Abstract

The equalization of tax to commercial values is becoming increasingly important during these politically and financially turbulent times. The rapid changes in the property market need to be captured through an effective system in order to better estimate property values and distribute tax burdens fairly. The objective is to evaluate the performance of an integrated system (developed by EPS), which can be used to estimate tax values. The purpose of this study is twofold i.e. to examine **a.** the AVM performance and **b.** AVM's application on the estimation of tax values. The study was based on 384 market transactions obtained by a variety of sources such as, the in-house Agency Department of EPS and a network of real estate agents. Market reports, real estate expert questionnaires and a rich database of certified valuations were also used during data selection and analysis. AVM and existing tax values were compared against transactions. The results show that AVM values "capture" successfully the market trends and values attributing a 73% of transactions to be considered as "ordinary", as opposed to 27% "non-ordinary" transactions. The results indicate that AVM can also be utilized to estimate tax values. This in turn will lead to a fair distribution of tax burden among tax payers.

Presentation Main Body

General Procedure

The equalization of tax to commercial values is becoming increasingly important during these politically and financially turbulent times. The rapid changes in the property market need to be captured through an effective system in order to better estimate property values and distribute tax burdens fairly. The objective is to evaluate the performance of an integrated system (developed by EPS), which can be used to estimate tax values. In view of that, the analysis was focused on the relationship of both AVM and Tax values versus transaction values.

The performance of AVM against 70,000 certified valuations showed outstanding results, according to the international bibliography, MD: 1.2% MAD: 12.8%, and 83% of the sample laying within [-20%,20%]. In addition, the performance of AVM values against transaction values was based on the property characteristics provided by the agents, which in many cases were not fully completed (limitations) and showed MD: 5.9% MAD: 15.3% and is an 80% of the sample laying within the extended acceptable limits [-27%,27%]. These limitations (e.g. exact location, date of transaction etc.), affect the final AVM value and these were taken into thoughtful consideration during the interpretation of results.

It was necessary to also distinguish **ordinary** and **non-ordinary** transactions so as to examine the performance of AVM based on arm's length cases only and avoid any distortions caused by non-ordinary transactions. For this to be achieved, apart from the AVM generated values, two more Real Estate tools were used **a.** desktop valuations and **b.** Market Report ranges. EPS extensive reports in approximately 1000 points of interest and locations have returned value ranges by age group and zone areas (e.g. expensive, medium, and cheap). Both market report ranges and desktop valuations were introduced to the sample and were compared against transactions in order to successfully grade ordinary and non-ordinary. Based upon these three sets of values, it was possible to classify the sample between ordinary and non-ordinary transactions.

<u>Tax Values</u>

On the same respect, the performance of tax values against ordinary transactions only, was examined. Tax values before and after 21/5/2015 were found, based on the location characteristics and were compared both against each other and against the 384 transactions. For the calculation of the tax values, assumptions were also made, which may affect the end result but do not make it unreliable. The results showed that the corrections made from the Ministry of Finance, have increased inequality among tax payers (MD_{before}: 14% & MAD_{before}: 36% compared to MD_{after}: -2% & MAD_{after}: 33%). Although the mean deviation was reduced considerably, the adopted solution can be considered as a half measure and hence another system needs to be embraced that will "capture" market values accurately and distribute tax burden fairly.

Conclusion

The PERFORMANCE of the EPS integrated system shows that it can be used effectively in order to:

1. Estimate Tax Values

2. Distribute Tax Burden Fairly

3. Track Market Trends and Changes

4. Constantly Update Values Fast and Accurately (on a portfolio level)

This approach offers a comprehensive framework for more reliable valuations and hence a step closer to equalization of tax and commercial values