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The Growth of Manufacturing and Services in Hong Kong

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On a Widespread Misperception

In the past decade, service industries have grown rapidly in Hong Kong as a result of the globalization of economic activity, rapid economic growth and integration of the Asia-Pacific region, and the opening of China.

In the decade between 1983 and 1993, the share of service sector employment in Hong Kong grew from 55 percent to 77.5 percent, while the share of manufacturing employment fell from 41 percent to 19.7 percent. The share of the service sector in the GDP grew from 62.3 percent to 78.1 percent, and the share of the manufacturing sector in the GDP fell from 23 percent to 11.2 percent. This increase in the share of service sector employment, and the corresponding decrease in the share of manufacturing employment, has led to the widespread perception that manufacturing in Hong Kong has declined.

A linear extrapolation of the employment trends of this decade implies that by the year 2003, all employment in Hong Kong will be in the service sector. Many observers have expressed alarm at such a prospect. They point out that de-industrialization or hollowing out will retard productivity and economic growth, increase the proportion of low-quality service jobs, and adversely effect income distribution. This disastrous scenario represents at best unfounded pessimism, and at worst faulty reasoning.

In response, two views have emerged. Proponents of the first view believe that a change in public policy from the present laissez faire approach is necessary in order to reverse the decline. Advocates of this course of action include those who believe that Hong Kong's future economic growth and competitiveness depend on a more aggressive industrial and technology policy than the one which is currently in place. The most vocal supporters include many industrialists and some academics. For somewhat different reasons, many labor groups, whose primary concern is to create employment opportunities for manufacturing workers, are also among the chorus of supporters.

Proponents of a second view believe that the transformation into a service economy is a natural outcome of market conditions that are not unique to Hong Kong. The service sector grows in almost every economy as it matures over time. In the long run, policies designed to arrest the decline of an economy's manufacturing sector are neither desirable nor practical. Furthermore, the shift in emphasis from manufacturing to service sector jobs has not resulted in unemployment in Hong Kong, rather, it has created a higher value-added economy.

Is Service Sector Productivity Growth Really Low?

The slow growth of measured productivity in an economy's service sector as compared with that in the manufacturing sector is a widely observed phenomenon. It is often looked upon as the source of many economic problems such as increasing inflation, growing unemployment, and rising income disparity. Although there is very little empirical support for any of these allegations, the perceptions nevertheless persist. Furthermore, they have contributed to an incomplete view of the rise of services and the decline of manufacturing, wherever this has taken place.

Part of the problem associated with the low measured rate of productivity growth in the service sector stems from the difficulty in properly capturing any improvements in the quality of service output. It is not clear to what extent the differential rates of productivity growth will remain if these measurement errors can be corrected.

The difference in productivity growth across sectors may be considered as nothing more than the corollary of two sets of related observations. First, economic growth rates have declined as economies become wealthier. On average, rich economies grow more slowly than poor ones; i.e., growth rates tend to converge. Second, over time, economic growth has resulted in a shift from manufacturing to services. If a slower rate of economic growth is a result of a slower rate of productivity growth, then the rate of growth of service sector productivity has to be lower than that for the manufacturing sector in order for this to happen. What we have observed is, therefore, an unremarkable phenomenon that need not be considered a problem. To the extent that we wish to consider it a problem, then, we should focus on raising overall economic productivity rather than promoting manufacturing per se.

It is significant that manufacturers in Hong Kong themselves are the first to admit that their business has not declined. For most of those who have expanded their production operations across the border, business has never been better. It is estimated that in China alone, Hong Kong manufacturers employ as many as 4 million workers. Contrary to common belief, service industries have not grown at the expense of manufacturing industries. The demise of the Hong Kong manufacturer is a statistical illusion.

Growth of Intermediate or Producer Services in Hong Kong

Much of the concern with the so-called decline of manufacturing in Hong Kong stems from the failure to appreciate the role of the service sector in raising productivity in the manufacturing sector. In Hong Kong, the growth of the service sector is entirely due to the

growth of intermediate or producer services. These services support our manufacturing industries. This unique feature of the service economy contributes significantly to the dynamism of Hong Kong.

The most important feature of Hong Kong's service sector growth is that all of it is in the area of intermediate or producer services. An intermediate or producer service is used as an input into the production of other goods and services. It is distinguished from consumption services in that it is not directly consumed by the consumer. To differentiate between final and intermediate or producer services, using existing data is not a trivial matter. We have to make use of both product-based and expenditure-based estimates of GDP.

We start with a simple taxonomy based on a mixture of the categories of the product and expenditure-based GDP. Table 1 first divides output into a goods-producing sector (section I) and a service-producing sector (section IIA) using product-based GDP estimates. The service-producing sector can be divided in a different way into consumption, intermediate or producer, and government services (section IIB), according to expenditure-based GDP estimates.

Consumption services are all those services that are used as final consumption and are obtained from the expenditure-based estimates of the GDP. In Hong Kong, the share of consumption services in the GDP declined from 29.5 percent in 1983 to 28.7 percent in 1993 (section IIB of Table 1). In contrast, during this period the share of final consumption services in Singapore, South Korea, Taiwan, Japan, and the U.S. all rose somewhat. The increase is especially pronounced in the case of Taiwan.

During the same period, the share of intermediate or producer services in Hong Kong's GDP rose spectacularly, from 27.2 percent to 42.8 percent (section IIB of Table 1). While the growth of services in general and of intermediate or producer services in particular is evident in all the other economies listed in the table, Hong Kong presents a striking case of rapid service sector growth that is due entirely to the existence of intermediate or producer services.

What are these intermediate or producer services which have expanded so quickly in the past decade? The rapidly expanding areas in the service producing sector are imports and exports, finance, insurance, business, and real estate services (section IIA of Table 1). The combined share of these services in the GDP rose from 28.6 percent in 1983 to 43.4 percent in 1993.

The growth of intermediate or producer services in Hong Kong is closely linked to (1) the expansion of goods-producing activities of Hong Kong manufacturing firms across the border into south China, and (2) the growing integration of trade and investment-related activities within the Pacific region. These links result in two effects.

First, the increase in demand for intermediate or producer services is derived from the growing demand for goods that are either exported, re-exported, or imported through Hong Kong. These autonomous changes propel the service economy forward. There are, of course, further interactions whereby increases in the demand for some services will generate increases in the demand for intermediate or producer goods, and the process feeds on itself.

The second effect stems from the role of intermediate or producer service inputs as a dynamic force driving the production of goods. According to this view, intermediate or producer service industries are the vehicle by which new technology is introduced into the goods-production process. This new technology can lead to the lowering of production costs, the development of improved and new products, and new and more efficient methods for the distribution of goods. These are service inputs that respond to an increased demand for goods, and in turn contribute to and change the mix of the demand for goods.

A large proportion of all services is produced by bankers, accountants, engineers, and scientists whose output is used by firms in producing goods. In addition, there are the transportation and distribution services without which there could only be self-sufficiency in production and consumption. Finally, it is possible to interpret the production of education and medical services as inputs into the creation and maintenance of society's stock of human and health capital. Without this expenditure, the productivity of any population would fall quickly.

Intermediate or Producer Services and Economic Growth

In free market economies, consumer satisfaction is continuously increased through the introduction of better and cheaper products. Entrepreneurial firms draw heavily on highly educated workers. They also develop and apply new technological and scientific knowledge. They sell advice and deliver innovative services to other firms. These firms in the service industries are the main vehicles through which the human and knowledge capital of society is produced, and through which it is introduced into the production process. Evidence of the greater educational attainment of service sector workers when compared with workers in the goods-producing sector supports this view.

Human capital is enhanced not only through investments in education and on-the-job training, but also through investments in health care, nutrition, and even the kind of moral and ethical standards which make for honest and reliable workers, and which create a willingness to work hard. Knowledge capital is all the scientific and engineering knowledge which permits the design of more efficient machinery and products. It also includes the knowledge which makes for the efficient organization of firms and society in general. Therefore, even if the measured rates of productivity growth of these intermediate or producer services are rather low, their existence is the reason that firms in the goods-producing sector can enjoy high rates of productivity growth.

Economists have long recognized that labor productivity is enhanced when the production process is reorganized and becomes more "roundabout," that is, when it includes more stages of production and employs an increasing number of intermediate or producer inputs. Labor and capital become more specialized as a result of "roundaboutness."

The growth of the service sector goes hand in hand with the appearance of more specialized firms producing a greater diversity of intermediate or producer services. In Hong Kong, the average number of persons engaged per establishment decreased by about 16.6 percent between 1983 and 1993. Decreasing firm size is consistent with greater specialization and increasing "roundaboutness". The decline is even more pronounced in the finance, insurance,

business, and real estate services sectors, where the number of persons engaged per establishment decreased by almost 30 percent during this period. The greater decline of the average establishment size in these sectors is a sign of enhanced economic efficiency and dynamism.

Specialization through the market has variously been called the process of “dehiving,” “unbundling,” “vertical disintegration,” and “contracting out.” The process is facilitated when the size of the market grows and the transactions costs of doing business through the market is reduced. The increasing complexity of business operations, the rising cost of monitoring the performance of employees in large organizations, the rapid rates of technological change in increasingly specialized activities, and the falling cost of information and communication in the marketplace have all contributed to this process.

Any close examination of the service sector in Hong Kong reveals that it is a highly heterogeneous industry with many firms working in different market niches. The rapid expansion of the service sector reflects a positive dynamic market process at work. Fear of low productivity following de-industrialization does not appear to be justified, especially in Hong Kong, because the expansion of our service sector has served to support the growth of our goods-producing industries. Hong Kong’s service economy developed, in response to market demands, to service the requirements of firms wishing to operate across borders, in different nations, and under different jurisdictions, in what is an increasingly integrated regional and global economy.

Given the important role of intermediate or producer services in the growth of productivity and international competitiveness, government roles in promoting services remain the classical ones of provision of infrastructure investment; maintaining a stable and transparent business environment; and, in the age of deregulation, liberalization, and privatization, exploring opportunities whereby economic efficiency can be further enhanced through a greater reliance on private initiative and a competitive market processes.

Table 1: Value-Added by Sectors

| Year | Hong Kong | | Singapore | | South Korea | |
|--|-----------|-------|-----------|-------|-------------|-------|
| | 1983 | 1993 | 1983 | 1993 | 1983 | 1992 |
| I. Goods Producing Sector | 32.46 | 18.68 | 40.02 | 36.61 | 54.50 | 53.30 |
| Agriculture & mining | 0.76 | 0.22 | 1.19 | 0.28 | 15.73 | 7.56 |
| Manufacturing | 22.95 | 11.15 | 25.22 | 27.53 | 28.24 | 33.77 |
| Construction, electricity & gas | 8.75 | 7.31 | 13.61 | 8.80 | 10.52 | 11.97 |
| IIA. Service Producing Sector (production based estimates) | 62.26 | 78.11 | 59.98 | 63.39 | 42.46 | 45.33 |
| Imports-exports | 10.95 | 17.54 | | | | |
| Wholesale, retail, restaurants & hotels | 9.50 | 9.54 | 17.45 | 17.79 | 12.17 | 12.25 |
| Transport, storage & communications | 8.20 | 9.52 | 12.80 | 14.44 | 7.56 | 8.74 |
| Finance, insurance, business services & real estate | 17.65 | 25.84 | 22.99 | 26.86 | 10.77 | 14.89 |
| Community & personal services | 10.38 | 9.09 | - | - | 3.75 | 4.31 |
| Government services | 5.58 | 6.62 | 6.74 | 4.30 | 8.21 | 5.14 |
| IIB. Service Producing Sector (expenditure based estimates) | 62.26 | 78.11 | 59.98 | 63.39 | 42.46 | 45.33 |
| Consumption services | 29.45 | 28.71 | 21.63 | 23.75 | 20.85 | 21.33 |
| Producer services | 27.23 | 42.78 | 31.61 | 35.34 | 13.41 | 18.86 |
| Government services | 5.58 | 6.62 | 6.74 | 4.30 | 8.21 | 5.14 |
| Overall Economy | 100 | 100 | 100 | 100 | 100 | 100 |
| | | | | | | |
| | Taiwan | | Japan | | U.S. | |
| Year | 1983 | 1993 | 1983 | 1993 | 1983 | 1992 |
| I. Goods Producing Sector | 51.32 | 42.71 | 43.84 | 42.37 | 29.72 | 29.77 |
| Agriculture & mining | 7.10 | 3.79 | 3.74 | 2.41 | 3.68 | 4.00 |
| Manufacturing | 36.43 | 31.08 | 29.05 | 26.80 | 18.79 | 18.58 |
| Construction, electricity & gas | 7.79 | 7.83 | 11.05 | 13.16 | 7.25 | 7.19 |
| IIA. Service Producing Sector (production based estimates) | 50.45 | 58.58 | 58.09 | 59.26 | 70.32 | 70.96 |
| Imports-exports | | | | | | |
| Wholesale, retail, restaurants & hotels | 12.93 | 15.51 | 14.91 | 12.53 | 16.08 | 17.55 |
| Transport, storage & communications | 6.29 | 6.33 | 6.17 | 6.31 | 6.04 | 6.79 |
| Finance, insurance, business services & real estate | 13.48 | 18.98 | 15.43 | 16.17 | 22.49 | 21.43 |
| Community & personal services | 5.23 | 6.69 | 13.05 | 16.36 | 12.52 | 13.46 |
| Government services | 12.52 | 10.81 | 8.53 | 7.90 | 13.19 | 11.73 |
| IIB. Service Producing Sector (expenditure based estimates) | 50.45 | 58.58 | 58.09 | 59.26 | 70.32 | 70.96 |
| Consumption services | 23.48 | 31.65 | 29.53 | 29.73 | 36.57 | 37.97 |

| | | | | | | |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Producer services | <i>14.45</i> | <i>16.13</i> | <i>20.03</i> | <i>21.63</i> | <i>20.56</i> | <i>21.26</i> |
| Government services | 12.52 | 10.81 | 8.53 | 7.90 | 13.19 | 11.73 |
| | | | | | | |
| Overall Economy | 100 | 100 | 100 | 100 | 100 | 100 |

Note: For Hong Kong and Japan, nominal shares were used because figures for real value-added were not available.