CHAPTER VI

CONCLUSION

6.1 Introduction

The economic theory of rational expectations implies that forecasts should meet two criteria: (1) they must be unbiased, that is forecasts errors must average out to zero over time; and (2) they must be efficient, that is, forecasters must use all the relevant information at their disposal in forming forecasts.

The rational expectations hypothesis has become a critical part of modern macroeconomic analysis and of the theory of economic decision-making. Nevertheless, while the theoretical basis for rationale expectations is clear, the empirical support for it has been decidedly mixed. Moreover, survey forecasts of major macroeconomic variables are widely reported, and deviations of announced values from such forecasts influence asset markets significantly. However, regression tests used in prior studies to test the rational expectations hypothesis directly using survey data can lead to incorrect inferences if the data series are non stationary and follow unit root processes.

This study attempts to evaluate the accuracy of the economic forecasts for capital expenditure, gross revenue and employment in four sectors namely logging, manufacturing, construction and finance, which are made by business firms as reported in the 'Business Expectations Survey of Limited Companies' published by the Department of Statistics of Malaysia.

In this study, the variables are subjected to the Unit Root test, Cointegration test, Unbiasedness test, Serial Correlation test, and Weak Form Efficiency test.

6.2 Summary of Findings

The empirical evidence presented suggests that all the series are stationary in first-differences in the Phillips-Perron test except employment for manufacturing sector and gross revenue for construction. A stationery series of variables will tend to return to its mean and fluctuate around within a constant range. Pretests on data collected prove stationery. This allows us to proceed to the test for Cointegrating series. It is found that all the forecasts for the three series are cointegrated with their respective actual series except employment for the construction sector and capital expenditure for the manufacturing sector. Cointegrated variables mean the actual and the forecasted are moving together in the same directions. In addition, the results also show that all the forecasts of the series tended to overpredict their actual values, as demonstrated by the slope coefficient, which is less than unity for all series except that for capital expenditure in the manufacturing and finance sectors. In all cases, the forecasted figure is greater than the actual figure is because the predictor formed an optimistic figure expectations which lead them to overestimate future figures.

From the aspect of Unbiasedness, the evidence suggests that forecasts of gross revenue, capital expenditure, and employment are biased predictors of the actual values.

99

Test results on biased and relative accuracy of survey forecasts suggest that the market participants do not fully exploit private and public information in formulating their forecasts.

The logging sector indicates significant existence of serial correlation between forecast errors for capital expenditure and employment, suggesting that forecasters tend to repeat their past forecast errors. The results for manufacturing sector exhibit that forecast errors are no serially correlated, with the exception for capital expenditure . On the other hand, the findings also reveal serial correlation between the forecast errors of the capital expenditure series for the construction sector. In the finance sector, gross revenue and capital expenditure indicates serial correlation between forecast errors.

However, forecasts of the capital expenditure are inefficient for manufacturing, construction, and finance because of the significance of F and χ^2-statistics at the 5% level indicating that the forecasts are irrational. Furthermore, the evidence suggests that forecasts of gross revenue are efficient for all sectors. Forecast for employment are efficient except for logging, and finance. When testing for rationality of the economic forecasts made by Weak Form Efficiency test suggest that business firms have utilized all available relevant information including past realization efficiently when forecasts is made.

In short, the evidence provided in this paper does not give conclusive support to the rational expectations hypothesis except certain series namely; Capital and revenue in

Logging sector, revenue and employment in both Manufacturing and Construction sector, and revenue in Finance sector.

6.3 Policy Implications

Rational expectations undermines the idea that policymakers can manipulate the economy by systematically making the public have false expectations. Lucas (1987) showed that if expectations are rational, it simply is not possible for the government to manipulate those forecast errors in a predictable and reliable way for the very reason that the errors made by a rational forecaster are inherently unpredictable. Lucas's work led to what has sometimes been called the "policy ineffectiveness proposition." If people have rational expectations, policies that try to manipulate the economy by inducing people into having false expectations may introduce more "noise" into the economy but cannot, on average, improve the economy's performance.

Several policy implications arise from study. In the case of employment, it is found that business firms are rational in forming their forecast. Thus, the government is ineffective in exploiting employment for policy purposes. If the government tries to raise employment by adding to aggregate demand and expanding the flow of money, business firms will quickly incorporate into their expectations the fact that a more rapidly rising level of prices and wages will usually follow. Business firms will not then be likely to mistake the price and demand pressures that soon occur as signals of profit opportunities, beckoning them to expand employment.

Because of the policy ineffectiveness problem, it is suggested that the random element, that is, unsystematic monetary changes in monetary policy should be reduced as much as possible and that the best way to do this is through imposition of some form of money growth rule. This is the primary policy conclusion that is derived from rational expectations.

From another perspective, the rationality of the employment forecast also implies that the existing econometric model is not appropriate in capturing the true responsiveness of real-life decision makers concerning government policy actions.

This is because employment, as a parameter of the model, changes when new policies are introduced. The actions of the firms are based, in part, on the monetary and fiscal policies in effect during the period in question. Should new policies be implemented, firms will behave differently and, as a result, the parameter of the model will change. Since the estimates of the effect of the new policies are based on the original set of (estimated) parameters, the actual effects may be quite different.

Accordingly, the ineffectiveness of policy proposition, as applied to fiscal policy, is to be understood to refer to the ineffectiveness of attempts at expansionary fiscal policy reflected in an enlarged size of the government deficit. (Shaw 1984). Increases in government spending, or decreases in taxation, will be quickly translated into inflationary expectations by rational expectations agents who will then modify their behaviour

accordingly. However, it does not necessarily follow that there will be no real impact, especially in the short term. Several important implications immediately arise for fiscal policy. Changes in the rate of taxation, for example, have an immediate effect upon disposable income and hence upon the level of current consumption outlay. Changes in the level of consumption generate multiplier impacts throughout the rest of the economy thus magnifying the initial impact. Changes in taxation, therefore, are seen as principal means, in addition to changes in government expenditure, of changing the flow of expenditures throughout the economy and hence of pursuing stabilization policies. Belief that the marginal propensity to consume was both relatively high and relatively stable provided the authorities with the means to fine tune the economy so as to maintain reasonably full employment levels of output.

16.4 Limitations and Recommendations of the Study

There are a number of limitations in this study. The data observations used in this study are insufficient considering the fact that incomplete pairs of actual or expected data are excluded. This inevitably decreases the size of data available for analysis. For future research, it is recommended that the years of analysis be extended to incorporate more data.

Besides that, the variables used are also limited. In order to overcome this problem, it is suggested that more variables such as production, prices and profit are

included in the further studies of future researchers. It is hoped that the rationality for the

forecast besides the given three variables can be examined.