with full-responsibility contracts, and that such contracts are suitable for condominiums with minimal public funds, few households, and low management fees. However, under consultancy contracts, labor disputes are likely to occur; thus, distinguishing between powers and responsibilities and controlling service quality are difficult, and a property management company's corporate image is likely to sustain damage. Among the nine transaction costs, most of the respondents believe that transaction costs will decrease when using consultancy contracts, although for five transaction costs, some respondents felt that costs will increase, and for two items, no change is expected. This study provides six strategies for property management companies to select management modes and contracts: use a company website and advertising strategy, develop different service modules, use property service proposals, use management contract modes combined with new technologies, enhance the degree of authorization, and help protect employees' rights and interests.

1. Introduction

M110

Since the implementation of the Condominium Administration Act Building Administration Division (CAABAD) in Taiwan in 1995, condominium management has become increasingly comprehensive but complicated. Initially, the condominium management modes in Taiwan could be divided into the self-management (SM) mode, the self-employed management (SEM) mode, the part-commissioned management (PCM) mode, and the all-commissioned management (ACM) mode (Hung & Chang, 2002; see Table 1). Recent years, Taiwan condominium management regulations and facilities have become more complex, and few residents have the required expertise and time to manage and maintain the communities in which they live. Therefore, the residents and commissioned management committees of condominium using the SM mode are unable to fund the complicated management and maintenance required. Consequently, in Taiwan, the SM mode has become less popular than the SEM and commissioned management (CM) modes (including the PCM and ACM modes), and the need for property management (PM) companies has increased (Chu & Chang, 2013).

However, for management committees, the cost of the SEM mode is generally lower than that of the CM mode, and the SEM mode offers high decision-making control (Chu & Chang, 2013). However, management committees may face uncertainty risks regarding personnel, including recruitment, personnel leave, and public injury accident compensation. For PM companies, the CM mode offers high decision-making control and management rights (Chu & Chang, 2013), but its higher service fees are less attractive when compared with the lower cost of SEM mode.

E-mail address: kuochintai@gmail.com.

https://doi.org/10.1016/j.jum.2019.08.002

^{*} Corresponding author.

 Table 1

 Summary of the various condominium management modes.

Acronym	Acronym Management mode	Management method	Management contract Employer type	Employer	Cost level	Cost level Authorization degree
SM SEM	Self-management mode Self-employed management mode	management committees self-manage all affairs. management committees self-employ management service staff to manage all affairs.	1 1	– Management committee	1 2	1 2
CBM	Consultancy-based management mode type	Consultancy-based management management committees employ PM companies as management consultants, and Consultancy contracts PM companies assist in the recruitment and training of management personnel.	Consultancy contracts	Management committee	က	3
CM PCM	Part-commissioned management mode	management committees commission part of their affairs to management companies	Full-responsibility contract	Management company	4	4
ACM	ACM All-commissioned management mode	CMCs commission all their affairs to management companies.	Full-responsibility contract	Management company	ro	D.

Notes: Cost levels and authorization degree, 1 = lowest and 5 = highest.

Recent years, labor costs have increased in Taiwan, as new regulations have limited working hours for security guards following several instances of overwork that resulted in sudden death as well as amendments to labor holiday policy. To reduce the labor costs associated with the CM mode and to enable housing communities with limited financial resources to afford it, personnel uncertainty in the SEM mode must be reduced. PM companies have developed a new management mode in which they provide a consultancy contract (i.e., the consultancy-based management [CBM] mode) (Kuo, Hsieh, Chou, & Kao, 2016), which is positioned between the SEM and PCM modes.

The CM and CBM modes have several differences. The first is a difference in contracts. The CM mode often uses the standard-form contracts (also called the full-responsibility contracts) provided by the government, whereas CBM modes use consultancy contracts. In the CBM mode framework, PM companies merely play the role of management consultant for assisting with legal advice, personnel hiring, and personnel training, but management committees become the real employers of the property management personnel (security guards and management service staff). The reason for the change of employer is that the management committee is not a corporation and is not liable under corporation laws in Taiwan, thus, it need not pay any operating fees or taxes. The second difference is that the salary of property management personnel can be reduced. The third difference is that management committees are unable to provide the same welfare as PM companies. The fourth difference relates to insurance; because a management committee is not a company, labor insurance may need to be covered by professional trade unions, and health insurance may be provided by the management committee. This mode will reduce the welfare of personnel and therefore causes other management companies to doubt damaging the labor rights of employees and rejecting adherence to the law. In addition, lower salaries are less likely to attract competent personnel. In practice, the CBM mode is more popular in cities with lower wages in southern Taiwan (Kuo et al., 2016). Therefore, a new similar type of CBM mode has evolved in some central and northern Taiwanese cities. In practice, this new type should be identified as a kind of PCM mode in which PM companies directly hire management service staff (e.g., director generals) as management consultants to manage and supervise security guards³ employed by the management committee. In this framework, PM companies and the management committee sign full-responsibility contracts only for the management service staff (Table 1). However, whether PM companies in the communities with less financial power should recommend use of the CBM mode constitutes a primary research motivation of this study.

In practice, as PM companies have begun to face greater competition within the industry, they must occasionally provide additional services, such as the collection and payment of staff fees and various costs and the performance of other business activities, with these additional services reflecting the increasing diversity of the industry. In this situation, the CBM mode will resemble the PCM mode. Finally, the extent to which a PM company serves as a consultant depends on the degree of the implementation of public affairs entrusted by to a management committee (Kuo et al., 2016). Therefore, under the CBM mode, PM companies serve as the employer, despite the reduction in personnel costs and related responsibilities, and may also provide additional services and deal with related potential risks. Whether this type of CBM mode with additional service is superior to the CM mode is worth discussing in depth from a PCM perspective. This is a second research motivation of this study.

From PM companies' perspective, management contract choice is often related to whether PM companies can reduce operating costs. In general, production costs are easier to measure, but transaction costs are also an important factor, albeit harder to measure. Coase (1937) states that transaction cost theory explains how the parties of a transaction choose a viable mechanism to minimize transaction costs. Williamson (1975) finds that manufacturers often have different transaction costs, such as those associated with searching for information, bargaining, decision-making, supervising transactions, and contract breaches. Luo, Hung, and Ho (2007) classify transaction costs according to the time of the transaction into ex ante, current, and ex post. Measuring the associated ex ante, current, and ex post transaction costs can help PM companies understand the transaction costs of various management contracts during different periods, and these results can serve as a reference for developing relevant strategies.

This study interviewed managers of major PM companies in six cities in Taiwan to explore the following three research objectives from the perspective of transaction costs faced by PM companies. First, this study aimed to determine the factors considered by PM companies when providing consultancy contracts. Second, it aimed to determine whether PM companies experience substantial differences in transaction costs at various stages when switching from full-responsibility contracts to consultancy contracts. Third, this study intended to devise strategies that PM companies can adopt when providing consultancy contracts.

The contributions of this study are as follows. First, the interviews with PM companies in different regions can help elucidate the different factors PM companies consider when providing management contracts in the major urban markets of Taiwan. Second, determining the transaction costs at different stages can help PM companies to clarify the associated ex ante, current, and ex post transaction costs of signing consultancy contracts, and these results can help the industry to understand potential problems and risks encountered during various periods of contract execution. Third, related studies primarily consider condominium management modes from a management committee perspective (i.e., a demand viewpoint) and discuss only the total transaction costs for the

¹ These are as follows: the Ministry of the Interior, Police Department of the Republic of China on June 19, 1990, announced the Full Security Service Contract Mode, and the Ministry of the Interior, Construction Department of the Republic of China on June 3 in the same year issued an Apartment Building Management, Maintenance Company Management, and Maintenance Business Contract Mode.

² In Taiwan, security guards and management service staff are subject to different laws and regulations and are employed by different companies. Security guards are legally responsible only for security protection against theft, fire, and disaster. Management service staff are responsible for executive management, cleaning and environmental sanitation, environmental safety, disaster prevention management, and other transactional business. In practice, for management companies or management committees to save costs, security guards often function as management service staff in capacities such as receiving mail and cleaning.

³ In Taiwan, a medium-sized community requires one director general and two to four security guards, approximately.

whole period. By contrast, this study examines condominium management modes from the perspective of the property management industry (i.e., a supply viewpoint) and considers changes in transaction costs across various stages; thus, this study fills a gap in the literature. Through interviews, valuable advice is obtained from managers in major PM companies and combined with strategic analysis of the contracts of PM companies and management committee. The results of this study serve as a valuable reference for governments developing property management policies.

The remainder of this study is organized as follows: the second section presents a literature review. The third section presents the data and adopted research methods. The fourth section presents analysis and discussion of the findings. Finally, the conclusion is presented in the fifth section.

2. Literature review

2.1. Condominium management modes and contracts in Taiwan

Yiu, Wong, and Yau (2006) compare the condominium management modes in the following six territories (the United States, Canada, Australia, Singapore, the United Kingdom, and Hong Kong) from an institutional economics perspective, and find that management modes vary in different regions. Yip, Chang, and Hung (2007) identify four condominium management modes in Hong Kong: owner managed, direct labor, third-party managed, and delegated control, and these modes are similar to those in Taiwan and also represent the degree of authorization (Hung & Chang, 2002). As mentioned in the introduction to management modes in Taiwan (see Table 1), condominium management modes and contracts in Taiwan can be currently divided into six management modes and three contract types. The cost level and authorization degree of the ACM mode are the highest, whereas those of the SM mode are the lowest.

The condominium management mode that is most suitable for management committees and PM companies is a subject of debate in the literature (Chen & Liu, 2000; Hung & Chang, 2002; Yip & Forrest, 2002; Chen, Chang, & Yip, 2007; Chu & Chang, 2013; Kuo et al., 2016; Tzow & Tu, 2016). Kuo et al. (2016) documented that PM companies have developed a novel management mode (i.e., the CBM mode) to reduce condominium management fees for management committees. Initially, the emergence of the CBM mode was mainly due to some PM companies utilizing a loophole in Taiwan's Labor Standards Act to save costs. Management committees were not bound to the provisions of the Act, meaning that they were not required to pay employees 6% of their salary toward a pension and to provide labor and health insurance. However, this management mode attracted the attention of the government and was blocked in 2014 (Kuo et al., 2016). Subsequently, the CBM mode is no longer abused to avoid workers' rights. PM companies now assist management committees to apply to become a labor insurance unit and to establish a mechanism for providing employees with their pension payments. However, management committees do not provide as high-quality welfare and salary as PM companies do, which means that the relative quality of their employees is worse. However, PM companies tend to provide more services in addition to their work as consultants, depending on management committee requirements. The CBM mode therefore will resemble the PCM mode.

Management committees often must consider their financial situations when selecting management modes in Taiwan. Kuo et al. (2016) explained that the financial situations of condominiums before 1995 were relatively poor due to Taiwan's construction companies not being required to provide management funds to condominiums before the implementation of CAABAD. Therefore, the management committees of these condominiums were more likely to choose lower-cost management modes, whereas some condominiums built after 1995 or higher-level condominiums are more capable of adopting higher-cost management modes. In general, PM companies consider the financial situation of each condominium and the requirements of its management committee to provide different types of management contracts.

Previous studies have explored issues regarding management mode choices from the perspectives of management committees. For example, some studies have found that the choice of management mode is affected by property-related factors such as property size, type, price, age, total number of households, and management fees, while others have found that community-related factors are crucial, such as community conflicts, awareness, and participation (Hung & Chang, 2002; Chang, 2007; Chen et al., 2007; Yip et al., 2007; Ko & Chen, 2010; Chu & Chang, 2013).

Few studies, however, have discussed the contracts and considerations of management modes from the perspectives of PM companies. The objectives of a PM company are generally to create revenue and maximize the interests of its shareholders. Wu and Chen (2011) claimed that revenue achievement rate, customer satisfaction, image, innovation, and cost control all substantially influence a PM company's operating performance. Tsai, Chen, and Hsu (2012) found that contract price and management service quality are the key factors related to a PM company's business performance. Bian (1999) stated that contract types often involve obligations, responsibilities, and the distribution of benefits to both parties. Macneil (1980) argued that contract choice must be made in line with the legal system to provide protection and to regulate the relationship between parties. Liao and Hsieh (2011) suggested that organizations should strengthen their internal management to reduce labor disputes.

To summarize, when providing a contract, PM companies should primarily consider maximizing shareholder interests, defining power and responsibility, maintaining service quality, understanding the legal system, minimizing labor disputes, and upholding their corporate reputations.

2.2. Transaction cost theory and management contracts

Ever since Coase (1937) proposed transaction cost theory, the theory has been applied in numerous fields. However, few studies have applied it to property management modes. Ko and Chen (2010) compared the differences in transaction costs between the SM

and ACM modes from a management committee perspective. Using content and text analysis, Kuo et al. (2016) used the preferred strategy of transaction cost theory to examine the influence of contract content with regard to condominium management from the perspectives of PM companies and management committees. The present study extends the work of both Ko & Chen and Kuo et al. by exploring how to identify the associated risks of the transaction costs of CBM mode from the perspective of PM companies.

Williamson (1985) classified transaction costs as ex ante and ex post. Luo et al. (2007) further divided transaction costs into ex ante, current, and ex post. The present study adopted these classifications to divide PM company transaction costs into ex ante, current, and ex post. Furthermore, this study summarizes the results of the literature to explore nine transaction costs and the associated expected increase or decrease when PM companies provide consultancy contracts compared with full-responsibility contracts.

Regarding ex ante transaction costs, Nelson (1970) found that prices have an effect on search behavior because consumers may find low price goods by more search behavior. When consumers expect that search interest will increase, they engage in more search activities to save costs. Thus, when PM companies provide an alternative consultancy contract that can save management costs, management committees will actively consult the details of the contract, and hence, the search and information costs of PM companies will be saved. Hypothesis 1 is therefore as follows:

H1. Providing consultancy contracts will reduce search and information costs.

Zaheer, McEvily, and Perrone (1998:144) stated that "trust reduces the inclination to guard against opportunistic behavior (i.e. deliberate misrepresentation on the part of the exchange partner." They found support for a negative relationship between interorganizational trust and negotiation costs. The consultancy contract is a new type of contract that is not as familiar to management committees as the full-responsibility contract, which means that PM companies must expend more time explaining the contract to obtain the trust of management committees. In addition, if management committees require additional services, the negotiation costs will increase. Therefore, this study expects the negotiation costs to be higher. Hypothesis 2 is therefore as follows:

H2. Providing consultancy contracts will increase negotiation costs.

Regarding current transaction costs, Luo et al. (2007) found that distrust between two trading sides and bounded rationality will increase drafting and signing costs for contracts as well as bargaining costs. Once a management committee decides to adopt a consultancy contracts, the PM company should draft a new, trustworthy consultancy contract, which might include additional services, to mitigate distrust. Thus, this study expects that the drafting costs of consultancy contracts will be higher than those of standard contracts. Hypothesis 3 is therefore as follows:

H3. Providing consultancy contracts will increase drafting contract costs.

Williamson (1985) argued that service providers often increase the guaranteed contract costs to reduce the uncertainty of transactions and to gain the trust of other parties. However, consultancy contracts only provide management committees with professional management consultancy services, and PM companies are not required to implement guarantees. Thus, the guaranteed contract costs for consultancy contracts are expected to be relatively low. Hypothesis 4 is therefore as follows:

H4. Providing consultancy contracts will reduce guaranteed contract costs.

Furthermore, Luo et al. (2007) find that the distrust between two trading sides and bounded rationality will increase drafting contracts, developing contract costs, and bargaining costs. Because of the low costs of this new type of contract, management committees may have more motivation to engage in bargaining. Thus, this study expects bargaining costs will be relatively high. Hypothesis 5 is therefore as follows:

H5. Providing consultancy contracts will increase bargaining costs.

Regarding ex post transaction costs, the supervision and prevention costs are considered the costs of preventing the other party from defaulting (Williamson, 1985). Dahlstrom and Nygaard (2010) found that supervision and prevention costs increase when both trading sides display inadequate communication. Due to the low price of consultancy contracts and the provision of consultancy services, PM companies and management committees may have less time to meet, and this may result in a higher likelihood of inadequate communication. Hence, this study expects that the supervision and prevention costs will be higher. Hypothesis 6 is therefore as follows:

H6. Providing consultancy contracts will increase supervision and prevention costs.

After the contract is signed, both parties monitor each other to ensure compliance with the terms of the contract. When the other party breaches the contract, the costs of forcing them to perform the contract are called the examination and implementation costs. Li et al. (2013) found that highly price-conscious consumers can extract product-related information before the transaction in the process of finding low-priced goods, which means that they can evaluate the benefits and avoid goods with high examination and implementation costs. The consultancy contracts are similar to lower-priced commodities; thus, this study expects that the examination and implementation costs of consultancy contracts will be lower. Hypothesis 7 is therefore as follows:

H7. Providing consultancy contracts will reduce examination and implementation costs.

Furthermore, McCann, Colby, Easter, Kasterine, and Kuperan (2005) argued that both trading parties face default and litigation costs because examination processes are usually not implemented, which can result in a lack of consensus regarding how to resolve disputes. Because PM companies are less responsible when serving as consultants, default and litigation costs are expected to be relatively low when both parties are involved in a dispute. Hypothesis 8 is therefore as follows:

H8. Providing consultancy contracts will reduce default and litigation costs.

Finally, Luo et al. (2007) argued that bounded rationality and poor communication between trading parties during the course of a contract generate contract termination costs. Under a consultancy contract, the employer of the property management staff is the management committee. Therefore, when the contract is terminated, the PM company does not have to incur the cost of personnel placement and dismissal. Thus, the expected termination costs will be lower. Hypothesis 9 is therefore as follows:

H9. Providing consultancy contracts will reduce termination costs.

Coase (1937) demonstrated that when transaction costs are zero, private bargaining will result in an efficient use of resources, regardless of the legal assignment of property rights; by contrast, when transaction costs are high enough to prevent bargaining, the efficient use of resources will depend on how property rights are assigned. Hence, Coase proposed that clearly defining property rights by signing contracts is the most effective way to reduce transaction costs. Cooter and Ulen (2016) identified ten factors that can reduce transaction costs when parties sign contracts, namely (Beng, 1999) standardized goods or services (Chang, 2007); clear, simple rights (Chen et al., 2007); few parties (Chen & Liu, 2000); friendly parties (Chu and Chang., 2013); familiar parties (Coase, 1937); reasonable behavior (Cooter & Ulen, 2016); instantaneous exchange (Dahlstrom & Nygaard, 2010); no contingencies (Hung & Chang, 2002); low monitoring costs; and (Ko & Chen, 2010) cheap punishments. Moreover, Beng (1999) proposed a method for reducing the transaction costs of two parties that hinges on clearly designed trading rules and contractual processes. The aforementioned concepts can be applied to develop strategies for reducing the transaction costs of consultancy contracts for PM companies.

3. Data and research method

This study explores the factors that PM companies consider when selecting management modes and condominium management contracts in consultation with management committees alongside the changes in transaction costs and related strategies. Therefore, the research data are collected from professional managers of PM companies. This study uses a qualitative research method based on interviews to explore and describe the process of contract agreement in the condominium management mode, as well as the factors professional managers consider based on their expertise, experience, and teamwork. Moreover, the strategies they develop to reduce transaction costs are examined by analyzing the changes in ex ante, current, and ex post transaction costs.

Participants in this study were selected through purposeful sampling of management and maintenance associations in six metropolises in Taiwan (i.e., Taipei, New Taipei, Taoyuan, Taichung, Tainan, and Kaohsiung cities, as shown in Table 2). The members

Table 2Background information of the respondents.

Cities	Respondent codes	Position	Years
Taipei	TP1	AM	14
-	TP2	GM	16
	TP3	GM	12
	TP4	M	11
	TP5	M	10
New Taipei	NP1	GM	22
	NP2	GM	20
	NP3	M	12
	NP4	M	11
	NP5	M	10
Taoyuan	TY1	GM	15
ruoyuuri	TY2	GM	18
	TY3	GM	23
	TY4	GM	20
Taichung	TC1	GM	13
0	TC2	GM	21
	TC3	GM	19
	TC4	GM	16
	TC5	GM	20
Tainan	TN1	GM	18
	TN2	GM	16
	TN3	GM	20
Kaohsiung	KS1	CB	23
	KS2	GM	20
	KS3	GM	15
	KS4	GM	23
	KS5	GM	18
	KS6	GM	20
	KS7	GM	22

Notes: 1. Position: AM, assistant manager; GM, general manager; M, manager; CB, chairperson of the board.

2. Acquisition date: The first stage was from August 17, 2015 to September 28, 2015. The second stage was from September 30, 2015 to October 15, 2015. The third stage was from February 18, 2019 to February 27, 2019.

are professional managers of PM companies, and each meet three or more of the following criteria: more than 10 years' experience in property management; incumbent or former president, chairperson, or supervisor of an association; his or her management company is among the city's top three in terms of market share; and he or she has an understanding of or experience with full-responsibility and consultancy contracts. Therefore, most respondents have a wealth of information on the use of full-responsibility and consultancy contracts in the planning and management of condominium maintenance services, which they provided in the interviews. Moreover, the respondents are mostly opinion leaders and, because their companies' market shares are large enough, they understand the different regions of the industry. They use different contract types in their condominium management work and possess practical experience in resolving issues such as contract disputes. Hence, their viewpoints are representative on the conceptual formation and strategy of transaction cost change that occurs when using a consultancy contract.

In the first stage of this study, the predesigned consultancy contract consideration factor table, transaction cost change analysis table, and response strategy table were created on the basis of the literature, and they were retested and corrected by four academic experts and four property management experts to improve content validity. These tables were sent to the interviewees, with a total of 130 invitations to supervisors of property management–related industry associations in six metropolises in Taiwan. The second stage was to identify members who were willing to participate in in-depth telephone interviews. The third stage was to identify the reasons why some respondents expressed negative views regarding the CBM mode. Subsequently, 28 supervisors agreed to participate in interviews, a rate of 21.54%.

The interview method in this study was divided into two parts. First, in the transaction cost part, a structured interview method was adopted, and respondents were interviewed according to predesigned consultancy contract consideration factors and transaction cost change analysis tables. Because 28 respondents participated in this study, the increase and decrease in transaction costs at various stages could be used for quantitative analysis. The second part was a semistructured interview. Respondents expressed their views on the strategy of selecting a property management contract according to the proposed outline. The strength of structured interviews is that the results are easy to quantify, but structured interviews are not flexible; the advantages of semistructured interviews is that they are more flexible and allow respondents to fully express their opinions (McLeod, 2014).

4. Data analysis and discussion

Upon analyzing the interview data, the results show that the PM companies in Kaohsiung City were the first to adopt the CBM mode in Taiwan. Therefore, compared with the other cities, more companies in Kaohsiung City have used consultancy contracts in addition to providing advisory management and maintenance services. In fact, the usage rate in Kaohsiung City is higher than elsewhere in Taiwan. Hence, the experiences of PM companies using the CBM mode in Kaohsiung City can provide relatively mature feedback, making it worthy of reference during the interview process. However, the PM companies in Taipei, New Taipei, Taoyuan, Taichung, and Tainan cities stated that consultancy contracts are used mostly by few small and medium PM companies and for small housing communities, and that they mostly play the roles of consultants, especially when management committees first start and when checking, accepting, and transferring public facilities. In such instances, a consultancy contract is usually converted into a full-responsibility contract.

The following discussion examines how PM companies use consultancy contracts under the CBM mode and how transaction costs change. Furthermore, recommendations are presented for PM companies that use consultancy contracts.

4.1. Factor analysis of using consultancy contracts in the CBM mode

The PM companies in Kaohsiung City typically presented positive views about the CBM mode, whereas those in the other cities typically expressed negative views.

4.1.1. Advantages of consultancy contracts

The advantages of using consultancy contracts in the CBM mode are obtained from the interviews. These advantages can be divided into those relating to company management and those relating to bidding management contra [insert Table 3 here].

Company management advantages—Both are mainly related to saving personnel costs and reducing a company's tax burden. Regarding saving personnel costs, PM companies can save the cost of hiring property management service staff. Regarding minimizing taxes, companies pay less tax under consultancy contracts than they do under full-responsibility contracts. According to the

Advantages of using consultancy contracts.

Types	Respondent codes	Advantages
Company management advantages	KS 1-7	Saving company personnel costs
	KS 1, 4, 5	Reducing the company tax burden
Bidding management contract advantages	KS 1, 2, 4, 6	Bidding for a community with fewer public funds
	KS 4, 6, 7	Bidding for a community with fewer households
	KS 2-5, 7	Bidding for a community with less ability to pay management costs
	KS 3, 5, 6	Bidding for a community with a low management fee
	KS 2, 7	Bidding for a community using the lowest bidding prices

personnel costs and tax data provided by the respondents, the minimum number of service personnel (one manager and two security personnel) in a housing community is taken as an example for discussion. Under a full-responsibility contract, the cost of employing a manager for a PM company is approximately NT\$32,000/month, and the cost of employing two security personnel is approximately NT\$58,000/month. For personnel costs under a consultancy contract, a management committee must employ one manager at approximately NT\$27,000/month and two security personnel at approximately NT\$50,000/month; however, a PM company only needs to pay training and consultancy fee of approximately NT\$5,000/month. Therefore, the personnel costs associated with a consultancy contract are relatively low. In terms of a PM company's tax burden under the two contracts, the business tax of a full-responsibility contract is NT\$4,717/month whereas that of a consultancy contract is NT\$286/month. Therefore, the tax burden under a consultancy contract is also lower.

Bidding management contract advantages—A PM company's use of a consultancy contract in bidding for a management contract offers competitive advantages, especially for housing communities with the following five characteristics:

- (1). Communities with fewer public funds. Most housing communities established before the implementation of CAABAD do not have sufficient public funds for management and maintenance.
- (2). Housing communities with fewer households; that is, the number of households does not exceed a certain economic threshold.
- (3). Housing communities with less ability to pay management costs. For example, a management committee fails to verify an increase in management costs, which means that management fees cannot be reduced in a timely manner, resulting in less money available to cover management and maintenance costs.
- (4). Housing communities that have a low management fee; management fees do not rise with inflation, and households do not want to pay higher fees.
- (5). Housing communities that use the lowest bidding price. A management committee instigates price competition by demanding the lowest price.

This study finds that PM companies choose consultancy contracts to reduce personnel costs and lower tax burden. This shows that the principle of maximizing interests for PM companies is an imperative factor in contract mode choice. Additionally, the first four advantages of a bidding management contract may be caused by insufficient income from management fees, which cannot meet the minimum payment requirements of the ACM mode. Consequently, a management committee may switch to using the PCM mode. If households wish to pay lower management fees, the consultancy contract of the CBM mode may be adopted, which is congruent with the findings of Kuo et al. (2016). The fifth advantage is also a result of insufficient income from management fees and the decision to select the lowest bidding price.

2. Disadvantages of consultancy contracts

The interviewed PM companies thought of several disadvantages to using consultancy contracts. For example, they easily cause labor disputes, make distinguishing between power and responsibility difficult, restrict accountability for quality, and make it easy to damage corporate image. These disadvantages of using consultancy contracts are summarized in Table 4.

- (1). Easily causes labor disputes—Before July 1, 2014, management committees in Taiwan were not subject to the Labor Standards Act. The employer of property management service staff in a consultancy contract was a management committee; thus, the management committee had to deposit a labor retirement reserve for staff. Because staff were not recognized by their real employer, PM companies were often taken to court to confirm employment relationships. Moreover, when labor accidents occurred, PM companies were often required to bear joint liability, which could cause labor disputes. Therefore, avoiding labor disputes is a key consideration of PM companies when choosing management contracts and modes, which is consistent with the conclusions of both Liao and Hsieh (2011).
- (2). Difficult to distinguish between power and responsibility—When management committees use consultancy contracts, they often require PM companies to provide advisory services. Moreover, management committees may extra add some commissioned projects. However, sometimes these accepted projects and others that have not been entrusted have a causal relationship that causes an agency problem for management. In particular, distinguishing between power and responsibility is difficult in some situations. For example, if management committees choose to entrust collection of management fees to self-employed property management service staff and not to PM companies, if staff theft occurs, the PM companies can be criticized for their poor supervision and may jointly liable. Therefore, some PM companies do not accept consultancy contracts. This shows that division of authority is also a factor that PM companies consider when choosing contract modes. This is in line with the findings of Beng (1999).
- (3). Difficult to account for service quality—Because a PM company is not a direct employer, the supervision requirements regarding property management services may encourage laziness. Furthermore, PM companies only serve as consultants, regardless of whether they accepts another commissioned contract to perform training or supervise management committees' self-employed

⁴ Normally, the economic threshold is nearly 100 units in a community in Taiwan.

⁵ For example, some respondents stated that when a staff member has a major accident, the management committee may not be able to afford the associated compensation.

 Table 4

 Disadvantages of using consultancy contracts.

Types	Respondent codes	Disadvantages
Easily causes labor disputes	TP 1, 2, 4 NP 1–3; TY 1, 3; TC 1, 2, 4; TN 1	Workers file lawsuits to confirm employment relationships
	TP 1-3, 5; NP 1, 2, 4; TY 1-3; TC 1, 3; TN 1	Labor accidents occur, and PMCs are often jointly and severally liable
Difficult to distinguish power and responsibility	TP 1-3; NP 2, 3, 5; TY 1, 3, 4; TC 1-4; TN 1	Entrusted and not entrusted matters often have a continuous relationship; thus, power and responsibility are difficult to divide
	TP 1, 2, 4, 5; NP 1–3; TY 2, 3; TC 2, 3, 5; TN 1	In the event of theft, a PMC is often rebuked for the oversight and is jointly and severally liable
Difficult to account for service quality	TP 2, 4; NP 2, 4, 5; TY 1, 4; TC 3, 4; TN 1	Supervising management work may encourage laziness
	TP 1, 4; NP3, 4; TY2, 3; TC3, 4; TN1	Effectively supervise SEM staff using a CMC and achieve the desired service quality
Easy to damage a PMC's corporate image	TP1, 2, 4; NP2-3; TY1-3; TC1-4; TN1	The aforementioned factors may damage a PMC's corporate image and affect an enterprise's sustainable management

property management service staff. However, management committees cannot always expect PM companies to monitor self-employed property management service staff if they wish to achieve desired service quality. Unsurprisingly, service quality is the core of the service industry. Many PM companies will not use consultancy contracts when service quality cannot be guaranteed. This shows that service quality is often an imperative factor in a PM company's choice of contract mode.

(4). Easy to damage a PM company's corporate image—Although consultancy contracts are low cost, the aforementioned problems can severely affect management service quality during implementation, which can harm a PM company's corporate image and affect its sustainable management. This means that maintaining goodwill is also a factor that PM companies must consider.

To summarize, although PM companies naturally seek to maximize benefits when choosing contracts, it is difficult to account for service quality if powers and responsibilities are not clearly defined. Additionally, in the absence of effective internal management mechanisms or a supportive legal system, labor disputes can easily occur, which affect a company's goodwill. In particular, when PM companies focus on luxury housing communities, service quality is often their core competitive advantage. Therefore, such PM companies will not adopt consultancy contracts. However, for PM companies specializing in providing services to small- and medium-sized housing communities, more attention is directed toward the housing communities' ability to pay. Therefore, PM companies choose consultancy contracts to enable them to successfully bid for management contracts in situations where management committees have limited budgets. During one interview, a manager said that his PM company started using consultancy contracts soon after they emerged. PM companies that manage numerous housing communities often simultaneously adopt full-responsibility and consultancy contracts, depending on the requirements of each housing community.

Other cities expressed negative views due to the efforts of the industry association, primarily because the industry association believed that the CBM mode could reduce the level of service from PM companies and damage the labor rights of security workers; moreover, the association argued that the low-price strategies of the CBM mode could hurt competition in the industry. Because Kaohsiung City's average salary and price levels are lower than those of other cities and it has more working class residents, the city has a higher demand for low-cost management modes such as CBM. However, after conducting re-interviews, ⁶ this study determined that other cities did not use the CBM mode, but some used a type of PCM in which PM companies directly hire a director general as a management consultant to manage and supervise security guards employed by the management committee.

4.2. Reasons for the changes in transaction costs

Except for the PM companies in Kaohsiung City that simultaneously use full-responsibility and consultancy contracts, the PM companies in the other cities were less certain about using consultancy contracts, and therefore fewer companies simultaneously used both contracts. Consequently, these PM companies gave fewer reasons for the changes in the ex ante, current, and ex post transaction costs. Table 5 is based on the PM companies in Kaohsiung City and presents the reasons for the changes in transaction costs associated with consultancy and full-responsibility contracts.

The following text explains the changes in the 9 transaction cost items associated with the PCMs' using consultancy contracts, as shown in Table 5.

4.2.1. Ex ante transaction costs

Search and information costs—Most the managers said that they could reduce search information costs if they provided management committees with different contract options. This result is consistent with Nelson (1970) and agrees with Hypothesis 1 (i.e., providing consultancy contracts will reduce search and information costs). However, some managers said that management

⁶ To confirm the reasons why other cities expressed negative views of the CBM mode, this study re-interviewed some respondents during the third stage rom February 18, 2019 to February 27, 2019.

Table 5
Reasons for changes in transaction costs when using consultancy contracts.

Transaction cost analysis	Reasons for changes in transaction costs				
project	Increased	Unchanged	Decreased		
Panel A: Ex ante transaction costs					
Search and information costs	Takes longer to explain (KS 3)		More contract choices (KS 1, 2, 4-7)		
Negotiating costs	Additional entrusted matters must be renegotiated (KS 2–4, 7)		No additional entrusted matters must be renegotiated (KS 1, 5, 6)		
Panel B: Current transaction	costs				
Drafting contract costs	Determining who holds authority of additional entrusted matters is more complex (KS 2–4, 7)		Contracts with no additional entrusted matters are simpler (KS 1, 5, 6)		
Guaranteed contract costs	-		No guarantee of margin payments (KS 1–7)		
Bargaining costs	Contracts with additional entrusted matters require more bargaining (KS 2–4, 7)		Only consultancy fees; thus, less bargaining is required (KS 1, 5, 6)		
Panel C: Ex post transaction of	costs				
Supervision and prevention costs		Cannot reduce the number of communications with the CMC, regardless of whether it is only with a consultant or additional entrusted matters (KS 1–5, 7)	The number of communications with the CMC is lower only for consultants (KS 6)		
Examination and implementation costs		Must keep a weekly dispatch supervisor attached to the community for additional entrusted matters (KS 2–4, 7)	Do not need to keep a weekly dispatch supervisor attached to the community supervisor (KS 1, 5, 6)		
Default and litigation costs	Due to additional entrusted matters, can easily become involved in litigation if staff violate an employment contract (KS 2–4, 7)		When acting as a consultant, there is no joint liability for staff violating employment contracts (KS 1, 5, 6)		
Contract termination costs			PMCs are not employers, and therefore do not have an obligation to placement staff (KS 1–7)		

Note: The respondents' codes are in parentheses.

committees may not understand the differences between the two contracts (consultancy and full-responsibility contracts), and that search and information costs may therefore increase because PM companies must spend time explaining them.

Negotiation costs—Three respondents stated that they used consultancy contracts that do not normally accept additional entrusted matters, thereby reducing negotiation costs. However, four respondents revealed that management committees normally require PM companies to meet additional entrusted services and that management committees meticulously negotiate the contents of contracts, thereby increasing negotiation costs. This finding supports the results in Zaheer et al. (1998) and agrees with Hypothesis 2 (i.e., providing consultancy contracts will increase negotiation costs).

4.2.2. Current transaction costs

Drafting contract costs—Three respondents said that under the nonadditional entrusted services of a management committee, the terms of consultancy contracts were simpler than those of full-responsibility contracts. Moreover, there is no need to pay a lawyer to review consultancy contracts in advance, meaning that the drafting contract costs are relatively low. However, four respondents said that, under the additional entrusted services of a management committee, the drafting costs increase. This agrees with Luo et al. (2007) and with Hypothesis 3 (i.e., providing consultancy contracts will increase drafting contract costs).

Guaranteed contract costs—All the respondents said that consultancy contracts only provide advisory services for management committees and often do not provide additional requirements of a similar margin. Therefore, consultancy contracts reduce guaranteed contract costs, and this result agrees with Hypothesis 4. Nevertheless, a management committee may require a PM company to make oral promises, but this does not involve the payment of substantive amounts of money.

Bargaining costs—Three respondents said that consultancy contracts only provide a management committee with consultants in relation to condominium management and maintenance, thereby minimizing bargaining costs. However, four respondents said that under consultancy contracts, a management committee is often required to provide additional entrusted matters such as the recruitment and training of property management service staff, the collection of management fees, and the payment of management and maintenance costs. Such additional services must be negotiated, which increases bargaining costs. This finding is consistent with Luo e al. (2007) and accept the hypothesis 5.

4.2.3. Ex post transaction costs

Supervision and prevention costs—Most respondents said that, irrespective of whether a consultancy contract or full-responsibility contract is used, the PM company of a community must regularly ask supervisors to attend meetings organized by the

management committee to provide consultation services, which lessens the communication gap and minimizes the likelihood of the management committee terminating a contract prematurely. Thus, supervision and prevention costs are unaffected. However, several respondents believed that consultancy contracts only provide advisory services, meaning that there is minimal communication between a PM company and management committee. Hence, supervision and prevention costs are lower under consultancy contracts compared with full-responsibility contracts. This finding does not support that of Dahlstrom and Nygaard (2010) and rejects Hypothesis 6.

Examination and implementation costs—Three respondents stated that they did not accept additional entrusted matters and therefore did not need to dispatch supervisors to housing communities weekly. Thus, examination and implementation for them were relatively low. This result is congruent with that of Li et al. (2013) and agrees with Hypothesis 7. Four respondents said that they accepted additional entrusted matters, such as supervising and enforcing property management service staff, whereby the respondents needed to dispatch supervisors to housing communities weekly. Therefore, examination and implementation costs for them were relatively high.

Default and litigation costs—Three respondents said that consultancy contracts can reduce the risks of violating the service agreement of contracts for PM companies, thereby reducing default and litigation costs, and this result agrees with Hypothesis 8. Four respondents said that consultancy contracts with additional entrusted matters are prone to commercial disputes and litigation, such as those arising from poor service quality from property management service staff, self-piracy, and other problems, ultimately leading to violations of employment contracts. Thus, the default and litigation costs are relatively high, which agrees with McGann et al. (2005).

Contract termination costs—The respondents stated that under consultancy contracts, management committees are the employers of property management service staff, and because management committees often initiate contract termination, PM companies are consequently not responsible for subsequent placement of property management service staff. Thus, consultancy contracts can reduce contract termination costs. This result is compatible with Luo et al. (2007) and agrees with Hypothesis 9.

To summarize, when PM companies adopt consultancy contracts, the aforementioned 11 transaction costs are relatively low when there are no additional entrusted matters. However, if consultancy contracts have additional entrusted matters, this mode exhibits a trend toward the PM company mode. Thus, under consultancy contracts, five transaction costs increase, namely ex ante planning, negotiating, contract drafting, bargaining costs, ex post defaulting, and litigation costs; three transaction costs do not change, namely current contracting costs, ex post supervision and prevention costs, and inspection and execution costs; and only three transaction costs reduce, namely ex ante search and information costs, current guaranteed contract costs, and ex post contraction termination costs. This reveals that PM companies are inclined to adopt consultancy contracts with no additional entrusted matters to reduce their transaction costs. If they adopt consultancy contracts with additional entrusted matters, they face the risk of more than five transaction costs increasing.

4.3. PM companies' strategies for using consultancy contracts

The results show that PM companies use consultancy contracts with no additional entrusted matters to reduce their transaction costs. However, it is unclear what strategies PM companies adopt when they cannot avoid adopting consultancy contracts with additional entrusted matters. This may be of concern to PM companies. Therefore, we analyze the reasons why some transaction costs increase or do not change from a PM company viewpoint.

(1) Effective use of company websites and effective advertising strategy

Because PM companies search for potential management committees, they can make effective use of their company websites and advertising to make potential consumers understand services, contractual rights, the obligations and responsibilities of the participants, and other aspects for each mode, especially the ACM and CBM modes. This will reduce the time required to explain the content of contracts and also reduce search and information costs required when searching for possible partners.

(2) Planning different service modules

Because PM companies use consultancy contracts with additional entrusted matters, they can provide different planned service modules to management committees to reduce transaction costs. For example, PM companies can design a facility and electrical equipment maintenance module, a financial management service module, an environmental cleanliness and hygiene management service module, a community planning service module, an asset management services module, and a property management services supervision and audit module. PM companies can present these modules to management committees and give them different combinations to choose from, reducing planned service, negotiating, bargaining, monitoring, and policing and enforcement costs.

(3) Using a property service proposal

PM companies can develop property service proposals according to the aforementioned service modules and describe in detail the programs of the modules in a management committee tender briefing session. Moreover, PM companies can explain the service operating processes and service quality control instructions for management committees, who can then choose according to their needs. Thus, PM companies can reduce their negotiating, bargaining, monitoring, and policing and enforcement costs.

(4) Management contract modes combined with new technologies

In addition to researching and developing optional contract modes for management committees, PM companies can combine management contract modes with Internet of Things, financial software, robots, and other new technological applications. For example, radio-frequency identification can assist in the management of facilities, equipment, and personnel. Moreover, financial software can help pay management fees. This approach can lower monitoring and policing and enforcement costs.

(5) Enhancing the degree of authorization

Decision makers in PM companies depend on organizational structure. If PM companies use consultancy management with different additional entrusted modules, they face demands from management committees to choose a variety of service modules, increasing the total contract price. PM companies can reduce contracting costs if they adjust the authorized space of the contract decisions and allow managers to enter directly into a contract with management committees.

(6) Helping to protect employees' rights and interests

PM companies should assist management committees in changing consultancy contracts to meet the needs of property management service staff. In addition to assisting management committees in signing employment contracts with their self-employed property management service staff and clarifying the relationship between management committees and property management service staff, PM companies must also assist management committees in handling their employees' social insurance and safeguarding employees' rights and interests. This effectively reduces default and litigation costs.

5. Conclusion and suggestions

In this study, professional managers of PM companies in six major cities in Taiwan were interviewed to understand the factors that PM companies consider when using consultancy contracts.

This study finds that consultancy contracts offer PM companies lower personnel costs and a lower tax burden compared with full-responsibility contracts, and that such contracts are suitable for condominiums with minimal public funds, few households, and low management fees. However, under consultancy contracts, labor disputes are likely to occur; thus, it is difficult to distinguish between powers and responsibilities and to control service quality, and a PM company's corporate image is likely to be damaged.

In addition, this study determined that among the nine transaction costs, most of the respondents believed that transaction costs are likely to decrease when using consultancy contracts, although for five transaction costs, some respondents felt that costs will increase, whereas for two items no change is expected.

Finally, this study provides six strategies for PM companies when choosing management modes and contracts: use a company website and advertising strategy, develop different service modules, use property service proposals, use management contract modes combined with new technologies, enhance the degree of authorization, and help protect employees' rights and interests.

Explaining the differences between full-responsibility contracts and consultancy contracts through prior description of the services offered by each can help management committees understand the status of consultants and PM companies as their advisors, thereby facilitating dispute resolution. The use of a clearly standardized number of services and charges, in addition to reducing the cognitive gap between the two parties of a contract, can also improve service quality. Moreover, establishment of a management unit can reduce labor disputes. The aforementioned strategies can prevent a company's image from being damaged.

The advantages of reducing personnel costs and tax burdens associated with consultancy contracts can be clearly evaluated. Consultancy contracts may be regarded as a mean of reducing production costs, but in essence, they may have a causal relationship with an increase in transaction costs. However, the disadvantages of supervision and responsibility are inherently less predictable and can be regarded as direct increases in transaction costs, but they are also related to agency costs.

Although some people question whether the reductions of personnel costs associated with consultancy contracts may be a measure of corner cutting, the quality of consultancy contract management is actually worse than that of the full-responsibility contracts because of the reduced personnel costs. However, some communities with weak financial power should recognize that they can purchase only low-quality services with limited funds; that is, management quality standards may have to be compromised. In addition, in relation to production costs, although the advantage of tax burden reduction is beneficial to PM companies, they must consider whether the tax increase occurring when PM companies are penalized by the tax authorities outweighs any advantages. This is central to evaluating whether such advantages are worth maintaining. In the framework of consultancy contracts, PM companies are not the employers of property management personnel; however, they have regulatory obligations. The relative responsibility to personnel decreases; therefore, agency costs also decrease. However, if the management quality declines and the company's image is damaged, transaction costs still increase.

The standard form of the full-responsibility contract announced by the government seeks to strike a balance between the rights and obligations of both trading sides as well as to reduce transaction costs, but it cannot prohibit free trade in the market. This study argues that there are three substantive differences between consultancy contracts and full-responsibility contracts, namely the number of entrusted matters, property management service modes, and the relationship between employees and employers. However, these differences are likely to cause disputes among PM companies, management committees, and property management service staff. Therefore, to maintain the rights and interests of property management service staff employed by management

committees, the government stated in 2014 that the Labor Standards Act should be applicable to management committees. However, this study argues that the competent authorities should be involved in the control and maintenance of the condominium management market. In particular, such authorities should focus on whether PM companies use consultancy contracts with additional entrusted matters because there may be hidden labor problems that affect the recruitment of property management service staff. Finally, although the main benefits of the consultancy contract type studied apparently relate specifically to Taiwan's labor code and tax regime, the implementation of strategies, reduced personnel costs and tax savings on consultancy contract can be applied to PM companies in other jurisdictions.

Acknowledgement

The author thanks three anonymous reviewers, the journal editor for comments, and Wallace Academic Editing for their manuscript editing.

References

Beng, T. M. (1999). The contract choice of public land development. NSC Research Report NSC88-2415-H-004-019 (in Chinese).

Chang, C. O. (2007). The influence of community sense, collective action and principal- agent modes on housing management and maintenance in Taipei metropolitan area- and a discussion of a cross- city comparative study among Taipei, Hong Kong and Shanghai. NSC Research Report NSC95-2415-H-004-021 (in Chinese).

Chen, H. F., Chang, C. O., & Yip, N. M. (2007). Impact of community cohesion and institutionalized management on collective action- an analysis of subjective satisfaction and objective performance in condominium management and maintenance. City and Planning, 34(2), 139–163 (in Chinese).

Chen, Z. H., & Liu, Z. Z. (2000). Apartment building management organization management manual template study. Ministry of the Interior Taiwan: Architecture Research Institute (in Chinese).

Chu, F. N., & Chang, C. O. (2013). Performance evaluation of condominium management and maintenance modes: From a perspective of the principal-agent relationship. *Management Review*, 32(3), 25–48 (in Chinese).

Coase, R. H. (1937). The nature of the firm. Economica, 4(2), 386-405.

Cooter, R., & Ulen, T. (2016). Law and economics. Addison-Wesley.

Dahlstrom, R., & Nygaard, A. (2010). Epilogue: Popperian perspectives on transaction cost economics and future directions of empirical research. *Journal of Retailing*, 86(3), 284–290.

Hung, T. Y., & Chang, C. O. (2002). An analysis of the management and maintenance modes of condominiums in Taipei. *City and Planning, 29*(3), 421–444 (in Chinese). Ko, B. S., & Chen, C. Y. (2010). To make or to buy the quality of neighborhood environment: Transaction cost perspective. *Soochow Journal of Accounting Special Issue,* 29–59 (in Chinese).

Kuo, C. T., Hsieh, B. M., Chou, S. H., & Kao, P. Y. (2016). Influence of property management services contract on apartment building management and maintenance. Journal of Taiwan Land Research, 19(2), 37–77 (in Chinese).

Liao, S. C., & Hsieh, H. C. (2011). A study on labor disputes in central taiwan: A perspective of conflict management theory in organization. *Journal of Human Research Management*, 11(3), 27–46 (in Chinese).

Luo, J. D., Hung, W. T., & Ho, K. K. (2007). Which city is good for Taiwanese overseas investment: The transaction cost-embeddedness approach, thoughts and words. Journal of the Humanities and Social Sciences, 45(2), 95–131 (in Chinese).

Macneil, I. R. (1980). Power, contract, and the economic model. Journal of Economic Issues, 14(4), 909-923.

McCann, L., Colby, B., Easter, K. W., Kasterine, A., & Kuperan, K. V. (2005). Transaction cost measurement for evaluating environmental policies. *Ecological Economics*, 52(4), 527–542.

McLeod, S. A. (2014). The interview method. Retrieved from https://www.simplypsychology.org/interviews.html.

Nelson, P. (1970). Information and consumer behavior. Journal of Political Economy, 78, 311-329 March/April.

Tsai, M. H., Chen, M. C., & Hsu, Y. C. (2012). The pricing model for the service of property management company. *Journal of Property Management*, 3(1), 25–34 (in Chinese).

Tzow, Y. H., & Tu, K. J. (2016). Investigation of property management mode of public and private condominium in cases. *Journal of Property Management*, 7(1), 1–10 (in Chinese).

Williamson, O. E. (1975). Markets and hierarchies: Analysis and antitrust implications. New York: Free Press.

Williamson, O. E. (1985). The economic institutions of capitalism: Firms, market, relational contracting. New York: Free Press.

Wu, C. H., & Chen, W. T. (2011). Developing a performance assessment model for a property management company using a balanced scorecard. *Proceedings of the institute of property management* (pp. 176–185). (in Chinese).

Yip, N. M., Chang, C. O., & Hung, T. Y. (2007). Modes of condominium management: A principal-agent perspective. Facilities, 25(5/6), 215-226.

Yip, N. M., & Forrest, R. (2002). Property owning democracies? Home owner corporations in Hong Kong. Housing Studies, 17(5), 703-720.

Yiu, C. Y., Wong, S. K., & Yau, Y. (2006). Property management as property rights governance: Exclusion and internal conflict resolution. *Property Management*, 24(2), 87–97.

Zaheer, A., McEvily, B., & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*, 9(2), 141–159.