Chapter 7

Conclusion

7.1 Summary

The main focus of this empirical study is to assess whether increases in industrial wages in Malaysia manufacturing are commensurate with higher increases in labour productivity. By using econometric models, the wage formation in the Malaysian manufacturing as a whole and 13 selected sub-sectors is assessed in the long run as well as in the short-run. The results show that in the long run, labour productivity is positively related to real wages in Malaysian manufacturing as a whole. However, the higher increase in wages is faster than increase in labour productivity causing an increase in unit labour cost, thus eroding the competitiveness of the nation in the era of globalization. As in the short-run, the relationship between wages and labour productivity are negative and insignificant statistically. The results may attribute to the rigidities or lag of adjustment of money wages causing by collective bargaining agreements which running for three years.

In the sub-selected sectors of manufacturing industry, labour productivity has a positive impact on the real wage. In most of the sectors, increase in real wages are slower than increase in labour productivity, therefore, reducing unit labour cost except for three sub-sectors. It is imperative for the manufacturing sub-selected sectors to ensure increase in wages are kept in pace with increase in productivity. As in the short-run, the labour

productivity impact on wage changes is insignificant for most of the sectors. The results suggesting that there are institute rigidities in the wage-setting behaviour in the formal sectors of the Malaysian economy, such as manufacturing.

7.2 Policies for Productivity-linked Wage System

In view of the present economic situation, the need for the industry to rationalize costs through productivity increases in order to enhance competitive becomes even more apparent. To be competitive, strategies should be directed at the twin issues of wages and productivity. Measures should be targeted at increasing productivity to create a bigger pie to be share. Wage can increase as long as it commensurate with a higher increases in productivity.

7.2.1 Wage Reform System

The guideline on the wage reform system had been established by the Government and was adopted by the National Labour Advisory Council in 1996. The key elements of the system are as follows: wages cover a combination of monthly or other frequent payments, annual increments, an annual or other infrequent bonus; and should comprise of a fixed component which includes basic wage and an additional component in the form of variable payment. The fixed component reflects the value of the job within in the market and changes in the basic wage shall take into account various factors including changes in the cost of living. The variable component provides the variability,

determined in relation to productivity and performance of the economy, the company or individual. The indications used in determination are measurable.

7.2.2 Research and Development

The government had outlined some basic strategies and programs for R&D and innovation to take place to achieve nation's objective to become a highly industrialized nation by the year 2020. An obvious step is the intensification of Research foe Priorities Areas (IRPA) programs. For the For the Seventh Malaysia Plan (1996-2000), RM 1 billion as compared to RM 629 million in the Six Malaysia Plan had then allocated. The focus in future stressed upon the promotion of several advanced technologies which will create new investment opportunities. The core technologies identified are information technologies and communications, microelectronics, biotechnology, life science, advanced manufacturing technology, advanced materials and environment and energy related technologies. This means that productivity strategy is being addressed directly through R&D improvement in manufacturing techniques, equipment and reduction in costs.

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7.2.3 Capital Formation

Investment and capital are the principal factors towards productivity growth in industries. What is important is capital widening as well as capital deepening. Besides that, the rate of utilization of capital and the efficiency in the use of capital are both equally significant as Malaysia experiencing shortages of skilled labour. Policies

towards improving the quality of capital stock should be taken into consideration too. Besides the quality, new capital should associate with the latest technology and best techniques of production. As a result of this, productivity growth can be encouraged through investment incentives. Policies towards encouraging such investment should be promoted with the aim to encourage the refinement of inefficient plants, injections of new plants, and machinery besides helping to solve the problem of labour. Encouragement of R&D co-operation between industry, research institutions and universities *in lieu of* generating new products and improvement procedures should be strengthens further in the future.

7.2.4 Reviewing the Education and Training System

The development of human resources plays an important role in the intense rapid development of skills due to the importation of sophisticated technology which needs to be streamlined together. This shall enable the workforce to acquire the necessary elementary skills in the design and the technological aspect of the product if the industry wishes to rid itself of foreign expertise and technology. It is therefore of vital importance to increase the training and education in the science and technical fields.

Human resources training should emphasis on the ability of workers to make changes. This can be achieved through the upgrading of skills for skilled workforce through on-the-job-training. Other than emphasizing skills, the government should also provide training for management skills in order to increase the level of motivation among employees which is related to a management system that emphasizes quality and

productivity. The center of higher learning should improvise their curriculum and syllabus to accommodate and streamline to the industrial needs. Courses offered should have a weighted bearing towards practical rather than theory. The industry shall then be able to use the well-research design to upgrade own design or product.

7.3 Limitations of the Study

The empirical results on the wage equation for the Malaysian Manufacturing sector are essentially based on secondary data gathered from the Department of Statistics, Malaysia. Any interpretation resulting from such data should be taken broadly as it may be subject to measurement error.

One drawback of the Engle and Granger two-step procedure using more than two variables (as in our present study) is that this approach cannot estimate the number of cointegrating vectors. In this study, determination of the number of cointegrating vector falls outside the scope of the study and moreover, is not particularly critical to its economic arguments. However, the study can be further enhanced using the Johansen (1988) methodology to determine the number of cointegrating relations.

The period of study is limited to 1975-1997 since the recent data was not available at the time of study. Thus, we cannot assess the relationship between wages and labour productivity from 1997 onwards. Another shortcoming of the study is that it only assess 13 sectors of manufacturing industry and does not cover all the sub-sectors in the

manufacturing sector. The study of wage formation in relation to labour productivity can be further enhanced by analyzing the relationship in other sectors as well as in other industry such as agricultural and services.

7.4 Significance of the Study

The current emerging trend where growth in wage rate outstrips productivity growth is cause for concern. In this study, the model proposed by Carneiro (1998) is adapted to analyze the wage formation process in Malaysian manufacturing since this model has not been employed in the Malaysian context. The model is based on a conventional model of wage bargaining where the employer-employee relationship is taken into account.

The study details the relationship between three economic variables with real wages with emphasis on labour productivity. The analysis shows that growth in wage rate outstrips productivity causing an increase in unit labour cost in the Malaysian manufacturing industry.

This study uses the Engle and Granger two-step procedure to assess the path of wage formation. The methodology used explores cointegration among a set of nonstationary variables in the long-run. Besides incorporating the long-run relationship between the variables, the short-run wage path is captured.