Comparison Method - Preference Of Adjustment Techniques Among Valuers

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Abstract

This paper discusses the adjustment techniques applied by valuers in determining the market value of the property. There are several types of adjustment techniques that can be applied in comparison method such as summative pecentage, dollar percentage, add and/or subtract percentage, and proper base adjustments. In order to investigate the most preferred adjustment techniques applied by valuers in Malaysia as well as the elements of adjustment, a questionnaire survey is conducted that involves valuers from government and private sectors as respondents. The research reveals that the most preferred adjustment technique among valuers in Malaysia is the summative percentage method with the sequence of adjustment based on the ranking order of tenure, date of transaction, location, physical characteristics, economic, land use and zoning, quantum, topography, and financial terms. This study benefits the profession of real estate especially to practising valuers in Malaysia.

Keywords**:** *Comparison method, adjustment techniques, adjustment elements.*

1.0 Introduction

Theoretically, there are five methods of valuation being practised by the valuation profession namely the comparison, cost, residual, profit and investment method of valuation. In addition, discounted cash flow (DCF) is another valuation technique commonly used in valuing investment property. The most popular valuation method among valuers is the comparison method (Anuar, 2002; Fischer, 2002). In land reference cases the court prefers the comparison method while at the same time criticising the credibility of the other methods of valuation. In Nanyang Manufacturing Co. Ltd v CLR Johore Bahru (1954) 20 MLJ 69, Buhigiar J, remarked, *'I consider that the safest guide to determine the fair market value is evidence of sales of the same land or similar in neighborhood after making due allowances for all circumstances'*. Ellsworth (2001) is of the view that sale comparison approach should be considered as a valuation benchmark and treated as a foundation of the appraisal profession.

Comparison method is applicable when there is similarity of characteristics between the comparable and subject properties. Direct comparison is applicable in situations where the similarities are marked where dissimilarities are more, adjustments have to be made to account for the differences (Williams, 2004; Anuar, 2002, Ellsworth, 2001). Thus, the aim of this study is to identify the adjustment techniques most preferred by valuers in Malaysia in their practice of the comparison method. Additionally, the importance for each element of adjustment and the procedural manner in which valuers perform the adjustment are also investigated.

2.0 Background and Problems of Study

In arriving at the market value, a subject property needs to be compared with an appropriate number of comparable properties for the similarities and the dissimilarities. The types of properties that are amenable to the treatment by comparison method as suggested by various authors are residential (Rodgers, 2001; Dennis & Pinkowish, 2007), investment (Wincott, 2002), industrial (Ellsworth, 2001; 2002), mining (Healy & Berquist, 2000), contaminated land (Patchin, 1999), vacant land (Guidry, 2003), telecommunication corridor (Bucaria & Kuls, 2002) and office properties (Wincott, 2001; Clendaniel, 2005). Rodgers (2001) proposes that valuers can apply a systematic grid-adjustment process that employs specific percentage or dollar-amount adjustments, highlighting that this approach emphasises the individual comparable sales as the most meaningful units of comparison called 'property-to-property comparison'. Williams (2004) observes that adjustments for the numerous of dissimilarities between a subject property and its comparables can be made on a dollar or a percentage basis. If a comparable property is superior to the subject property to which it is being compared, then a negative or minus adjustment is made to take the comparable property from that superior position down to a equal level equal to the subject property. If a comparable property is inferior which it is being compared to the subject property, then a positive adjustment is made. The market itself determines whether the item is superior or inferior.

For any given element, the adjustment quantum can be derived by using a paired data or "matched pair" technique, which measures the price difference between two recent transactions that are otherwise identical except for the element under consideration; the value difference between the two constitute the dollar or percentage adjustment for this element. Either dollar or percentage adjustments should result in the exact same adjusted sale price (Williams, 2004; Rodgers, 2001).

Williams (2004) notes that the dollar adjustment for each element independently arises from the market as a result of reflecting the dissimilarities that affect value, and they are simply added together. The total of the adjustments is then added to or subtracted from the comparable's sale price to make the comparable equal to the subject as of the date of value. This is the principle of dollar adjusting. Percentage adjustments, however, are conducted differently on the basis of adjusting to make them equivalent to dollar adjustments. Several percentage adjustments should not be added together and then applied to adjust comparables sales. It would be technically and mathematically incorrect to add the adjustments because this does not result in moving from basis to basis. When percentage adjustments are applied, the result must be mathematically equal to dollar adjustment that is obtained separately from the market. Adding and subtracting the percentage adjustments gives an answer that is different from that derived by principle of adjusting using dollars. Williams (2004) concludes that the basis of adjusting the percentage can be used for all elements of comparison in the sales comparison approach, but it would be incorrect to simply add or subtract these adjustments and apply the sum to the comparable sale price.

Stellmacher (1998) reports that valuers add and subtract percentage to arrive at a conclusion when multiple adjustments are involved, but views this procedure as flawed. Valuers should multiply percentage to arrive at a conclusion, although it is perfectly correct to add and subtract adjustments in dollar amounts. Based on the analysis by Stellmacher (1998), two methods of adjustments are add and subtract percentage and multiple percentage. Based on the analysis, the indicated value is different. Hodges (2007) states that no specific mathematical theory exists regarding the proper averaging of percentages.

From the above discussion, the problems encountered in applying comparison method in Malaysia are as follows:

- There is the current lack of data to guide valuers on the preferred technique of adjustment to use, this made valuers uncertain about which technique is more appropriate to apply.
- The valuers are uncertain on which adjustment techniques are most appropriate to use.
- There is lack of empirical study to examine how valuers perform the technique and what are their preferred.
- Against the background of this situation, there is no data currently in terms of the valuers practise the adjustment on the techniques they prefer (if any)

3.0 Objectives

The specific objectives of this research are as follows:

i. To examine the adjustment techniques used by valuers in Malaysia in their practice of the comparison method.
ii. To determine the sequence for adjustment of elements in comparison method.
iii. To explore the most preferred adjustment techniques by valuers in applying comparison method.

4.0 Research Methodology

This research has adopted a questionnaire survey method for data collection. To achieve the objectives, the research explores the perceptions of related parties on the issues of adjustment techniques and elements of adjustment in carrying out the valuation exercises by applying comparison method.. Interviews were also carried out to strengthen the results.
The questionnaire was divided into three main sections:

- Part A – respondent's background.
- Part B – views on the adjustment techniques and elements of adjustment in carrying out valuation by comparison method.
- Part C – perceptions on the most preferred adjustment techniques applied by valuers in Malaysia in carrying out the valuation by comparison method.

The rationale for this particular format of the questionnaire design was so that views and perceptions of valuers in Malaysia toward the most preferred adjustment techniques among valuers could be explored. To ensure the reliability of the questions, reliability tests were performed on the questionnaire and the results are as in Table 1. The overall value of above 0.6 for the Cronbach's Alpha shows that all variables had attained internal consistency and achieved high reliability scores based on scales developed by Sekaran (2000). Based on this theory, a variable that achieves a Cronbach's Alpha coefficient value of more than 0.6 points is regarded as achieving high internal consistency and reliability. This suggests that the respective respondents were able to understand the questions in the questionnaires while the necessity of asking the questions was also confirmed.

No.	Variables	No. of Items	Coefficient Value Cronbach's Alpha
1	Important of adjustment process in comparison method	1	0.7369
2	Adjustment techniques available	3	0.7358
3	Elements of adjustment	9	0.7406
4	Sequence of adjustment for elements	9	0.7358
5	The most preferred adjustment techniques	3	0.7350
6	**Overall**	**25**	**0.7314**

Table 1: Reliability Test

5.0 Discussion of the Research Findings

5.1 The Respondents' Profiles

The backgrounds of the respondents who took part in the survey are presented in Table 2.

Characteristic		Frequency (N)	Percentage (%)
Sector			
Valid	Government Valuer	80	53
	Private Valuer	70	47
Total		***150***	***100***
Experience in Real Estate Valuation (Government Valuer)			
Valid	< 6 years	10	12.5
	16 – 10 years	40	50
	11 – 15 years	15	19
	16 – 20 years	10	12.5
	> 20 years	5	6
Total		***80***	***100***
Experience in Real Estate Valuation (Private Valuer)			
Valid	< 6 years	12	17
	16 – 10 years	40	57
	11 – 15 years	11	16
	16 – 20 years	5	7
	> 20 years	2	3
Total		***70***	***100***

Table 2: The Background of the Respondents

5.2 Opinion on Comparison Method

Some 60% of the public valuers viewed comparison method as the best among the methods of valuation while 57% of private valuers shared the same view. It is evident that a large number of respondents are in mutual agreement to consider that the best method is the comparison method. This result are consistent with the view of Ellsworth (2001), Rodgers (2001) and Williams (2004).

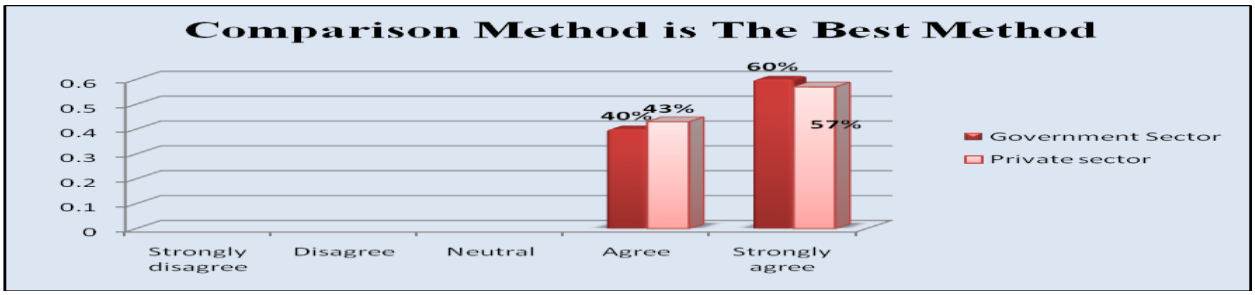

Figure 1: Opinion on Comparison Method

5.3 Importance of Adjustment Process

Figure 2 shows that 53% of private valuers agreed on the importance of adjustment process while only 23% of government did. Thus, this result shows that valuers from both sectors were agreed that adjustment process is important process in applying comparison method.

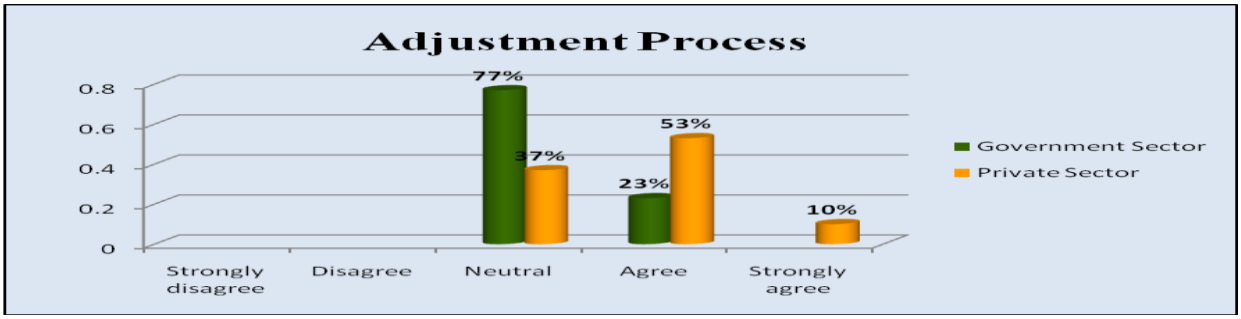

Figure 2: Adjustment process

5.4 Preference of Adjustment Techniques

Figures 3 showed that a majority of the respondents (64% from private; 53% from public sector) were agreed that summative percentage adjustments were most practised in Malaysia while Figures 4 showed that majority of the respondents (77% from private and 67% from public) were agreed that base percentage is also being practised as an adjustment technique in comparison method. This is because the basic adjustments for base percentage are more alike summative percentage. Williams (2004) states that either summative or base percentage techniques, both are represented by the percentage on its application for adjustment process. Attention must be taken to identify the correct base to be adjusted. For example, a corner lot and first layer site for commercial commands a higher price than an interior site.

The principle for a base adjusting is as follows:

New Base ($) – Original Base ($) = Adjustment

The bases may be identified by pairing two different comparables. If two properties are basically equal except for one feature, the adjustment is implemented. Assume the sale of a property one year ago was for $100,000 and a current sale for the same property now is $120,000. The adjustment is calculated by applying the base adjustment concept as follows:

New Base ($) – Original Base ($) = Adjustment

$120,000 - $100,000 = $20,000

The adjustment for the change in market conditions is $20,000 for a one-year period. The direction of the movement from the original base shows that the market is getting better and the adjustment is positive.

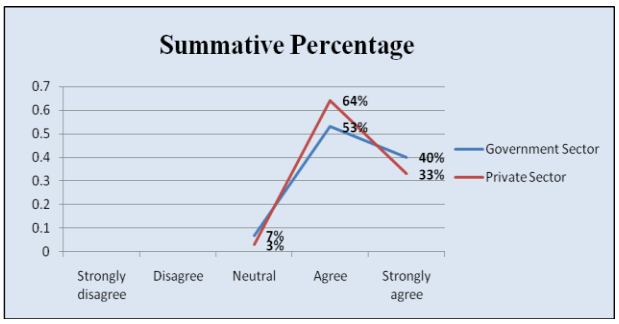

Figure 3: Summative percentage.

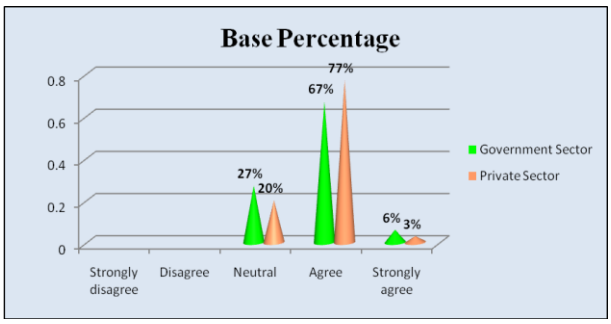

Figure 4: Base percentage.

Figure 5 illustrates that 90% of respondents from private sector and 77% respondents from government sector were in neutral opinion on dollar adjustments as an adjustment technique. In this regard, only a small percentage i.e. 23% from government sector and 10% from private sector were agreed on application of dollar adjustment in Malaysia.

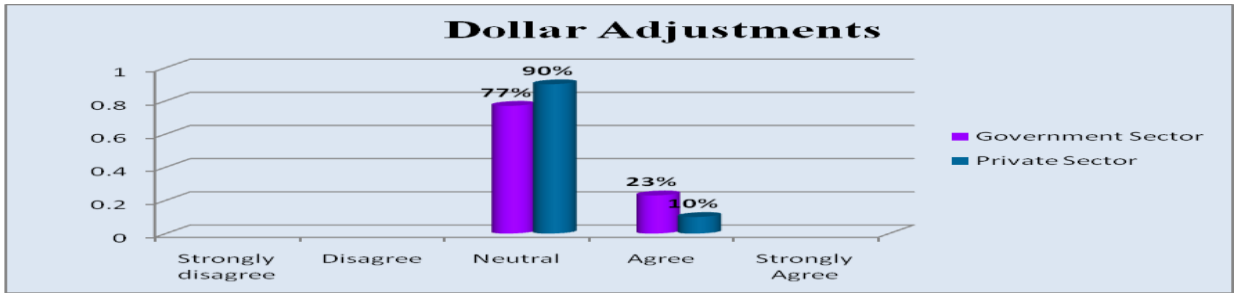

Figure 5: Dollar Adjustment

5.5 Analysis on Sequences of Elements for Adjustment Process in Comparison Method

Table 3 shows the descriptive statistics on what the valuers perceive as the sequences of elements for adjustment process in comparison method. It was evident that the valuers in Malaysia considered the 'tenure' as the most important factor or first rank to adjust in applying comparison method (mean=2.64). Basically, in Malaysia there are two types of tenure namely freehold and leasehold interests. Theoretically, the best comparable properties were the properties that have the same tenure as the subject property.

Among other significant factors that the valuers attributed as the elements for adjustment are; the transaction and financing terms; transaction date; location and physical characteristics; economic characteristics; land use or zoning; size; and topography. In particular, all the suggested factors were perceived as agreeable to the respondents as the elements for adjustment process in comparison method evident from the mean values of 2.43 to 2.58 points.

Variables	Descriptive Statistics					
	N	Min	Max	Mean	Standard Deviation	Ranking
a) Tenure	150	1	3	2.64	.529	1
b) Date of transaction	150	1	3	2.58	.585	2
c) Location	150	1	3	2.56	.568	3
d) Physical characteristics	150	1	3	2.52	.621	4
e) Economy condition	150	1	3	2.52	.612	5
f) Land use / zoning	150	1	3	2.49	.630	6
g) Quantum /size	150	1	3	2.48	.612	7
h) Topography and terrain	150	1	3	2.46	.671	8
i) Financial terms	150	1	3	2.43	.656	9
Valid N (listwise)	150					

Legend: 1= Disagree, 2= Not Sure, 3= Agree

Table 3: Descriptive Statistics on the Sequence of Adjustment Elements

Table 3 also shows that the respondents were strongly agreed that the transaction date is an element to be adjusted in comparison method. This finding confirmed the research by Rodgers (2001) that transaction date is an important element that needs to be adjusted. Location, by region and the street level, is a major factor that effects property value. Rodgers (2001); Anuar (2002) and Fischer (2002) mentioned that location is a major factor effecting property value. Both private and public valuers agreed that location is one the major element of adjustment which they ranked as third position and followed by physical characteristic. The physical characteristics are including defects, furnishes, and the level of maintenance works.

Economic characteristic is referring to economic life span of the building. Generally, life span of a building was about 60 years. Besides that, in valuing property, zoning or land uses of the property also need to take into consideration. In Malaysia's context, there are three types of zoning namely residential, commercial and industrial. The market values for properties are influenced by zoning. This study showed

that adjustment should also be considered for element of size of the property. On the other hand, topography/terrain is also considered as one of the elements for adjustment in comparison method.

Other elements for adjustment are very subjective to be identified and are based on case by case basis. It can be the prices of the property together with other fees such as legal fees and stamp duty fee. Financing terms refer to the term of the loan or payment period. In Malaysia, financing terms was not really considered as the elements of adjustments since this information is confidential and not easily available. From the results, it clearly shows that the financial term was the last ranking in the sequence of adjustment.

6.0 Conclusion

Most of the findings were consistent with the findings of the previous studies. Practising valuers in Malaysia were agreed with Ellsworth (2001) that comparison method is the best method in determining the market value of property. Based on the analysis, summative percentage, base percentage and dollar adjustment are the techniques that are applied by Malaysians' valuers in comparison method. However, summative percentage is the most preferred adjustment technique in applying the comparison method. Generally, on the elements of adjustment such as tenure, location, size, zoning, physical characteristics are adjusted based on the sequence of order. Tenure is the highest order or the first ranking that being adjusted in applying comparison method.

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