Hong Kong's Third Economic Transformation: What Are We Waiting for?

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Given the continued struggle between China and the US amid the coronavirus pandemic, coupled with the global trends of deglobalization and disintermediation, it is unlikely that Hong Kong could continue to reap handsome profits as a trade and financial intermediary for various countries.

As a matter of fact, Hong Kong's four pillar industries (financial services, tourism, trading and logistics, as well as professional and producer services) have seen their gradual decline in total employment since 2011. With the exception of financial services, the GDP shares of the other three pillar industries have also demonstrated a downwards trend in recent years. In face of the China-US trade and tech wars, the trading and logistics industry has borne the brunt of them while tourism, which has come to a grinding halt during the pandemic, will take more time to recover. Fortunately, the listing of heavyweight new-economy enterprises in Hong Kong has brought along considerable wealth, serving as a temporary buffer against the economic downturn. However, as the financial sector makes up less than 9% of the employed population, its role in solving the problems of post-epidemic unemployment and the ever-widening wealth gap will be minimal.

How to break the historical deadlock of the economy?

In my opinion, further to its transformation into a manufacturing-oriented economy in the 1960s, followed by another one in the 1990s towards the service domains of finance, real estate, logistics, etc., Hong Kong must now undergo a third economic transformation. It must not repeat the mistake of missing the opportunity by simply relying on tourism and real estate to drive recovery as happened in post-SARS 2003. It is advisable to turn crisis into opportunity by taking advantage of the global pandemic and the pressure of China-US friction. The third economic transformation calls for strong support by the SAR Government placing great emphasis on inclusive growth. The aim is to create diverse and upward-mobility employment opportunities as the core as well as sustainable development of knowledge-based industries.

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Regarding the specific strategies to adopt, I would like to make the following three suggestions.

1. Increasing R&D expenditure

The SAR Government must significantly raise its expenditure on research and development (R&D). As a developed economy, Hong Kong should be at the forefront of the new knowledge economies. However, R&D inputs by the SAR Government (and universities for that matter) have remained low at merely 0.73% of GDP in 2017. Hong Kong pales in comparison with most developed countries (e.g. the rate among OECD member countries is 2.4% on average) and is even lower than the average at 0.81% among countries in the Middle East and North Africa.

In the recent few years, the SAR Government seemed to have woken up to reality. As laid down in the 2017 Policy Address, the GDP share of R&D expenditure would go up to 1.5% (approximately HK\$45 billion) by 2022, which is encouraging indeed. However, the Government's R&D expenditure in 2019 still fell way short of the goal. Compared with the HK\$300 billion total worth of COVID-19 relief measures (including the HK\$71 billion of cash handouts), the HK\$45 billion R&D pledge as a long-term investment to achieve the goal of GDP share at 1.5% is only reasonable. In addition, the Monetary Authority, which is responsible for managing the Future Fund – amounting to more than HK\$200 billion from the public purse – should capitalize on the know-how of investment experts through more flexible direct investments in risk funds and angel funds in support of start-ups and scientific research. Should the above suggestions be put into practice, more R&D investors and talent will be attracted to be based in Hong Kong.

2. Resolving talent shortage

When it comes to Hong Kong's overall economic development, the catch is not so much capital as the shortage of the right talent.

So the second strategy is undoubtedly a multipronged approach by the Government to make up for the talent shortage. In fact, there is no lack of highly-qualified and experienced locals but since they are concentrated in the financial, medical, and higher-education sectors, huge amounts of knowledge and R&D outcomes remain to be released on to the market for the common good. One of the main causes is the

shortage of middle-level technicians and R&D professionals, resulting in a broken industry chain in a high-tech new economy.

This can be put down to a mismatch of supply and demand in the labour market. One of the main reasons why the most popular subjects at university are generally medicine, law, and business administration rather than science or engineering is that the labour market hardly offers relevant job opportunities to science or engineering graduates. While this, of course, is the chicken or the egg causality dilemma, I think it is necessary to first deal with the talent demand issue in order to resolve the talent supply issue. The Government may consider using the significantly-increased R&D expenditure to establish R&D institutions dedicated to developing or even manufacturing bio-tech and fintech products and technologies. At the same time, economic incentives can also be provided to lure new-economy enterprises from both the Mainland and overseas to set up subsidiaries in Hong Kong. This will help to effectively boost the demand for science-and-technology professionals and facilitate the city's economic transformation.

In addition, the University Grants Committee should gradually enhance the number and quality of graduate students at local tertiary institutions. Take, for example, The University of Hong Kong (HKU) Business School, where I work. With a full-time faculty of around 30 research / teaching staff members, the School only admits a maximum of eight doctoral students on an annual basis. Such a ratio is undesirable from both the talent-nurture and R&D perspectives. It is likely that other academic departments face a similar situation. Let's be clear that most doctoral students in Hong Kong come from the outside (Mainland China in particular). Given their globally-recognized professional knowledge, even if they cannot be absorbed by the local job market in the short term, they can choose to work at research institutions, enterprises, or universities in the Mainland or any other places around the world. Grooming doctoral students is also conducive to Hong Kong's economic transformation in future and the strengthening of its soft power. This goes to show the soundness of the overall increase in doctoral students.

As for the import of talent from abroad, the Government should optimize the existing scheme and expand its scale. For instance, from 2018 to March 2020, the Technology Talent Admission Scheme brought in only 321 people to work in Hong Kong, a far cry from the target at 1,000. This may have something to do with the unstable local economy in recent years but is probably also related to the fixed two-year employment

contract and the bundled requirement of hiring a local person. To attract overseas talent, I would like to suggest that the SAR Government should build senior R&D staff quarters for seasoned and specialized personnel. Given the limited number of the eligible candidates, the estimated impact on local housing will be minimal.

Also noteworthy is that, as shown by economic research over the years, the process from hi-tech R&D to production not only raises productivity and drives economic growth but also consolidates overall employment. Enrico Moretti, a professor of economics at the University of California, Berkeley, has found in his research that in the US, every job filled at a hi-tech company will create five new jobs, covering highend service industries and other old-economy industries. In other words, hi-tech transformation is more conducive to achieving inclusive economic growth.

3. Reindustrialization of Hong Kong

The third strategy is for Hong Kong to reindustrialize so as to bring socially-upward-mobile and diverse employment opportunities for young people as well as to forge a sound scientific research and start-up ecosystem. In contrast to manufacturing taking up less than 1% in the local GDP in 2019, the equivalent GDP shares in Taiwan, South Korea, and Singapore (once collectively known as "Asia's four little dragons" together with Hong Kong) are 30%, 25%, and 20% respectively. Even Japan, despite its economic doldrums over the past three decades, is able to maintain the industry's share at 21%. This is proof of the revival of manufacturing in developed economies. The manufacturing industry in these developed economies is geared towards technology, automation, and market globalization due to high production costs. Thus it can be seen that the challenge facing manufacturing lies not so much in cost as in productivity, product quality, market positioning, and government policy.

The development focus of Hong Kong's industries should primarily be on the sectors that have comparative advantage (e.g. finance and healthcare). The establishment of a hi-tech manufacturing industry should use the local market as the starting point while targeting the global market as the ultimate goal. In terms of the financial sector, the SAR Government and the Hong Kong Monetary Authority have already become aware of the importance of internet banking, big data, and fintech. I believe this will be the area most poised for rapid growth. In line with this vision, HKU launched an interdisciplinary undergraduate programme in financial technology last year in response to social demand. As for healthcare services, with the drive towards

digitization and artificial intelligence, drawing on Hong Kong's advanced medical technology and world-class medical experts, coupled with its R&D knowledge of COVID-19, the industrialization and commercialization of medical products are likely to be taken to the next level.

As the general public may not understand how individuals can benefit from R&D, entrepreneurship, and reindustrialization, Hongkongers may negatively dismiss economic diversity policies and one-sidedly blame social plights on such hurdles as high land prices. Despite being the number-one economic and livelihood issue, Hong Kong's housing problem boils down to residential supply. As a matter of fact, after more than two decades of deindustrialization, there are still many industrial buildings left in the city. The Government's revitalization of industrial buildings is mainly oriented towards small-scale industries, arts, and catering while nearly 40% of the buildings are used as warehouse space. Simply put, reindustrialization in Hong Kong is not a land problem.

To promote the economic transformation policy, the Government should emphasize its role as an engine of inclusive growth and, with this as the guiding principle, review policy effectiveness on a regular basis. As pointed out by Dani Rodrik, a professor of economics at Harvard University, in his paper entitled "Creating a Good Jobs Economy", sustainable and inclusive growth can create good jobs, which – apart from providing workers with enough wages to meet basic needs – can also afford them on-the-job learning opportunities as well as upward-mobility vision, motivation, and responsibility. Compared with most service industries, high-end manufacturing and other tech industries are in a better position to offer such good jobs.

Economic theory as the basis of industrial policy

In the final analysis, the "big market, small government" non-intervention policy advocated by the British colonial government of Hong Kong during the 1960s and 1970s was the most appropriate economic policy approach and philosophy in the absence of market failure. In case of market failure, however, it is essential for the government to change tack.

The most classic case of market failure is when there is externality in the market. In economics, the most frequently-discussed example is pollution. When a polluter, say a factory, does not compensate the victims of pollution and there is no effective market mechanism to hold the polluter accountable, the government often has to

implement measures (e.g. tax) to increase the production cost of the polluter. But how can the government offer production incentives to companies that create positive externalities for the benefit of the wider community? Massachusetts Institute of Technology professors Jonathan Gruber and Simon Johnson, in their co-authored book *Jump-Starting America*, have proved that between post Second World War and the cold war with the Soviet Union, America was able to enjoy a jump-start to its technology development and productivity thanks to the government's fiscal and policy support for R&D (particularly the projects related to military technology). They have even drawn up a list of 102 American cities of potential new technology hubs, including deindustrialization-battered Detroit. What is lacking today is the former enthusiastic support from the government.

Talent demand and supply as well as market expectations among workers and investors are closely interwoven. I suggest the above three-pronged approach in order to find a path out of the economic woods by setting up a robust R&D ecosystem and industrialization environment. Hopefully the SAR Government and various sectors can adapt to change with agility, turn crisis into opportunity, and jump-start Hong Kong's economic transformation.