The seal of the Lau Chor Tak Institute of Global Economics and Finance, CUHK, is a circular emblem. It features a globe in the center with latitude and longitude lines. The text "LAU CHOR TAK INSTITUTE OF GLOBAL ECONOMICS AND FINANCE" is written around the perimeter of the globe, and "CUHK" is at the bottom. The seal is surrounded by a decorative border of small triangles.

**The Impacts of the Social Unrest and the COVID-19
Epidemic on the Hong Kong Economy
and the Way Forward**

by

Lawrence J. Lau

Working Paper No. 82

August 2020

Lau Chor Tak Institute of Global Economics and Finance
The Chinese University of Hong Kong
13/F, Cheng Yu Tung Building, 12 Chak Cheung Street, Shatin, Hong Kong

Acknowledgements

The Lau Chor Tak Institute of Global Economics and Finance is grateful to the following individuals and organizations for their generous donations and sponsorship (in alphabetical order):

Donors

Johnson Cha	Agile Group Holdings Limited
Vincent H.C. Cheng	Asia Financial Holdings Ltd
Jonathan K.S. Choi	Bank of China (Hong Kong) Limited
Fred Hu Zulu	BCT Financial Limited
Miky Kambara	China Concept Consulting Ltd
Tak Ho Kong	CMB Wing Lung Bank Limited
Lau Chor Tak and Lau Chan So Har	First Eastern Investment Group
Lawrence J. Lau	Four Seas Group
Chien Lee	Hang Lung Properties Limited
Milton K.H. Leong	Henderson Land Development Co. Ltd.
Antony Leung	Hong Kong Exchanges and Clearing Limited
Wei Bo Li	Hony Capital Limited
Francis Lui	Industrial and Commercial Bank of China (Asia) Limited
Robert Ng	Lai Sun Development Co., Ltd.
Simon Suen	Lau Chor Tak Foundation Limited
Wong Ting Chung	Man Wah Holdings Limited
Lincoln Yung	Sing Tao News Corporation Ltd.
Allan Zeman	Sun Hung Kai Properties Ltd.
	Tai Sang Bank Limited
	The Bank of East Asia, Limited
	The Hongkong and Shanghai Banking Corporation Limited
	The Lanson Foundation

Programme Supporters

C.K. Chow	Bangkok Bank Public Co Ltd
Alvin Chua	Bank of China (Hong Kong) Limited
Fang Fang	Bank of China Limited - Phnom Penh Branch
Eddy Fong	Bei Shan Tang Foundation
Victor K. Fung	China Development Bank
Wei Bo Li	China Soft Capital
K.L. Wong	HOPU Investment Management Co Ltd
	Industrial and Commercial Bank of China - Phnom Penh Branch
	King Link Holding Limited
	Sun Wah Group
	The Santander-K Foundation
	UnionPay International

The Impacts of the Social Unrest and the COVID-19 Epidemic on the Hong Kong Economy and the Way Forward[§]

Lawrence J. Lau¹

August 2020

Abstract: The impacts of the social unrest, which started in the second quarter of 2019, and the COVID-19 epidemic, which started in the first quarter of 2020, on the real GDP of Hong Kong are separately estimated. The actual year-over-year quarterly rates of growth from 2019 Q2 to 2020 Q2 are compared with the corresponding hypothetical quarterly rates of growth, estimated from historical data, attributing any differences to the impacts of the social unrest and the COVID-19 epidemic respectively. It is found that the social unrest in 2019 caused a loss of real GDP of 3.7% in 2019 and that the COVID-19 epidemic caused a loss of real GDP of 6.4% up to the second quarter of 2020. However, since the COVID-19 epidemic may be expected to cause further contractions of the Hong Kong economy of approximately 9% in 2020 Q3 and 5% in 2020 Q4, the total loss due to the COVID-19 epidemic may be as high as 11.4% of real GDP for 2020 as a whole. On the assumption of no more social unrest going forward, the Hong Kong economy may recover to positive growth in 2021. However, the economic recovery is likely to be slow unless the government takes the lead in increasing aggregate demand through suitable and timely public investment expenditures. Several possible areas for public investment are identified in this paper.

[§] © 2020 Lau Chor Tak Institute of Global Economics and Finance, The Chinese University of Hong Kong

¹ The author is Ralph and Claire Landau Professor of Economics, The Chinese University of Hong Kong, and Kwoh-Ting Li Professor in Economic Development, Emeritus, Stanford University. He wishes to thank Mrs. Ayesha Macpherson Lau, Prof. Pak-Wai Liu and Prof. Yanyan Xiong for their comments and suggestions and Ms. Sophia Lok for her able research assistance. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the Institute.

1. Introduction

The impacts of the social unrest, which started in the second quarter of 2019, and the COVID-19 epidemic, which started in the first quarter of 2020, on the real GDP of Hong Kong are separately estimated. The actual year-over-year quarterly rates of growth from 2019 Q2 to 2020 Q2 are compared with the corresponding hypothetical quarterly rates of growth, estimated from historical data, attributing any differences to the impacts of the social unrest and the COVID-19 epidemic respectively. It is possible to separate out the impacts because the social unrest mostly affected the last three quarters of 2019 and the COVID-19 epidemic only affected 2020. However, the social unrest may return to have an impact in 2020 Q3 and 2020 Q4, although it appears unlikely because of the enactment of the National Security Law for Hong Kong on 1 July 2020.

The Fugitive Bill², an amendment to the relevant ordinances to enable extradition between Hong Kong and any other jurisdictions, was introduced by the Hong Kong SAR Government in February 2019.³ It set off a chain of protest actions, beginning with a sit-in at the government headquarters on 15 March 2019, evolving into initially peaceful marches, followed by a demonstration by an estimated three hundred thousand participants⁴ on 9 June 2019, and culminating in a violent confrontation at the Legislative Council Complex on 12 June. In the months that followed, there were continuing blockage of roads, looting, occupation of the airport, throwing of bricks and gasoline bombs, beating and setting on fire innocent bystanders, and wanton destruction of public and private property by the violent protestors, some of whom had apparently been paid to do so. As a result, tourists were discouraged from visiting Hong Kong, shoppers were discouraged from shopping, and potential bar and restaurant patrons were discouraged from going out at all. This went on through the end of 2019.

The first confirmed case of COVID-19 was found in Hong Kong on 22 January 2020. In Chart 1, the numbers of daily newly confirmed cases and deaths in Hong Kong from 16 January through 31 August 2020 are presented. Hong Kong actually did extremely well at the

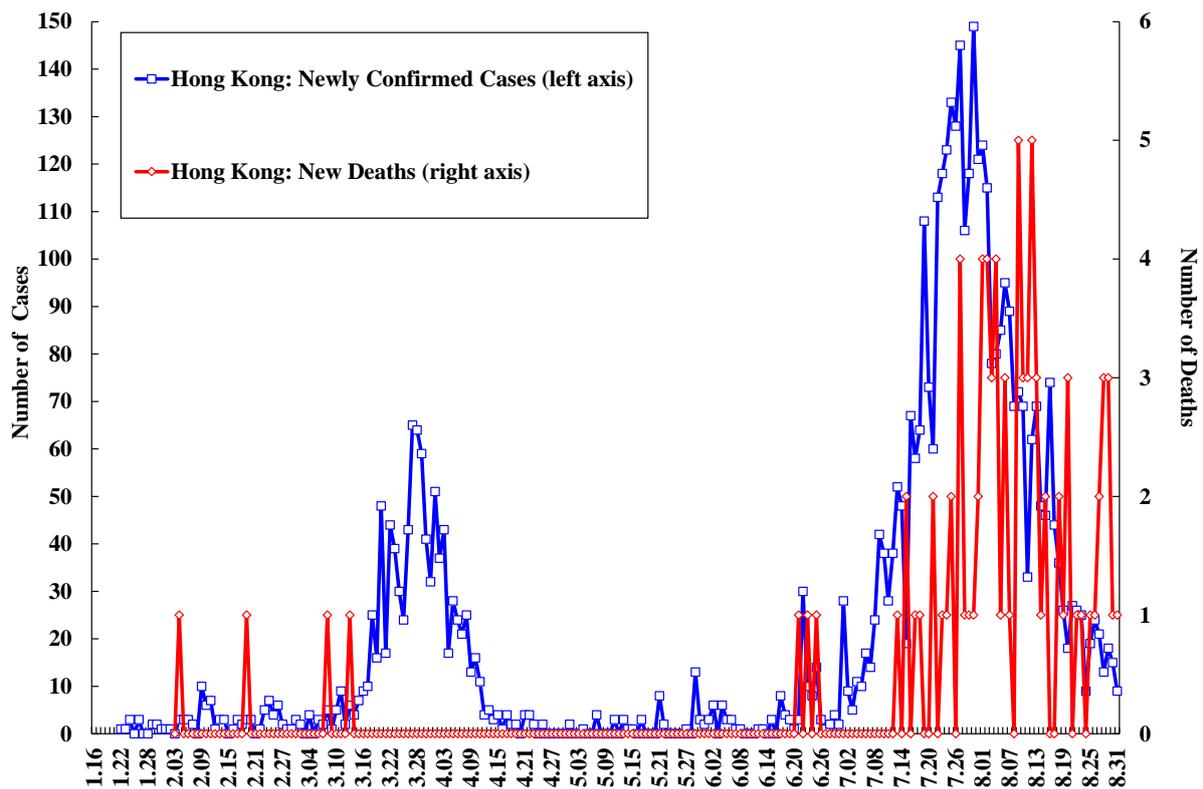
² Fugitive Offenders and Mutual Legal Assistance in Criminal Matters Legislation (Amendment) Bill 2019 (Chinese: 2019 年逃犯及刑事事宜相互法律協助法例 (修訂) 條例草案).

³ The Bill was published on 29 March 2019.

⁴ The organisers claimed a million participants.

beginning of the COVID-19 epidemic and its numbers of daily newly confirmed cases and daily deaths were very low indeed. However, in mid-March, the COVID-19 epidemic flared up again in Hong Kong because of the influx of a large number of returning residents from Europe and North America, with the number of daily newly confirmed cases rising rapidly. Fortunately, this second wave subsided in approximately a month and did not result in any deaths. Then beginning in late June, there was a third, much larger, wave, that seemed to have started in the community. At its peak, the number of daily newly confirmed cases almost reached 150. This number has since fallen but has yet to decline to low single digits as of this writing. The number of deaths was also extremely low during the first two waves, being mostly zeroes with an occasional one once in a while. However, it rose significantly during the third wave, reaching 5 new deaths a day a couple of times, with deaths trailing cases by approximately 12-13 days.

Chart 1: Daily Newly Confirmed COVID-19 Cases and Deaths, Hong Kong



Source: From 16 January to 31 May 2020, Lawrence J. Lau and Yanyan Xiong, The COVID-19 Epidemic in China, Singapore: World Scientific Publishing Company, 2021; from 1 June to 31 August, courtesy of Prof. Yanyan Xiong.

As of 31 August 2020, the cumulative numbers of confirmed COVID-19 cases and deaths in Hong Kong reached 4,810 and 89 respectively. In terms of controlling the spread of

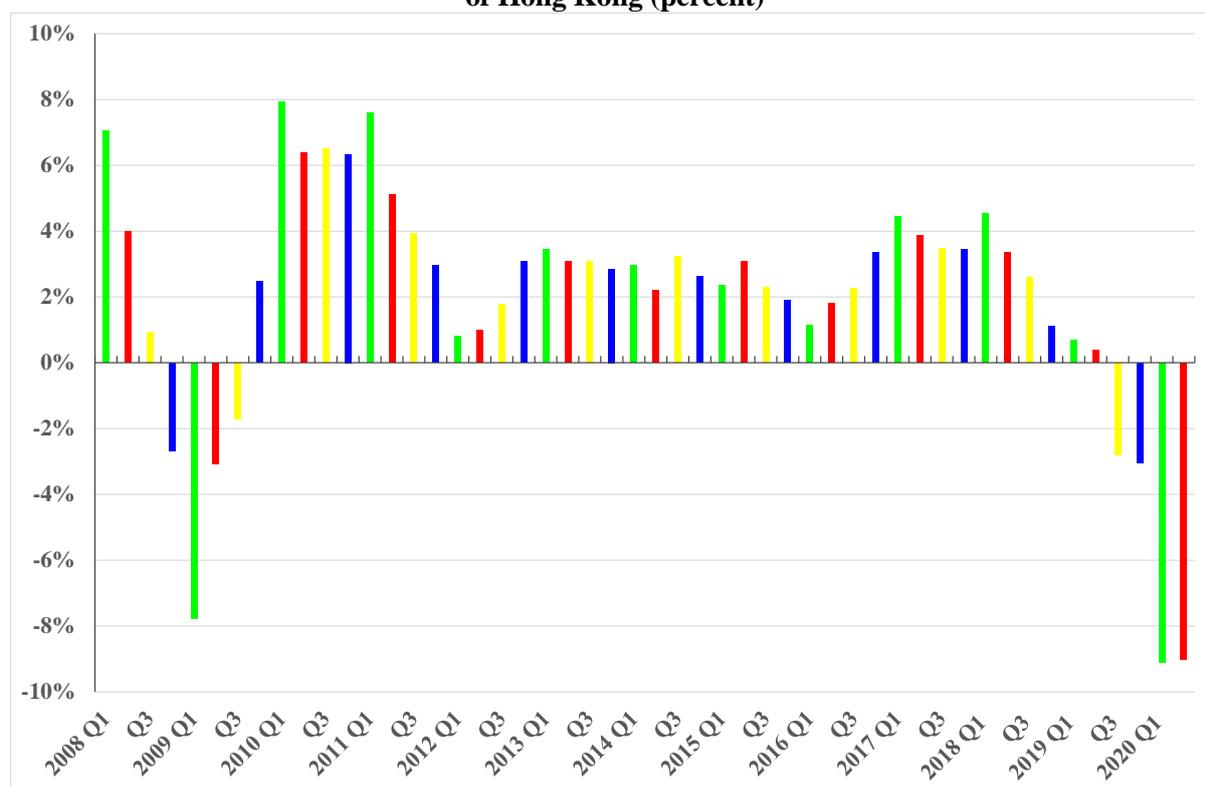
the epidemic, Hong Kong has been doing much better than Singapore, a city with a smaller population than Hong Kong, which has cumulatively 56,771 confirmed cases, but only 27 deaths. However, Beijing, a city with a population of over 21 million, has cumulatively only 935 confirmed cases and 9 deaths.

Both the social unrest and the COVID-19 epidemic disrupted the Hong Kong economy significantly. The social unrest discouraged visitors, interrupted public transportation, and prevented shops, bars and restaurants, and personal service providers such as barber shops and beauty parlours from operating normally. The COVID-19 epidemic mandated periods of work-at-home, quarantines, social distancing, and banning of large gatherings, which also resulted in a significant reduction of economic activities. Moreover, they both contributed to the lowering of the expectations about the future prospects of the Hong Kong economy, which in turn reduced the motivation for both private investment and consumption in Hong Kong.

2. Estimation of the Losses of GDP

The social unrest in Hong Kong began in 2019 Q2 and the COVID-19 epidemic began in 2020 Q1. In order to estimate the loss of GDP due to the social unrest and the COVID-19 epidemic, we need to estimate the hypothetical GDP in the absence of the social unrest or the COVID-19 epidemic first.⁵ The year-over-year quarterly rates of growth of the real GDP (in 2018 prices) of Hong Kong since 2008 Q1 are presented in Chart 2. Chart 2 shows that the rate of growth of the Hong Kong economy has been subject to large variability. The 2010 Q1 rate of growth of 7.9% is the highest quarterly rate of growth since 2006 Q1. We should note that the rate of growth already started declining in 2018 Q4, probably in response to the then already on-going China-U.S. trade war.

Chart 2: The Year-over-Year Quarterly Rates of Growth of the Real GDP (2018 prices) of Hong Kong (percent)



Source: Census and Statistics Department of Hong Kong.

An inspection of the data in Chart 2 suggests two alternate ways to estimate the hypothetical quarterly rates of growth, assuming “business as usual”. First, one can take the

⁵ The same methodology as introduced by Lawrence J. Lau and Yanyan Xiong, *The COVID-19 Epidemic in China*, Singapore: World Scientific Publishing Company, 2021, Chapter 7, is employed here.

average rate of growth separately for the four quarters from 2010 to 2018. This yields hypothetical quarterly rates of growth of 3.91%, 3.32%, 3.24% and 3.08% for the four quarters, or an annual rate of growth of 3.39%. Alternatively, one can take the average over the immediately preceding two-year period, from 2017 Q1 to 2018 Q4. This results in hypothetical quarterly rates of growth of 4.49%, 3.61%, 3.04% and 2.28% for the four quarters, or an annual rate of growth of 3.36%. Since the differences between the two alternatives are not that large, we shall take their arithmetic averages as the hypothetical rates of growth: that is, Q1, 4.20%; Q2, 3.46%; Q3, 3.14%; and Q4, 2.68%, or an annualised rate of growth of 3.37%.

The actual quarterly rates of growth from 2019 Q2 to 2020 Q2 were 0.38%, -2.79%, -3.04%, -9.10% and -9.00% for the five quarters respectively. The loss of GDP due to the social unrest from 2019 Q2 to 2019 Q4 may be estimated, by comparing the actual rates of growth with the hypothetical rates of growth, to be 2019 Q2, 3.08%; Q3, 5.93; and Q4, 5.72%; or an annualised rate of 3.68%. Similarly, the loss of GDP due to the COVID-19 epidemic may be estimated to be 2020 Q1, 13.30%; and Q2, 12.46%; or an annualised rate of 6.44% as of the end of 2020 Q2. Additional losses due to the COVID-19 epidemic are expected in 2020 Q3 and 2020 Q4. As there appears to be little improvement in the control of the epidemic in Q3 compared to Q2, we expect that the real GDP is likely to contract by another 9.0% in Q3⁶ and recover slightly to contract by 5.0%⁷ in Q4, taking into account possible remedial measures of the government.⁸ The loss of GDP due to the COVID-19 epidemic for 2020 Q3 and Q4 may be estimated to be 12.14% and 7.68% respectively. For 2020 as a whole, the total loss due to COVID-19 may be approximately estimated to be 11.40%.

It is also possible to estimate the loss of GDP using annual data. The Hong Kong economy contracted by 1.25% in 2019, with the social unrest impacting the last three quarters. In the absence of the social unrest, Hong Kong would have been expected to grow 2.49% in 2019, taking into account that it actually grew only 0.68% in Q1. Thus, the total loss of real GDP may be estimated as the sum of the foregone growth and the decline, 2.49% and 1.25%, or 3.74% in 2019. The Hong Kong Government has projected that for 2020 as a whole, the

⁶ The projected net loss in GDP in Q3 is therefore the sum of the foregone normal growth of 3.14% and the contraction of 9%, or 12.14% annualised, or 3.04% on a quarterly basis.

⁷ The projected net loss in GDP in Q4 is therefore the sum of the foregone normal growth of 2.68% and the contraction of 5%, or 7.68% annualised, or 1.92% on a quarterly basis.

⁸ A U.S. investment bank has forecast contractions of 9.5% and 6.5% in 2020 Q3 and Q4 respectively. Our projections are more optimistic.

economy is likely to contract by between 6% and 8%. A U.S. investment bank has projected a decline of 8.5% for 2020, followed by a rebound to growth of 5.5% in 2021. My own projection is a decline of 8% in 2020. With a hypothetical annual rate of growth of 3.37%, the loss of real GDP may be estimated as the sum of 3.37% and 8%, or 11.37% for 2020 as a whole. These estimated losses are virtually the same as those derived from quarterly data.

If social unrest were to return, its net additional damage on the real GDP of 2020 Q3 would be relatively small as the COVID-19 epidemic would have already killed off the tourism and retail businesses by itself. However, the resumption of social unrest might prevent the increase of the rate of growth from -9% in Q3 to -5% in Q4, and delay the economic recovery even further. We summarise our estimates of the costs of the social unrest and the COVID-19 epidemic in terms of percent of GDP in Table 1 below.

Table 1: The Estimated Costs of the Social Unrest and the COVID-19 Epidemic to Hong Kong as a Percent of GDP

Loss due to Social Unrest	Loss due to COVID-19	
2019 Q2-Q4	2020 Q1-Q2	2020 Q1-Q4 (projected)
(percent of GDP)		
3.7%	6.4%	11.4%

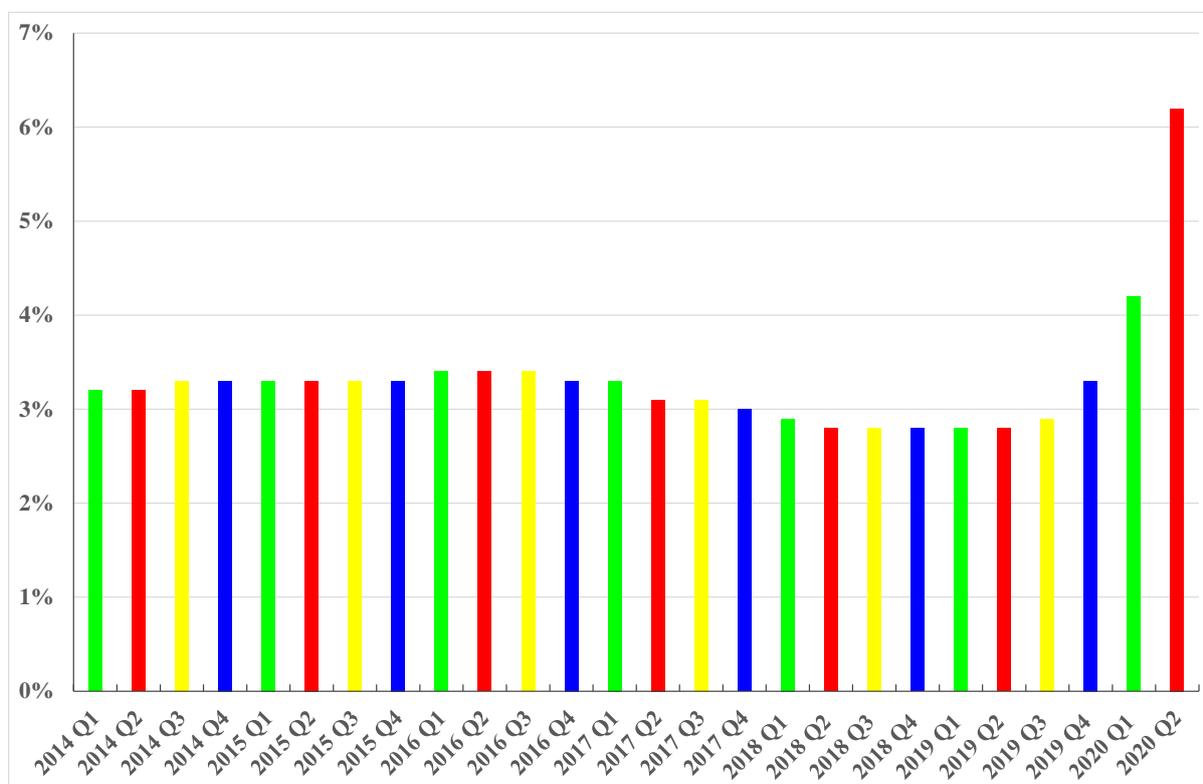
3. Insufficient Aggregate Demand

While the social unrest mostly reduces aggregate demand (from visitors, shoppers, diners and drinkers), its impact on aggregate supply is relatively marginal. However, the COVID-19 epidemic reduces both aggregate supply and aggregate demand because of its requirements of work-at-home, isolation, quarantines and social distancing. After a long stretch of negative economic growth, from 2019 Q3 through to at least the end of 2020, with its accompanying bankruptcies, business closures and unemployment, private enterprises are unlikely to increase their gross fixed investment and households are unlikely to restore their consumption to pre-social-unrest levels any time soon. What this means is that the recovery in aggregate demand is likely to be anemic unless the government steps in with a substantial increase in public investment expenditures.

The Rise of Unemployment

The seasonally adjusted quarterly rates of unemployment of Hong Kong since 2014 Q1 are presented in Chart 3. Chart 3 shows that the rate of unemployment began to come down in 2017 Q1 to reach 2.8% in 2018 Q2 as the economy grew at a robust average rate of almost 4% from 2017 Q1 to 2018 Q2. But then it rose from 2.8% in 2019 Q2 to 6.2% in 2020 Q2, the highest in 15 years, as a result of first the social unrest and then the COVID-19 epidemic. By comparing Charts 2 and 3, we can see that the rise in the unemployment rate is synchronous with the decline in the rate of economic growth with a lag of one or two quarters.

Chart 3: The Seasonally Adjusted Quarterly Rates of Unemployment in Hong Kong (percent)

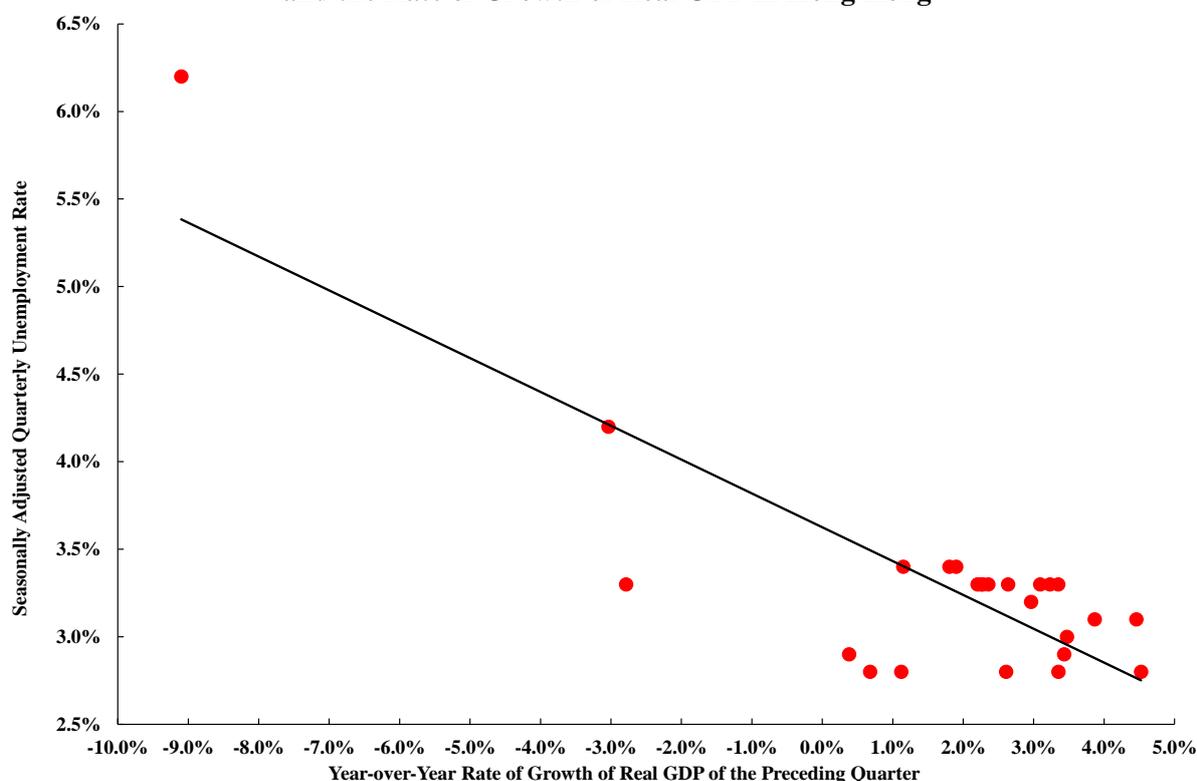


Source: Census and Statistics Department of Hong Kong.

The Relationship between the Rate of Unemployment and the Rate of Growth of Real GDP

In Chart 4, we present a scatter diagram between the seasonally adjusted quarterly rates of unemployment against the rate of growth of real GDP of the immediately preceding quarter since 2014 Q1. Chart 4 shows clearly that the rate of unemployment is negatively related to the rate of growth of real GDP, lagged one quarter. A decline in the rate of growth of the real GDP causes a rise in the rate of unemployment in the following quarter. The rate of growth of real GDP in 2020 Q2 was -9.0%, and is not expected to turn positive until 2021. The rate of unemployment in Hong Kong may be expected to remain high for the rest of 2020.

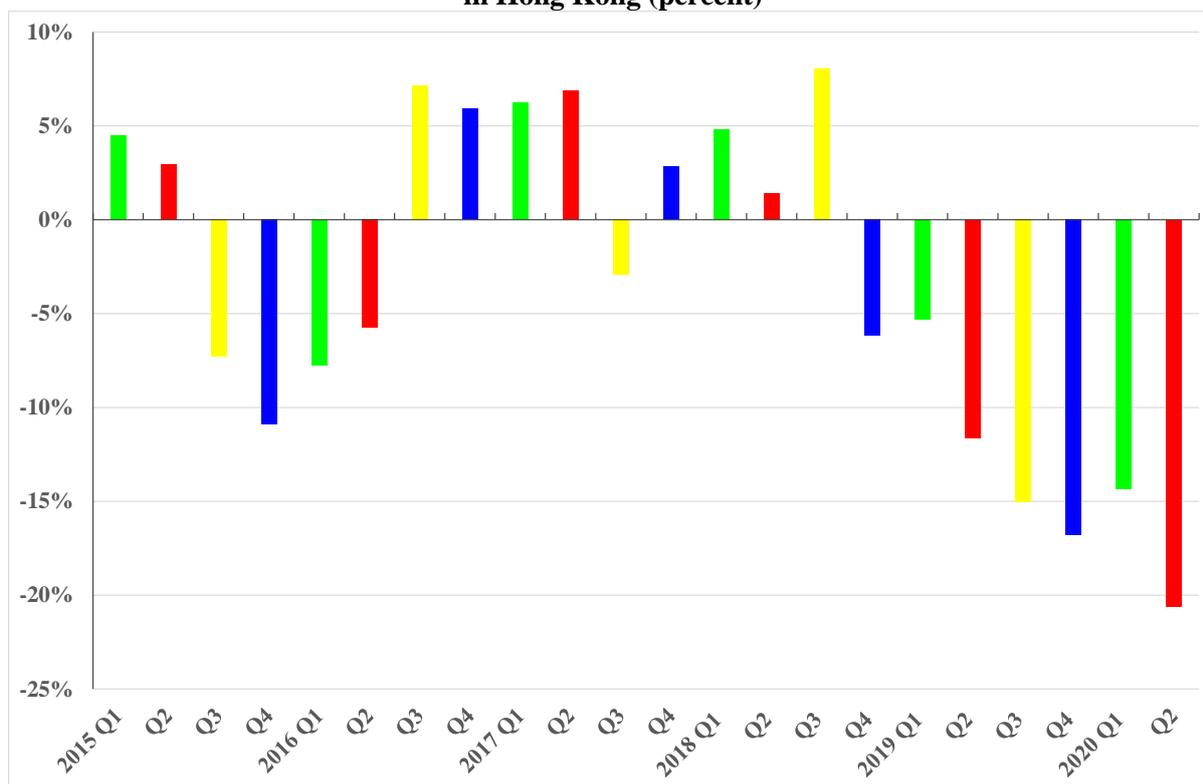
Chart 4: A Scatter Diagram between the Rates of Unemployment and the Rate of Growth of Real GDP in Hong Kong



The Decline in Gross Fixed Investment

The year-over-year quarterly rates of growth of the real gross domestic fixed investment (in 2018 prices) of Hong Kong since 2015 Q1 are presented in Chart 5. Chart 5 shows that the growth of gross domestic fixed investment already turned negative in 2018 Q4, possibly due to the then on-going China-U.S. trade war. The rates of decline became even higher as the social unrest began in 2019 Q2, and continued to increase with the breakout of the COVID-19 epidemic on the Mainland and in Hong Kong in January 2020. Between 2015 and 2018, gross domestic fixed investment of Hong Kong averaged 22.0% of its GDP. By 2020 Q2, this ratio had dropped to 15.2%, contributing by itself to a reduction in aggregate demand of approximately 7% of GDP.

Chart 5: The Year-over-Year Quarterly Rates of Growth of Real Gross Fixed Investment in Hong Kong (percent)

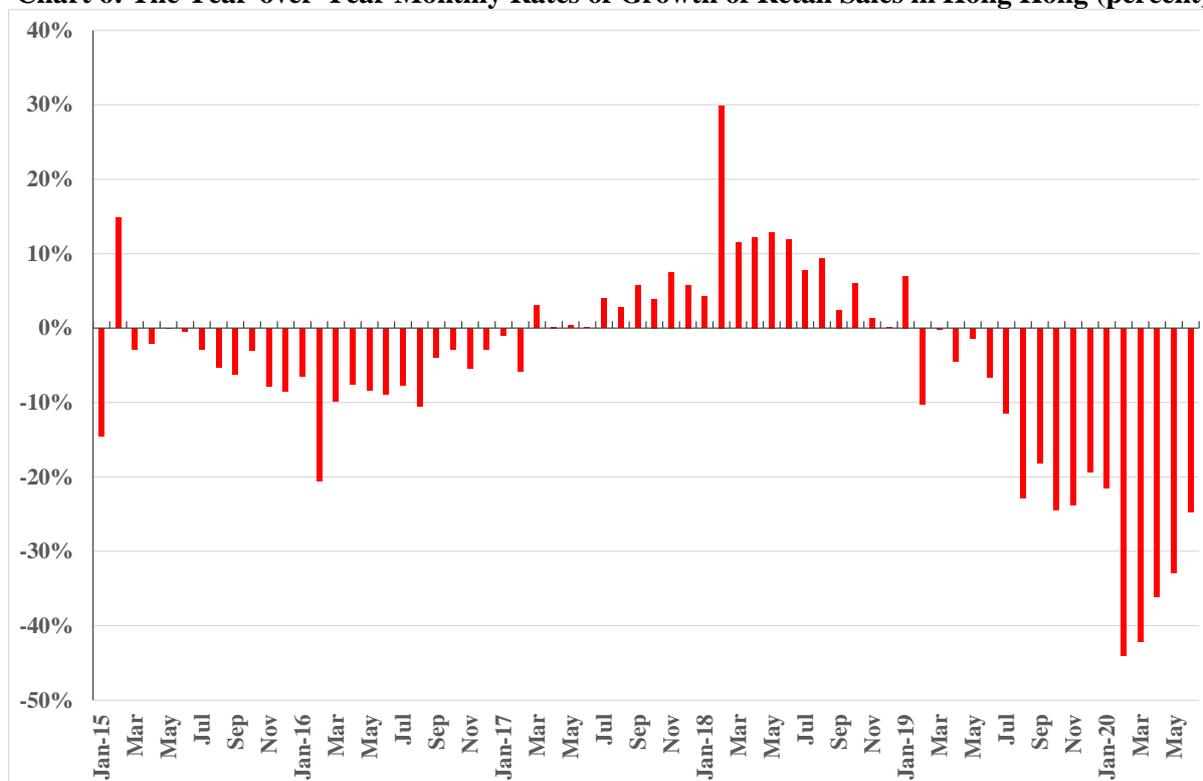


Source: Census and Statistics Department of Hong Kong.

The Shrinkage of Retail Sales

The year-over-year monthly rates of growth of retail sales in Hong Kong since January 2015 are presented in Chart 6. Chart 6 shows that the rate of growth of retail sales has been consistently negative since February 2019. The decline in retail sales may be attributed to two sources. First, both the social unrest and the COVID-19 epidemic discouraged tourists, resulting in large declines in retail sales in addition to the hospitality industry. Second, both the social unrest and the COVID-19 epidemic also discouraged Hong Kong domestic shoppers. Monthly total retail sales fell from HK\$48.1 billion in January 2019 by almost one half, to HK\$26.5 billion in June 2020.

Chart 6: The Year-over-Year Monthly Rates of Growth of Retail Sales in Hong Kong (percent)

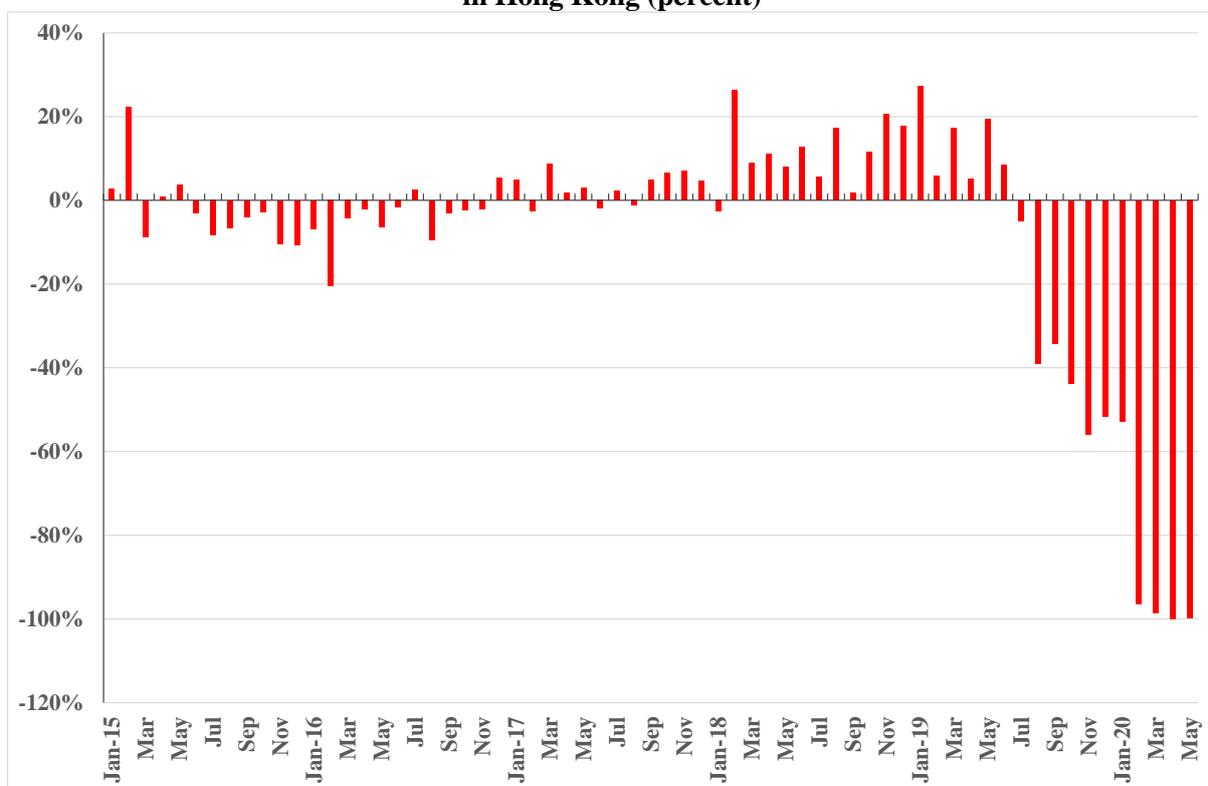


Source: Census and Statistics Department of Hong Kong.

The Total Disappearance of Visitors

The year-over-year monthly rates of growth of total visitor arrivals in Hong Kong since January 2015 are presented in Chart 7. Chart 7 shows that the rate of growth of total visitor arrivals started falling in July 2019, and then at an accelerating rate over time. By May 2020, the monthly rate of decline was 99.86%. The total number of monthly visitor arrivals fell from a peak of 7.78 million in January 2019 to 8,139 in May 2020. The entire hospitality industry in Hong Kong was devastated, as was the retail industry that caters to visitors.

Chart 7: The Year-over-Year Monthly Rates of Growth of Total Visitor Arrivals in Hong Kong (percent)

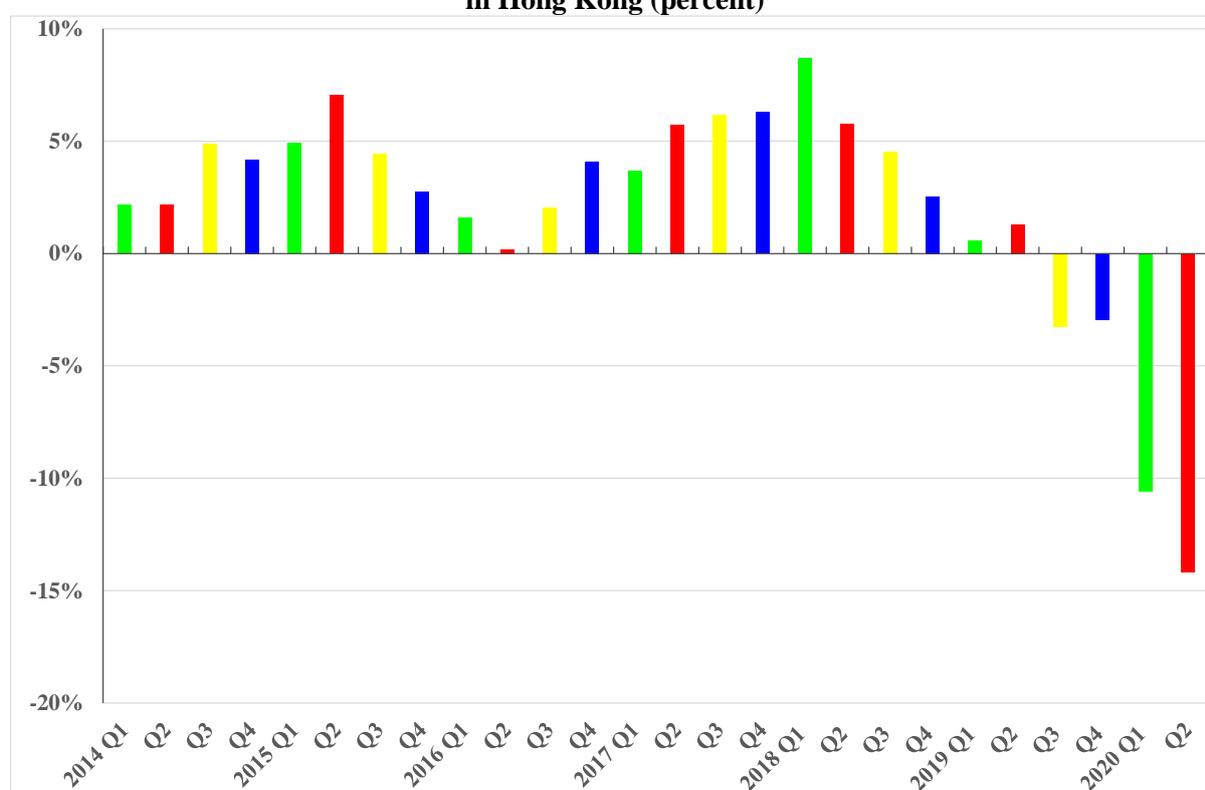


Source: Census and Statistics Department of Hong Kong.

The Decline in Household Consumption

The year-over-year quarterly rates of growth of the real household consumption (in 2018 prices) of Hong Kong since 2014 Q1 are presented in Chart 8. Chart 8 shows that the rate of growth of real household consumption turned negative in 2019 Q3, due to the social unrest. The decline was worsened by the quarantine and social distancing rules in response to the COVID-19 epidemic beginning in 2020. Household consumption contracted by 14.2% in 2020 Q2, following a decline of 10.6% in 2020 Q1.⁹

Chart 8: The Year-over-Year Quarterly Rates of Growth of Household Consumption in Hong Kong (percent)



Source: Census and Statistics Department of Hong Kong.

⁹ The remaining component of aggregate demand is net domestic exports of goods and services, which means that the re-exports into and out of Hong Kong are excluded. The net domestic exports of goods has not been important for Hong Kong for at least a couple of decades. However, net domestic exports of services have generally been positive as it includes all services provided to visitors to Hong Kong. Yet the net domestic exports of goods and services combined has been consistently large and negative and not a contributor to the growth of GDP.

4. Accelerating the Economic Recovery

Controlling the epidemic is of course the most important task facing Hong Kong at this time. If the epidemic cannot be controlled, nothing will work and the economy will continue to deteriorate. Restoring law and order is also essential for the Hong Kong economy to move forward again.

Given the expected deficiency in aggregate demand from both private investment and consumption, the HKSAR Government should be much more pro-active in accelerating the economic recovery. It must try to increase aggregate demand so as to support both GDP and employment. Moreover, by taking substantive actions, even if the effects cannot be realised for a while, the Government can improve public expectations about the future prospects and hence increase both private investment and consumption. This is the time for the Government to act boldly and decisively.

The various measures already undertaken by the HKSAR Government, such as the distribution of HK\$10,000 to each and every resident and the Employment Support Scheme (ESS), have been most helpful because they inject purchasing power into the economic system immediately and contribute to maintaining employment. However, they alone are not sufficient to uphold the aggregate demand needed by the Hong Kong economy because they cannot be sustained and businesses and households may be loath to spend when future economic prospects are so uncertain. Thus, aggregate demand needs to be replenished through public investment expenditures that can create domestic GDP and employment directly. An important consideration is whether these public investment projects can be readily implemented with local labour and resources and relatively small import requirements.

What are some possible areas for public investment? Listed below are some examples (it is not a comprehensive list).

First, the Government can consider the retrofitting of all public buildings to make them energy-efficient—this can range from installation of solar panels, replacement of antiquated air conditioning systems, use of double-glazed windows, etc. And while retrofitting, one can even make the public buildings epidemic-safe at the same time, through automated doors, voice-activated lifts and even automated temperature-sensitive surveillance cameras at the

entrances.¹⁰ Done properly, such retro-fitting should be able to pay for itself, through savings of energy, maintenance, and operating expenses.

Second, the Government can also consider building more hospitals with up-to-date surgical and intensive-care facilities. Hong Kong doctors have been telling us that we already have enough doctors. But why do some patients still have such a long wait before they can be treated? It is apparently because of a shortage of adequate facilities and equipment. So let us build more hospitals, and also better elderly care homes, and train more nurses. Such investments will not be wasted as Hong Kong has a rapidly aging population that will be requiring medical care of increasing quantity and quality.

Third, many government-owned public rental housing units have deteriorated over the years and major maintenance and repairs have become necessary. There is also a proposal for the government to eventually privatise these units.¹¹ The Government has a responsibility to bring these housing units up to the current code and to restore them to good working condition before selling them to the existing tenants. With the unemployment rate high and aggregate demand low, now is the perfect time to start repairing and restoring these flats one by one.

Fourth, our largely antiquated underground sewage system also needs to be repaired and restored both to avoid the frequent flooding and to prevent it from becoming a potential source of transmission of bacteria and viruses.

Fifth, during the COVID-19 epidemic, many governmental functions have been executed online and through video-conferencing. These practices should continue to be maintained as part of the “new normal”. In order to further facilitate the use of e-Government, an effort should be made to digitalise all old government documents such as birth, death, marriage and divorce records and property deeds, so that they will be readily accessible if ever needed.¹² This will also greatly reduce transactions time and cost.

¹⁰ This would also facilitate subsequent contact-tracing should it become necessary.

¹¹ See, for example, the comprehensive study of Yue-Chim Richard Wong, Yuen-Shan Stephen Wong, William Wai-Him Tsang and Ryan Man-Ki Ip, Housing Policy Reform to Narrow Wealth Gap, No. 3, Part 1, Hong Kong: Our Hong Kong Foundation, 2017.

¹² This was suggested to me by Prof. Frederick Ma.

Where can the money for financing these initiatives come from?

First of all, the retrofitting of government buildings to be more energy-efficient is ideally suited to be financed with “green” bonds. As the retrofitting costs can be recouped over time through future energy savings, no subsidy is required. The government can issue long-term, say twenty-year, fixed-rate bonds to finance such a project. It will have much lower electric utility bills. It can use the savings to repay the principal and the interest of the bond financing.

Second, the additional hospitals are also an investment, and should come out from the capital budget of the government. Hong Kong has large accumulated surpluses equal to 70 percent of its GDP and can easily afford to run a budget deficit for at least several years. Moreover, it has almost no public debt, compared to the public debt to GDP ratios of Japan (over 250%) and the U.S. (over 100%). Hong Kong’s credit rating should be better than either Japan or the U.S. It has plenty of unused borrowing capacity.

Third, the costs of repairing and restoring the government’s rental housing units can also be financed through long-term bonds. These repair and restoration costs should be amortised over the remaining life of the rental housing unit and added to the monthly rental rates. If and when the unit is privatised, the unamortised balance can and should be added to the sale price of the unit. The additional rental revenues and the proceeds from the sales should go to servicing and retiring the bonds.

Fourth, the sewage system can also be financed through the issuance of bonds since it will last for another few decades. The costs can be recovered from an increase in building permit fees or in rates since the property owners are the principal beneficiaries.

Finally, digitalisation of old government documents is also a one-off capital expenditure that probably should be borne by the government. It will more than pay for itself over time because of the potential savings in document search costs and time.

Development of an Active Bond Market

The above discussion brings out the importance of developing an active bond market in Hong Kong, so that the Hong Kong Government and other entities can raise long-term funds easily and inexpensively. Moreover, it will greatly enhance the competitiveness of Hong Kong as an international financial centre. Hong Kong is usually ranked third in the world, after New York and London. What do New York and London have that Hong Kong does not? An active, deep, liquid and wide market in fixed-income securities, especially long-term fixed-income securities. Almost all asset management firms, family offices, insurance companies and pension funds invest in both fixed-income and equity. The Hong Kong market needs to beef up its offerings in fixed-income securities in order to be able to attract more of these financial service providers to locate in Hong Kong.

However, Hong Kong needs to offer much more than just green bonds. In order to create an active and liquid bond market, there has to be a sufficiently large volume of transactions and new issues, as well as a full variety of maturities—short-, medium- and long-term. The most promising place to start is for the Hong Kong Mortgage Corporation (HKMC), which is basically wholly-owned by the HKSAR Government, to issue HK\$-denominated long-term fixed-rate bonds (say, up to 35 years), the proceeds of which are used to purchase qualified long-term fixed-rate owner-occupied residential mortgage loans from commercial banks that will act as originators and servicers in Hong Kong (up to a ceiling amount, of say, HK\$8 million).¹³ There will be heavy demand for such long-term fixed-rate HK\$-denominated bonds from life insurers who need long-term HK\$-denominated assets.

By amortising a mortgage loan over 35 years instead of 15 years, the monthly payments will be more than halved. In addition, the borrower is not subject to the interest rate risk of a variable-rate loan over this long time horizon. The availability of these loans will greatly benefit the lower-income households by reducing their net cost of borrowing and increasing their monthly cash flows. These low fixed-rate long-term mortgage loans will be particularly helpful as the Government contemplates the sale of its public residential rental units to their

¹³ There may be some opposition on the part of commercial banks to these mortgage loans because they believe these long-term fixed-rate loans will take away their business. However, they are in no position to offer long-term fixed-rate mortgage loans. They can still make money by originating and servicing the loans for HKMC without having to tie up their capital. Moreover, because of the relatively low ceiling amount for these mortgage loans, the commercial banks will not be significantly affected.

existing occupants. In fact, even a simple refinancing of an existing mortgage loan of shorter maturity with a 35-year mortgage loan can put cash into the pockets of borrowers immediately and monthly thereafter. With improved cash flows, these households can increase their consumption and help speed up the economic recovery.

The present time is probably the most favourable for the promotion of long-term fixed-rate loans as the rate of interest on long-term fixed-rate bonds such as 30-year U.S. Treasury bonds are at a historic low. The rate of interest of 30-year fixed-rate U.S. Treasury securities is currently less than 1.5%.¹⁴ The HKMC, with its credit guaranteed by the HKSAR Government, arguably should qualify for an even better rate than the U.S. Treasury, which means these mortgage loans can in principle carry a rate of interest below 2%.¹⁵ Moreover, the yield curve is almost flat—the short-term rate is almost the same as the long-term rate. Thus, the borrower does not have to pay a higher rate of interest for a longer-term loan.

The development of an active and deep bond market can also enhance the role of Hong Kong in the Belt and Road Initiative. In the early phase of the Belt and Road Initiative, the emphasis is on infrastructural projects to enhance connectivity and promote electrification. Hong Kong's comparative advantage is not in the building of infrastructure or power plants, but is potentially in capital raising. As most of the Belt and Road infrastructural projects are capital-intensive projects with long payback periods that require long-term financing, it is absolutely essential for Hong Kong to develop the capability of long-term bond issuance and trading. Moreover, to the extent that some of the Belt and Road projects require Renminbi expenditures, Hong Kong is the ideal place to float Renminbi-denominated bonds.

¹⁴ In fact, one may even argue that the HKSAR Government should borrow long-term at these low rates of interest to finance its budget deficit rather than draw down its accumulated surplus, which presumably has been earning a rate of return much more than 1.5%.

¹⁵ The HKMC is and should remain non-profit making. All it needs to do is to break even. One reason for the difficulties faced by Fannie Mae and Freddie Mac in the U.S. was because they decided to chase after profits.

5. Concluding Remarks

It is found that the social unrest in 2019 caused a loss of real GDP of 3.7% in 2019 and that the COVID-19 epidemic caused a loss of real GDP of 6.4% up to the first half of 2020. For 2020 as a whole, the total loss due to the COVID-19 epidemic may be estimated to be 11.4% of real GDP. On the assumption of no more social unrest going forward, the Hong Kong economy may recover to positive growth in 2021.

However, the economic recovery is likely to be slow unless the government takes the lead in increasing aggregate demand through suitable and timely increases in public investment expenditures. Several possible areas for public investment have been identified in Section 4. It may still take a while before any public investment plan becomes a reality. But the mere announcement of the plans by the Government will get the private sector to begin thinking, and working, even before the tenders are out and contracts are awarded. The time for the Hong Kong Government to act is now!