

CHAPTER 5



CONCLUSION AND SUGGESTIONS

5.1 CONCLUSION

From the standard economic arguments, in a competitive environment, when entrepreneurs introduce innovations, new products, production processes, marketing techniques and organizational strategies that create temporary competitive advantages and superior profits, imitators will have the incentive to enter the market and drive these profits towards equilibrium levels. This implies profits should be mean reverting and thus should be predictable to some level.

This study examines the mean reversion behavior of profitability and earnings in attempt to use it in earnings prediction. The tests made on firms listed on the Stock Exchange of Thailand covering the periods from 1992 to 2003, with all the information available. Initially, I estimate the model to explain the level of expected profitability and find that the dividend, the earnings-to-price ratio, and the industry effect have the information of the level of profitability. All are consistent with the hypotheses. The firms with more dividend payout seem to have a better profitability since there is a theory that firms target dividend to the permanent component of earnings. The firms with a low valuation seem to behave better as investors will give a valuation based on past earnings, firms with the poor past earnings will be given a low valuation. However, follow the mean reversion concept, those with the earnings below its mean will reverse to the mean the year after, leads to a more-than-expected performance. The results also provide the information on the industry effect; the agribusiness appears to be the industry that has a superior performance in Thailand, which absolutely is an agricultural country, whereas the bank, finance and insurance sectors are the group that has an inferior performance. This might happen because these industries are under more regulations which might have cause the unusual behavior of profitability. Besides, profitability of these sectors measured mostly by other ratios, such as the net interest margin since its asset is different from other sectors.

When test for mean reverting, the evidences show that profits reverts towards the mean at a rate of about 30% per year. This mean reversion is also found to be non-linear; the reversion is faster when the profitability is far below its mean. However, when profitability is far above its

mean, the reversion seems to be slower. This can be explained by the fact that, in Thailand, the competitive advantage between the top firms and the poor firms is too much different. Thus, the top firms will outperform for a few more years before their competitors can draw nearer. Yet, it is different for the very unprofitable firms since they have to fight real hard to avoid a broke; the potential for reversal is more for them. When test for behavior of earnings, there is also predictable variation in earnings and some of it traces to the mean reversion of profitability. The behavior of mean reversions in earnings is much like those in profitability.

I also estimate the simple linear regression of the lagged variables of earnings, the results consistent with the test of the mean reversion model since there is a negative relation between this period earnings and the two periods lagged earnings, which imply that the mean reversion will not happen immediately but will delay for one more year.

Moreover, I test the two models with the set of firms which exclude the exporters to diminish the effect from the currency exposure. The outcome are not much different from the test for all firms, suggest that currency exposure might have only slightly effect on the behavior of profitability and earnings.

Finally, I test for the forecasting performance of the two main models and discover that the mean reversion model seems to be superior to the naïve time-series model. Though the forecast from the mean reversion model is closer to the actual value, the difference is still large. Hence, these models can be use as a basis, serves for a comparison purpose only.

5.2 LIMITATIONS AND SUGGESTIONS

The variables used in this paper are quite a common term, so if more refined variables are used, one might yield a better result. For example, ROA (always referred to as “profitability” in this paper) can be replaced by RNOA (return on net operating asset) since ROA does not distinguish operating and financing activities appropriately. RNOA excludes financial assets in the denominator and subtracts operating liabilities. Or, one might employ the macroeconomic variables, such as money supply which was proved once to be a better predictor than a time-series, as another caption for changes in profitability and earnings.

In addition, though I try to solve the problem of currency exposure by excluding exporting firms, the effect might still exists. More delicate resolve should be adopted.

Anyway, the simplest way to develop this study is to extend the period of analysis, both in-the-sample and out-the-sample period. The bigger picture will make the trends or characteristics become clearer.

Finally, there might be other firm-specific factors that can capture variation in expected profitability missed by the variables used here. So, employing those factors possibly will help improving the model.