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The Small Factories in Kwun Tong:
Problems and Strategies for Development

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By
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1. Introduction

There is a growing concern about the prospects of Hong Kong's small scale factories. Despite of many alleged advantages, the small factories are specially affected by a series of grave problems: trade barriers, keen competition, rising costs and labor shortage, which have become more acute in recent years. Hong Kong has come to the point where a fresh hard look at this sector and a reassessment of its policy towards it are of great importance. Since the mid-sixties, a number of writers have expressed their views on this matter. While Sutu (23, 24) stressed mainly on the financial plight of the "small men", and Dwyer's major concern (5, 6, 7) was with their location and irrational land-use in Hong Kong, Owen (18) came to quite different conclusions from the standpoint of Hong Kong's development perspective. In 1968, the Department of Commerce and Industry did a survey on 200 industrial undertakings with less than 100 workers. As reported to the Trade and Industry Advisory Board, suprisingly there were few complaints about inadequate financing. A supplementary survey was conducted later which only confirmed the previous finding. Anyhow, the Trade and Industry Advisory Board reported to the Government in 1970 that in view of their potential contributions to economic development there was still a case for financial assistance to small manufacturers in machinery purchases. After further consideration, a Loans for Small Industry Scheme was put into effect in July 1972 under the administration of the Loans for Small Industry Branch of the Commerce and Industry Department.

But their apparent lack of the need for financing leaves many questions unanswered. Is it too much ado about nothing? Is it a symptom of their problems rather than an indication of satisfactory performance? How is this related to the other factors in their operation? And, what does this really mean to the entire Hong Kong economy? Answers to these questions will give us more insight into the real nature of their problems so that solutions can be found in accordance with their proper role in Hong Kong's further development.

The first thing we have to do here is to identify this group of small factories. Unfortunately there is no generally accepted definition. In fact, the definition of a small factory does not have to be given in quantitative terms: we could refer to its functional characteristics such as relatively little specialization, rudimentary technical know-how, and closer personal contacts. Indeed, Walsh (28, pp. 4-5) made the point that "it is only necessary to remember that primarily direct management and face to face communication are the distinguishing criteria of small manufacturing enterprises". However, for analytical and administrative purposes, quantitative definitions are given with the number of workers as the most accepted size indicator. Here it must be somewhat arbitrary. For example, Staley and Morse (21) defined the small factories as those having less than 100 workers, while Dwyer and Lai (7) used 50 as the line of demarcation. In administering loans to small industries, many countries have additional qualification in terms of the value of their assets. In Japan (see Shinohara, 20, p. 8) the most commonly used term is "small-medium enterprises" with 100 workers as the upper limit in the pre-war period, but post-war it was changed to 300. This brings in another demension of the problem -- whether an enterprise should be classified as small or otherwise also depends on the country's stage of economic development. Our definition of a small factory is one having less than 50 workers. We readily admit that this is arbitrary. But as our analyses show, it does bring out the characteristics of the small factories as a distinctive class from the others. From an analytical point of view, this also gives us a better focus on the genuinely small factories within the context of the Hong Kong economy.

The alleged advantages of the small factories are all too familiar -- they have close personal relationships and low overheads, tend to be more flexible and able to take quick opportunities, and are more suitable to produce specialized products and cater to the local market. These to a great extent explain their

proliferation, even in the developed countries. But so very often their low rate of growth and high rate of failure tell quite a different story. There is in fact no general presumption that the small factories are necessarily less efficient; the modern ones can be just as efficient as their large counterparts. For the entire society, what could turn out to be a liability is its traditional small factories which remain stagnant in the process of economic development. It is this consideration which has prompted some countries, notably Japan, to initiate comprehensive legislations and schemes to modernize their sector of small factories.

Some writers have stressed the importance of the small enterprise as the source of innovation and training ground for entrepreneurship. Hoselitz (13, p. 143) talked of the "climate of genuine entrepreneurship" in Europe during the period of the industrial revolution. It should be noted that the rugged individual may find his way in a largely unorganized market, but beyond a certain stage of economic development it becomes increasingly difficult for a small firm to grow into a large one. The prime movers are those who have established themselves in concerns of substantial size; the late comers, no matter how spirited they are, become primarily followers. Summarizing the experience of the developed countries, Staley and Morse (21, p. 22) have these to say: "... the relative role of small factories in newly industrializing countries nowadays may start very low, subsequently rise quite high, and then gradually decline and level off as the country moves toward industrial maturity. Even at a high level of industrial maturity, small factories will by no means disappear". Granted the importance of entrepreneurial talent, it suggests that selective development is more vital to society than unlimited proliferation.

The proliferation of small enterprises in the developing countries is very often a symptom of surplus population, and it is from the standpoint of employment creation that some writers (Aubrey, 1; Herman, 12) thought that small enterprises should be promoted. Relying on a broad front of initiatives, taking advantage of low wages and mobilizing savings which would probably not have been tapped, promoting small enterprises goes a long way in fostering economic development. The crucial assumption here is the existence of disguised unemployment, which is more applicable to countries with a large agricultural sector and low productivity so that as Lewis pointed out (14, p. 140) "the real cost of using labour in cottage industry is zero".

It is quite true that in an earlier stage of economic development Hong Kong did provide a most favorable climate for the Schumpeterian entrepreneur. Under a laissez-faire policy, with well-established transportation and communication facilities, cheap labor and inroads to overseas markets, many small scale enterprises did grow up into respectable sizes. Many entrepreneur, after learning the tricks of his trade, scrapped up some savings of his own as well as those of his friends and relatives, started modestly on his own, ploughing heavily back his profits, and established himself in the business. But the further development of Hong Kong has certainly worked against the small fry. For one thing, the emerging labor shortage means that he can no longer rely on low wages to compensate for his low efficiency. What is more, increasingly keen competition in the world market in labor-intensive products necessitates Hong Kong's production moving into high quality and more capital-intensive lines. We should note that many small factories in Hong Kong are also export-oriented. In a world of trade barriers, negotiations and increasingly dependent on long-standing contacts, the small factories are in a great disadvantage. Indeed, our survey does indicate that the small factories have relatively slow rates of growth in terms of production, export value and employment. They can only pick up what is left to them by the

large ones. With respect to employment, we should not over-emphasize their importance. Our survey (16, p. 15) shows that while 73.9% of the factories in our sample are small, they employ only 14.5% of the labor force. In many aspects, we find these small factories constitute the traditional sector. Admitting that they do have advantages, it is not their smallness that causes our concern. Perhaps it is not even their proliferation per se. It is their proliferation along traditional lines in a rapidly changing world that is the core of the problem.

Inasmuch as this sector is an integral and indispensable part of our economy, what we urgently need is its transformation into a modern one, with up-to-date technical know-how, rational management and organization, efficient marketing and modern means of financing. With its fuller integration into the rest of the economy, this sector can then play an active role in the further development of Hong Kong. Therefore, ways and means should be sought to modernize the existing ones which do show promise and make efforts to expand in the long run rather than indiscriminate assistance which would only generate further proliferation and promote nagging inefficiency.

Our survey was conducted in summer 1971. From the information supplied by the Labour Department, a stratified sample according to industrial type was taken and 346 factories in the Kwun Tong area were interviewed with pre-coded questionnaires. The factories in our sample were all "registered" and "recorded", meaning that they either had more than 20 workers or used power-driven machinery, gas, petroleum or other inflammable materials. By virtue of this, we have already eliminated a large part of what Staley and Morse (21) called the "non-factory" forms of manufacture from our sample. Thus, the small factories in our study were "factories" in a genuine sense. They were all urban-located.

In the questionnaire, each factory was asked about its size, the owner and his ideas, its management and organization pattern, products and markets, inputs and sources, its relationship with other factories both within and outside of Kwun Tong and so forth. Based on this information and cross-classifying the factories by industrial type and size, two reports have been written. The first one, entitled "The Nature of Kwun Tong as An Industrial Community: An Analysis of Economic Organizations", dealt with the economic structure and interdependence of the factories; it was basically a study at the macro-level. The second one, entitled "The Organization and Management of Factories in Kwun Tong", concentrated on comparisons in the organization and management patterns among various size groups and between the Chinese and non-Chinese factories.

In summer 1972, 48 small factories owned by the Chinese were selected from our sample for re-interviews. We were able to obtain 30 successful ones -- the rest were either moved, closed or simply could not be located. This fact itself should give us some idea about the fast changing scene in this sector. The textiles, plastic products, garment, wigs, and fabricated metal products industries were represented in this sample, which provided us with information on their production, marketing, finance and management problems.

Even though Kwun Tong was originally planned to be an industrial zone, it was the conclusion in one of our reports (16) that it turned out to be very much an integral part of Hong Kong's economy, having much in common with the other areas and sharing their same problems. It is with this in mind that in analyzing the problems of the small factories in Kwun Tong we can assess the general nature of this sector in Hong Kong.

2. Production

It is generally admitted that there is no exact correlation between the efficiency and size of a factory. From a purely technical point of view, it is difficult enough to specify its optimal size, and this is further complicated by many external factors. With its lower overhead, a small factory can be more efficient in situations where a large factory simply cannot adapt itself to. This, however, rests on the assumption that the advantage of the small factory is not offset by its inefficiency in other aspects, such as out-dated management and organization methods, not realizing its full potentials, using the wrong process, or simply shortsightedness. It is only the modern small factory that is not disadvantaged by its size. Even then, it can do best by specializing according to its comparative advantage. From the standpoint of society as a whole, therefore, the proper role of the small factories is complementary to instead of competing with the large ones.

In both our survey (1971) and re-interview (1972), we are amazed to find the respondents admitting to little problems in production. Out of 31 answers in the re-interview to the question whether they had technical difficulties, 19 stated that they had none, 5 expressed no opinion, and only 2 complained about their equipment. A number of explanations can be given in this respect. First and on the face of it, the small factories were really doing a good job so they had little to complain about. They were enjoying and absorbed by their good business of the time. Second, truthful to the spirit of individualism prevalent in Hong Kong, they were quite confident in taking care of themselves. Even if there were difficulties, they would not want to confide to others except close friends; they just wanted to be left alone. Third, complacent with what they were, there was little desire to change what they had been doing for some time. Contradictory to the Schumpeterian venturesome entrepreneur, the small industrialist was reluctant to initiate changes and satisfied with the marginal

profit or whatever he was making. Finally, due to the lack of knowledge and with a limited economic horizon, the average small factory owner had little future plans after all. This was basically a hand-to-mouth operation with little idea about the changing environment. Its problems were so deep-rooted that the lack of complaint is rather a sign of stagnation.

Even though theoretically the small factory has a shorter gestation period in the use of capital so that it could be more adaptable to new technology, our survey (16, p. 56) showed that the small factories tended to use older equipment. What is more, when asked in the re-interview whether they had important technical improvements in the past three years, 21 out of a total of 30 stated that there was none whatsoever, and only 6 had purchased new equipment. With respect to their products, more than two-thirds of the small factories had no changes during the same period. This lack of product improvement was mainly due to the fact that the majority of them produced according to ordered specifications -- less than one-third of them had put in some effort of product design and improvement. In our survey, only 22.7% of the small factories had increased product lines since their establishment, with an overwhelming majority of them remaining in a one-product operation. Compared to the factories of larger sizes, in which nearly one half claimed that their product lines had increased, there is ample sign of stagnation in this sector.

Regarding personnel, our survey indicated (17, p. 28) the percentage of technical to all workers¹ decreased slightly as factory size increased. By no means should this be interpreted as there was a higher level of technical expertise on the part of the small factories. On the contrary, this is an indication of little internal specialization. So often in

¹ By our definition, technical workers include engineers, craftsmen, technicians and skilled workers.

these factories, not only the owner-manager himself had to assume other duties, but also the technically more advanced workers had to do many other chores as well. In our re-interview, two-thirds of the factories had no people specializing in product design and improvement or technical innovation. The same percentage of factories stated that their technical personnel were interchangeable with others -- they also worked as foremen, buyers, salesmen or plain workmen. Under these conditions, their technical expertise just cannot be compared with those of the larger factories.

In fact, simple lines of production and the lack of internal specialization could be considered as an advantage of the small factory. To work otherwise might just be too complicated and expensive. If a small factory has a good working relationship with a large firm, be it another manufacturer or exporter, it can concentrate its efforts on the improvement of production efficiency. This we shall discuss when we come to the subject of sub-contracting. Another way is to solicit the specialized services from public or private organizations at low cost. Productivity Centers in many developing countries are founded for this purpose, and Hong Kong is no exception. However, the relationship between the Hong Kong Productivity Centre and the small factories does not seem to be encouraging despite of its many activities. In our re-interview, 13 (out of a total of 30) said that they had never heard of it at all; 11 said that even though they had heard of it, but there was little impression. Only 2 claimed that they had contacts with it. When asked to express their opinion on the productivity Centre, an overwhelming majority of them had none.

The way the small factories react to changing production requirements also gives us some idea about their operation. In booming seasons, the majority of them tended to work overtime and hired more temporary workers; in slack seasons, they slowed down and hired less temporary help and few of them turned to laying off workers. The large factories presumably react in the

same way except that they had a much higher percentage of production workers (16, pp. 28-29) which allowed bigger adjustment in terms of employment. This was evidenced by the fact the larger factories did have higher turnover rates in their production workers (16, p. 42). The lower turnover rate of the small factories were accounted for by reasons such as closer personal relations, less rigid organizational structure and the general inter-changeability of the work force. In this respect, we have to reconsider the "flexibility" of the small factory which is so often claimed to be its advantage. In terms of capital overhead and internal organization, it may be quite true. But there seems to be an assymetry in its adjustment to changing production requirements. In times of prosperity, a small factory can adapt itself readily in the same way as its large counterpart, or perhaps even more so. It is in a period of low activities that it may face serious adjustment problems. Its low overhead in equipment might well be more than compensated by its disadvantage in having a more rigid "establishment".

In one of our reports (16, p. 33) we found that the large factories tended to have higher capacity use. As Hong Kong is an export-led economy, it is understandable that the large factories would be first in line to reap the benefit due to their established connections. But there is also another plausible explanation. Since the large factories have heavier capital equipment and make wider adjustments in their employment of production workers, they tend to report their use of capacity in relation to their capital investment. The small factories with less overheads, on the other hand, would tend to relate their capacity use to the utilization of their existing manpower, which shows less adjustment due to their more traditional mode of organization. Here the small factories may not be as flexible as they first appear. In normal times, their excess capacity may still be tolerable; but in times of adversity when they are especially hard hit, they will have a difficult time in making cost adjustments. The small factories acting as a buffer might add some

flexibility to the entire economy in a way that they are easy to set up and close down. But this is quite different from saying that the small factories are flexible in weathering a storm.

Low productivity of the small factories is reflected in low wages. In our survey of the average monthly wages of production workers (16, pp. 69-72), we found that those of the larger factories were approximately 18% higher than those of the small ones. On top of this, the larger one also had better working conditions and provided more benefits such as medical care, transportation, insurance and occasional entertainment (17, pp. 54-57).

All these give us a general picture of the small factories which are fested with serious problems. Low productivity, stagnant and especially vulnerable to external changes, so much so that they are very much occupied with their daily operation and have little time to plan for the future. Here we are not saying that they have not shared the benefit of Hong Kong's continuing economic growth; but their performance is no comparison to that of the larger ones. Since their establishment in Kwun Tong up to 1971, the value of production of about three quarters of the small factories had less than doubled, while that of over half of the larger ones had more than doubled, with more than one quarter of them chalking up increases in excess of 200%. The same pattern can be found in the relative increases in the employment of production workers; but the disparity was much less. This suggests that the productivity increase of the small factories had been much slower.

One more factor also affecting the production of the small factories is the housing shortage which is so acute in Hong Kong. Dwyer (5, 7) has lamented about the chaotic land-use pattern in the city where small factories are located in tenement buildings. This is the result of the lack of urban planning and general housing shortage. In Kwun Tong, the situation is somewhat better as it was planned with zoning. However, many of

the small factories were resettled there in low-cost government flatted factory buildings. No wonder that in our re-interview, 20 (out of 30) small factories were satisfied with the housing and rent situation. It would have been quite different if they had to pay the market price. Their dependence on low-cost housing is such that since their establishment, only one quarter of the small factories had increased their space, compared to one half of the larger ones which had been able to do so. Without low-cost housing, their problems would be much aggravated.

There is little doubt that the Hong Kong Productivity Centre has made efforts in arranging exhibitions, orienting factories to new techniques and providing technical consultancy. But we suspect how much of these are actually useful to the small factories. For one thing, the equipment which the small factories are interested in buying are not the same as the large factories; the type of technical information and advice they seek are also different. Moreover, the small factories need training in addition to mere consultancy. Therefore, what is needed is an agency which is created exclusively for this purpose. Naturally, the work of such an agency serving the needs of factories having less than 50 workers is much wider in scope and far more complicated, for in many aspects the larger factories can take care of themselves. The first important task of this agency is to convince the small factories that they must modernize and they can. For instance, a mere display of low-cost automation units would only leave the small manufacturers confused and soon be forgotten. As Groot (11, p. 97) put it, " ... we have to break the vicious circle where a lack of knowledge about the equipment does not create the demand that is necessary to get the equipment which in turn is required to get the knowledge". They must be induced to know that such equipment are well within their reach and the change-over can be a gradual one. Another area in which this agency can be of useful service is to provide technical information, testing and quality control and consultancy in general. In so doing, this agency

must keep clear in mind the special needs of this group, and thus it has to do considerable research to make sure that general principles are adaptable and applicable. Furthermore, all these guidance and consulting services must be accompanied by visits and in-service training for its own personnel in order to maximize feedbacks. For especially in the initial stage, the learning process is as important to the agency itself as to the small factories. As a result, efforts must first be selective and concentrated on few factories as a testing ground for its own program; intensive care will also receive better response from the factories.

Rationalization by consolidation of this sector can also help improve efficiency, but much more problems are involved. A frontal attack by an open promotion of mergers will most probably fall into deaf ears. We do have evidence that Hong Kong is still a strong bastion of rugged individualism: an overwhelming proportion of the small factories in our re-interview were neither interested in taking in partners nor being absorbed. They would rather stay the way they were or even engage in hit-and-run operations than commit themselves permanently in a bigger joint venture. The rationalization of this sector must be indirect and more subtle.

One thing which can be done is to create a physical environment favorable to more cooperation among factories of all types and sizes. Here we are especially referring to the development planning of new industrial areas. More flatted low-cost factory building should be built for small factories in these areas in order to foster more complementarity and interdependence. This would not only make it much easier for the government to conduct studies and carry out its training and consulting programs, but also would facilitate the spreading of information and the use of common facilities. In addition, this convenient environment will foster the development of a sense of common interest in solving problems collectively, such as joint marketing and purchase of raw materials.

A further step is to promote sub-contracting between large and small factories. This we shall discuss in the following section. But it should be noted that it is more than just a marketing relationship. With sub-contracting, the small factories will derive much benefit in production efficiency through specialization.

3. Marketing

Our analysis of the nature of Kwun Tong area showed that it was far from being a self-contained community -- there was relatively little interdependence among the factories there. Even if we consider the entire Hong Kong economy, it is also true that the majority of factories are more related to overseas than domestic markets. They also depended heavily on foreign suppliers for their equipment, intermediate products and raw materials (16, pp. 29-30, 55-59). To a considerable extent, Hong Kong is an international point of manufacture, where sorts of inputs are imported, processed into manufactured goods, and then exported to foreign markets. This is the very nature of Hong Kong's economic existence. With respect to the small factories, they were somewhat less export-oriented (16, pp. 24-25). This is understandable because many of them were catering to domestic needs. However, it is interesting to find that for those small factories which were export-oriented, they indulged in direct exporting, instead of through exporters, about as much as other size groups (16, pp. 25-26). Either they were actively doing their own trading, or the larger ones depended just about as much on the export merchants.

Relatively little is known about the overall pattern of the export merchants in Hong Kong, especially so with the small ones which presumably serve the small factories. It is the general impression that this sector of small traders is about the same individualistic as the sector of small factories. A person with some capital, having some knowledge of overseas markets through friends and relatives, or even his previous employer, hires a couple of clerks, may or may not have a regular office, has some connection with a couple of small manufacturers, and he is in the export business. In fact, Hong Kong is not short of one-man exporting firms. With much ingenuity and effort, they look for small markets throughout the world and shop around

for local manufacturers to fill such orders. Similar to the small factories, they eke out a marginal profit and are vulnerable to external changes. Needless to say, these traders involve only a relatively small amount of trading, but certainly contribute a great deal to the chaotic marketing pattern.

In our re-interview of the small factories, we found no clear pattern of their marketing channels. Export merchants, other manufacturers, direct local sales, direct exports and local distributors were all reported to be major outlets. On the question of how did they find their customers in the first place, there was a great variety of answers of similar importance ranging from regular overseas connections, agents, approached by customers, own market research efforts to the Trade Development Council. Opinions were also divided on the question whether they had regular cooperation with various types of buyers. All these add up to a very complicated picture of the overall marketing network. Given the highly individualistic nature of the market both on the supply and demand side, this is what we should expect. Even though there is no consensus among the small factories about the degree of competition, the overwhelming majority of them pointed out that competition came mainly within their own ranks and in the price rather than the quality of their products, so much so that more than half of them admitted that they kept their own secrets and had little to do with their peers.

Indeed the small factories are in very minute struggling for their survival. Many of them do have standing connections with their buyers and produce according to specification, yet their large number makes it necessary for them to resort to price-cutting in order to fend off competition. On the other hand, they also try to explore every possible avenue in shopping around for buyers as much as the buyers shopping around for them. Their clustering into certain new opportunities is also against their interest. It is a common scene in Hong Kong

that whenever there is demand for some new products which can be produced on a relatively small scale, many small factories will be flooding into their production. It does not take long for the market to saturate. Of course, there will always be a few which get in first and reap a handsome profit; but the rest will find it increasingly difficult to face up to the competition. If, on top of this, the industry is confronted by external adversities, such as reduced foreign demand or material shortage, many of them will face bankruptcy. In fact, the development of Hong Kong's industries is filled with such examples -- the rise and fall of the wigs industry is a classic one. As early as in 1962, when the Economist Intelligence Unit was preparing a report on the Industry in Hong Kong for the Federation of Hong Kong Industries, it had these to say (8, p. 9), "... the multiplicity of firms engaged in manufacturing and exporting, the tendency towards a limited view of management, the inadequate equipment and under-capitalisation of large parts of industry, the habit of waiting for the buyer to place his orders and the ceaseless struggle to attract the largest possible volume of trade, adds up to Hong Kong industry's most serious problem -- disorderly marketing. In these conditions the unhappily familiar tale of fierce internal competition, price-cutting, deterioration in quality, over-expansion and collapse is bound to be repeated time and again". Over the years, steps have been taken by larger factories in a number of industries to secure marketing in a more organized manner. But what the report says is still very true with respect to the small ones. In fact, when a large segment of the market is getting more organized, those who are left in the open will find life more difficult.

At the outset, we have pointed out that in the process of Hong Kong's further economic development, the small factories should become more complementary with the larger ones. This is so in their production as well as in their marketing practices. Complementarity can take two forms. One is in the provision of different kinds of products to cater for different markets.

It is in this that the small factories can fill the gap by producing goods and services which the large factories may not find it profitable. The other is in the cooperation and specialization in the process of producing the same kind of product. Our basic concern is with the complementarity of this type. We have shown that in their marketing the small factories can be described as disorderly, and at the same time they subject themselves to excessive competition within their own ranks, with so much duplicated efforts wasted struggling for marginal gains, inefficiency because of distraction from production matters, irregular input and output flows, and consequently a high rate of failure. In many instances, they are actually competing with instead of complementary to the larger ones. Hong Kong has come to the point where these basically irrational trading and marketing practices have to be changed. It is expensive to rely on the invisible hand which takes a high toll in eliminating many small factories and yet cannot prevent them from coming back a second time around just going through another cycle. What is needed is a more integrated industrial structure in which the small factories have a regular role to play instead of indulging themselves in hit-and-run activities.

Of course, either horizontal or vertical integration of factories can go a long way in the desired direction. More resources, finer specialization, better bargaining power, more stable relationships and less undue competition tend to strengthen their ability to promote growth and weather a storm. Unfortunately these seem to be too much for many small manufacturers to stomach. The least one can do is to promote collective actions in sales and purchases. The strengthening of sub-contracting relations is also a logical step.

An expert group of the ECAFE countries has given the definition of sub-contracting as follows (26, p. 51): "A sub-contracting relationship exists when a company (called a contractor) places an order with another company (called a sub-

contractor) for the production of parts, components, sub-assemblies or assemblies to be incorporated into a product to be sold by the contractor. Such orders may include the processing, transformation or finishing of materials or parts by the sub-contractor at the request of the contractor". On the surface of it, there is no lack of sub-contracting relationships in Hong Kong -- many small factories do carry on production according to the specification of larger factories and export merchants. To give it real substance, such relationships must be regular and long-standing, valued and honored by both sides, and as a final resort, obligations must be accountable by law. It is under these conditions that a good working relationship can develop beyond contracted purchases into a genuine cooperation between parties concerned.

The manufacturing industries of Japan, which have developed an elaborate system of sub-contracting, have much valuable experience to share with the developing countries. In that system, the majority of the sub-contractors are "captive firms" which sell nearly all of their products to their "mother" firms. It might not be feasible for others to follow exactly the Japanese pattern. But as Vepa has pointed out (27, p. 74), "There is no doubt, however, that at an early stage of development, sub-contracting helps industry to grow rapidly and to produce goods at a lower cost than is otherwise possible. For this reason, a widespread, but judicious, adoption of such a system in developing countries is likely to produce immense benefits to the growth of small industries".

There are many benefits a small factory can derive from sub-contracting. First of all, a steady off-take of output by its contractor(s) lessens the pressure from fear of competition, especially in price-cutting. It has a better chance of survival. Second, with a standing relationship, many things which the small factory is in a disadvantage in doing can be delegated to its contractor. These include marketing and market research,

bulk purchase and regular supply of materials, product design and other information in general which the contractor can better handle. Third, a good working relation goes beyond contracted purchases. The contractor can provide much valuable guidance in technical know-how, product lines, quality inspection and control as well as management efficiency. And finally, the contractor can also render useful assistance in financing such as trade credit and regularized payments. All these will save much time and effort of the small factory which can be better spent on realizing its comparative advantage through specialization. From the standpoint of the entire economy, the result will be less waste in duplicated efforts, better division of labor, a more stable market and generally higher efficiency.

It is conceivable that there is little immediate incentive on the part of the large factories to initiate such a move. The ever-changing scene of the small factories, inefficient management and the low quality of their products are the major causes for apprehension. On the other hand, the short-sightedness of the small manufacturers, their fear for being swallowed, the reluctance to abandon their independence and sheer individualism may prove equally fatal to the idea. However, we should not be too pessimistic about this. In fact, a considerable amount of sub-contracting is already taking place in Hong Kong. If we accept the idea that it is a necessary step for Hong Kong's economic growth and in the long run it is in the interest of all parties concerned, we must find ways to promote its development on a more organized and regular basis.

We have mentioned earlier that in order to have real substance a system of sub-contracting must imply legal obligations; but too much legislation and formalities may be a barrier for the idea to be accepted in the first place. The least we can do is to set up a public body which can bring all interested parties together for the purpose of exploring sub-contracting possibilities. This body should not limit its functions to that of a clearing-house. In addition to publicizing and information-

providing, it should also be able to provide consultancy, especially to the small factories which presumably will have lots of questions to ask and show signs of reservation at the beginning. Once the ice is broken, discussions can be left to the parties concerned until more concrete proposals are being formulated. Then, it can render services in the more formal aspects of sub-contracting, such as advising on sub-contracting schemes, formalities of contracts and other relevant legal matters. There must also be provisions to guard against the non-fulfilment of contracts and other abuses so that both parties can be assured of deliveries and payments on schedule, no unreasonable rejects, quality and price as contracted and other protections they have sought in the finalization of the contract. Of course, all these should not be imposed upon the parties concerned by legislation. But rather it is the contracting parties which should arrive at mutually agreeable terms and the job of this public body is to see to it that they are carried out.

A discussion on the marketing problems of the small factories is not complete without mentioning the trading sector, which has the same basic characteristics. We have to admit that an active trading sector has much to contribute to the small factories. By specializing in marketing, it could help arrange contacts with buyers, exhibitions, and work as a buffer by carrying stocks. It is unfortunate that the small exporters in Hong Kong, which presumably deal heavily with the small factories, are not performing these functions satisfactorily. Instead, they behave in more or less the same manner as the latter only adding more to the already unorganized marketing structure. The rationalization of the sector of small traders may require a separate study. It suffices to say here that a better integration of the small industry sector with the rest of the economy by promoting sub-contracting relationships is also one way to force the small traders to rationalize.

On the promote of exports, the Trade Development Council has contributed much in seeking overseas markets, introducing Hong Kong products, arranging for the participation of exhibitions and strengthening trade negotiations. However, there is much doubt as to how much the small factories can directly benefit from these activities. In our re-interview 20 small factories (out of 28 answers) stated that they either had never heard of it or had no impression at all. Since the amount of exports by the small factories is relatively small and fragmented, and the activities of the Trade Development Council overseas are costly, it would seem to be too uneconomical for it to expand its activities into this area. It is much better to promote their exports through the larger firms by a better system of sub-contracting.

4. Finance

Up until recently, when merchant bankers and finance companies began to flourish, the financial scene in Hong Kong was completely dominated by commercial banks which had over a century's history of development. The Hong Kong Stock Exchange was by and large dormant; shares of some well-established companies were traded but it was not utilized as a means to raise capital from the public. There was no industrial bank or anything close to it in nature. Thus, aside from internal source and other traditional means of small financing, the commercial banking sector was the source of finance for the Hong Kong's industries. In the late fifties, the increase in the number of banks and spread of branch banking had no doubt contributed a great deal to their development. This was made possible by the out-dated Banking Ordinance, which was then so lenient that there were neither capital nor reserve requirements and entirely no regulations governing the lending activities of the commercial banks. However, being what they were, the commercial banks were still limiting their operations in short and intermediate term loans. There was an expressed need for the establishment of an industrial bank to cater for the long term capital requirements of the industrial sector.

The Chinese Manufacturers' Association had long been a champion of this idea. Its outcry had prompted the government to appoint an Industrial Bank Committee in 1959-1960, which only advised the government that there was no such need at all. The banking crisis in the early sixties resulted in an amended Banking Ordinance which, among other things, imposed upon the commercial banks a minimum requirement of a 25% liquid assets to total deposits ratio. Naturally, this compulsory liquidity ratio only made the banks more reluctant to make long term commitments. The plea for an industrial bank was revived and later took a change in its direction. This time the emphasis was on the small factories which were believed to have special

difficulties in financing. They were unable to put up collaterals in order to obtain bank financing so that they were subject to the exploits of alternative channels which were either expensive or very limited in scale, and they were normally the immediate victims of a credit squeeze. The controversy continued in public and private quarters, and finally with some reluctance the government handed the matter to the Trade and Industry Advisory Board for a study in 1968. The Department of Commerce and Industry conducted two sample surveys, one among factories with less than 100 employees and the other with 100-200 employees. The results were quite astonishing. The bulk of the capital investment needed to start the factories came from the owners themselves, some were loans from friends and relatives, private money-lenders and hire-purchase firms, but little was from banks because of the lack of adequate collateral. Neither were the loans from private channels extraordinarily expensive, nor the small factories in general found financing to be a major constraint to their growth plans.

In our survey, high percentages of factories of all sizes agreed that there was the need for an industrial bank financed by public funds (16, p. 54). In view of the fact that more than three quarters of the small factories were under single or family proprietorship, we should expect that they would have a more urgent need for such an institution because of their limited capability. But the evidence was not so. Even though a government industrial bank might provide additional finance, the small factories were not particularly enthusiastic about it (16, pp. 54-55). They might be sceptical about getting the government involved in their business; or, limited by their horizon and having relative less capital investment requirements, they were satisfied with what they were and had little plans for expansion in the future. This also explains why the small factories are sometimes more interested in obtaining working capital which is more urgent as far as immediate needs are concerned. Compared to the larger factories, the small ones did depend more on themselves in financing capital expenditures

(16, p. 53). It is either because bank loans are difficult to come by, or the small factories do have ingenious ways to scarp up enough funds for their needs.

Our re-interview only confirmed such results. Out of 34 answers,² the original capital of 16 factories were from the owners and their family members, 10 from friends and partners, and 7 from relatives. Only one stated the bank as a source of capital. The banking sector did better in providing working capital. In a total of 39 answers, friends and relatives were stated as sources by 13, the owner and his family by 11, and banks by 9. The rest mentioned trade credits and other channels. A hypothetical question was raised: where would the capital come from if they were to expand? Close to one half (12 out of 27) had no idea -- they said they would consider it only when the time came. However, 6 thought they would get finance from the banks and 7 mentioned their own savings, friends and relatives.

In general, the financing problem of the small factories can be summarized as follows:

First, as far as fixed capital investments are concerned, the small factories have to rely heavily upon themselves. They may also get financial assistance from friends and relatives, but little from the banks. In fact, this is a major characteristic of small business units -- they plough back their profits heavily and rely very much on personal connections. The fact that they have little financing from banks reflects either they are unable to offer collateral which proper banking practice requires, or their capital needs are sufficiently provided by conventional means. Difficulties arise only when they want to expand beyond the capability of such means.

² The factories were asked to give up to two answers so that the total number of answers is larger than the number of responding factories.

Second, with a well-established banking system in Hong Kong and ever expanding banking services, the small factories do have much access to banks as an important source of working capital. For many of them, loans and advances from banks have become an accustomed business practice. However they will be the first victims of a credit squeeze, with credit lines reduced, loans recalled or not renewed.

And third, for both long and short term loans it seems the availability of credit is more of a problem than cost to the small factories. Loan rates paid to private money-lenders may be somewhat higher than the going rate of banks; those to friends and relatives would probably be lower, if any. But it is the availability of credit in times of need that makes a big difference. The current outcry for working capital provided by government sources well demonstrates their difficulties when faced with an exceptionally tight money market. Again, like in production and marketing, this financial plight is just another aspect of the vulnerability of these small factories upon the impact of adverse conditions.

Based on the surveys of the Commerce and Industry Department, which found an apparent lack of need for government finance, the Trade and Industry Advisory Board still considered that there might be a case for government financing of equipment. A Loans for Small Industry Scheme was approved and became effective in July 1972. In this Scheme, any manufacturing enterprise employing less than 200 workers and with the proprietor's investment amounting to less than \$600,000 is qualified to apply for a loan for machinery purchases. The size of loans will normally range from \$50,000 to \$250,000 with an interest of 2% above the prime lending rate of banks on the reduced balance of loans. In fact, it is the banks which have to do the actual lending, while the government only underwrites the Scheme with \$30 million and carries 50% of the risk of every loan granted. In applying, the small factory has to submit to its bank, provided the latter

has joined the Scheme, audited balance sheets and profit and loss accounts for three previous years. No collateral is required when a loan is granted, and screening is performed by the Hong Kong Productivity Centre with a fee of \$1,000.

It was in August of the same year we conducted our re-interview. When asked about their opinion on this Scheme, 13 out of 30 said that they had not heard of it, another 14 expressed no interest, and 3 thought that they would apply. They were also asked to give comments on this Scheme, with 17 of them having none to make. For those who did have specific comments, 6 pointed out that the process was too cumbersome, 3 thought that probably they would not qualify, and 1 considered the \$1,000 fee too expensive.

About a year and a half since the first implementation of this Scheme, it was found that there had been altogether only 9 applications of which 6 were approved with total loans amounting to less than \$1 million. It should be noted that under this Scheme the definition of a small factory is one with less than 200 workers, which is substantially broader than the one we use. By its definition, more than 80% of all the registered or recorded factories in Hong Kong are qualified to apply.

The poor response is regrettable as well as puzzling. It could be attributed to a number of reasons. First of all, the requirement of three years' financial records immediately disqualifies many of the small factories simply because they do not keep their accounting records systematically. Moreover, the screening fee of \$1,000, which is not returnable if the proposal is rejected, is not only a burden but also a risk to the would-be borrowers. Even though it could be said that the report itself is of some use, it is still difficult to convince the small manufacturers its worth. Furthermore, interest charges under this Scheme are not particularly attractive. Many of the small factories could probably get alternative financing at similar cost. In their efforts to promote the sales of machinery,

the hire-purchase firms also provide credit schemes and other services with a lot less questions asked. In short, the poor response to this Scheme is due to the fact that those who are qualified may not need it, and those who may need it are not qualified. It has also been claimed that what the small factories really need is working capital rather than term loans.

It was in November 1973 that the Scheme was revised in order to widen its scope and make it more attractive. The maximum requirement on the proprietor's investment was raised to \$1 million, the minimum loan amount was lowered to \$30,000, the screening fee was reduced to \$500 for loans from \$30,000 to \$50,000, and only one year's audited financial statements were required instead of three. It is still too early to tell what marginal effects will result from these revisions. Davenport (4, pp. 7-8) has pointed out the poor results of most similar programs due to a number of reasons -- they are hastily conceived, allowing too limited financing, fested with administrative delays, burdensome qualifications, and terms ill-adapted to needs. Presumably, a lot of these can be equally applied here.

However, the performance of such a scheme, especially in its experimental stage, cannot be measured merely by the number of loans approved. For this can be achieved by simply watering down its requirements. What is more essential is to establish the fact that it can make important contributions to the modernization of small factories and is not merely another source of ordinary business financing. In the process, the administrative organ should also take advantage of its practical experience to train more of its personnel which can be put to fruitful use for more factories in the longer run. For it was found in an international study by the Asian Productivity Organization (see 9) that for such programs the major problem in common was not one of capital shortage but that of a bottleneck in administrative manpower.

The major reason for setting up such programs in so many developing countries is that their small industries are by and large excluded from the modern financial sector. In Hong Kong the problem is not so acute, especially for those factories having close to 200 workers. As far as the present Scheme is concerned, they are in a much better position to get qualified -- they do have the ability to submit up-to-standard proposals and financial statements. But at the same time they also have better access to alternative channels of financing. The government Scheme works only via the commercial banks, with which these factories would most probably prefer to deal directly because of connections already established and less additional procedural formalities. The efforts of this Scheme, then, should be concentrated on the lower end -- the genuinely small factories. Even these factories, we have noted, have quite adequate means of internal finance, and they are not excluded by hire-purchase schemes provided by the private sector. If the government Scheme is to have special contributions to make, it must have something additional to offer -- the kind of services along with financing which the private sector does not provide. Since at present the Productivity Centre has already been delegated with the responsibility of screening applications, there are much more services it can render to the small factories within its capacity. It is more crucial to the success of this Scheme in providing additional services than in somewhat revising its requirements.

There is little doubt that in the initial stage knowledge and experience would be lacking in screening proposals. Officials will have as much information and experience to acquire as advice to give on the technological feasibility of proposals, sales prospects as well as on financial matters. The job of the screening team should not be limited to approving or rejecting proposals; in the longer run, it should build up information and contact, and identify small manufacturers who have the incentive and capacity for modernization. Once a good working relation is established, there should be provisions of technical, management

and other advice along with financial assistance in a package in order to ensure the desired results. Even after the granting of a loan, follow-up actions in counselling should continue to be forthcoming. The demonstration of some successful examples will help disperse the scepticism about this Scheme; it will also bring forth the initiative for modernization of the small manufacturers and inspire their full cooperation.

Therefore, it is imminent that the screening team must enlist the support of other services. Or better still, there should be an exclusive unit coordinating all its efforts in servicing the small factories.

5. Management

In the previous sections we have discussed the production, marketing and financial problems facing the small factories and suggested certain solutions. The prerequisite for the success of these measures is that the management of these factories must be convinced of their usefulness. They must be induced to aspire for modernization as well as educated on its many aspects, so that all kinds of assistance can be fruitfully taken advantage of in a coordinated manner. In a small factory, the owner-manager is the management; he is the central figure coordinating all matters. His strategic role, thus, must be fully recognized by development policies.

The importance of management for small factories is borne out by the experience in Indonesia, which found its program for the mechanization of small factories unsatisfactory after some years of experimentation and reported that (22, p. 1) "Management seems to be the main prerequisite for a favorable implementation of the mechanization programme. Without proper managerial skills upon the side of the entrepreneurs, we cannot see any useful purpose in continuing this mechanization programme, even with all sorts of government protection and help". Some economic historians (see for example Cameron, 2) also hold that at an earlier stage of economic development capital accumulation and a more efficient use of the existing productive capacity are of equal importance in their contribution to growth. At the present stage, Hong Kong does not seem to suffer from a lack of entrepreneurs. The proliferation of small firms in almost every line of economic activity bears an unmistakable witness. But the sheer number of entrepreneurs, though a valuable asset, may not bring forth exactly what is desirable. We have alluded to the deplorable results of too much duplicated efforts and excessive competition. What is more important is the quality of such entrepreneurial endeavor. As Hong Kong must now move in

the direction of improved production efficiency and better organized marketing, the improvement in the quality of her entrepreneurship becomes all the more important.

In our survey, we found that more than three quarters of the small factories were under single or family proprietorship; needless to say an overwhelming majority of them were owned by the Chinese (17, pp. 3-6). About the owners, most of them had somewhere between a primary and secondary school formal education (17, pp. 9-11). In our re-interview of 30 factories, we also found that more than two-thirds of the owners were in their thirties or forties. Presumably, most of them came from mainland China in one time or another; after learning their trade and saving some money, they became first-generation entrepreneurs mainly through hard work and experience.

In our analysis of the management and organization of the factories in Kwun Tong (17), we found the small ones constitute quite a distinctive group. With respect to organization, they were much simpler in structure vertically and horizontally compared to the larger ones. Their functional structure was also somewhat peculiar in that the "administrative personnel" constituted a substantially higher percentage in its total employment than their larger counterparts. This suggests that the lack of internal specialization in these factories started all the way from the top administrative level. Our re-interview also confirmed this. The administrative personnel, including the owner, the manager, department chiefs, etc., had also to work as clerks, technicians, foremen, buyers, salesmen and workmen. Rarely were these people engaged exclusively in administrative jobs. The same, of course, was true for other categories of workers. Being the size of what they were, it is just hard to imagine how much they could profitably gain from reorganization along the lines of the large factories without being impractical. With the lack of internal specialization, a good top-level management becomes even more indispensable.

Personal contacts played a very important role in the management of the small factories. The owner-managers relied very much on their own in making decisions; even in their absence, they would leave the authority to their kinfolks or some direct appointees. In other words, many of these small factories were genuinely family business. The administrative personnel was not formally structured as much an apparatus which would assume authority in the absence of the owners. Personal relations was also an important factor in the recruitment of various categories of workers. Compared to the larger factories, the small ones relied considerably less on the market mechanism. Instead, a high percentage of them resorted to the recommendation of friends and relatives for hiring administrative, clerical as well as other workers. It was also found that in many other aspects, the small factories operated in an informal manner and depended primarily on direct personal communications, and there were little prescribed ways in tackling problems systematically.

In fact, all these are very much expected -- the small factories do constitute the "traditional" segment of various industries. The modernization of this sector will call for a gradual change of these ways and attitudes. However, we should not be too hasty to brand all these as irrational. On the contrary, the existence of many elements of traditionalism in small factories have great practical importance. For one thing, simple organization and close personal contacts are natural results of smallness in size. Moreover, the lack of internal division of labor stems from the fact that their size limits their feasible degree of specialization. Even close family or kinship ties have their economic rationale. In a place like Hong Kong, highly individualistic and competitive, with so many people wanting to get independently established and a piece of the action, loyalty without personal ascription has become a rare commodity. Any small factory owner who disregards this might find himself making an expensive mistake. In fact, this is not confined to the small factories. We found that some

large factories, especially those owned by the Chinese, also resorted to similar means to safeguard the interest of the owners (see 17, pp. 47-48). Therefore the decision in striking a balance in these various aspects must ultimately rest upon practical relevance.

Let us now come back to the point that since the owner-manager of a small factory personified its management, the modernization of the factory must start with the modernization of this owner-manager, i.e., his ways, attitudes, ability and outlook. A management training program should give some knowledge of all aspects of management as a start in order to arouse the interest of the small industrialists. Conceivably, a program of this sort could consist of short courses of three categories. The first is a management course in a narrow sense which is somewhat like an introductory business course aiming at the exposure of modern business practices, basic management and organization principles and some general economic knowledge to the small manufacturers. The second category consists of a number of short courses, which could also be combined in one, on various specific problems facing the factory, such as finance, marketing, accounting and business law etc. All these are applied knowledge in various fields. Courses in the third category are even more specific in nature. They are courses dealing directly with the production problems of various industries, such as the introduction of new technical know-how, quality control, testing, packaging, plant lay-out and product design. In general, it may not be necessary for all these courses to be structured in a comprehensive study program. The needs of the small managers are varied. As Lomnický (15, pp. 69-74) has pointed out, some entrepreneurs are technically-minded so that what they need is an orientation to management techniques, whereas some entrepreneurs are commercially-minded so that they may need advice on technical matters. The main task is in orienting their attention to the right direction which so often these people themselves have no idea.

In Hong Kong, there is no lack of courses of all these various types. The Hong Kong Productivity Centre, the Hong Kong Management Association and the Extra-mural Studies Department of the two Universities etc. all have a wide range of courses from which an interested individual can choose. However, the following observations are worth making.

First, all these courses are offered separately and there is little coordination so that they can be presented in an integrated program of study.³ As a result, an interested individual may have to do a lot of shopping around and trying out in order to obtain what he needs.

Second, except those dealing directly with technical matters, most courses are taught by people with more academic orientations than practical experience. The lectures thus tend to presume a certain level of academic preparation which unfortunately many small manufacturers are lacking. More specifically, many management courses are actually intended for junior executives of big firms; they are theory-oriented and have little relevance for the small factories.

Third, there is little or no counselling in the entire process of this type of education. Before enrolling in a certain course, the student has no way of knowing whether this is really what he needs except what he reads in the short course descriptions. In the course of his study, he has no idea of what other program he could benefit from in connection with his present doing. Furthermore, there is little communication based on which the program designers can offer courses better tailored to the needs of the small factories. Under these conditions,

³ At the time of writing, the Department of Extra-mural Studies at the Chinese University of Hong Kong has started a program for basic business administration with 12 integrated short courses, in collaboration with the Commercial Radio of Hong Kong.

an owner-manager of a small factory might be hard put to select a suitable course of study for his own improvement. If it is desired to modernize the small factories through management training, three lines of action can be taken.

At the very minimum, a central counselling service can be set up for the purpose of giving out information and publicizing the available courses which are now offered by various organizations in a scattered manner. In addition, it can also advise the interested individuals on the requirements and contents of these courses.

One step further, this counselling service can seek co-ordination among these organizations in designing courses and programs especially suitable for the needs of the small manufacturers. In so doing, special attention should be paid to the background and orientation of these people so that these courses are prepared at an appropriate level and practical enough for them to find actual applications.

Finally, this counselling service itself, or in connection with some other organization, can work out an integrated program which consists of a series of short courses on the various aspects of management including production, marketing, finance and others. Conceivably, this program should not be confined to lecture instructions. At the beginning, it has to be a pilot project limited to a manageable number of trainees with genuine interest and active participation. With a relatively small group, it is much easier to test out teaching materials, encourage the exchange of ideas through group discussion, use case studies to demonstrate the practicability of basic principles and in general promote a better working relationship. It is also easier to invite guest speakers, hold panel discussions and plan visits. Based on the experience of this pilot group, this program can be expanded to include more would-be modern small manufacturers. Like financial assistance, the demonstration of successful examples will inspire enthusiasm and better use of these services.

6. Summary and Conclusions

To a great extent, the successful industrialization of Hong Kong in the past twenty years is due to her active entrepreneurship. Even though at the very beginning there were already some large business concerns, few of them were industrial in nature. The rapid transformation of an entrepot into an industrial city must have been brought about by advances on a broad front. In every line of economic activity the individual could set out for a venture, there seemed to be an unlimited supply of initiatives from the small entrepreneurs. It was, indeed, a classic example of the Schumpeterian world. In this colorful history of industrial development, the process of the survival of the fittest, many small manufacturers did have great achievements. There is little doubt that their contribution to Hong Kong's economic growth has been very significant.

As far as the scattered activities of the small entrepreneurs are concerned, the general pattern continues to be true. Hordes of small manufacturers are still flooding and clustering into industries where there seem to have a good opportunity at the time. This pattern of behavior certainly leaves no feasible avenue unexplored, but it is not without its misgivings. After some twenty years' of development, there are much more well-established large firms than before. In the manufacturing industries, even though small factories dominate in number, the large factories are of overwhelming importance in terms of employment, output and exports. These large factories are modern and efficient, have well-established connections here and abroad, and are in a much better position to weather a storm. With a large portion of the market already secured, the small factories can only mop up what is left. Competition is tense within their ranks. In good times, they may still be successful in carving off fragments in the market; it is in times of adversity that the real problem is revealed. Their high rate of failure shows deplorably so much of the duplicated ingenuity and efforts have gone to waste.

On top of this, they are also faced with the emerging change of Hong Kong's comparative advantage. Cheap labor, which was once an asset so valuable to their existence, has begun to vanish. The economic development of other regions in the world with cheaper labor, notably South Korea and Taiwan, has made their lot even more difficult. Needless to say, this will only aggravate in the years to come. Looking forward, it is necessary for Hong Kong's industries to move into products of higher quality and more capital-intensive categories. With their superior know-how, financial resources and bargaining power, the large factories are able to make the necessary adjustments, but the small ones are just not equipped to do so. If this process is allowed to take its natural course, we can foresee a growing disparity between the large and small factories. Inasmuch as the economy requires complementarity among factories of all sizes and kinds, this development will have undesirable effects on overall economic efficiency. It can be argued that because Hong Kong is an industrial city and judging from past experience the market mechanism can be depended upon to weed out the inefficient ones. Unfortunately, this process is slow and painful, and usually resulting in heavy private and social losses. This kind of experience is not unfamiliar in Hong Kong; in the industrial sector alone, it has happened time and again. We need more positive attitude and policies.

There is no doubt that the small factories must be modernized. A growing economy needs a sector of modern small factories to provide modern goods and services, some of which the large factories cannot efficiently produce for reasons of scale and locality. This is complementarity in catering to various needs. In addition, the modernized small factories can supply better and cheaper outputs which are used as inputs for the large factories. The development of this kind of complementarity will in turn foster the process of modernization itself as both the large and small ones can benefit from taking fully their comparative advantage. In view of the current status of the small factories

in Hong Kong, their transformation into modern ones and fuller integration with the modern sector are of great importance to Hong Kong's economic future.

It is unfortunate that so many small factories seem to be unaware of their precarious situation. Other surveys as well as ours have shown that many of them were seemingly satisfied with what they were and not enthusiastic about changes. We should not be hasty to take this as a sign of no problem. Rather, they were so busy occupied with their hand-to-mouth operations that they had little plans for the future. They lamented for assistance when deep-rooted difficulties materialized, but their problems were so complicated that piecemeal assistances were no solutions at all. What they really need are better coordinated services which will have mutually reinforcing effects on modernization.

Staley and Morse (21, pp. 352-353) have coined this idea as the Principle of Combinations and Interactions which says "... the productiveness of small manufacturing plants ... depends on a combination of interacting factors. If a development program improves only one of these factors, the results may be quite meagre, perhaps not worth the effort and expense. To improve a properly selected combination of factors may, on the other hand, prove highly effective. The yield, in terms of the development of the country, may then be much more than the cost". As far as specialists services go, there seems to be a sufficient supply in Hong Kong. Various official and semi-official bodies do provide courses and services in production, marketing, finance and management. But so many of the small manufacturers are ignorant or not interested either because these services are not designed to cater to their special needs or provided in such a way that it is doubtful whether individually they can have much real contributions to make.

Thus, to deal with the problems confronting the small factories, there must be more coordination of efforts. The best thing to do is to create a public body exclusively for this purpose. It should be understood at the start that it is not a "relief agency". For even though relief operations can help the small factories in overcoming their short-term problems, they might promote further proliferation which only compounds such problems in the longer run. The objective of this public body is to foster modernization and transformation as required by economic development.

For convenience, let us call this the Small Industry Division under the Commerce and Industry Department. Conceivably, there are three major functions to be performed by this Division. First of all and for its own purposes, this Division should have a research unit to conduct comprehensive surveys and studies on the various aspects of the sector of small factories, especially with respect to their present and future role in Hong Kong's economic structure. Based on these findings, the Division can then formulate programs and projects within the context of a proper perspective. The second job of this Division is the coordination of the existing assistance available to the small factories. It is in this that the Division can work with the other official and semi-official bodies in offering training programs, designing courses, promoting cooperation, providing technical service and financial assistance to the small manufacturers. In addition to providing information and counselling on the availability of these services, the Division should not refrain from embarking on projects of its own if they are lacking. This, of course, means that this Division should have a number of specialist units on technical management, marketing, and financial matters, which do not limit themselves to research activities. To go one step further, this Division could pioneer on certain projects focussing on factories. At the experimental stage, the number of factories involved is necessarily small, and in fact this is

only a logical extension of what is already available. The Productivity Centre is currently performing the task of screening and reporting for the Government Loans Scheme; it is also a consultant agency on technical matters. The Division should enlist such expertise for its own operation, or perhaps even absorb into its own structure the section of the Productivity Centre which deals exclusively with the small factories. Starting with the approval of a loan, for instance, follow-up actions and other supplementary services should be forthcoming in order to maximize potential gains. From the standpoint of the Division, intensive care for concrete cases is the best way to test and reassess all its programs as well as in training its personnel. It will also inspire the cooperation and confidence of the participating small manufacturers in these services. On the other hand, the concerted efforts of financial assistance, technical advice, management training and other relevant activities will assure a much higher chance of success. It is only through the demonstration of successful examples that more initiatives can be encouraged to participate and efforts be channelled in the right direction so that the contribution of the small factories can be maximized in Hong Kong's further development.

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