RETURN ON EQUITY: AN EMPIRICAL STUDY

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Universiti Utara Malaysia

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ABSTRAK

Kertas projek ini mengkaji nisbah pulangan atas ekuiti untuk syarikat-syarikat yang tersenarai di papan utama Bursa Saham Kuala Lumpur. Sebanyak 40 syarikat dari sektor hartanah, kewangan, penggguna dan industri digunakan sebagai sampel kajian

Hasil kajian menunjukkan bahawa pulangan atas ekuiti bagi sepuluh tahun dari 1987 hingga 1996 ialah 1%. Purata pulangan atas ekuiti bagi sektor hartanah dan industri menunjukkan pulangan yang negatif iaitu -17.17% dan -6.7% masing-masing. Sementara sektor kewangan dan pegguna mempunyai pulangan yang positif iaitu 10.5% dan 13.9% masing-masing.

Berdasarkan pulangan atas ekuiti bagi tempoh sepuluh tahun, sebanyak 22 buah syarikat telah dipilih untuk mengkaji prestasi pulangan ringgitnya di mana 7 adalah dari sektor hartanah, 3 dari kewangan, 4 dari pengguna dan 8 dari industri. Daripada 22 buah syarikat tersebut, 6 syarikat yang tidak mencatatkan keuntungan yang positif. Antara keempat-empat sektor tersebut, sektor kewangan menunjukkan prestasi yang paling baik sekali dari segi prestasi pulangan ringgitnya secara keseluruhan iaitu kesemuanya mencatatkan pulangan prestasi ringgit yang positif di mana 70% daripada syarikat mencatatkan keuntungan modal yang lebih daripada 20%. Sebagai kesimpulan, daripada kajian ini, nisbah pulangan atas ekuiti yang positif tidak semestinya akan memberi pulangan ringgit yang positif kepada pelabur.

ABSTRACT

This project paper is a study on the ratio of return on equity for those companies, which are listed on the KLSE main board. Those companies, which are chosen for this study, consisted of property, financial, consumer and industrial sectors.

The result of this study shows that the return on equity for the period of 10 years from 1987 to 1996 is 1%. The average return on equity for the properties and industrial sectors nevertheless has shown a negative return i.e. -17.17% and -6.7%, respectively. On the other hand, the financial and consumer sectors experienced a positive turnover of 10.5% and 13.9%, respectively.

Based on the return on equity for the period of 10 years, 22 companies have further been chosen for a study to be made on the dollar performance. This time the list consisted of 7 properties companies, 3 financial companies, 4 consumer products companies and 8 industrial products companies. Out of 18, 6 companies did not make a positive gain. Among all sectors, the finance sector had demonstrated the best positive overall performance on its dollar performance whereby 70% of the companies had indicated capital gain for more than 20%. As a conclusion, from the study, positive return on equity does not necessarily give investors a positive gain on their investment.

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CHAPTER ONE

INTRODUCTION

1.1 Review of Economic Condition

The rapid and healthy growth of our capital market particularly between the period of 1989 and 1996, before the East Asian Crisis began in July 1997, have shown good prospects and promising returns to investors. The Composite Index rose dramatically especially during 1993 where it appreciated nearly 100% as compared to 1992. The Composite Index reached its highest level in 1993 and 1996, which were 1275.32 points and 1237.96 points respectively. (See Table 1). The KLSE's enormous growth has been a reflection of our country's strong, vibrant and sustainable economic development in recent years. During the five years period up until 1996, the real GDP growth averaged 8.7 per cent per annum, inflation was as low as 3.8% and unemployment rate was only at 2.5%. (The National Economic Recovery Plan 1998).

No doubt, the East Asian Crisis resulted in a significant wealth loss, decline in asset prices, sudden capital flight and threats to currency and banking systems stability. During the year 1997, the KLCI declined by 52%, the market capitalization of the KLSE was reduced by 53% to RM376 billion or 135.6 % of the nation's GDP. Between March and early September 1998,

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BIBLIOGRAPHY

- Aswath Damodaran (1996). Investment Valuation, John Wiley & Son.
- Annuar and Shamsher (1993). Estimation of Unbiased systematic Risk Measures: The Case on the Kuala Lumpur Stock Exchange, The Efficiency of The Kuala Lumpur Stock Exchange, A Collection of Empirical Findings, pp. 122-140
- Bank Negara Malaysia Annual Report. (1997)
- Bank Negara Malaysia Annual Report. (1998)
- Ben Branch (1991). <u>Investment Principles and Practices</u>, Dearborn Financial Publishing Inc.
- Bird R.G. and McHugh (1997). Financial Ratios: An Empirical Study, <u>Journal of Business Finance and Accounting</u>, 4,1, pp. 339-359
- Bougen P.D. and Druru J.C. (1980). U.K. Statistical Distribution of Financial Ratios, <u>Journal of Business Finance and Accounting</u>, 7,1, pp.39-47.
- Brandrowski K.R.(1992). Market-to-Book Ratios and Positive and Negative Return on Equity, <u>The Journal of Financial Statement Analysis</u>, pp. 21-30
- Deakin E.D. (1972). A Discriminant Analysis of Predictors of Business Failure, Journal of Accounting Research, Spring, pp. 167-177.
- Devine K (1995). An Examination of Quaterly Financial Ratio stability: Implications for Financial decision Making, <u>Journal of Applied Business Research</u>, 11,1,pp81-95.
- Elsemann P.C. (1996). Return on Equity and Systematic Ratio Analysis, <u>Commercial Lending Review</u>, pp. 51-57.
- Estep T. (1987). Manager Style and The Sources of Equity Returns, <u>The Journal of Portfolio Managemet</u>, Winter, pp. 4-10.
- Eugene F. Brigham (1992). <u>Fundamentals of Financial Management</u>. The Dryden Press.

- Fitzpatrick P.J. (1931). Symptoms of Industrial Failures. <u>Journal of Accountancy</u>, pp.49-56.
- George E. Pinches, A.A. Eubank, Kent A. Mingo and J. Kent Caurthers (1975). The Hierarchical Classification Of Financial Ratios, <u>Journal Of Business Research</u>, October, pp. 295-310.
- James O. Horrigan (1965). Some Empirical Bases of Financial Ratio Analysis, <u>The Accounting Review</u>, July, pp. 558-568.
- Keller, Warrack and Bartel (1990). <u>Statistics For Management And Economics: A Systematic Approach</u>, Thomson Information / Publishing Group.
- Kristy J.E. (1994). Conquering Financial Ratios, <u>Business Credit</u>, February, pp.14-19.
- Koh K.L. and Goh K.L. (1995). Malaysian Securities Market, Pelanduk Publication.
- Kung H. Chen and Thomas A. Shimerda (1981). An Empirical analysis of Useful Financial Ratios, <u>Financial Management</u>, Spring, pp. 51-60.
- Levine, Ramsey and Berenson M.L. (1994). <u>Business Statistics for Quality and Productivity</u>, Prentice Hall.
- Melvin C. O'Connor (1973). On the Usefulness of Financial Ratio to Investor in Common Stock, <u>The Accounting Review</u>, April, pp. 339-352.
- Ott R.L. (1997). <u>An Introduction to Statistical Methods and Data Analysis</u>, Duxbury Press.
- Raj A. and Ramesh P.R. (1990). Institutional Ownership and Distribution of Equity Returns, <u>The Financial Review</u>, 25,2, pp. 211-229.
- Perrit G.W. (1996). Small Stock, Big Profit, Synergy Books International.

Pinches J.F. (1975). Focus on Profitability not Gross Profit, <u>CMA Magazine</u>, December/January, pp19-23.

Rolo C.J. and Klein R.J. (1988). Gaining on the Market, Little Brown Company.

R.K. Ashton (1985). The Effect of SSAP 16 on Performance Measurement, Accounting and Business Research, Autumn, pp. 259-264.

R.G. Bird and A.J. McHugh (1977). Financial Ratios - An Empirical Study, <u>Journal of Business Finance and Accounting</u>, <u>4,1</u>, pp. 29-45.

The National Economic Recovery Plan (1998).

The Kuala Lumpur Stock Exchange (1988).

The Kuala Lumpur Stock Exchange (1991).

The Kuala Lumpur Stock Exchange (1993).

The Kuala Lumpur Stock Exchange (1995).

The Kuala Lumpur Stock Exchange (1997).

Shari Westcott (1990). Explaining Earnings Forecast with Accounting, Industry, And Economic Variables, <u>Managerial Finance</u> 16, 3 pp. 3-10.

Short D.G. (1980). The Impact of Price-Level Adjustment on the Meaning Accounting Ratios, <u>Journal of Business Finance & Accounting 7.3</u>, PP 377-391.

Teitelbaum R.S. (1997). What's Driving Return on Equity, <u>The Fortune 500</u>, pp 31-42