

# BENCHMARKING FINANCIAL PERFORMANCE OF CONDOMINIUMS

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## ABSTRACT

*This paper documents the process and the findings of a study to benchmark property management practices of private residential developments in Singapore. Besides providing a set of financial performance benchmarks for the promotion of a higher level of condominium management, the empirical evidence shows that management expenditure decreases with the number of units within a development due to economy of scale. The age of a development, however, does not significantly influence management costs. The data further reveal interesting implications on the economics of outsourcing versus provision of in-house services.*

**Keywords:** Benchmarking, property management, Management Corporation, Singapore.

## INTRODUCTION

Whilst the properties in Singapore are generally well maintained, some condominiums tend to fall short of the desired standard due to environmental degradation and aging properties, improper use and inadequate maintenance, and fees undercutting by small and unregulated property management firms. As a result, there exists a disparity in the maintenance standards of individual condominiums. Some condominiums spend more on maintenance with the view of preserving property values over the long run, and others are thrifty to the extent of compromising the quality of maintenance.

A benchmarking exercise was initiated in 2000 with the aim of promoting a higher standard of property management and maintenance of condominiums in Singapore. Recognising that benchmarking was a new concept to the local property management community, the project sought to promote the idea of measuring performance and comparing it with external benchmarks. For a start, the compilation and publication of the industry's benchmarks would provide an external source of reference for managing agents and condominiums to measure their performance, and hopefully help them to identify areas where expenditures may be excessive or inadequate. This would be an improvement over the current practice where financial performance is either not monitored at all, or at best, is compared against some pre-determined budget, which is normally based on some figures from the previous year. Without a substantial review, inefficiencies may have been built into the budget over the years (Leibfried and McNair, 1994; Hubbard, 1994).

This paper seeks to contribute to the literature by providing a perspective on the functioning of residential management in Singapore and by documenting the process and results of the benchmarking efforts. The organisation structure for the rest of this paper is as follows: Section 2 provides an essential background on the legal framework

for the management of condominiums in Singapore. Section 3 presents the research methodology for the study. Section 4 presents the financial parameters included in our benchmark study. Section 5 examines the impact of outsourcing, managing agent, age and size of development on the maintenance expenditures. Section 6 concludes with a summary of the key findings and our recommendation for further study.

## CONDOMINIUM MANAGEMENT IN SINGAPORE

The management and maintenance of condominiums in Singapore are governed by two legislations, namely the Buildings and Common Property (Maintenance and Management) Act and the Land Titles (Strata) Act (LTSA). The LTSA was introduced in Singapore in 1967 to facilitate the subdivision and sale of space, known as “strata units” on a specific site to multiple owners. Unlike the leasehold system, the strata title concept gives the buyers a legal status as owners. Since each strata unit is granted a separate title, a strata unit could be disposed without affecting other units within the same development. In addition to the exclusive ownership of their individual strata units, the buyers also jointly own all parts of the development that do not fall within the boundaries of any of the individually owned lots. Defined as the “common property” of the development, this includes most of the structure of the building, common staircases, lifts, foyers, car park, recreational and communal facilities. Collectively, all the strata unit owners make up the management corporation (MC), which is a legal entity created under the LTSA to represent the interest of all the owners with respect to management of the common property.

Whilst any maintenance requirements within the strata units are the responsibility of the individual owners, management of the common property is the responsibility of the MC. In particular, the MC is duty bound under the LTSA to properly maintain and keep in a state of good and serviceable repair, the common property for the benefit of all the owners. It can also, through a special resolution passed at the annual general meeting, install or provide additional common facilities such as the construction of a swimming pool, a barbeque pit, or tennis court.

The MC is provided sufficient powers under the LTSA to carry out its duties and functions effectively. For example, it could collect from owners a contribution for management fund, which is used to pay for expenses related to managing the condominium such as repairs, cleaning, insurance premiums, utilities charges, etc. In addition to the management fund, the MC is also required to establish a sinking fund to provide for major repairs, improvement works, and replacement of mechanical and electrical installations in the building. It is also empowered to institute legal proceedings to collect outstanding levies as debt.

The MC is run through a management council, members of which are elected from amongst the owners at the annual general meeting of the MC to represent all the owners. Similar to a Board of Directors in a company, the management council is under a fiduciary duty to implement the decisions of the MC and functions. The MC can also employ workers directly or appoint a managing agent to take charge of managing and administering the condominium.<sup>1</sup>

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1. A study by the Construction Industry Development Board (1990: 14) indicated that 73% of condominiums, in particular, the newer and larger developments which are better equipped with facilities and swimming pool, engaged the services of managing agents.

## RESEARCH METHODOLOGY

The objectives of the study were to introduce the benchmarking concept and illustrate its applicability and value to the property management profession in Singapore. With the assistance of the Association of Property and Facility Managers (APFM), the audited accounts for 54 condominiums were collected and analysed between May and July 2000. The study sample was restricted to residential developments to achieve a homogeneous sample to facilitate comparisons across similar developments.

An important stage of the study involved the identification of appropriate benchmarks to establish some common criteria to measure performance. We decided to focus on the financial metrics because of data availability and the ratios could be easily understood and computed. In addition to reporting the absolute figures, ratio analysis was employed to provide scale free benchmarks to facilitate comparisons across condominiums of different sizes. Results of the study were published in the national newspaper to generate publicity and stimulate interest and participation in future benchmarking exercise.

We adopted a similar presentation format as the 1997 Benchmarks II study undertaken by the International Facility Management Association (IFMA). In particular, the median and percentile distribution of each financial parameter were reported to maintain confidentiality. The extreme ends of the percentile distribution would represent the metrics of the top and worse performers in the sector. More importantly, the format allows an individual condominium to rank its performance within the percentile distribution and hence, provide a gauge on its standing vis-à-vis the study sample. By determining how far it is above or below the median level, areas that require the management's close attention would be highlighted.

A necessary precaution when using benchmarks for comparative purpose is to ensure that the reference points are reliable and have uniform definitions, so that one can measure "apples to apples" (Rogers, 1997). Averaging over a three-year period was employed in our study to even out any bulky or non-recurring maintenance items. In addition, any accounting statements that are not on a 12-month period were adjusted on a pro-rata basis to 12 months to facilitate a constant basis for comparison across period and across companies.

Our examination of the audited accounts of the 54 MCs over the last three years, however, revealed inconsistencies in the financial reporting format and classifications amongst the condominiums. As a result, the cost items could only be grouped broadly into the following five areas of expenditure:

(a) **Administrative costs** – which include expenditures on advertisements, telephone bills, stationary & postage, insurance, license fee, rental on office equipment and furniture rental, depreciation, refreshments, social events, and bank charges.

(b) **Professional fees** - which include fees payable to the managing agent, auditors and lawyers.

(c) **Costs of conservancy** - which include expenses incurred on housekeeping such as security, waste disposal, pest control, landscape and management of common facilities such as gym, swimming pool, courts, and BBQ pits. Wages incurred by staff employed

directly by the MCs such as basic salary, pension fund, bonus, medical expenses, uniform allowance, and transport claim are included in this category on the basis that some MCs employ cleaners and security guards in-house.

(d) **Maintenance costs** - which include expenditures on electrical works, inter-communication, lift, fire protection system, plumbing works, building repairs, auto-barrier gate, Mechanical & Electrical service contracts, and servicing of air-conditioners in the common area.

(e) **Utility charges** - which include bills for electrical and water consumption. This is an important statistic in view of the emphasis on “green” campaign. Very high figures would indicate an excessive use of utilities or the possibility of water leakage within the premises.

Although more detailed breakdowns would be desirable, the above categorisation was sufficient for the purpose of demonstrating the usefulness of an external benchmark to the MCs and the managing agents. The published benchmark would still provide a good idea of how an individual condominium is performing against the industry’s benchmark within a reasonable range.

## **FINANCIAL BENCHMARKS**

A total of 54 MCs managed by four managing agents were included in the study sample. The age of developments in our sample ranged from 3 to 31 years, with an average of 13.2 years. The average development in our sample has 73 strata units, with the number ranging from 8 to 314 units.

### **Areas of revenue**

The revenue for a MC comes from three sources; contribution levy from owners, income from investment, and others, such as fees for usage of communal and sporting facilities, and penalty for late payments. The average total income of the MCs in our sample was approximately S\$310,000 per annum. Table 1 show that, on a per-dwelling unit basis, the annual income represented S\$ 4,579 per unit and out of this, S\$ 4,267 was contributed by the owners as a management fund.

**Table 1: Annual Income (per dwelling unit)**

<b>Percentile</b>	<b>Annual Income</b>	<b>Management Fund</b>	<b>Management Fund Annual Income</b>
99	\$10,039	\$8,389	0.995
95	\$8,051	\$7,878	0.992
90	\$7,628	\$6,624	0.990
75	\$5,533	\$5,275	0.978
<b>Median</b>	<b>\$4,337</b>	<b>\$3,963</b>	<b>0.960</b>
25	\$3,002	\$2,862	0.927
10	\$2,544	\$2,368	0.855
5	\$2,365	\$2,201	0.829
1	\$1,996	\$1,728	0.650
<b>Average</b>	<b>\$4,579</b>	<b>\$4,267</b>	<b>0.936</b>

The last column in Table 1 confirms that the main source of income for the condominiums is management fund collection, which on average made up 93.6% of the total annual income collected by the MCs. Investment income, derived mainly from interest on savings contributed another 3.8%, and income from other sources such as rental income, interest on late payment, and other miscellaneous commission constituted the remaining 2.6%.

### **Total expenditure**

Table 2 shows the percentile distribution of the total annual expenditure of the MCs and the surplus for each year (the differences between annual income and annual expenses). The last two columns in Table 2 present the percentile distribution of the ratio of total expenses over total income and the ratio of total expenses over total management fee. These statistics provide a fair indication of whether the MCs are collecting enough income to cover operating expenses. Ideally, the ratio should be less than one, as it is a prudent measure for condominiums to build up from the annual surplus a reserve fund for future operating and capital expenses. Indeed it is mandatory under the LTSA for MCs to provide a sinking fund for the purpose of meeting expected major expenses such as repainting of the common property, major improvements within the development, or renewal or replacement of electrical and mechanical installations.

**Table 2: Total Expenditure & Income**

Percentile	Total Expenditure	Annual surplus	Total exp Total income	Total exp Mgmt fund
99	\$1,267,476	\$95,772	1.575	1.924
95	\$919,086	\$75,966	1.101	1.259
90	\$677,352	\$62,906	1.043	1.126
75	\$324,343	\$32,875	0.993	1.060
<b>Median</b>	<b>\$181,226</b>	<b>\$11,247</b>	<b>0.936</b>	<b>0.986</b>
25	\$104,116	\$1,713	0.867	0.912
10	\$73,880	-\$7,454	0.795	0.836
5	\$60,926	-\$12,724	0.755	0.806
1	\$39,887	-\$82,043	0.706	0.771
<b>Average</b>	<b>\$293,000</b>	<b>\$ 17,830</b>	<b>0.947</b>	<b>1.019</b>

Overall, the total annual expenditure of the MCs in the study sample averaged S\$ 293,000. This was marginally lower than the average annual income of S\$ 310,000, thus an average surplus of S\$17,830 was generated per annum. Although the mean and median data show that MCs collected enough management funds to cover their total expenditure, analysis of the percentile distributions revealed that only 57 % of the MCs sampled collected enough management funds to cover current expenditure. The other 43 % spent more than they collected over the study period, and our analysis suggests that older developments tend to fall under this category, as they may have accumulated substantial amount of surplus and could, therefore, afford to collect less from the owners.

### Areas of expenditure

To facilitate further analysis, the aggregated expenditure was partitioned into five broad items and their percentile distributions as percentage of total expenditure and on a dwelling unit basis are presented in Table 3. The benchmarks serve to highlight to the MCs their major cost items and how much they are spending on each cost category as compared to the industry. Naturally, closer attention should be paid on major areas of expenses as well as cost items that are significantly out of line with the industry's median figures.

Panel A of Table 3 shows that on average, more than half (50.2 %) of the MC's expenditure was incurred on conservancy works, 19.6 % on maintenance works, 12.5 % on utility charges, 11.4 % on professional fees and 6.3 % on administrative matters. Panel B shows that the annual cost to the median owner is S\$ 231 for administrative cost, S\$ 375 for professional fees, S\$ 1,846 for conservancy works, S\$ 772 for maintenance works, and S\$ 420 for utility charges relating to the management and maintenance of common areas.

**Table 3: Areas of Expenditure**

<b>Percentile</b>	<b>Admin. Costs</b>	<b>Professional fees</b>	<b>Conservancy works</b>	<b>Maintenance works</b>	<b>Utility charges</b>
<b>Panel A: % of total expenditure</b>					
99	13.2%	27.4%	72.9%	37.6%	37.1%
95	10.5%	21.9%	67.6%	31.5%	24.4%
90	9.2%	18.2%	63.1%	28.2%	18.7%
75	7.1%	14.8%	59.0%	25.1%	14.5%
<b>Median</b>	<b>5.6%</b>	<b>10.1%</b>	<b>51.4%</b>	<b>18.8%</b>	<b>11.2%</b>
25	4.9%	7.3%	42.9%	15.1%	8.9%
10	4.2%	5.1%	32.6%	10.4%	6.8%
5	4.0%	4.2%	29.0%	8.9%	5.9%
1	3.6%	3.7%	26.5%	6.6%	1.9%
<b>Average</b>	<b>6.3%</b>	<b>11.4%</b>	<b>50.2%</b>	<b>19.6%</b>	<b>12.5%</b>
<b>Panel B: \$ pa per unit</b>					
99	\$562	\$1,515	\$5,386	\$2,106	\$2,735
95	\$434	\$809	\$4,111	\$1,595	\$1,415
90	\$380	\$765	\$3,861	\$1,406	\$972
75	\$302	\$559	\$2,704	\$972	\$615
<b>Median</b>	<b>\$231</b>	<b>\$376</b>	<b>\$1,846</b>	<b>\$772</b>	<b>\$420</b>
25	\$170	\$295	\$1,409	\$535	\$270
10	\$152	\$199	\$1,046	\$335	\$217
5	\$150	\$170	\$906	\$243	\$158
1	\$133	\$164	\$734	\$205	\$79
<b>Average</b>	<b>\$252</b>	<b>\$463</b>	<b>\$2,167</b>	<b>\$822</b>	<b>\$563</b>

Besides being the largest cost category, conservancy works also had the largest range with the 99<sup>th</sup> percentile spending 72.9 % and the 1<sup>st</sup> percentile spending 26.5 % of total expenditure. MCs should therefore pay more attention on the expenditure on conservancy works, especially if the metric is above the median (51.4 %). For example, they could review the current arrangements and consider mechanisation of cleaning and provision of close-circuit monitoring system, as well as reducing the number of entry and exit points within the condominium to reduce manpower requirements.

Another potential cost savings area is utility charges, which consumed 12.5 % of the total annual expenditure of an average MC. Obviously, the consumption of electrical and water would depend on the design of the development; in particular, provision of swimming pool and water-features and the number of electrical and mechanical installations, such as lifts, within the development. Hence, it is not surprising to note that expenditures on utility showed a significantly large gap between MCs on the 99<sup>th</sup> percentile (37.1 %) and the 1<sup>st</sup> percentile (1.9 %). Condominiums with utility consumption on the higher end of the percentile distribution should initiate water and energy consumption audits since an unusually high consumption bill could be symptomatic of wastages - for example, undetected water leakage due to loose fittings, pipe corrosion, or faulty valves. Similarly, condominiums may consider using energy saving light fittings to replace the conventional ones.

## DETERMINANTS OF THE MC'S TOTAL EXPENDITURE

In addition to the financial benchmarks, which were computed based on aggregated data, we also investigated the influence of outsourcing, managing agent, size and age on the total expenditure of the MCs. In particular, we employed the following generalised regression model to examine how the four development-specific variables explain the expenditure patterns of the individual condominiums:

$$\text{Total Expenditure} = f(\text{Outsource}, \text{Managing Agent}, \text{Age}, \text{Size})$$

### Outsourcing of conservancy services

Close to half of the MCs (26 out of 54) do not have any staff in their payroll, which suggests that the management and maintenance services in these condominiums were outsourced to external parties. The remaining 28 condominiums employed in-house staff and tend to have more dwelling units than condominiums that do not employ in-house staff. We, therefore, divided the condominiums in our sample into two groups, namely those that employed in-house staff and those that outsourced their conservancy services.

The average conservancy and total expenditures of the two groups are reported in Table 4. The data showed that the means between the two groups were significantly different. In particular, the group of condominiums employing in-house staff incurred more expenditure on conservancy services (S\$ 2,582) as compared to the group of condominiums without any in-house staff (S\$ 1,720). The average total expenditure of the two groups also revealed a similar story – it was more cost effective to outsource management and maintenance services to external parties. Hence, an issue that warrants examination is the rationale for continuing to employ in-house staff when outsourcing conservancy services to external parties appeared to be more economical.

**Table 4: Outsourced versus In-house Conservancy Services**

Groups	Count	Conservancy works (S\$ p.a. per unit)	Total expenditure (S\$ p.a. per unit)	Size of development (no. of units)
Outsourced	26	1,720	3,798	43
In-house	28	2,582	4,702	100
Total	54	2,167	4,267	73

In our regression model, we employ a dummy variable to examine the effect of outsourcing on the MC's total expenditure. In view of the above observations, we hypothesize that the decision to outsource conservancy services would have a negative relationship with total expenditure.

## Performance of the managing agent

In Singapore, the MCs usually appoint a managing agent to carry out the day-to-day management and maintenance of their condominiums in return for a management fee. Table 5 reports the fees (normalised by the number of dwelling units and total expenditure) charged by the managing agents. On a dwelling unit basis, the median cost of engaging the managing agents was \$370 per annum. The percentile distribution showed a large variation in the managing agents' fees, which would depend on the scope of work and size of the condominium.

**Table 5: Managing Agent Fees**

Percentile	Managing agent fees (\$ p.a. per dwelling unit)	Managing agent fees (% of total expenditure)
100	\$2,003	28.8%
99	\$1,428	26.9%
95	\$776	21.2%
90	\$730	17.3%
75	\$527	13.6%
<b>Median</b>	<b>\$370</b>	<b>9.6%</b>
25	\$279	6.8%
10	\$189	4.3%
5	\$157	3.7%
1	\$138	3.4%
<b>Average</b>	<b>\$435</b>	<b>10.8%</b>

Since Table 5 showed that the fees paid to the managing agent fees constituted a significant proportion of total expenditures (10.8 %), an important question is the effectiveness of the agent in reducing operating costs of the condominium.<sup>2</sup> Since the condominiums in our sample were managed by four different property management companies, we could control for the contribution of the managing agents in our regression model.<sup>3</sup> This was achieved by incorporating a set of dummy variables representing the different companies.

Table 6 presents the total expenditure of the condominiums managed by the four property management companies as well as the average fees per dwelling unit and the average size and age of the developments managed by the respective firms. Firm A and Firm B were the two leading property management firms in Singapore. Whilst the managing agent fee were consistent amongst Firm A, Firm B, and Firm D, the management fee for Firm C appeared to be much higher than the rest. This could be

2. Lim (1987; 61) listed three qualitative advantages of appointing a managing agent. Firstly, it relieves the MC of many mundane secretarial and accounting duties; secondly, it helps remove any possible conflicts or animosity among the owners or occupiers which could arise as a result of late payment of dues; and thirdly, the MC can benefit from the expertise and advice of the managing agent in managing and maintaining the physical property and in complying with the law.
3. Another interesting way to examine the issue would be to compare the performance of agent-managed condominiums against the performance of self-managed condominiums. Unfortunately, the condominiums in the sample were all managed by managing agents and as such, could not facilitate such analysis.

reflective of the smaller developments managed by Firm C.<sup>4</sup> Overall, the table suggests that paying high fees to the managing agent does not necessarily result in a better financial performance as measured by a reduction in the overall expenditure of the condominium.

**Table 6: Comparative performance of managing agents**

<b>Firm</b>	<b>Count</b>	<b>Total expenditure (\$ per unit)</b>	<b>MA Fee (\$ per unit)</b>	<b>Size of development</b>	<b>Age of development</b>
A	25	3,702	359	66	13.8
B	20	4,618	376	100	14.5
C	8	5,245	834	21	9.1
D	1	3,545	310	92	5
Total	54	4,267	435	73	13.2

### Size of development

One could argue intuitively that maintenance costs should decrease with the number of units within a development due to scale economies. For our analysis, we obtained the number of dwelling units in each condominium from the Commissioner of Buildings. In our regression, the natural logarithm of the number of units in a development is used as a proxy for size.

The pair-wise correlations between the five expenditure areas (normalised by number of dwelling units) and size of development are presented in Table 7. Despite having more facilities and larger areas to manage in a big development, four of the expenditure items showed a negative relationship with the size of a development. In particular, spending on administration, professional fees, conservancy works and maintenance works decreased with the size of development. The only area of expenditure that did not decrease with development size was utility charges. This suggests that no economies of scale were enjoyed with respect to utility consumption.

**Table 7: Correlation Coefficients**

	<b>Total expenditure</b>	<b>Admin cost</b>	<b>Professional fees</b>	<b>Conservancy works</b>	<b>Maintenance works</b>	<b>Utility charges</b>
<b>Size</b>	-0.14	-0.30	-0.50	-0.02	-0.15	0.04
<b>Age</b>	-0.03	0.09	-0.15	-0.11	0.11	0.11

Table 7 also reported a strong negative correlation (-0.50) between professional fees and the number of units in a development, which is consistent with our earlier notion that management fee is tied to development size.

4. This is indicative of a steep discount in the managing agent's fee as the condominium size increases. Since the fixed costs associated with the provision of managing agent services could be spread over a larger number of dwelling units, the cost per unit would be lower.

## **Age of development**

One would expect that as a development gets older, the frequency and cost of building repairs would increase substantially. In addition, older developments are more likely to have archaic installations that are less energy efficient. Hence, a strong positive relationship between building age and total expenditure is predicted. In our regression model, the age of a development was calculated from the date the MC was formally established.<sup>5</sup>

The second row in Table 7, however, showed a weak inverse relationship (-0.03) between age of development and total expenditure, which is inconsistent with the hypothesis that maintenance cost increases with building age. Further analysis of the cost components showed that whilst administration costs, maintenance costs and utility charges increased with building age as hypothesized, professional fees and conservancy charges are inversely related with the age of a development. One possible explanation why less is spent on conservancy as condominiums get older could be a reduction in the importance of general upkeep and security over time. It could also be indicative of a learning experience over time where the condominiums eventually settled at optimal level with regards to the provision of maintenance and management services. For example, condominiums may rationalise the need for security manpower by stationing guards only at the entrance gate and relying on more sophisticated close-circuit monitoring system. The results could also be reflective of the higher specifications and more generous facilities provided in newer developments, such as water features, private lifts and intercom, and extensive landscaping, which translate to higher costs.

The correlation analysis also indicates the pressure for managing agents to reduce their management fee as a development gets older. This is symptomatic of the current state of property management in Singapore where fee undercutting is prevalent.

## **Results of regression**

Results of the regression using ordinary least squares (OLS) estimation are reported in Table 8. Overall, the multivariate analysis produces results that are consistent with our earlier observations. In particular, development size and outsourcing of conservancy services have significant impacts on reducing the cost of managing a condominium. The regression results also suggest that the age of a development and the decision on which property management firm is employed do not significantly affect the total expenditure of the condominium.

The  $R^2$  for the regression model of 0.309 indicates that the model is able to explain 30.9% of the variation in the total expenditures of the condominium in our sample. The explanatory power of the model could of course be increased if we include more right-hand side variables in the regression. For example, the spatial aspect of the developments such as quality of the condominium, size of the site, number of lifts, and the type of common facilities could also have significant influences on the management expenditure of condominiums.

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5. The establishment date for each MC was provided by the Commissioner of Buildings. An additional one year was added to account for the average time gap between the issuance of temporary occupation permit and the formation of the MC.

**Table 8: Determinants of Total Expenditure**

<b>Independent Variable</b>	<b>Coefficient</b>	<b>t-statistic</b>
Intercept	7,899.57	3.445*
Age of development	-252.07	-0.277
Size of development	-2,127.51	-2.838*
Outsourcing	-1,632.15	-3.289*
Firm A	1,585.94	0.943
Firm B	1,569.84	0.891
Firm C	487.53	0.290

\* indicate statistical significance at 1%. Total number of observation for the regression is 54. The coefficient of multiple determination for the OLS regression is 0.309.

## CONCLUSION

In summary, the findings of this study have several important implications for property managers. Firstly, there is an urgent need for the property managers in Singapore to address the problem of sustaining the current property maintenance programme, given that close to 25 % of the MCs surveyed operate on deficit. Secondly, property managers should review their current practices on conservancy works, which has been identified in the benchmarking exercise as the largest area of expenditure for condominiums. In particular, the empirical evidence shows that outsourcing may be a viable strategy to reduce conservancy costs.

There is also a need to improve and standardise the financial reporting of the MCs. In their current form, the audited accounts of MCs do not have standard classifications for reporting income and expenditures, which made benchmarking and comparisons between MCs difficult. For a start, benchmark standards could be specified at a more detailed level of each cost category is reported in a consistent manner across all MCs. The success of this effort, which could be driven through mandatory legislation or moral persuasion via the professional body such as the APFM, would depend on getting the MCs and managing agents to adopt the prescribed format in their financial reporting.

In conclusion, as a pioneer attempt to benchmark property management and maintenance costs in Singapore, the significance of this study goes beyond merely providing a framework for benchmarking property management and identifying excessive areas where costs could be reduced. It is hoped that the introduction of benchmarking would in the long run result in an improvement in the quality of management and enhance the services provided by the property managers. In short, the property management profession should not be seen only in terms of ensuring that floors are cleaned, bins emptied and the cost associated with these activities to be minimised or even eliminated, but as a necessary and strategic investment to maintain or even enhance property value (Construct I.T., 1997).

Property managers would, therefore, stand to fare better in the long run if they compete on the basis of how their services can add value to the condominiums rather than fee cutting. Although this study intentionally focused on the financial metrics because it can be implemented quickly, subsequent benchmarking studies could examine other non-

financial parameters - such as survey on owners' and tenants' satisfaction (Dean and Lee, 1998), cleanliness, response time to complaints, number of compliments and complaints, number of breakdowns within the year, and so on. These measures, some of which are more qualitative in nature, could then be linked to the financial metrics to provide a comprehensive benchmark on management standards in Singapore. Furthermore, if the survey could be repeated annually, an index of property management and maintenance costs could be constructed that would be useful to practitioners, government institutions and scholars alike.

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