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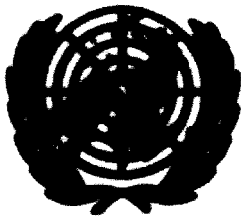
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TRANSFER OF TECHNOLOGY - THE HONG KONG VIEW ✓

by

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Transfer of Technology - the Hong Kong View

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FREAMBLE

It was not until I had accepted a commitment to prepare this paper and started work on it that I began to realise the extent to which the Hong Kong experience in attracting foreign technology into industry differs, as far as the Government role is concerned, to that of almost all other countries likely to be represented at the Conference. A free enterprise, free trade philosophy places an obligation upon Government authorities to ensure that bureaucratic interference and involvement with the vital commercial and industrial processes associated with trade in its widest sense is kept to an absolute minimum. That is the position of the Government in Hong Kong.

2. Most decisions involving the expenditure of private capital and the development of trade are best left to private enterprise and the stimulus of the profit motive. This philosophy and the Government policies which arise from it may well be unique to Hong Kong, in a world of increasing trade restrictions. It is with some trepidation therefore that I have tried to set out some of the advantages of the Hong Kong system in this paper, with reference to foreign involvement in our industry, for discussion at the Conference. If the paper is light on information about the legal and administrative aspects of joint venture and licensing arrangements that is because, in Hong Kong, the Government is not normally involved in these aspects of industrial promotion.

3. The Government role in Hong Kong's industrial development is, however, very positive and is flexible enough to provide substantial incentive to foreign industry to locate some form of industrial operation in Hong Kong. It has been successful and, this being so, there must be points of interest to participants in a Conference of this nature. It is my hope that there may be something to be learned from the Hong Kong experience by some of the participants and, if this proves so, the preparation of this paper will have been worthwhile.

THE BASIC NEED FOR TECHNOLOGY

4. In recent years increasing concern has been voiced by developing countries about the fact that, despite the good intentions and undoubted efforts of many countries and international organisations, the economic gap between the developed and the developing

concern is in general widening. Most developing countries regard industrialization as an essential element in narrowing the gap, and there is a growing belief that the international transfer of technology is an important method of achieving this: a method which, though increasingly used, has by no means yet been exploited to its full potential. The new slogan of international recognition that the transplantation of appropriate technologies is an important means of accelerating the economic growth of developing countries is apparent from the considerable attention given to the subject in international publications and in meetings of such organisations as UNCTAD, ONIDO and regional United Nations bodies. Almost without exception, national Governments in the Asian region are hard at work encouraging industrial development; some of this being related to the processing of their own indigenous raw materials and some being related to the production of goods which must rely on imported materials. Some of the production results in import substitution and the saving of foreign exchange; some relates directly to exports and the creation of additional foreign exchange.

5. The extent to which developing countries depend upon industrialization for their economic growth naturally varies, but I think it is true to say that, almost without exception, they depend upon industry to a steadily increasing extent. Furthermore, for continued economic growth they cannot be content with the relatively simple industries and unsophisticated technologies with which they may have achieved their initial aims of, for example, reducing the proportion of G.N.P. attributable to agriculture. For those countries which seek to increase their exports of industrial products, the pressure of competition from other developing countries following in their footsteps will itself ensure a continual need to upgrade their technologies and widen their industrial base.

DEVELOPMENT OF TECHNOLOGY

6. Despite some assertions to the contrary, an industrialising country is not able to develop its own technologies through indigenous research and development other than on a base so narrow and at such a pace as to be ineffective as a means of promoting general economic development. It is essential to progress that scientific and technological advances be borrowed from other countries, assimilated, adapted and revised to meet local conditions and then put to practical use. These technologies can then be used as the base for further development and innovation, but even this can occur in a large degree only over a considerable period of time.

7. The importation of modern but fairly basic technologies, such as those relating to the spinning and weaving of simple textile fabrics, the moulding of uncomplicated plastic products and the manufacture of footwear, can usually be achieved without over-much difficulty provided the overall political and economic climate is conducive to the establishment of a manufacturing industry and provided that the basic infrastructure, banking, insurance and communications services are adequate for the purpose. Subsequent steps become increasingly difficult for a number of reasons however. Capital costs increase rapidly as the level of technology improves; more original research and design work is required for product development and greater numbers of more highly qualified personnel are required.

8. Any industrialising developing country faces considerable problems in satisfying some, if not all, of the basic criteria for the necessary advancement of industry. It would be wrong, of course, to suggest that the import of technology is the only need and, indeed, it will be difficult to encourage the import of technology if other basic desiderata are not present. A foreign company considering the export of its specialised knowledge must be satisfied on a basis of fairly precise criteria that the developing country concerned offers the company the opportunity for a viable and profitable operation.

THE MEANS OF TECHNOLOGY TRANSFER

9. The ways in which technologies can be transferred from developed to developing countries are well enough known. This can be achieved through published literature, the employment of foreign experts, overseas training (all useful means but each limited in the total effect which can be achieved), direct foreign participation in manufacturing, subcontracting and licensing arrangements. None of these systems is mutually exclusive. For example, an American concern (company "A") established a subsidiary in Hong Kong (company "B") to undertake general machine shop work on a subcontracting basis. Another American company (company "C") manufactures car air conditioning systems which it sells in the U.S.A. and elsewhere for installation in U.S. cars. But, although its basic designs are universal and its main component (the compressor) standard no matter in what car the equipment is installed, the detailed design must be varied with the make and model of car. It is not profitable for company "C" to produce designs and manufacture in the U.S.A. relatively short runs for installation in European and Japanese cars. It therefore subcontracts this work to company "B" in Hong Kong which sells its products locally and

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in a number of overseas markets, including some in Europe. Company "B" is able to produce designs and carry out the quite basic engineering work required for the manufacture of suitable systems at a competitive price. Thus, through a combination of direct foreign participation and subcontracting two companies in the U.S.A. and one company in Hong Kong are profitable to the satisfaction of all concerned. A further coincidental result is that companies in third countries, including developed countries in Europe, are able to offer their customers a more satisfactory and competitive service.

COMMERCIAL INCENTIVES

10. This satisfactory situation arose, as do most others involving the participation of companies in foreign countries by any means, because there was commercial advantage to all concerned in doing so, not because the governments of the countries concerned decided that international cooperation between them was desirable.

11. Although many considerations of the subject pay scant regard to this aspect, experience shows that international cooperation in manufacturing can be successful only if there are clear commercial advantages in the arrangement. Only in this way can the acquisition of unsuitable and uneconomic technology be avoided and a satisfactory industrial growth rate achieved. Governments can, and do, encourage and assist international subcontracting to take place; but although multilateral agreements may be useful in stimulating, in providing pressures and in laying down guidelines, it is the policies of individual governments aimed at smoothing the way of commerce which are decisive. Hong Kong is not the only place which amply demonstrates this; a number of Asian countries which have policies quite different to those of Hong Kong are successfully industrialising as a result of their own national policies and efforts. The common denominator is that their policies are producing environments which are commercially attractive to both indigenous and foreign companies. An important aspect of an attractive investment environment is stability in Government fiscal and developmental policies.

FINANCIAL INCENTIVES

12. The most popular way of importing technologies has been to attract direct foreign industrial investment by means of tax holidays; immigration concessions; relaxation of exchange controls; training grants; protected domestic markets; export subsidies; duty

draw-backs for imports of machinery, equipment and even factory premises. The exact mix of these financial inducements varies considerably from country to country (other than in Hong Kong which is probably unique in using none of them specifically to attract foreign investors) and obviously Governments anxious to accelerate industrialization must experiment with the various factors before arriving at the right package for their particular territories. Too few concessions and foreign companies might establish themselves elsewhere; too many and the net return to the developing country may be economically unattractive.

13. Where special incentives are offered, the overall economic cost of attracting foreign technology can be high and it is a matter of careful judgment how much any country can offer to foreign industrialists to make the import of their technology profitable. The government of a specific developing country with access to detailed (and normally confidential) commercial information and reliable statistics may be able, with the aid of much intelligent guesswork, to arrive at a roughly estimated cost benefit analysis in each particular case. But although a number of attempts have been made, it has not proved possible to lay down reliable and all inclusive international guidelines. It is unlikely that developing countries can reach an agreement among themselves on how much to pay for such transfers. It is even difficult to lay down reliable guidelines as individual circumstances and needs vary so greatly and competition is keen; but it appears that many countries, eager for technology, may offer more than is necessary to attract it.

14. A number of companies have, for example, commented to me that the large tax concessions offered to them by some developing countries wishing to attract them were of only marginal interest: the tax they paid in the developing country was simply deducted from the amount of tax which was payable to their own government. Thus the end result of the large tax concession sometimes is that the developing country, badly in need of revenue, forgoes it in favour of the government of a developed country. It is moreover insufficiently appreciated that companies from the developed countries also have much to gain from manufacturing in low cost countries and are frequently more successful than they expect to be in wringing concessions out of developing countries competing for their favours. I must stress that I am not saying that tax concessions are unnecessary or undesirable in many countries. They very often are essential, but they should not be over generous or too freely given.

DISADVANTAGES OF DIRECT FOREIGN PARTICIPATION

15. Direct foreign involvement in the industrialisation of developing countries has a great many advantages, especially at the earliest stages of development; but there are disadvantages too and it is interesting to note that, once a certain point of development has been reached, there has occasionally been some adverse reaction against foreign-owned companies, sometimes stemming from national pride and the realisation or belief that an important part of the economy is under foreign influence; and sometimes from resentment that foreign owned companies are not contributing to the economy of the country to the same extent as their locally owned counterparts and are concerned with extracting from, but not contributing to, the economy. There are also occasions when foreign investors are accused in their countries of origin of exporting jobs and are unpopular with their governments for this reason and for exporting capital. A way around many of these problems is overseas manufacturing by means of licensing and subcontracting arrangements.

HONG KONG'S EXPERIENCE

16. Rather than enter into a detailed discussion of the theoretical advantages and disadvantages of each method of multinational manufacturing, which in any case will be well known to the participants in the Conference, I shall outline Hong Kong's experience of each of them. Hong Kong has not adopted the usual methods of attracting foreign manufacturers and its political, geographic and economic conditions are unlikely to be entirely relevant to those obtaining in any other territory. I believe, nevertheless, that there is general significance in them and I hope that some lessons can be learned from Hong Kong's solutions to problems even though they may often need some adaptation to be applicable elsewhere.

Historical Factors

17. In order to examine this experience it is necessary to sketch in, however briefly, the background to Hong Kong's industrialisation.

18. In 1951 international events forced Hong Kong to sharply reduce the import/export trade on which it had largely existed up to that time. In view of the absence of natural resources and a significant domestic market, external trade was - and remains - Hong Kong's only means of economic survival. Fortunately, the early 1950's saw a substantial immigration of capital and expertise which led to the rapid development of modern and highly efficient cotton spinning and weaving industries. The textile industry, supported by the advantages

of a Commonwealth Preference System which provided duty free access for Hong Kong goods into the British and other markets, expanded very rapidly during the late 1940's and the early 1950's based almost entirely on exports to developed markets.

19. Heavy immigration during this period stimulated the rapid growth of a number of relatively low technology industries, including garments and plastics. The local market for these products was small (the population in 1950 being two million as compared to four million at present) but Hong Kong's entrepreneurs were able to find foreign markets. In this they had certain advantages in the existence of an efficient commercial infrastructure. Banking, insurance trading and shipping companies which were experienced and well established were in need of new business to replace their lost trade. In the early 1950's some 80% of Hong Kong's total exports were accounted for by the re-export of the products of other countries. Within ten years the ratio had been reversed: 80% of total exports were of locally manufactured products. By 1971, nearly 600,000 persons from a population of four million were employed directly in manufacturing and the year's exports of locally made products were valued at US\$2,269 million. At least 90% of all manufactured products are now exported.

Contributing Elements

20. A number of features about this rapid industrialisation need to be emphasized:

- (a) it arose spontaneously in response to economic pressures rather than as a result of Government economic planning;
- (b) it could not have taken place had not the Government's economic policies been conducive to it and a sound commercial infrastructure been in existence to support it;
- (c) apart from textile, the products manufactured were in general unsophisticated and labour intensive;
- (d) the majority, even though produced in entirely locally owned factories, were produced to customers' designs and specifications - in other words they were subcontracted;
- (e) industry and industrialists were permitted the maximum freedom to decide for themselves, on the basis of their own financial and operational criteria, which industries to establish and how to expand them;

(f) inefficient industry was given no protection of any kind by the Government; indeed, no import tariff existed by which import protection could be given; the result was the emergence of viable and efficient industry.

21. As industry developed a number of changes took place, some extraordinarily rapidly and others at a progressive but steadier pace. It is unnecessary in the context of this paper to examine these closely but it may be useful to look briefly at some of the developments and the reasons for these as well as at the results in present day industrial and economic terms.

The Government's Industrial and Economic Policies

Free trade

22. The Government of Hong Kong is one of the very few in the world today to adhere in practical terms to the principles of free trade and non-interference with industry. Economic planning is not practised by the Hong Kong Government other than in the broadest sense and thus no particular sector of the economy is deliberately encouraged to expand at the expense of another. In the view of the Government, the industries which will be of most benefit to an export oriented economy and thus to the community as a whole will be those which emerge within a free market economy in which no sector is specifically protected or subsidised and which faces direct competition in overseas markets.

Lack of discrimination

23. As a corollary to this policy, and in contrast to Government thinking elsewhere in the world, foreign industrialists receive no fiscal incentives to establish themselves in Hong Kong other than those available to all local industrialists. There are specific advantages in this for the foreign industrialists as well as for the community as a whole. Foreign owned companies are on fully equal terms with local companies; there are no restrictions on the percentage of foreign ownership or on the nationalities of directors and there is no discrimination by the Government, other industrialists or employees against foreign owned companies. If the foreign company brings a viable project into Hong Kong it will succeed. An inefficient venture will fail. Either way the Government does not provide specific inducements or measures of protection.

Tariffs and taxes

24. There are no import tariffs levied in Hong Kong and relatively low revenue duties are levied on only a few items such as tobacco, alcohol and petroleum. All goods may be imported, manufactured and exported freely other than those restricted for safety and health reasons or as a result of international agreements.

25. Corporate and personal taxation is low, taxation on business being levied at a standard rate of 15% on all profits or income arising in or deriving from Hong Kong. Capital may be freely imported and, together with profits, may be free repatriated. Import licensing is not required for raw materials or equipment and there is no restriction on imports from any country.

The laissez-faire approach

26. The policy is frequently referred to as resulting in a "laissez-faire" economy; a term which I personally dislike as, although reasonably accurate, it gives an impression not only of non-interference but also of a lack of interest on the part of the Government. The policy of non-interference with trade and industry is in fact a live and vital one, carefully considered and intended to be positively helpful. A negative, uninterested approach by a Government cannot foster a healthy economic climate such as that existing in Hong Kong.

Government involvement

27. The Government plans industrial estates and provides industrial sites, builds roads, provides water and drainage, builds low cost housing for the workers, schools for their children, and so forth in each development area. In order that workers can be encouraged to take up employment in new industrial areas and that daily mass movements of people are reduced, each area is planned as a separate community. It is interesting to note in this context that the Hong Kong Government has already provided low cost housing for over 1½ million people and will house another half million before 1980.

28. The Government provides technical education at all levels and encourages and assists in the running of apprenticeship training schemes. It helps to establish, and financially supports, institutional organisations which encourage industrialisation such as the Productivity Centre, the Management Association, the Industrial Design Centre, the Federation of Hong Kong Industries, the Trade Development Council, the

Export Credit Insurance Corporation and a number of others, and it provides some financial backing for the smaller manufacturers who wish to re-equip their plants. These are examples, not an all inclusive list, of the Government's positive efforts to encourage industrial development. It will be noted however that these Government expenditures are all made in areas where private enterprise cannot normally expect a good financial return. Conversely, it is true to say that most private enterprises can be expected to provide the services and institutions required by the economy, the Hong Kong Government encourages them to do so.

Industrial Land

29. In view of Hong Kong's mountainous topography, land suitable for industrial buildings is a scarce and expensive commodity. It is usually necessary to form sites either by cutting down hills or by reclaiming from the sea (methods which are complementary). In accordance with the policy that it is for the industrialist to decide which industry will be viable in Hong Kong, industrial sites are normally sold by auction. Prices realised are relatively high which mitigates against industries which require a great deal of land but encourages labour intensive industries. Prices however cannot be excessive in economic terms as they are paid by developers and manufacturers in direct competition with each other and reflect the market demand at the time. It could be argued that a policy of providing land to industry at low (and therefore subsidised) prices would stimulate the development of a wider industrial base. It is less easily argued that it would encourage the growth of more profitable industry, however, either for its owners or in terms of the economy. In the view of the Hong Kong Government, industrial and economic growth will be encouraged by consistently low levels of taxation and freedom from trade and other controls; and I must say that the high prices paid for industrial land do not seem to have inhibited industrial development per se. It is also a fact that the substantial sums of revenue raised from land sales have helped substantially in keeping direct taxation at attractively low levels.

Labour

Regulations

30. Among the few regulations which industrialists must comply with are those related to the safety, health and welfare of workers. These are in conformity with those applied elsewhere in the world and will be expected by any industrialist, local or foreign.

Availability

31. From a population of four million (50% of whom are under 21 years of age), some 527,000 were directly employed in manufacturing industry in June 1971, which was a 100% increase over the figure for 1965. There was, in fact, some shortage of young workers for industry in 1971 and competition from industrialists and others for labour has helped to maintain the steady improvement of real wages which has been a feature of Hong Kong's industrial development for many years. By June 1972, however, labour employment in industry had levelled off due to a number of factors, including the general downturn in world trade during the past two years and other external factors, and an improvement in the productivity of factories. As manufacturing industry becomes more sophisticated and provides more attractive employment, it is likely that more people will be attracted to it from some other sectors of the economy. This is a pattern which has been seen in other industrialised countries and can be expected in Hong Kong in circumstances of relatively full employment. The lack of serious unemployment (despite a certain amount of under-employment) has in recent years stimulated manufacturers to look more closely into their use of labour and to adopt increased mechanisation, low cost automation and improved management and production methods.

Wages

32. Wages have increased from year to year in these circumstances of a free interplay of the forces of supply and demand, although the rate of increase has tended to slow down recently. Wage rates in Hong Kong industry are comparatively high by Asian standards. An assembly line worker would, for example, expect to earn some US\$2.20 to \$3.00 a day; a tool-maker some US\$5.50 a day.

33. Hong Kong's workers are not militant; they are industrious, adaptable and accustomed to an industrial and urban environment.

Infrastructure

Communications and transport

34. Communications by such means as telephone and telex, both local and international, are highly developed. Port and airport facilities are efficient and shipping and air services frequent. It is interesting to note in this context, as a comment on the Hong Kong Government's economic policies, that the container port which was recently opened was built by private enterprise rather than by the Government or the port authority as in

most countries. In this way the Government, and consequently of course the community at large, received an immediate financial return from the sale of the large area of land required for the operation. The three companies which purchased the sites and developed the facilities after very detailed evaluation clearly believe their ventures would be profitable; and, because commercial concerns anxious to earn returns on their investments at the earliest possible date can invariably work more quickly than Governments which have many other priorities, full container port facilities are available to shippers much earlier than would otherwise have been the case.

Banking

35. Hong Kong's banks, both local and foreign owned, are well used to dealing with commerce and industry and are ready to extend loans at competitive rates for any viable business project. Industry and industrial development are strongly supported by the banking system in Hong Kong. Bank deposits presently amount to some US\$4,000 million while total advances are only about US\$2,500 million. Other services, including insurance, are equally well developed.

The Structure of Industry

36. Hong Kong's industrial structure has developed in a way entirely predictable from the parameters established by the above paragraphs. It is in general concentrated in the field of light consumer products which:

- (a) can be manufactured without difficulty in multi-storey buildings;
- (b) have substantial markets overseas;
- (c) can be readily packed and transported by sea and air over long distances with acceptable freight charges;
- (d) have developed from highly labour intensive industries, although they are not now necessarily so;
- (e) have developed from low quality to medium-to-high quality;
- (f) or, as an alternative to (e), have been more recently developed as diversifications from simpler, highly labour intensive products which can no longer be competitively produced in Hong Kong.

By the middle of 1972, Hong Kong's manufacturing industry consisted of nearly 20,000 industrial concerns ranging from small family owned factories to very large undertakings employing over 7,000 workers. Factories employing less than 200 workers however still account for about 50% of all production and exports.

Foreign participation

37. Of particular importance in the context of this paper is the fact that, although the bulk of manufacturing industry is owned by local interests, foreign participation is important to its development. Direct foreign participation in the form of wholly owned subsidiaries or joint ventures is not so widespread as in some developing countries - as a measure of its size it employs 13 per cent of the total manufacturing industry labour force and accounts for about 10% of domestic exports. As is to be expected, it is concentrated in the more advanced and sophisticated industries, particularly in the electronics and textiles industries. With some notable, highly successful exceptions, licensing arrangements tend to be unpopular with Hong Kong's manufacturers, largely because the majority of licensors are believed to offer too little in contrast with the high return they require from licencees.

Dependence on foreign demand

38. Few Hong Kong factories manufacture for stock; the great majority produce only to the order of customers. Most are, in other words, subcontractors and as such are heavily dependent on their customers for research, design and markets. Great efforts are now being made to promote product research, development, and design in Hong Kong (and with some success) but for many years yet industry as a whole will largely depend upon overseas companies, particularly in those industries with a substantial technological content.

Assessment of the Hong Kong System

39. Has the Hong Kong system proved successful? I think our economic vital statistics tend to show that Hong Kong has successfully industrialised and that great potential exists for further development. In 1961 domestic exports were valued at US\$514 million; in 1966 they were valued at US\$1,003 million; and in 1971 at US\$2,269 million. Government revenue (US\$507 million in the year ending March 1971) has been sufficient to finance what for such a small territory are really quite vast public works schemes, including large scale housing projects, and increasingly heavy expenditure on such essential services as communications,

water, health and education. There is no great unemployment problem and real incomes have improved markedly from year to year.

40. In the future, however, some dangers ahead. The Government has encouraged a heavy concentration in those industries which require relatively low technologies and which offer high returns over a short period. Thus, industry has a narrow base, rendering it susceptible to competition from other, lower cost, developing countries and leaving it vulnerable to changing market conditions and protective action on the part of the Governments of its customers.

41. Greater efforts are therefore being made to diversify within Hong Kong's manufacturing industry. The Government participates in these efforts as far as it is able within its established broad economic policies and individual industrialists who, as a result of these policies, are in a position to react quickly to external commercial influences, are versatile enough to take advantage of new trends. At the present stage of Hong Kong's industrial development they will undoubtedly need to import additional technology, however, and for this reason, among others, the Government is encouraging increased foreign participation in local industry.

THE VALUE OF INDUSTRIAL INVESTMENT PROMOTION

42. The economic advantages arising from foreign involvement in industry have been recognised for many years in Hong Kong and overseas companies have been encouraged and assisted to establish themselves there. Until quite recently however it has not been necessary for Government to adopt a "hard-sell" approach. Because competition for foreign technology has become much keener in recent years and because Hong Kong has reached a stage of industrial development which could, with advantage, make use of greater injections of foreign know-how and skills, much effort is now being put into the promotion of foreign industrial investment by the Hong Kong Government and by autonomous organisations which have experience in this field. It is too early to assess the return from this increased effort, but one fact is fully recognised: the return from such efforts is not national but regional. Any company which is stimulated to consider manufacturing in a particular developing country will normally consider manufacturing in others in the same area which offer themselves as alternatives. Whatever the source of the original stimulus they will usually consider at the very least a region rather than a single country and will make a thorough analysis of a number of alternatives before reaching a decision.

The main advantage of being the country to provide the original stimulus is that companies are invariably impressed by an efficient and forceful approach. Honesty in approach also is particularly important: promotion staff must be thoroughly competent and well briefed on the needs of the companies they are dealing with and on both the advantages and disadvantages of locating an industrial operation in their country. They should obviously be aware of the advantages and drawbacks of each of the methods of foreign participation in industry: wholly owned subsidiaries; joint ventures with equity participation; licensing arrangements, and subcontracting. The last named is often given insufficient attention but becomes increasingly important with the development of a soundly based indigenous industry.

THE REGIONAL APPROACH

43. The regional approach by potential foreign investors is very marked in Hong Kong. Many foreign owned enterprises have established branch factories in other Asian countries and much subcontract work is done between them. In addition, Hong Kong owned enterprises have themselves set up subsidiary operations in other countries, quite often on a joint venture basis with local interests. These bilateral or multi-lateral operations provide important spin-off advantages in that subcontract work for parts and services is very often given to other local companies, and from this spread of work and contacts has come further joint ventures. In all this interplay of market forces, however, it is clear that the greatest incentive to its development is freedom for the individual company to make its own decisions based on its own observations, assessments and criteria. Government interference, however well meaning, is often not only unnecessary but may well be both resented and counter-productive.

LICENSING AND SUBCONTRACTING BY THE AUTOMOTIVE INDUSTRY

The Transfer of Parts and Accessories Production

44. The licensing and sub-contracting of parts and accessories for the automotive industry can be valuable to those developing countries whose industries have already achieved a reasonable degree of sophistication. It introduces to their generally smaller firms, which do not have the facilities to do their own research and development, new technology and new production techniques. The automotive industries of the developed countries are in turn able to reduce costs by having their more labour intensive components

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or accessories, or those for which only limited production is required, produced in lower cost countries. This indicates that components for out of date models, "optional extras" and accessories, many of which require short runs, should be examined to assess their suitability for production in a developing country. For a proposition for subcontracting to be practical it is important that the production processes associated with it are within the technical capabilities of the developing country.

45. An example from among the licensing and subcontracting arrangements presently being operated in Hong Kong is the manufacture of car air-conditioning systems. These are produced by several companies under both type of arrangement, for local use and for export. The operations of one of these companies was described in more detail earlier in this paper. The compressors for these units are of course standard, but otherwise the systems have to be extensively modified for each model of car. This means a good deal of detailed design work, which is done by the local companies, and production in short runs. The compressors apart (and they can easily be imported if necessary) the processes involved are limited to straightforward press work, turning and other basic engineering and surface finishing techniques.

Quality Control

46. Whatever type of arrangement is reached and whatever the eventual sales method, quality control is tremendously important. Provided the companies concerned have assessed each others' competence well and have ensured that the requirements of each are understood, problems of quality control are usually resolved within a short space of time. The company providing the design naturally insists upon receiving pre-production samples and, if these pass inspection and test, requires trial shipments from the production lines for thorough quality control tests. After this systems will vary, but in the case of components or accessories subcontracted and shipped to the company placing the orders, the proportion and depth of quality control checks can be reduced as confidence is gained. As long as it has not put itself in the position of being entirely reliant upon imported products at too early a stage it is unlikely that serious difficulties will arise for the buying company. The supplier will be eager to be profitable and thus meet the required quality standards as soon as possible.

47. It is the normal practice of those Hong Kong companies producing under licence to provide early production line samples as above and subsequently at

intervals agreed upon with the licensor. It is also common for the licensor's representative to make an occasional check on the factory by a personal visit, say, once or twice a year. In addition, the licensor sometimes has a permanent representative in Hong Kong to provide technical and other advice and to maintain a running check on production output and quality.

The Assembly of Vehicles

48. The assembly of motor vehicles from imported parts is now undertaken in some developing countries, but this depends for its success largely on the size of the domestic market and the element of protection by means of tariff adjustments or restrictive import licensing offered. This aspect of subcontracting is of little interest to Hong Kong which has no protection to offer for locally assembled vehicles and a limited market for them. The production of parts and accessories on the other hand has very great interest for Hong Kong and, no doubt, for other countries in the Asian area which have similar technical skills to offer.

CONCLUSIONS

49. Hong Kong, although pursuing a different course of economic development than most other countries, has recognised the substantial economic advantages to be obtained from the importation of foreign technology and skills. The Hong Kong Government has sought to provide the stability and environment which is believed to be attractive to foreign private enterprise.

50. This has been done by a policy of peripheral rather than direct inducement to the potential foreign investor. Government funds are utilized in the production of an efficient infrastructure and in assisting the development of the institutional system which supports industrial development.

51. A key feature in Hong Kong's industrial development is that foreign enterprises are welcomed by the Government and by local manufacturers as partners; not as favoured friends nor, conversely, as tolerated necessities. Foreign companies are neither given special inducements nor are they discriminated against.

52. Substantial commercial freedom is provided to all companies operating in Hong Kong regardless of origin. The Government will assist in resolving problems for industry but makes no claim to any success which industry achieves.

53. The foreign enterprise usually represents a higher degree of technology than Hong Kong has achieved, a ready made market, and access to design and marketing

knowledge which Hong Kong desires. For these reasons alone, foreign participation in Hong Kong industry is attractive and desirable.

54. The spin-off from foreign owned enterprises for domestically owned industry is very considerable and their presence in Hong Kong has stimulated accelerated progress in management, engineering, design, productivity, financing, and marketing. It has also encouraged the growth of technical training facilities and associated disciplines. Hong Kong entrepreneurs and industrialists have been encouraged, by example, to enter into joint ventures and subcontracting arrangements in other Asian countries and further afield.

55. The automotive industry is already making good use of Hong Kong's capacity for subcontract work. Licensing is not particularly appropriate for this industry in Hong Kong but subcontracting as well as joint ventures offer exciting prospects for the future. The range of parts and accessories required by the automotive industry is very wide and Hong Kong is in a good technical position to produce some of them.

56. A number of other developing countries have reached a similar position. They have arrived by different routes because their circumstances are different to those of Hong Kong. They nevertheless have one thing in common: their policies have produced environments which are attractive to manufacturers, both their own and foreign, and have allowed a reasonable return on investments made.





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