Fundamental Valuation of Construction Stocks: A Content Analysis from Property Developers

M S A Nordin, N Ab Rahim and H Adnan

1Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

Email: saifulalizan@uitm.edu.my

Abstract. The expansion of the Malaysian Construction Companies requires a holistic understanding on the intrinsic values as well as the nature of growth and value features of stocks in order to effectively invest in this sector. The paper aims to assess the intrinsic values of the Malaysia construction companies using fundamental methods of valuation. Content Analysis has been employed to the 10 property developers that has been listed under the top 10 Malaysian property developers in year 2018 identified as Company A to J. Based on the data derived from the companies’ annual report, Bursa Malaysia and stock-related websites, intrinsic value of the construction stock is assessed using three fundamental methods of valuation comprising Price Earning Multiple, Relative Price Earning as well as the Dividend Growth Model. The results suggested that there is a huge inconsistencies of intrinsic values across the first two methods of valuation where most of the stocks are in the state of undervalued while valuation derived from the Dividend Growth Model signifies the overvaluation state of all stock’s opening prices. This research is expected to provide a preliminary evidence on the intrinsic values of Malaysian Construction Companies as similar analysis and indicators can be used in reviewing the characteristics as well as fundamentally valuing the construction stock in both small and larger investment portfolios.

1. Introduction

Share trading become a new phenomenon among corporate entities in Malaysia after public listed companies on the Bursa Malaysia (formerly known as Kuala Lumpur Stock Exchange) began to issue stock options to its executives as a way of compensation in 1980s [1]. As a result, discussion on intrinsic value in acquiring mispriced asset became a major debate among economist, academicians and investors. This is because investors have started to realize the benefits of investing in the stock market, especially when its return on investment obtained is said to be higher than other asset classes.

Meanwhile, the construction industry is one of the sectors that has become the main attraction of investors due to its encouraging investment performance. In Malaysia, construction companies carry out their business activities through the collection of land banks in potential areas to be developed with various construction projects according to the needs and the demand at the respective locality. The construction projects involved focus not only on high-end and medium-cost development projects, but also on low cost development as well as public infrastructure. For example, in order to increase the number of affordable housing in Malaysia, the Malaysian government under the Ministry of Housing and Local Government as well as the Ministry of Economic Affairs have urged property developers to assist the government in providing shelters to the B40 group i.e. the low-income earners.

In order to encourage publics to invest in their shares, the company's performance needs to be scrutinized. The variation and volatility in the construction sectors are largely driven by its underlying
performance of the previous, existing and proposed development. In addition, the construction-related research and development (R&D) in the context of property market research, consumers’ preference and construction products’ quality plays an important role. According to Garcia and Oliveira [2], company that emphasising the R&D will have a rapid growth of development and earnings than other companies in the market. The establishment of construction stocks allow public to indirectly participate in the national construction industry even with the small initial cost of capital.

Numerous studies pertaining to the construction and other stock sectors are related to the effects of the stock prices in respond to the macro and micro-economic factors, risk and returns structures, stocks management as well as portfolio diversification for example by [3] [4] [5] [6]. Other studies in identifying the effects of taxation on Malaysian stock market index volatility, [7] found that the volatility of the Malaysian stock market index is persistent during the GST announcement and highly persistent after the implementation. The study however generalize all sectors in the stock market. Other example from Indonesia, [8] found that interest rate, inflation rate, exchange rate, and GDP growth rate, as composite variables, have a significant influence on real estate and property companies’ stock price.

This study however present the application of fundamental valuation particularly in valuing the construction stocks. It served as an alternative to the technical analysis of the stock by focusing on the real value of the company that simultaneously minimizing the speculative elements in the analysis.

2. Literature Review

2.1. Efficient Market Hypothesis in Stock Market

As stock market is a leading indicator, the most common issues in stock market is market efficiency in terms of operational, allocative and informational. The Efficient Market Hypothesis (EMH) suggests that the stock are accurately priced by the market so that the return is justified by the amount of risk that the security has. In other words, investors would not be able to obtain an abnormal return as the publicly information reflects the true value of stock. There are three levels of market efficiency starting from lowest which is weak-form, semi-strong form and strong-form. According to [9] the weak-form EMH states that the market is efficient in such a way that price, volume information, and stock price movements cannot be predicted using historic information. This weak-form EMH asserts that the stock returns are time invariant, that is, there is no identifiable short-term-based pattern [9]. Therefore under this levels, the higher the ability of people to assess the stock information, the greater the profit they can earn.

However market is not always efficient. The achievements of Warren Buffets in sustaining the returns as well as strategies in acquiring a mispriced asset based on an intrinsic value thus denying the principles of EMH. Besides that, the lack of long time series data and infrequent trading make the valuation of stock market quite challenging especially when involving an Initial Public Offerings (IPO). For example, [10] stated that the crisis in 1988 did not allow for the development of the stock options in Malaysia as much as in Japan. This may be due the slow responsiveness to the stock information. In comparing the Malaysian stock with Japan, [10] also reveals that the issues related to stock options in Malaysia are not that big as in Japan, because the amount is not large and material. However In the case of semi-strong efficiency, both fundamental analysis and technical analysis enables investors to produce excess returns as the stock prices response quickly to the newly available data in the market [2].

2.2. Value vs Growth Investing

There is no denying that stock market is the most preferred investment and discussion on value vs. growth investing has caught the attention of many investors in determining the appropriate selection of equity that match with the investment style and investors’ requirements. [11] defined growth stock as a stock that possess a higher earnings per share (EPS) above the rate of other common stocks and the growth is expected to continue in future. Growth investors are looking at the return from the capital appreciation thus concentrating on the companies that have long-term earnings growth prospects [2]. [2]
further added that investors are willing to pay more to buy growth stocks, which causes them to reflect higher price ratios in order to reflect the market expectations. Value stock is identified as a stock that having a lower price as compared to its fundamentals which is EPS, book value per share, cash flow per share, net tangible asset per share as well as dividend yield [11]. Value investors will normally dealing with the stock at a discount relative to industry peers, low price ratios and high dividend yields as well as a firm balance sheet operating in a secured investment environments [2]. The application of fundamental methods of stock valuation will enables investors to identify the characteristics of the stocks as the information used in the fundamental valuation models are the main indicators in determining the growth and value stock.

2.3. Intrinsic Values Via Fundamental Valuation

Unlike direct property valuation which heterogeneous, stock valuation is quite straight forward as all information are readily available in the market. Stock valuers, analyst or even investors can assess relevant information via Bursa Malaysia to see the trading prices (opening price and closing price) as well as company’s website or annual report to see any updates on organizational or business structure that may affect the stock performance in the market. The application of intrinsic values as an indicators to the stock prices would benefit investors in choosing the right stock to be invested in.

Intrinsic value of stocks is determined by a careful fundamental analysis. Fundamental analysis is a method of assessing the intrinsic value of a company’s stock by looking at the historical accounting and financial data. This information can be obtain freely from published annual report, official announcements and company’s website. However certain information such as investment and financial plan of a company is privately available where it only can be obtain through a private enquiries on a company.

According to [12], accounting information, especially the annual reports, and direct contact with company management, represent the most important and most useful sources of information to financial analysts, although there is a clear shift in the relative importance of these sources over time. Survey-based studies on financial analysts indicate that analysts consistently emphasise the long-term view over the short-term in stock evaluation and selection [12]. In investigating the relationship between accounting information and stock returns of selected Indian stocks [13] found that all individual accounting signals have a positive correlation with future stock returns. However the functionality of fundamental analysis might be differ in different market place. In contrast, other study by Iqbal et al. [14] however found that the fundamental analysis cannot predict stock returns in Pakistani listed companies. This is because the market information in Pakistan is not efficient as it cannot reflects the true value of stock.

By assuming the market information is efficient, many models have been constantly develop and improved over time in determining the intrinsic value of stock. However the authors only discuss on three main approaches that will be used in analyzing the selected share namely P/E Multiples, Relative P/E and Dividend Growth Model. The application of these models is briefly explains in the methodology section.

3. Methodology

3.1. Research Approach

Content Analysis has been employed to the 10 property developers identified as Company A to J where all companies has been listed in the Top 10 Property Developers’ Awards (TPDA) 2018 by The Edge and have been randomly sorted in this study. TPDA is awarded after both quantitative and qualitative evaluation by industry peers with all scores and rankings are audited by Deloitte Malaysia [15]. Based on the data derived from the companies’ annual report, Bursa Malaysia and stock-related websites, intrinsic value of the construction stock is assessed using three fundamental methods of valuation comprising Price Earning (P/E) Multiple, Relative P/E as well as the Dividend Growth Model. The date of valuation is effective as at March 1, 2019 where data on opening prices are concurrent with the period
of the study while other content inputs including P/E, EPS and Dividend per Share is taken at the recent date as announced by the companies for the financial year of 2018. The process of content analysis is summarized in Figure 1.

The P/E is a good indicator to the financial strength of the firm. By using the simple earnings capitalization model is employed to investigate the association between price and earnings across profit and loss firms, Papadaki and Siougle [16] signifies a negative P/E relation for the company that report losses and a positive P/E relation for the company that report profits. Even though the stocks’ intrinsic values can be established via P/E-related analysis, there is a need for other indicators particularly on dividend side. Even though the ratios derived from the P/E form the essence of fundamental analysis, investor sentiment may also contribute to the movements in P/E ratios [17]. Jitmaneero [17] also empirically proved that the P/E ratio is not only driven by fundamental factors but also investor sentiment to a greater extent. Therefore dividend can be an alternative or complimentary to the fundamental valuation as there is a positive relation is found between dividend yield and stock price changes, and a negative relation between dividend payout ratio and stock price changes [18].

3.2. Methods of Valuation

3.2.1. Price Earnings Multiples. Price Earnings (P/E) Multiples is a popular technique where the company’s expected EPS are multiplied by the average P/E ratio for the industry to estimate the company’s share value. The methodological strength of P/E Multiples is, it is considered superior to the use of book and liquidation values since it considers expected earnings. According to Wang and Ahammad [12], analyst compare the market P/E and share price in the same industry to come out with an estimated reasonable price interval before recommendation on investment being made. If the intrinsic value of share is higher than the share price, it implies the shares are undervalued. As mention earlier the expected earning is a main determinant under this method. The expected changes in EPS, expected return on equity, and prospects for the relevant industry are also considered the most important variables over the long-term besides giving a greatest weight over the short term [12].

3.2.2. Relative Price Earnings. Relative P/E is a measure of stock performance in relation to the average performance of the market. The similar concept of average P/E industry is adopted from P/E Multiples method by assuming that the selected companies represent the selected industry. Indication under this approach suggested that 1.00 is the fair value of the relative P/E to the stock market. Therefore if the relative P/E to market is exceed 1.00, the stock is said to be overvalued and otherwise if it less than 1.00.
3.2.3. **Dividend Growth Valuation Model.** Valuation of common stocks by using a dividend valuation model is based on the present value (PV) of the expected streams of the future dividend. There are three types of dividend valuation models namely Zero Dividend Growth Model, Constant Dividend Growth Model and Variable Dividend Growth Model. The computation of stock value under Zero Dividend Growth Model is characterised by its constant dividend payment for a perpetual time period. The formula is also simple as PV for the perpetuity can be calculated by dividing the dividend payment with the discount rate. Meanwhile under the Constant Dividend Growth Model, it is assumed that the dividend is increase at a constant rate and the model can be expressed as \( P_0 = \frac{D_1}{k-g} \), where \( P_0 \) is the current price of share, \( D_1 \) is the dividend per share for 1-year in advance, \( k \) is the required rate of return as well as \( g \) i.e. the growth rate. However as the stock market is imposed to the financial volatility, the distributed dividend cannot be perpetually constant. Hence the Two-Stage Dividend Growth Model under the variable dividend model is the most appropriate model in determining the stock’s value as it take into account the changes in expected growth rates. The model assumes that the stock prices will initially grow at a rate \( g_1 \) for \( T \) years and subsequently \( g_2 < k \) during the second stage or perpetual period. The same model is dictated as follows;

\[
P_0 = \frac{D_0(1+g_1)}{k-g_1} \left[ 1- \left( \frac{1+g_1}{1+k} \right)^T \right] + \left( \frac{1+g_1}{1+k} \right)^T \frac{D_0(1+g_2)}{k-g_2}
\]

where;

- \( P_0 = \) Current Price of Share
- \( D_0 = \) Current Dividend per Share Received
- \( k = \) Required Rate of Return
- \( g_1 = \) First Stage Growth Rate
- \( g_2 = \) Second Stage/Perpetual Growth Rate

4. **Results and Discussion**

Table 1 depicts the summary of intrinsic values derived from the three methods of valuation. Opening prices of the stock is based on the quoted opening prices listed at Bursa Malaysia as at March 1, 2019. Intrinsic values is determine by analysing all relevant information using respective valuation models. Percentage +\% and -\% at each cells represent the variance of valuation with the opening share prices traded in the market. Finally the valuation scores column referring to the state of the opening price as compared to intrinsic values with the maximum score of 3.

Based on the data analysed, three companies were reported at issuing a penny stock where the opening prices is less than RM1.00 per unit namely Company B, C and F. In terms of fundamental valuation, there is a huge inconsistencies of intrinsic values across the first two methods of valuation where most of the stocks are in the state of undervalued. Company A and F recorded a fairly valued score based on the first and second method where the variance ranging from -0.06\% to -1.67\%. Company C and H however recorded an overvaluation figure where values derived from all methods are lower than the stock opening price at RM0.86 per unit and RM1.82 per unit respectively. No single procedure is conclusively precise and therefore, combined valuation model is more informative by providing better and more accurate estimations of stock values [19] which is in this study, stock values vary from the points of view of P/E and distributed dividends.

The percentage changes ranging from -58.94\% to -94\% in the Dividend Growth Model suggested that all companies are issuing relatively low dividends which resulting to the lower intrinsic values. These were supported by Yoo [20] where each simple multiple valuation is likely reflects the common information and also encompasses an incremental information that is beneficial for the improvement of the valuation accuracy. In this study, the values derived from the Dividend Growth Model reflects the real performance of the dividend distributions. The results also suggested that all shares analysed are likely to lies within the growth stock where the best strategy to be adopted is growth investing strategy. From fundamental perspectives, undervalued stock are a good stock to buy as market has yet to realise
its real value besides its future potential growth and vice-versa for the overvalued stock. Meanwhile, fairly valued stock referring to the stock that bears only a small or no variance at all as compared to the market values represented by the opening share prices.

### Table 1. The Intrinsic Values of the Top 10 Malaysian Property Developers

| No | Malaysian Property Developers | Opening Stock Prices (RM/unit) | Intrinsic Values (RM/Unit) [%: variance to the opening prices] | Valuation Scores (3/3) |
|----|--------------------------------|---------------------------------|------------------------------------------------------------|-------------------------|
| 1  | Company A                      | 2.9400                          | Method 1: P/E Multiples [2.9152 [+0.84%] 2.9381 [+0.06%]] | 0/3 2/3 1/3            |
| 2  | Company B                      | 0.8650                          | Method 2: Relative P/E [1.7853 [+106.39%] 1.3745 [+58.90%]] | 2/3 0/3 1/3            |
| 3  | Company C                      | 0.8600                          | Method 3: Dividend Growth Model [0.5475 [+81.38%]]         | 0/3 0/3 3/3            |
| 4  | Company D                      | 1.6000                          | Multiples [2.1098 [+31.87%] 1.8698 [-71.49%]]              | 2/3 0/3 1/3            |
| 5  | Company E                      | 1.0000                          | Dividend Growth Model [1.1933 [+19.93%] 0.4106 [-58.94%]] | 2/3 0/3 1/3            |
| 6  | Company F                      | 0.8200                          | Model [0.8099 [-21.67%] 0.0912 [-88.88%]]                  | 0/3 2/3 1/3            |
| 7  | Company G                      | 2.2900                          |                                                      | 2/3 0/3 1/3            |
| 8  | Company H                      | 1.8200                          |                                                      | 0/3 0/3 3/3            |
| 9  | Company I                      | 2.2800                          |                                                      | 2/3 0/3 1/3            |
| 10 | Company J                      | 1.6400                          |                                                      | 2/3 0/3 1/3            |

Sources: The Authors’ Analysis (2019)

### 5. Conclusion

This study has presented an estimate intrinsic values of the selected construction stocks. As the study involving the application of valuation model, the intrinsic values derived are highly dependent on the available market data as at the period of the study. Several assumptions have been made in arriving at the dividend growth rate (g, gY) as well as the required rate of return (k) under the Dividend Growth Model. Therefore it should be noted that the result only provides a preliminary evidence on the intrinsic values of construction stocks in relation to its listed/opening prices and should not be treated as a consultation to specific investment decision. The volatility nature of the stock market also provides a lagging effect to the valuation outcome as it requires an up-to-date valuation based on the latest market data.

### References

[1] Ariff, M., & Nassir, A.M. (1998). Stock pricing in Malaysia: corporate financial and investment management. UPM Press.

[2] Garcia, M. T. M., & Oliveira, R. A. A. (2018). Value versus growth in PIIGS stock markets. Journal of Economic Studies, 45(5), 956-978.

[3] Hiang L. K., Ooi, J., & Gong, Y. (2005). Cross-market dynamics in property stock markets: Some international evidence. Journal of Property Investment & Finance, 23(1), 55-75.

[4] Zull Kepili, E. I., & Masron, T. A. (2016). Malaysia property sector: Performance analysis and portfolio diversification benefits within sub-sector. International Journal of Housing Markets and Analysis, 9(4), 468-482.

[5] Kan, Y. Y. (2017). Macroeconomic environment of bull markets in Malaysia. Qualitative Research in Financial Markets, 9(1), 72-96.
[6] Ung, L. J., Brahmana, R. K., & Puah, C. H. (2018). Brokerage fee, ownership expropriation and earnings management of Malaysian property companies. Property Management, 36(4), 461-482.

[7] Haron, R., & Ayojimi, S. M. (2018). The impact of GST implementation on the Malaysian stock market index volatility: An empirical approach. Journal of Asian Business and Economic Studies.

[8] Simbolon, L., & Purwanto. (2018). The Influence of Macroeconomic Factors on Stock Price: The Case of Real Estate and Property Companies. In Global Tensions in Financial Markets, 29 (pp. 19-39).

[9] Hadi, A. R. A., Pyeman, J., & Mahmood, W. M. W. (2011). A Quest for Small-Firm Effect: Evidence from KLSE Second Board. IUP Journal of Financial Economics, 9(3), 28.

[10] Yamashita, K., Hanefah, H. M. M., & Noguchi, A. (2010). Stock options rules in Malaysia and Japan: A comparative analysis. Journal of International Business Research, 9, 99.

[11] Pyeman, J., Hadi, A. R. A., Yahya, M. H., Zakariah, S. & Ahmad, I. (2013). Value versus growth investing. Penerbit UiTM Press

[12] Wang, J., & Ahammad, M. F. (2012). Private information acquisition and stock evaluation by Chinese financial analysts. International Journal of Management, 29(1), 117.

[13] Venkatesh, C. K., & Ganesh, L. (2013). Fundamental analysis and stock returns: Indian evidences. International Journal of Applied Financial Management Perspectives, 2(1), 248.

[14] Iqbal, N., Khattak, S. R., & Khattak, M. A. (2013). Does fundamental analysis predict stock returns? Evidence from non-financial companies listed on KSE. Knowledge Horizons. Economics, 5(4), 182.

[15] The Edge (2018, October 30). The Edge Malaysia Property Excellence Awards. S P Setia is Malaysia’s Top Property Developer. Retrieved from http://tepea.my/2018/index.php

[16] Papadaki, A., & Siougle, G. (2007). Value relevance of price, earnings and book values in the Athens Stock Exchange. Managerial Finance, 33(5), 309-320.

[17] Jitmaneeroj, B. (2017). Does investor sentiment affect price-earnings ratios?. Studies in Economics and Finance, 34(2), 183-193.

[18] Hussainey, K., Oscar Mgbame, C., & Chijoke-Mgbame, A. M. (2011). Dividend policy and share price volatility: UK evidence. The Journal of Risk finance, 12(1), 57-68.

[19] Tiwari, R., & Singla, H. K. (2015). Do combining value estimates increase valuation accuracy? Evidence from Indian chemical industry. Journal of Accounting in Emerging Economies, 5(2), 170-183.

[20] Yoo, Y. K. (2006). The valuation accuracy of equity valuation using a combination of multiples. Review of Accounting and Finance, 5(2), 108-123.