

**THE RELEVANCE OF GORDON'S DIVIDEND VALUATION MODEL AND
EARNINGS MULTIPLIER IN STOCK VALUATION**

By

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DEDICATIONS

With love to Allah S.W.T

My parents and family,

for their continuous love and support, and faith in my strengths.

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in partial fulfillment of the requirement for the degree of Master of Science

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The empirical finding suggested by Mansor and Lim (1992) is that approximately 75% of the analysts used to be speculators. Many investors in Malaysia want capital gain rather than dividends and for some investors focusing solely on dividend is not desirable. Norhayati (2005) found that about three quarter of the firms listed on the Kuala Lumpur Stock Exchange (KLSE) paid stable dividends which indicates the Gordon's Model is relevant in appraising stock prices. However, due to arguments among analysts the model is considered irrelevant and the focus has been on the Earnings Multiplier Approach. The Earnings Multiplier Approach is more intuitive model which is less sophisticated, less formal, and easy to use. Shamsheer, Annuar, and Chotigeat (1998) suggested that about 84% of the analysts prefer to use the Earnings Multiplier Approach in valuing the share prices.

It is interesting to investigate whether the Gordon's Dividend Valuation Model and the Earnings Multiplier Approach are relevant in appraising the firm's value on the Kuala

Lumpur Stock Exchange (Bursa Malaysia). Thus, this paper tests the Gordon's Dividend Valuation Model developed by Gordon (1956) and the Earnings Multiplier approach developed by Basu (1977) to appraise the stock value of selected component stocks of the KLSE.

The objective of this study is to evaluate whether share prices on the main board follow the valuation models of Gordon's Model or that of Earning Multiplier approach using data stretching from periods before, during and after the financial crisis of 1997. This study also extends the earlier work of Annuar and Shamsheer (1993) by incorporating the analysis to include three different economic situations. We believe this is one of the earliest studies employing multi-companies pooled time series panel data approach. In addition, the study also employs the normal traditional cross section analysis for comparison purposes and completion of analysis. This study also conducts appropriate test refinements on risk adjusted market model by employing Dimson-Fowler Rorke (1983) for non-synchronous trading bias. Furthermore, this study consults the analysis on CAPM-DFR and book value (ROE) for the purpose of making comparisons. The findings suggest that the CAPM –DFR is an appropriate tool to measure the discount measured for Gordon's Model while the Book Value (ROE) is deemed to support the Earnings Multiplier Approach.

Based upon cross sectional analysis, the evidence seems to support both Gordon's Dividend Valuation Model and Earnings Multiplier Approach depending on the economic conditions. Gordon's Dividend Valuation Model is applicable only for the period during an economic crisis as documented by Mansor and Lim (1992).

The Earning Multiplier Approach (Value of Stock) is relevant for the period before economic crisis and overall market. Using multi-companies pooled time series panel data approach, the general result suggests that the Gordon's Dividend Valuation Model is more superior especially during the economic crisis. However, the low and high ranks of dividends and earnings analyses seem to support both Gordon's Dividend Valuation Model and Earnings Multiplier Approach. Thus, we conclude that both models are practical enough in appraising stock value during the economic crisis though Gordon's Dividend Valuation Model exhibits more superiority based upon cross sectional results.

Abstrak thesis yang di kemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi sebahagian daripada keperluan untuk Ijazah Master Sains

PENDEKATAN RELEVAN MODEL GORDON PENILAIAN DIVIDEN DAN TEKNIK PENGANDAAN PENDAPATAN UNTUK PENILAIAN SAHAM

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Hasil kajian empirikal yang dicadangkan oleh Mansor dan Lim (1992) mendapati lebih kurang 75% daripada para penganalisis adalah spekulator. Kebanyakan pelabur di Malaysia menginginkan perolehan kapital dan sebaliknya bagi sesetengah pelabur berfokuskan dividen. Di dalam kajian Norhayati (2005) mendapati lebih kurang tiga perempat syarikat-syarikat yang tersenarai di papan utama Bursa Malaysia membayar stabil dividen. Ini menunjukkan bahawa pendekatan model Gordon adalah relevan dalam menilai harga saham. Walaubagaimanapun, berdasarkan pertelagaan dikalangan para penganalisa, Model Gordon tidak sesuai digunakan dan telah memfokuskan pendekatan penggandaan pendapatan untuk menganalisa harga saham. Teknik penggandaan pendapatan, kurang canggih, tidak formal yang bedasarkan intuisi yang mana model ini mudah digunakan. Kajian yang dilaksanakan oleh Annuar, Shamsheer dan Chotigeat (1998) mendapati lebih kurang 84% daripada penganalisa menggunakan pendekatan penggandaan pendapatan untuk menilai harga saham.

Isu –isu yang diketengahkan sangat manarik untuk memastikan samada pendekatan model Gordon atau/dan pendekatan penggandaan pendapatan adalah relevan untuk menilai harga saham syarikat yang tersenarai di papan utama Bursa Malaysia. Oleh itu, kertas kerja ini menggunakan model Gordon yang diilhamkan oleh Gordon (1956) dan teknik penggandaan pendapatan yang diilhamkan oleh Basu (1977) untuk menilai harga saham bagi syarikat – syarikat yang terpilih di papan utama Bursa Malaysia.

Matlamat kajian ini ialah untuk menilai samada senarai harga saham di papan utama terbentuk daripada pendekatan model Gordon atau pun pendekatan penggandaan pendapatan dengan meluaskan data kepada sebelum, semasa dan selepas krisis kewangan pada tahun 1997. Kajian ini adalah kesinambungan daripada kajian Shamsheer dan Annuar (1993) dengan menambahkan tiga situasi ekonomi yang berbeza. Kami yakin ini adalah kajian terawal yang menggunakan teknik dinamik panel data. Tambahan pula, kajian ini menggunakan kaedah penyilangan sektor untuk membuat perbandingan dan sebagai penamat kepada analisa. Kajian ini telah menggunakan Dimson –Fowler Rorke (1983) untuk membaikpulih model risiko pasaran terlaras bagi mengelakkan daripada “bias” urusanniaga yang tidak serentak. Oleh itu, kajian ini menggunakan CAPM-DFR dan nilai buku untuk membuat perbandingan. Daripada analisa yang dijalankan CAPM –DFR sesuai digunakan untuk mengukur kadar diskaun bagi model Gordon. Manakala, nilai buku sesuai digunakan untuk mengukur kadar diskaun untuk pendekatan penggandaan pendapatan.

Keputusan yang diperolehi melalui teknik penyilangan sektor menunjukkan keputusan menyokong Model Gordon dimana model ini sesuai digunakan pada ketika ekonomi didalam kemelesetan sebagaimana keputusan yang didokumentasikan oleh Mansor dan Lim (1992). Bagi teknik penggandaan pendapatan (Harga Saham) adalah sesuai digunakan pada ketika sebelum kegawatan ekonomi dan secara keseluruhan pasaran. Dengan menggunakan dinamik teknik panel data, keputusan secara umumnya juga menyokong model Gordon sebagai yang lebih superior pada keadaan ekonomi yang gawat. Dalam analisa ke atas tinggi rendah dividen dan pendapatan menunjukkan pendekatan penggandaan pendapatan lebih sesuai digunakan menilai harga saham di pasaran membangun. Pengkaji membuat kesimpulan kedua –dua model adalah cukup praktikal dalam menilai harga saham terutamanya ketika ekonomi meleset walaupun model Gordon menunjukkan lebih superior berdasarkan keputusan yang diperolehi daripada teknik penyilangan sektor.

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I certify that an Examination Committee met on **28 June 2006** to conduct the final examination of **Imbarine Bin Bujang** on his **Master of Science** thesis entitled “**The Relevance of Gordon’s Dividend Valuation Model and Earnings Multiplier Approach in Bursa Malaysia**” in accordance with the Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

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DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or any other institutions.

IMBARINE BIN BUJANG

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