the fact that this laborious and elaborate work, which affords Japanese agriculture a wide overall historical and international perspective, fully deserves a great deal of international attention. (Miyohei Shinohara)

Industrial Growth, Employment, and Foreign Investment in Peninsular Malaysia by Lutz Hoffmann and Tan Siew Ee, Kuala Lumpur, Oxford University Press, 1980, xviii + 322 pp.

This book is part of a series of fifteen-country studies on "Import Substitution and Export Diversification in the Industrialization of Selected Developing Countries" carried out by the Kiel Institut für Weltwirtschaft.

Lutz Hoffmann, professor of international and development economics at Regensburg University, West Germany was formerly economic adviser to the Malaysian government. He has published many articles in academic journals on the various aspects of industrial growth in Malaysia. Tan Siew Ee is lecturer at Universiti Sains Malaysia. Together with Lutz Hoffmann he has also published an article entitled "Employment Creation Through Export Growth: A Case Study of West Malaysia's Manufacturing Industries" (in *Readings on Malaysian Economic Development,* [Kuala Lumpur: Oxford University Press, 1975]). These both authors are competent in dealing with the problems of industrial growth in Malaysia.

Since quite a neat and compact outline and summary of the major findings is contained in the book (pp. 2–9), rather than repeating the summary in this review, it would be more useful to pick up the major findings and to discuss them from the reviewer's point of view.

A. *Economic Development and Industrialization*

The underlying basic proposition of this book concerning economic development is rather simple and therefore quite clear. "The process of economic development is almost universally associated with the expansion of industry, in particular manufacturing, and the relative decline of agriculture. . . . After Malaysia became an independent nation in 1957, it already possessed a highly productive agricultural sector with a strong foothold in the world market. Though agriculture certainly could still improve—and has done so substantially since then—it was quite apparent that the thrust of further development had to come from industry . . ." (p. 2).

This rather simple and clear proposition might come from their conclusion in Section 4 of Chapter 2. It is concluded that the flow of resources into agriculture does not appear to have been drastically hampered by the rapid expansion of the manufacturing sector since the 1960s in Malaysia. Convincing evidence, however, is not shown to support this conclusion. Rather contradictory evidence is given in another chapter.

The major outlet for the production of the primary sector, consisting mainly of the agricultural sector, has been in the form of exports. A calculation of the effective rate of protection reveals, however, that exports, particularly resource-based exports were strongly discriminated against in the early 1970s (pp. 73–80). Discrimination was in favor of the manufacturing sector, particularly the import substitution sector where the rate of growth was significant. It might be supposed from the evidence given that the primary sector is hampered by resource transfer from the resource-based sector to industry through the international market mechanism.

As historical evidence shows, it is true that the process of economic development is almost universally associated with the expansion of industry, particularly the manufacturing sector, with the consequent decline of the primary sector including agriculture. This process is, however, not so simple but a complex one particularly in modern developing countries, in the sense that the speed and pattern of industrial growth would depend upon the development pattern of the primary sector and vice versa. This interaction, moreover, between the two sectors could be complicated by development policy, in particular, industrial policy, the pattern of involvement in the international market mechanism and so on.

It is not intended here to find fault with the authors' basic proposition. Many useful and interesting viewpoints for study, however, might be overlooked simply by presuming and insisting upon a rather simple concept of economic development. Observers of the Malaysian economy, in particular, might be quite interested in the present and future pattern of industrialization in Malaysia. Would Malaysia also follow the Korea-Japan type of industrialization? Or, would Malaysia follow another type of industrialization since Malaysia is endowed with abundant natural resources? An example might be natural resource–based industrialization.

From the reviewer's point of view, it is rather disappointing that the resource-based manufacturing sector is not fully explored from the point of view mentioned above. As the authors' research indicates, the industrialization process has been promoted since the middle of the 1960s mainly through expansion of the resource-based manufacturing sector and its exports. The authors, however, seem to be reluctant to admit the possibility of this line in the development process of Malaysia. For example, although quite convincing evidence to support resource-based industrialization is given in analyzing the demand multiplier, backward and forward linkage (pp. 133–39) the authors concentrate on non-primary processing industries with relatively high "potential" demand multipliers. Furthermore, even with regard to the employment creation effects of exports, the "new" primary processing industries, such as palm oil, wood mills and so on are shown to be more effective than such industries as textile spinning, wearing apparel, other chemicals, and non-electrical as well as electrical machinery (pp. 187–94).

It is, however, stressed that this is an illusion. The reason behind this assertion is as follows: When processing facilities are expanded raw material exports are substituted for by the export of processed material, because the suppliers of raw material for the processing sector, say forestry and agriculture, have limited production expansion at least in the short run. Hence, additional jobs are created mainly in the processing plants, and it is therefore an indirect effect through input-output relations which is an illusion (p. 189). Thus, it is admitted that the second industry group mentioned above creates very few jobs indirectly, mostly because the majority of their inputs are imported. With regard to this point, a policy recommendation is stressed and that is to promote further vertical integration by substituting their imported inputs for domestic production (p. 189). If the resources are made to flow into the supplying sector of raw materials for the processing sector, which means another "vertical integration," is it not another process of industrialization?

The only remaining point to be judged is which line of industrialization is more efficient from the social point of view. In relation to this point, it is quite disappointing not to inquire in depth into the empirical results concerning the factor intensity of trade (pp. 194–202). Based upon the significant empirical results only available for the period 1963–68, it is shown that export goods, excluding primary processing, were more capital intensive than import substitution goods. Furthermore, in the regression of the changes in the trade surplus per unit of labor on changes in capital intensity between 1963 and 1968, the estimated coefficient (on the basis of cross section data) is shown to be significantly positive. This implies that the export surplus per labor unit rises in those industries which increase their capital intensity. This result is in line with the result mentioned above, and the Leontief paradox. If these empirical results had been investigated in greater depth in line with the arguments advocated by Vannek and others, where natural resource is advocated to be a third factor input, the authors could have described Malaysia's development process much more realistically and consistently.

B. *Evaluation of the Government Policy toward Industrialization*

In Malaysia the industrialization process has been intentionally pursued since the middle of the 1960s through the governmental industry promotion policy. The major promotion policy in the 1960s was a tax incentive system through the pioneer company system. When certain conditions are fulfilled, "pioneer company status" is given to any company, whether a manufacturing company or not, and whether local or foreign. To this pioneer company, profit tax exemption is given for several years (the duration has been changed according to the amount of investment and this has also been changed from time to time since the establishment of the system). Since 1968–69 rather restrictive tariff protection measures have been introduced as another major industry promotion policy. In Chapter 3, the effectiveness of major policy measures is evaluated empirically.

However, the redundancy argument for the tax incentive system seems to be rather confusing. A cost-benefit analysis of this incentive system has tried to show the system to be largely redundant in the sense that most of the investment would have come about even without the system. Firstly, the tax forgone during the period 1963–71 is estimated to be M$252 million. This amount is quite substantial amounting to 36 per cent of the pioneer sector's capital stock in 1971. The opportunity costs of this tax forgone is calculated "on the alternative assumptions that the investment of the M$252 million would have produced by 1971 an output, value added, and employment resembling that of all public corporations, all Malaysian establishments or of the entire manufacturing sector" (p. 43). It is estimated that in terms of value added the opportunity costs range between M$167 and 248 million. Since according to their estimate value added in the pioneer sector as a whole is M$451, the benefit from the pioneer sector outweighs the opportunity cost at least under the non-redundancy assumption if we follow the authors' more straightforward and simpler method. If value added in the pioneer sector is less than the opportunity costs, it could be concluded that the system was 100 per cent redundant.

This was not the case in Malaysia. Value added in the pioneer sector outweighed the opportunity costs. Therefore the only way to evaluate this tax incentive system is to estimate what portion of this value added in the sector is attributable to production of value added through the system under the specified conditions of tax exemption. If this value added outweighs the opportunity costs, the system can be said to be 100 per cent not-redundant under the specified conditions of tax exemption.

The authors spend much space talking about the redundancy rate and the critical redundancy rate. This redundancy rate as such seems to refer to the rate of tax exemption only on the basis of which the investor would decide whole investment. The critical redundancy rate as they showed seems to refer to the rate of tax exemption only on the basis of which the investor would decide just enough investment to create M$451 million of value added. However, many factors, not only tax exemptions but also factor costs, raw materials costs and so on, are related to investment decisions. Therefore, the tax incentive system would have only a marginal effect on the amount of investment which would be decided. In line with this kind of thought, the explanation given to EPU calculation (pp. 48–47) seems to be rather confusing. The long-run rate of return with no tax holiday after tax T_i was calculated. And this rate was compared with the internal rate of return of 10 per cent and 15 per cent. In 42 per cent of the companies in the pioneer sector, T_i exceeded, 10 per cent internal rate, and in 24 per cent of the companies in the same sector 15 per cent internal rate was outweighed by T_i. A given explanation is as follows: "This means that the *ex-ante* rates of 42 per cent and 24 per cent respectively for all companies would have exceeded the target rate, i.e. the critical minimum rate below which a company would not have invested. These percentages represent the redundancy rates for the two alternative target rates, because, by definition, the companies in this group expected and realized even in the absence of the incentives, a long-run rate of return in excess of their target rate" (p. 47). From the viewpoint of investment theory, the companies in this group would have invested up to the point where a long-run rate of return is equal to the internal rate. And if the tax incentive system is given to the companies at this equilibrium point, these companies would increase the additional investment up to the point where their shifted investment schedule curve would be equal to "the critical minimum rate." Value added through this additional investment would be real benefit realized by the tax incentive system.

In line with the just mentioned theoretical framework, the explanation given to FIDA survey (p. 46) and the remark by D. S. Pearson (p. 52) to support the redundancy hypothesis, seems to be confusing. There is no reason to suppose that the tax incentive system is redundant except when the tax incentive is the most influential factor in investment decision. As well known, many factors are related to investment decision. Thus the marginal analysis of investment decision in investment theory, which is basically the theoretical foundation of cost-benefit analysis, is so powerful as to explain the actual investment.

Protective trade policy is analyzed by the conventional concept of the effective rate of protection. In measuring the effective rate of protection, several aspects are improved in comparison with the earlier studies, by taking account of sales and excise taxes, and prohibitive import duties. On the basis of the results of these calculations, it is pointed out that protective trends have been intensified in Malaysia from the latter half of the sixties to the early seventies. And the protection system is biased against the export industries, particularly exports of the primary-based industries. In a calculation of the effective protection rate of exports, however, the export incentive system under the Investment Incentives Act, which is in favor of manufacturing exports other than primary-based exports, is not taken account. Therefore, the discrimination effect on manufacturing exports excluding the primary processing exports might be overstated, and the effect of discrimination on primary-based exports might be relatively understressed.

C. *The Labor Absorption Effect of Industrialization*

Another major theme, the labor absorption effect of industrialization in Malaysia is tackled from several points of view.

Firstly, on the basis of an estimation of substitution elasticities, it is argued that the rising trend of wages would not largely reduce the labor absorption effect because of the rather low elasticity. This is the technological aspect of the labor absorption effect.

The growth effect of industrialization on labor absorption is analyzed by conventional accounting or identity method. By using accounting identity relationships, the total labor absorption effect is separated into several parts in analogy to the methodology of study on the growth of sources. The results reveal that import substitution was the most important growth source for job creation during the period 1963–71. And next comes domestic demand expansion, and last export expansion. As a result, the relatively poor performance of labor absorption through rapid industrialization during the period is implicitly attributed to this finding.

This poor performance is also attributed to technological change which increased labor productivity during the period of import substitution. This finding is related to the estimation results of scale economies. According to the estimation, scale economies can be found in almost all manufacturing sectors. These are quite interesting results to stimulate the next step of study. The next step would be to evaluate the labor absorption effect of Malaysia's industrialization on the basis of the integrated multi-sectoral econometric models and simulation analysis.

D. *Conditions and Prospects for Further Export Expansion*

On the basis of an analysis of the book, it is concluded that the sources of growth through import substitution have already been exhausted in Malaysia. Therefore, the pursuit of domestic sources of industrial growth would show quite a low rate of labor absorption in the future. In line with this reasoning, the promotion of the labor intensive manufacturing export sector is strongly suggested in order to tackle the unemployment problem in Malaysia.

Finally, on the basis of a summary of the respective findings of "Hoffmann–export survey" (which was done by the author, in 1974), Malaysia's future export potentiality of labor-intensive manufacturing goods is assessed from the aspect of markets for export expansion, availability of input and infrastructure, and international competitiveness.

Unfortunately, these points are discussed from the consultant's point of view. Therefore, there is little insight into the future, which might have come from an analytical study and from empirical findings resulting from this book.

E. *Conclusion*

As far as the reviewer is aware, this book is the first to have analyzed the process of industrial growth in Malaysia so comprehensively. A great deal of new statistical data, including industrial technology, capacity utilization, export behavior of industry, and foreign investment in Malaysia, is available. Various techniques, new and conventional, are applied with improvements on this voluminous data. So many interesting findings and hypotheses are presented that space is not enough to mention them.

Several comments mentioned above, of course, cannot reduce the value of this book at all. It can be said that it is worth reading for all development economists including observers on the Malaysian economy. (Hideki Imaoka)