

**FISCAL INCENTIVES AND TECHNOLOGICAL
DEPENDENCE: AN ASPECT OF INDUSTRIALIZATION
IN MALAYSIA.**

Anuwar Ali

UNIVERSITI KEBANGSAAN MALAYSIA

Introduction

Malaysia has introduced numerous policy instruments in order to attract foreign investments into the manufacturing sector. These include tariff protection, the establishment of industrial estates, and fiscal incentives. In this paper we shall be chiefly concerned with the role of fiscal incentives as one of the most important instruments of industrial policy. In Part I, we shall examine the impact of these incentives on employment creation and the small scale sector. In Part II, we shall examine their impact on the choice of techniques and industry composition. The diffusion of imported technology is one aspect of the industrialization process encouraged through the various incentives given by the government. It is therefore our interest to examine whether such diffusion has resulted in 'technological dependence' on the part of Malaysia on the developed countries. In the final part, we shall discuss the implications of existing incentives on the future growth of the manufacturing sector.

PART I

In order to stimulate manufacturing investments immediately after Independence, a major legislation was introduced in 1958 in the form of the Pioneer Industries Ordinance.¹ Under this ordinance, manu-

1. Many developing countries have also introduced these pioneer incentives. See for example S.M. Shah & J.F. Toye, "Fiscal Incentives for Firms in Some Developing Countries: Survey and Critique", in J.F. Toye (ed), *Taxation and Economic Development*, Frank Cass Co. Ltd., London, 1978, p. 269-296; also G.E. Lent, "Tax Incentives in Developing Countries", in R.M. Bird & O. Oldman (ed), *Readings on Taxation in Developing Countries*, Johns Hopkins University Press, 1975, p. 363-377.

facturing firms, when granted pioneer status approval,² were given tax relief on their profits for varying periods depending on the size of their capital investments; with the maximum of 5 years of tax exemption.

The 1958 Ordinance gave emphasis to the growth of import-substituting industries, thus catering mainly for the needs of the domestic market. This was not inconsistent with the early phase of the industrialization process. The provisions of the ordinance were not sufficient to induce an accelerated growth in manufacturing sector, and it was therefore deemed essential that additional incentives be introduced. The Ordinance was thus repealed and replaced by the Investment Incentives Act of 1968.³

In addition to the existing pioneer status incentives, the Act also provides new incentives; the major ones being the investment tax credit for non-pioneer firms and export incentives. Additional incentives were incorporated into the Act in 1971, the main one being the Labour Utilization Relief (LUR).

During the 1960s, investment and output objectives of fiscal incentives appear to be the main concern of policy makers; whilst it was only in the 1970s that employment was given greater prominence. This change must have been related to the disappointing results of past policies to solve the ever increasing level of unemployment in the whole economy. Consequently, another major incentive scheme was formulated solely to induce the establishment of export-oriented industries, including the electronics industry. The latter is considered

-
2. "Generally a pioneer industry is regarded as one that is not already carried on in the country, or one not producing enough to meet current or expected domestic requirements. Pioneer industry policy is dictated by the desire to encourage the development of new or necessary industries that will reduce the country's dependence on imports". See G.E. Lent, "Tax Incentives for Investment in Developing Countries", *IMF Staff Papers*, Vol. 14, 1967, p. 249-321.
 3. The introduction of the Investment Incentives Act coincided with the formation of the Federal Industrial Development Authority (FIDA and now known as Malaysian Industrial Development Authority), which was given the responsibility to formulate and co-ordinate industrial policies.

to be relatively labour incentive.⁴ This attracted substantial interest particularly from American and Japanese multinational companies.

Inducements to Invest

The duration of tax holidays provided with the pioneer status approval appears to be an important inducement for new investments by dramatically improving the financial profitability of such investments.⁵ In Malaysia, where the role of foreign investments is given prominence,⁶ the granting of such incentives is important to foreign firms since, as prospective investors, they tend to regard tax exemptions as subsidies to offset the extra costs involved in establishing new factories in a country where industrial skills are relatively scarce and where markets and inter-industry linkages are still to be developed.⁷ By reducing the host country's claim to a share in the firms earnings during the initial period, the foreign firm is thus enabled to recover its capital investments within a shorter period when compared under the formal provisions of the income tax laws.⁸

-
4. Special incentives for export-oriented industries were complemented with the establishment of "free trade zones", thus enabling manufacturing firms to import free of duty machinery, raw materials and component parts, and then to export their finished products with the minimum of customs formalities. See *Malaysia: The 1973 Budget*, Minister of Finance, 1972, p. 39-41.
 5. See M.D. Bryce, *Policies and Methods for Industrial Development*, Mc) Graw - Hill Book Co., Inc. U.S.A., 1965, p. 206.
 6. See for e.g. *Malaysia: Second Malaysia Plan, 1971-75*, Government Printers, 1971, p. 158; L. Hoffmann & Tan Siew Ee, *Industrial Growth, Employment and Foreign Investment in Peninsular Malaysia*, Oxford University Press, Kuala Lumpur, 1980. p. 204-234.
 7. See M.C. Taylor, *Industrial Tax Exemptions in Puerto Rico*, University of Wisconsin, Madison, 1957, p. 122.
 8. G.E. Lent, "Tax Incentives for the Promotion of Industrial Employment in Developing Countries", *IMF Staff Papers*, Vol. 18, 1971, p. 399-419.

The proponents of foreign investments argue that there are possible risks and uncertainties that foreign firms have to face when establishing their production facilities in a developing country; and in this situation the introduction of fiscal incentives is justified on the grounds that they have to be generously compensated. This was certainly the view of the Working Party on Industrial Development.⁹

In addition to the tax holidays, foreign investments are also granted other favourable concessions, which include duty exemptions on imports of capital equipment or machinery and raw materials.¹⁰ Such duty exemptions, especially on capital equipment or machinery, will have an important bearing in our later discussion. These concessions have become to be regarded as an integral part of the 'investment

-
9. A Working Party of Officials was formed in May 1956 to formulate an industrial development policy. Its report formed the basis of the Pioneer Industries Ordinance, 1958. According to the Working Party:

"The establishment of a pioneer industry was in the nature of a gamble; and prospective investors, motivated by profits, were more likely to be attracted to a territory which guaranteed some measure of relief from income tax during the period in which the industry was becoming established. The decision to invest was greatly if not wholly influenced by the anticipated commercial profitability which in turn was significantly influenced by the potential size of the tax bill".

The Working Party also argued that,

"Since the cost of a tax exemption programme was likely to be small, there would not be much to lose and possibly much to gain from introducing special legislation or amending the existing income tax legislation to provide special inducements of the type of tax holidays for the establishment of new industries".

See, *Federation of Malaya: Report of the Industrial Development Working Party*, Government Printers, Kuala Lumpur, 1957.

10. See *Federal Industrial Development Authority, Investment in Malaysia; Policies and Procedures*, 1979, (2nd Edition), p. 25-26.

package' for potential foreign investors. This would undoubtedly increase substantially the financial advantage of new investments.

The pioneer incentives bind the duration of tax holidays to the amount of a firm's expenditure on fixed capital. The incentives therefore not only explicitly encourage the use of capital-intensive techniques but also stimulate the growth of relatively capital intensive industries at the expense of labour-intensive techniques and industries. But in a situation where there is structural unemployment and substantial underemployment, pioneer incentives appear to be inappropriate if the objective is to create more employment opportunities. The provisions of the investment tax credit¹¹ further accentuated the bias against labour using techniques and industries because it too encourages capital expenditure on factory, plant and machinery.

Although the industrial strategy seemed to be concerned with maximum employment expansion through increased manufacturing activities, hardly any attempt was made to influence the industrial structure so as to stimulate labour intensive industries and labour intensive techniques. More importantly, the latter should be given due consideration in an economy where unemployment and underemployment are widespread. The bias towards capital intensity was evidently encouraged by the provisions of the Investment Incentives Act and this trend was likely to continue as long as the fiscal incentives formulated remained in their present form. Duty exemptions for the imports of new capital equipment or machinery do not help the situation.

Realizing the weakness of the existing fiscal incentives to stimulate much employment policy makers consequently introduced the LUR as an additional incentive scheme under the Investment Incentives

11. The introduction of the investment tax credit is primarily to stimulate investments by firms which are not eligible to apply for pioneer status. This would include, firstly, those firms with long gestation periods that get very little benefit under pioneer status, since they are not expected to be profitable in the initial years of their production. Secondly, there are those already established firms wishing to produce a range of new products or to expand their existing lines of production; and they too need the incentives.

Act.¹² Its introduction in 1971 was primarily aimed at altering the product composition of manufacturing via increased investments in relatively more labour-intensive industries, and to encourage firms to adopt alternative methods, in any part of their production process, which would be more labour-using.¹³

The LUR provides for a complete exemption of income tax on profits in the same manner as the pioneer status except that the tax holiday period is now varied with the labour intensity of the project. The tax exemption period and the qualifying requirements are as follows:

Qualifying Employment	Tax Exemption Period
51 – 100	2 years
101 – 200	3 years
201 – 350	4 years
351 and above	5 years

Initially the LUR appears to be promising as it is the only employment incentive of any kind formulated and implemented since the early 1970s. However, this employment oriented incentive scheme has its own shortcomings.

Firstly, the LUR is provided along with the other fiscal incentives under the Investments Incentives Act. However, as an approved project can enjoy only one type of incentives, the firm concerned will presumably choose the one that maximizes its profit expectations. As

12. The introduction of the LUR coincided with the dropping of the payroll tax of 2% in 1971 (initially introduced in 1965) on the grounds that its abolition would provide additional encouragement to use more labour in manufacturing activities. See *Malaysia: The 1971 Budget*, Minister of Finance 1970.

13. See R.A. Berry, "Factor Proportions and Urban Employment in Developing Countries", *International Labour Review*, Vol. 109, 1974, p. 217-233.

such a firm which tends to be capital-intensive and which expects reasonable profits soon after it starts production would be likely to choose the pioneer status incentives; a highly capital intensive firm with lengthy gestation period would prefer the investment tax credit; while the firm that opts for LUR is likely to be inherently labour intensive anyway.

Only a small number of firms really opted for LUR as compared to pioneer status or investment tax credit.¹⁴ Those that opted for LUR are mainly concentrated in the production of food, beverages and textiles; and these are relatively labour intensive anyway.

If labour absorption is taken to be most desirable objective in the selection of investment projects, this may be better achieved by granting direct subsidies for every man employed during the initial years of production rather than a tax exemption scheme. A direct subsidy scheme will pick up the more labour intensive investments, and would make it somewhat less likely for capital intensive investments to displace relatively more labour-intensive firms already established and would provide an inducement for newly established firms to adopt relatively labour-intensive techniques.

Secondly, the qualifying employment (i.e. 50 or more employees) has been set at a high level in relation to the size of the labour force in the majority of manufacturing firms. For instance, in 1968 establishments with a labour-force of less than 50 full-time employees accounted for 94.4% of the total; and the corresponding figure for 1973 was 90.4.¹⁵ It can be assumed that there is little variation in this percentage from year to year, thus indicating that a substantial number of firms will be unable to take advantage of the LUR incentives. These firms generally have small capital outlays, and as such the other types of incentives are also denied to them. We therefore have a system of fiscal incentives that discriminates against small firms which are comparatively labour-intensive.

14. See FIDA Annual Reports-various years since 1972.

15. Figures computed from Census of Manufacturing Industries in Peninsular Malaysia; 1968 and 1973.

Bias Against The Small-Scale Sector

There has been no concerted effort to promote the expansion of small firms and to protect them from the competitive pressures emanating from the large and modern firms, mainly controlled or owned by foreign companies. Although the promotion of small firms became an important objective during the Second Malaysia Plan,¹⁶ this objective was directed towards the modern-type of small firms which are expected to undertake subcontracting work especially in the production of intermediate goods.

The above policy would neglect those small firms that are already established and those that would have directly benefited the consumers – such as in food and food processing industries. Small firms are also disadvantaged by other handicaps and discrimination against them. Discrimination exists not only through the workings of the Investment Incentives Act, but also through the credit system extended by banking institutions. In its interest to foster further manufacturing growth, the capital market tends to favour large scale projects; while the capital markets for small firms has been largely neglected. Therefore, in the absence of strong institutional support for the small scale sector, its larger counterparts have tended to get all the advantages in terms of fiscal incentives and credit allocation.¹⁷

However, it must be noted that the extent of employment provided by small firms to unpaid labour, and family members as part of the 'extended family' system is quite substantial. But because of such an employment structure where work-wage relationships are not

16. Malaysia, Second Malaysia Plan, op.cit. p. 154.

17. In its desire to stimulate substantial manufacturing investments especially those from foreign companies, even FIDA tends to discriminate against small firms. According to FIDA, "the larger firms are able to undertake proportionately more investment, can reap more benefits from economies of scale, tend to be more stable, are less susceptible to the pressure of internal competition from imports, have a better export potential and are better placed to reap advantages of government incentives". See *Malaysia: Federal Industrial Development Authority, Industrial Trends Survey, No. 3, 1969, p. 7.*

formalised, and because small firms are often regarded as 'informal' and often viewed as outside the jurisdiction of government departments, the role of small firms in terms of labour absorption and as technological innovators is likely to be underrated by policymakers.

It has been observed that there is an upward trend in the average firm size in most manufacturing industries.¹⁸ An important factor in this respect could probably be related to the Investment Incentives Act that encourages large and modern firms. This may well be consistent with the observation that the growth of manufacturing employment is relatively slow when compared to output growth. Apart from the general increase in the size of manufacturing firms, this phenomenon could also be related to the change in industry composition favouring those with high value-added per employee or capital-intensive industries and to the adoption of more capital-intensive techniques. This may be related to the fact that large manufacturing establishments enjoy technological and management economies of scale.¹⁹

The encouragement of large-scale manufacturing firms vis-a-vis the small scale sector must have an important impact on the growth of local entrepreneurship and adaptive abilities. Because of the relatively higher wage structure in the large companies which are mainly foreign owned, they are able to attract highly-trained and skilled personnel.²⁰ This works against the interests of the small firms which could be the focal point for the development of indigenous technology that would take into account the factor endowments within the economy. In expanding the small-scale sector, domestic research and development within manufacturing could be encouraged in directions which cater for the needs of the population as a whole. By fulfilling the demands

18. See Anuwar Ali, *Industrialization and Employment Creation in a Developing Economy: An Analysis on Malaysia*, Ph. D Thesis (unpublished).

19. See G. Winston, "Capital Utilization and Economic Development", *Economic Journal*, Vol. 8, 1971, p. 36-60.

20. See for e.g. D. Lim, "Do Foreign Companies Pay higher Wages Than Their Local Counterparts in Malaysian Manufacturing", *Journal of Development Economics*, Vol. 4, 1977.

of the larger segment of the population for low price and perhaps relatively lower quality goods and by specializing in labour-intensive processes, the small-scale sector can increase the overall labour-intensiveness of the manufacturing sector.²¹

PART II

Technological Dependence

The transfer of technology to developing countries may take many forms; the important ones being the transfer of technical know-how, management services or the employment of foreign personal as well as direct purchases of machinery or capital equipment. Hence the transfer of technology not only involves the physical aspect of production but also the non-physical aspect. Its transfer from the developed countries has generally been associated with multinational companies. It is in this respect that the latter 'promote' industrialization in the developing countries as an extension of their global interests.

Their promotion of certain industries, either in resource-based industries or in low labour cost industries, generally coincides with their interests to sell capital equipment and/or technical processes. In tandem with these sales, there would be technical know-how and management agreements as well as foreign technical/managerial personnel, out of which domestic firms will have to bear technical fees, royalty payments and expatriate remunerations.

Technology transfer has therefore become an important topic of political concern as technological diffusion and technological leadership between countries will have an important impact on the development of any economy-particularly that of the developing countries. Although it has been argued that higher technologies promote world economic integration by making trade in both goods and ideas mutually profitable,²² this has been questioned by the Third World.

21. See H. Hughes, "The Scope for Labour-Capital Substitution in the Developing Economies of Southeast and East Asia: A Sectoral Approach", *IBRD Economic Staff Working Paper*, No. 140, January 1973.

22. See W.M. Corden, *Trade Policy and Economic Welfare*, Clarendon Press, Oxford, 1974, p. 327-329; and H.G. Johnson, *Technology and Economic Interdependence*, Macmillan Press Ltd, 1975, p. 7-8.

In production encouraged to all the capital developed countries technological imported equipment labour-intensive equipment a of successive capital-intensive either to replace successively are constrained. This resulted weaknesses manufacturing

Such technological dependence' foreign companies in capital equipment absence of this lack of insignificant goods will of the machine bias.²⁵

23. See also

24. 'Technic of manu a produc products "Technic Develop

25. See also A Prelim Develop 1979, p.

In production manufacturing firms in Malaysia are deliberately encouraged to use modern and new equipment.²³ But since almost all the capital equipment used in production are imported from the developed countries, this practically means that the range of actual technological choice is limited by the technical specifications of imported equipment. The possibility of opting for relatively more labour-intensive techniques is therefore reduced as most of this new equipment are relatively labour-saving. As long as capital equipment of successive vintage produced in the developed countries are more capital-intensive and so long as new capital equipment must be purchased either to replace worn out equipment or to add to existing stock, successively more capital intensive techniques will be installed. These are constraints on choice which are imposed at the source of supply. This resulted in 'technical rigidities' which have been a source of many weaknesses in the expansion of employment opportunities through manufacturing growth.²⁴

Such technical rigidities are an important aspect of 'technological dependence' that is generally encouraged by the activities of large foreign companies. Given the structure of Malaysia's trading patterns in capital equipment with developed countries and also due to the absence of a capital goods industry in other developing countries, this lack of choice can thus be perpetuated. Furthermore, the relatively insignificant demand by developing countries as a whole for such goods will only have a small impact on both current decisions about the machinery to be produced and the nature of their factor-saving bias.²⁵

23. See also *Malaysia: Investment in Malaysia*, op.cit, p. 25-26.

24. 'Technical rigidities' may also be related to (a) the limited number of manufacturing processes known to be capable of producing a product; (b) the demand for high-quality modern 'inappropriate' products. See D. J. Forsythe, N.S. McBain & R.F. Solomon, "Technical Rigidity and Appropriate Technology in LDCs", *World Development*, Vol. 8, 1980, p. 371-398.

25. See also S.Lall, "Developing Countries as Exporters of Technology: A Preliminary Analysis", in H.Giersch (ed), *International Economic Development and Resource Transfer*, University of Kiel, Tubingen, 1979, p. 589-616.

There appears to be an 'international push' for new firms to adopt the most up-to-date techniques of a labour saving type that are inappropriate for a developing economy. Even in the modernization of established firms, they are encouraged to do likewise. Furthermore, there is an increasing tendency for international engineering consulting firms to act autonomously in process choice, material output and machinery specifications, generally designing 'best practice' plants similar to those in developed countries.²⁶

In a wide range of manufacturing industries, Malaysia will have little choice but to buy the standard equipment that are available in the developed countries. But it has to be noted that these equipment and their techniques are the result of lengthy scientific development spanning many years of research. As such they can be extremely sophisticated and therefore would require correspondingly specialist skills. In most cases, the importation of such equipment and techniques are complemented with the employment of foreign personnel. The need for the latter becomes more urgent in most modern industries because of the complex equipment; and more importantly because of the lack of skilled labour.

The shortage of skilled labour is prevalent in many manufacturing industries and this in itself affects the choice of techniques. In order to minimize costs arising from this shortage, industries prefer more expensive and complex equipment which reduces repairs and maintenance to less sophisticated equipment or cheaper second-hand machinery.

Multinational companies that have established their subsidiaries locally tend to contribute to this state of dependence. Techniques employed in their local production facilities are determined by the parent companies in the developed countries. This would generally mean that their machinery and plant equipment are imported directly from the developed countries without much modifications to suit local factor endowments. The small size of the domestic market has often been quoted as an obstacle for such an adaptation. But more significantly, the failure to adapt has been largely due to the low priority

26. See J. Roberts, "Engineering consulting, industrialization and development," *Journal of Development Studies*, October, 1972 p. 39-61.

given to local interests and for them to be rational for the countries of the

The whole of the world is now a labour market. In the past, labour was unfamiliar labour via machine-usable for the

Technological bias as indicated by Investment in manufacturing in the developed countries they may prefer there is little that might be

Preference for staff is related to that are developed country like modern and managers, trained in developed countries of the orientation of their source of other reading availability

As implied by the various

27. See *International Enterprise and World Development*, p. 100.

given to local research and development.²⁷ In view of their global interests and their organizational structure, there is very little incentive for them to give priority to local research and development. It is only rational for them to concentrate their research activities in the developed countries of their parent companies.

The wholesale adoption of capital-intensive techniques by multinationals can be related to their 'organizational' preference for less labour. In this situation, they are able to minimize the impact of unfamiliar labour relations and to be in a position of reducing output via machine-time contraction rather than labour lay-offs. This may be useful for them during periods of depressed demand for their products.

Technological dependence is also perpetuated by institutional bias as indicated earlier, including the important provisions of the Investment Incentives Act. Generally policy makers and domestic manufacturers passively accept production techniques that are available in the developed countries. In the case of domestic manufacturers they may perhaps modify them slightly to suit local conditions. But there is little evidence to show that they want to introduce innovations that might challenge the dominance of the imported techniques.

Preference for relatively capital intensive techniques by managerial staff is related to familiarity with modern and sophisticated methods that are developed in the more advanced countries. In a developing country like Malaysia, there is also a 'status value' attached to these modern and sophisticated equipment. Decision makers including managers, engineers and technicians at the firm level are generally trained in modern modes of thought that are associated with the developed countries, either because they are in fact taught in these countries or their teachers are. They are substantially influenced by the orientation of the developed world which has increasingly become their source of textbooks, research articles, academic journals and other reading material. The effect is greater given the limited domestic availability of such sources.

As implied above, technological bias can occur at several points along the various levels of decision making; for example, at the managerial

27. See *International Labour Office, The Impact of Multinational Enterprises on Employment and Training*, Geneva, 1976 p. 10-11; and W.Baer, "Technology, Employment and Development: Empirical Findings", *World Development*, Vol. 4, 1976, p. 121-130.

level, and at the design level.²⁸ At the design level, for instance, the engineer tries to maximize technical efficiency with the objective of conserving energy or minimizing energy loss. Since this implies a greater need for precision and control, the firm will need a more up-to-date or sophisticated equipment that has to be imported from a developed country. This need will generally mean a greater dependence on spare parts, components and intermediate inputs.

In the case of a multinational company operating a subsidiary in a developing country, the above dependence would only strengthen the position of the former. In the sale of components or intermediate inputs, the multinational company will always have an upper hand in its dealing with the subsidiary. In this respect, the parent company could easily inflate prices of inputs purchased by the local subsidiary. These are problems of transfer pricing often associated with multinational companies.²⁹

The tendency for the manufacturing sector to be dominated by capital-intensive techniques can also be related to the needs of the more sophisticated and brand-conscious consumer demanding better quality products manufactured locally or preferably in developed countries. But these needs for 'modern' products only affect the minority, especially in big urban centres, whose consumption habits have been greatly influenced by the affluence of the developed countries. The demonstration effect on this class of consumer, affected by pernicious advertising and world-wide communications, biases its choice towards products that are produced by relatively capital-intensive techniques. Such a bias coincides with the interests of multinational companies which promote the global sale of their 'modern' products; and whose promotion inevitably requires dualism and inequality in the distribution of income.

28. See O.Hawrylyshyn, "Capital - Intensity Biases in Developing Country Technology Choice," *Journal of Development Economics*, Vol 5, 1978.

29. Profit transfers through transfer pricing have been cited in many studies. See for example, R. Du Boff, "Transferring Wealth from Underdeveloped to Developed Countries via Direct Foreign Investment," *Southern Economic Journal*, Vol. 38, 1971.

In his ch
absolence
which are
countries.
whose usef
inappropria
ments of
frequently
complex p
facturers t
demand of
buys, with
prices, dim

PART III

Implication

Our discus
is perpetua
the institu
incentives
to a state
negate the
be fully en
account.

The pr
character
the large
managed t
prises. Th
labour su
productio
forever ur

Given
the mult
economic
facturing
to the sm
industrial

In his choice for 'modern' products, the consumer is also trained for obsolescence. Product obsolescence is a consequence of innovations which are chiefly prompted by market demands in the developed countries. These innovations are intended to replace 'old' products whose useful lives may not yet be over, and as such they may be inappropriate for developing countries. Continued technological refinements of products which are already established on the market frequently benefit the producer more than the consumer. The more complex production processes tend to enable only the large manufacturers to continually replace outmoded models, and to focus the demand of the consumer on the marginal improvement of what he buys, without taking into account the side effects such as higher prices, diminished life span, higher cost of spare parts, etc.

PART III

Implications for Malaysia

Our discussion reveals that the diffusion of capital-intensive techniques is perpetuated not only because of the role of foreign firms but also by the institutional bias that exists in Malaysia's industrial strategy. Fiscal incentives that are part and parcel of this strategy too have contributed to a state of 'technological dependence' and such dependence will negate the development of indigenous technology. The latter should be fully encouraged so that domestic factor endowments are taken into account.

The production structure of many industries has remain dual in character since some of the small firms have been unable to make the large technological jump required by modern methods, and yet managed to survive. These are locally-owned and locally managed enterprises. Their survival is largely due to their accessibility to very cheap labour supply (including family and part-time labour) and/or to the production of cheap and inferior substitutes. But this may not last forever unless new policies are adopted so as to promote their growth.

Given the higher profitability enjoyed by foreign firms, especially the multinational companies, in view of their ability to maximize economies of scale and to dominate an industry, this type of manufacturing concern will expand at a relatively rapid pace compared to the smaller firms. This will eventually increase the former's share of industrial output or sales in the domestic market. If the growth path

of the large multinational companies were allowed to continue without considering its impact on the small scale sector, one would expect that the manufacturing sector will become more dependent on imported technology.

Our discussion also implies the need to adopt appropriate measures so that an investment goods industry could be established geared to the country's long term industrial and employment needs. The ability to produce capital equipment or machinery would be a catalyst for further manufacturing growth. There are of course numerous constraints that have to be overcome in its development.³⁰ However, in the short term, Malaysia like any other developing country must still depend on the technology of the developed countries to sustain its manufacturing growth. As a first step to reduce this dependence, appropriate incentives should be given to domestic industries to design capital saving equipment through research and development activities. Familiarity with advanced country methods needs to be broken by greater emphasis on indigenous and technical education; especially middle-level technical education. It has often been argued that developing countries have an advantage in that they could make immediate use of the accumulated experience on science and technology which it has taken the developed countries years to acquire. But in fact a developing country cannot jump the technological gap. They may be many short cuts here and there, but in the end it has to tread warily and patiently through the entire difficult path to accumulate the knowledge of what is best suited to its needs.

Even with the establishment of local universities and colleges of technology, progress on research and development of indigenous technology has been very slow. The employment of foreign personnel or experts has not helped the situation. This form of underdevelopment has been the consequence of neglect on the part of developing countries as a whole to establish a technological base favourable to local factor endowments.

30. See H.Pack & M. Todaro, "Technological Transfer, Labour Absorption and Economic Development", *Oxford Economic Papers*, Vol. 21, 1969 p. 395-403; and M.C. Shetty, *Small-scale and Household Industries in a Developing Economy*, Asia Publishing House, New York, 1963, p. 41.

STRATEGIES A Scheme of C

Ngo Manh Lan
UNITED NATION

From import-sub

Since the second
ment of develop
have made it un
strategies which
historical and p
independence ha
to the diversity
the nature of le
course of the st
led by the natio
the struggle; by
to the mass of t
the different w
national and int
colonial rule.

The search for
dominated by s
related to the sc
to the capitalist
pattern of mixe
Vietnam were
fascinating deba
Vietnam War pe
A coup d'etat c
staged in Indone

It should be
of great signific
regime under Pa
proved to be c
leading Western
State involveme