CFA Society Hong Kong

30 YEARS ANNIVERSARY

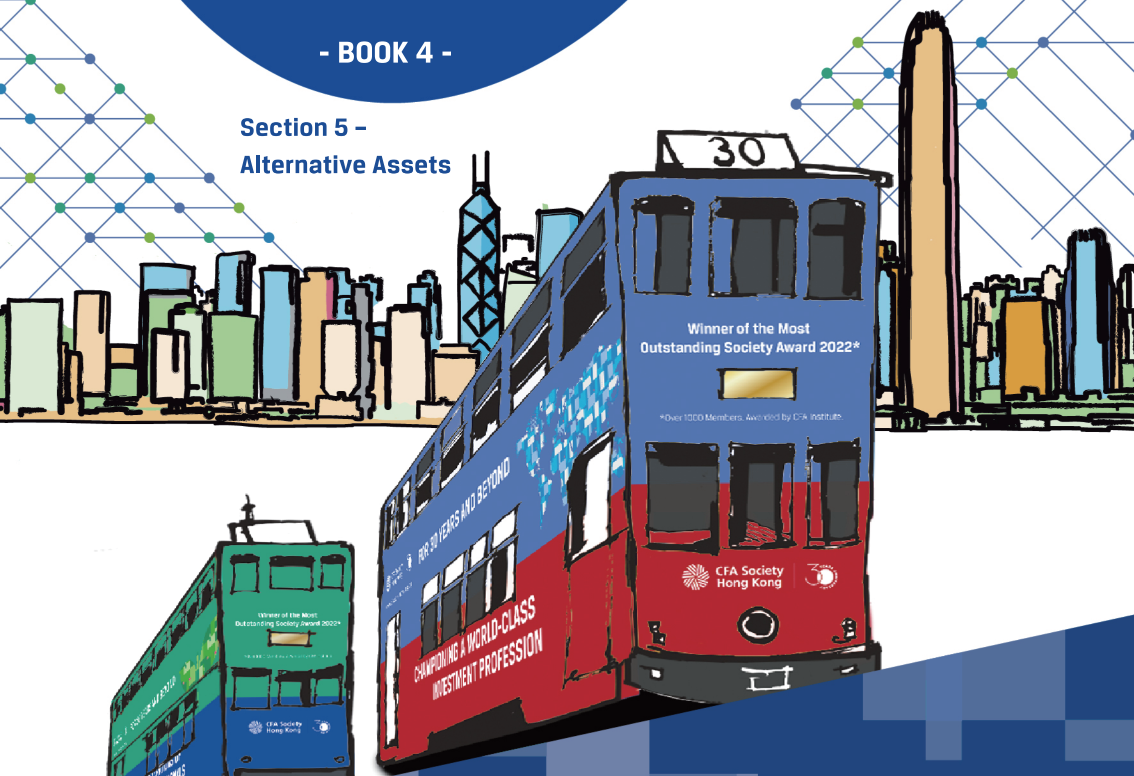
RISE FROM CRISES

- BOOK 4 -

How Hong Kong survived the financial and other crises, and rose to the occasion, over the past 30 years

30 tales from practitioners

Section 5 – Alternative Assets



Edited by Alvin Ho, CFA, Alfred Lau, CFA, and Felicia Wong, CFA

This work contains excerpted chapters from *Rise from Crises*. For further content, please consult the other excerpted ebooks, or the complete volume.

CFA Society Hong Kong (also known as The Hong Kong Society of Financial Analysts) is a non-profit organization founded in 1992 by a group of CFA® charterholders. The Society shares the mission of CFA Institute in raising the professional and ethical standards of financial analysts and investment practitioners through our advocacy and continuing education efforts.

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Section 5

Alternative Assets:

Asset Allocations,

Private Equity,

Real Estate and ESG

Chapter

Photo credit: Christiaan Hart

5.1

CDF: Calamity, Dynamic Asset Allocation and Fortune

— **Janet Li, CFA**

In the midst of every crisis lies great opportunity, as the saying goes. It would therefore be fitting to look back at the past three decades and reflect on what we, as a business community, have been through. If you switch on CNN or CNBC these days, you'll very quickly see headlines about inflation and recession fears rising across the globe. This concern is being reflected in markets, with investors understandably wary about what the next 12-24 months will bring.

I'm going to revisit three distinct financial crises that shook the world during the past 30 years. It is easy to look back on these periods negatively, and remember the losses, redundancies, fear and uncertainty that accompanied them all. However, it is crucial—as strong believers in maintaining long-term investment horizons—to be objective and remember the opportunities that arose from these crises. Indeed, for a subset of investors—those who were able to keep their heads while others around them were losing theirs, to borrow Rudyard Kipling's phrase—economic calamity opened the doors to considerable fortune by recognizing value in oversold assets.

The 1997 Asian Financial Crisis

No doubt it is clear how this first crisis left a legacy. The tumult, of course, did not just impact Hong Kong, but left scars throughout the region, in markets such as South Korea, Indonesia, Thailand, Laos, Malaysia, and the Philippines. Suddenly there was a rush for the exit, as foreign investors withdrew their capital, pushing many of the region's currencies into a downward spiral, taking asset prices down with them.

It was a costly lesson to learn, but one that would benefit Asia for decades to come: have a large home bias at your peril.

The benefits of diversification were instantly highlighted. Those with varied exposure, especially to other regions, such as Europe and North America, were much more resilient during the crisis. What's more, the recovery was rapid and, by 1999, signs of an economic rebound were clear, which compounded the lesson for many. Investors who suffered catastrophic losses due to poor diversification were unable to take advantage of weakened asset prices and therefore missed out on some of the most attractive opportunistic investments available during the recovery.

Hindsight is 20/20, but investing is about maintaining a long-term view. This includes being objective and keeping short-term noise in perspective, no matter how loud it is. During a crisis, investors' behavioural biases can drive overreactions to asset price declines. Liquidity issues tend to be more common during these times, which can further amplify such overreactions.

The opportunity created was a valuable one: it was a chance to learn from diversification and market timing mistakes. The crisis also underlined the importance of stress testing. Thoroughly assessing portfolios and having awareness of potential risk exposures—before a crisis begins—can pay dividends when needed.

The 2008 Global Financial Crisis

I have vivid memories of this period. I remember watching it all unfold, as the U.S. residential property market collapsed, and the Federal Reserve was forced to bail out the banks. It caused a true tsunami that swept the world, which was by that time far more globalized than in 1997. I recall watching Lehman Brothers employees carrying boxes and walking out of their office building in the news—events we thought could never happen, they happened.

A different crisis from that of 1997 was occurring, but it was exhibiting similar patterns. Markets again fell victim to psychology and behavioural tendencies. What would generally apply across all these crises would be the importance of sticking to governing principles and having a robust asset allocation framework. A crisis will test what the investor has put in place.

This period again made the case for dynamic asset allocation, and how in these times managers should be rigorously evaluating the value of different asset classes, with the ability to reposition accordingly.

The crisis eventually presented investors with very attractive opportunities (e.g., in investment-grade credit) to invest in both public and private assets that were available at low valuations. As in 1999, the recovery was not far off, and broad categories of impacted assets subsequently re-rated significantly in 2009. The importance of diversification and having dry powder to deploy was again on display.

There were also opportunities to reposition between asset classes and take advantage of distressed valuations and illiquidity-induced price declines. Portfolios swiftly rebounded by more than 10%. The ability to hold onto weakened assets and adopt a long-term horizon was also shaped by the preparedness of portfolios for such crises: those investors who had paid heed to scenario planning, diversification, liquidity, and strong governance were far better situated to weather the storm.

Pandemic-Driven Volatility

We have seen similar market phenomena over the past two years, as COVID-19 made the world confront a risk it had not faced in a hundred years. Much of the world was put into lockdown, and since then the virus variants and unprecedented fiscal responses have taken their toll on markets.

Interestingly, rather than a relatively straightforward market crash and recovery scenario, markets have continued to face challenges. COVID-19 hasn't truly gone away, with new variants repeatedly giving investors reasons to despair. The conflict between Russia and Ukraine has escalated, ramping up geopolitical tensions and redrawing international relationships. This has all caused inflation to surge upwards, putting central banks and consumers under pressure.

Again, we have seen long-term investors use dynamic asset allocation to capitalize on opportunities driven by uncertainty and volatility. But there is a broader opportunity emerging from this current crisis—an elevated awareness of systemic risks and sustainability issues. Associated with this, there are opportunities to increase the resilience of portfolios to future shocks—specialist allocations to sustainability-themed strategies, building portfolio climate transition plans and enhancing stewardship efforts are all examples.

It is said that what doesn't kill you makes you stronger. This means being prepared for the next crisis and having a plan in place. Generally, taking a more institutional grade and risk-averse approach to investment portfolios is a plus. This involves having organized and constructive dialogue about where the portfolios are exposed and what you would do in a less-than-ideal scenario. Not only can this help to avoid areas of the market where valuations may not be as substantiated, but it also allows investors to keep some powder dry for strategic and dynamic asset allocation decisions. The benefits of such an institutional approach are clear. In times of crisis, the observation was that investors with robust strategic and dynamic asset allocation frameworks in place are able to benefit from asset price weaknesses.

Valuable Lessons——In the Midst of Every Crisis, Lies Great Opportunity

Although these three crises were different in various ways, they shared important similarities. They all caused losses and created uncertainty but—– inevitably—generated opportunities for investors. Building dynamism and flexibility into their portfolios has become a clear priority for firms, allowing them to withstand the worst lows and capitalize on the strongest recoveries.

Over time, we have seen mindsets change. The world has moved on each time, and investors need to be more careful around their allocations, thorough in their analysis and mindful of risk and what they are potentially exposed to.

I see this as an improvement because people learn from the mistakes they made going into these crises. Investors have been forced to adjust their programs and we see proof of this in the way they approach diversification. In the past, many Hong Kong investors preferred to buy just a few blue-chip stocks (or even one!) from the Hong Kong market for their portfolio. This is not just because of home bias, but because historically such stocks had yielded attractive dividends, which those in retirement favored due to the income provided.

Now, this may have changed for some investors whose eyes have truly been opened to the risks of being too concentrated in a down market. Investors have also become smarter about how they review whether the investments are value for money by demanding more transparency in fees and underlying transaction costs. A good example of enhanced transparency in Hong Kong would be the fees and disclosure of MPF investments over the years.

Each time markets have fallen, they have eventually rebounded, and the same could be said for people's attention to risk management. In the same way that equities will rally again, we usually see spikes in the engagement of how investors talk about risk management. They'll have been shaken by a crisis and they want to be in a better place for future crises, which will inevitably occur.

We currently face uncertain times in markets, and many investors will be nervously thinking back to 1997, 2008 and 2020. We cannot predict when or how the next crisis will happen, and any new crisis will inevitably be a shock in the short term. But it is crucial to maintain a long-term outlook and be prepared for a recovery, whenever that may materialize.

Looking back over the past 30 years, I have seen investors' mindsets change, portfolio diversification improve, and investors growing more able to benefit from dynamic asset allocation in recovery phases. The industry has become more robust as a result, which gives me confidence that when the next crisis comes, we will be better prepared for it—and more importantly, better equipped to capture the opportunities when they arise.

5.2

Private Equity in Greater China — A Long-and-Short View

— Alvin Ho, CFA

1. Introduction

Private equity (PE) began to emerge in the U.S. as venture capital (VC) during the middle of the 20th century. In the 1980s, buyout firms came into the mix on the back of junk bonds. Since then, PE has muscled into mainstream finance. Its arrival in Hong Kong and then mainland China can be seen as the globalization of financial capitalism.[1] This short article will take a long, historical view of the PE landscape from a Hong Kong perspective. This is logical because Greater China's PE began in the entrepot. We will then see how the novice industry spread out from the city to its hinterland. The heroes and victims that came with the Asia Financial Crisis and the Global Financial Crisis will follow. Due to the evolving nature of matters after 2018, we will paint the pandemic-led crisis in broad strokes.

2. Two Pictures That Save Some Words

Figure 5.2.1 below summarizes Hong Kong PE managers' (or general partners, GPs) fundraising cycle, the activity that seeds the beginning of their business cycle.

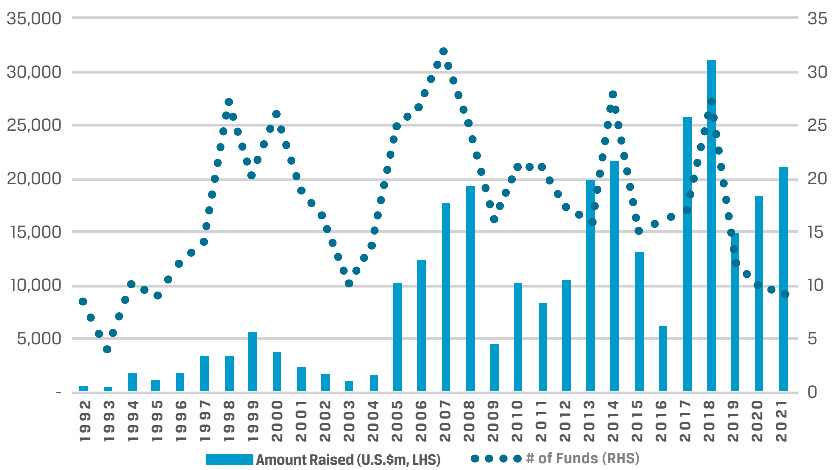

Figure 5.2.1: Annual Amounts Raised and Numbers of Funds on the Road.
Source: AVCJ

A secular trend is visible—the annual amount raised is sequentially higher. The trend rides out the crests and troughs. Before 2010, the two peaks mirrored that of the public markets, suggesting that institutional investors did engage in asset-class diversification. The post-2018 drastic withdrawal could result from the impact of the Regulation (see below Sub-section 6), while the pick-up in 2021 after the COVID-19 pandemic broke out in 2020 suggested that things were not too bad before the fifth wave took its toll. The following Figure 5.2.2 demonstrates the investment activities of the GPs who, after obtaining the mandates, went about doing their businesses. Thanks to the Asian Venture Capital Journal (AVCJ), a specialist journal and data provider, we have six types of sub-categories reflecting the stage of target companies, growing from zero to one.

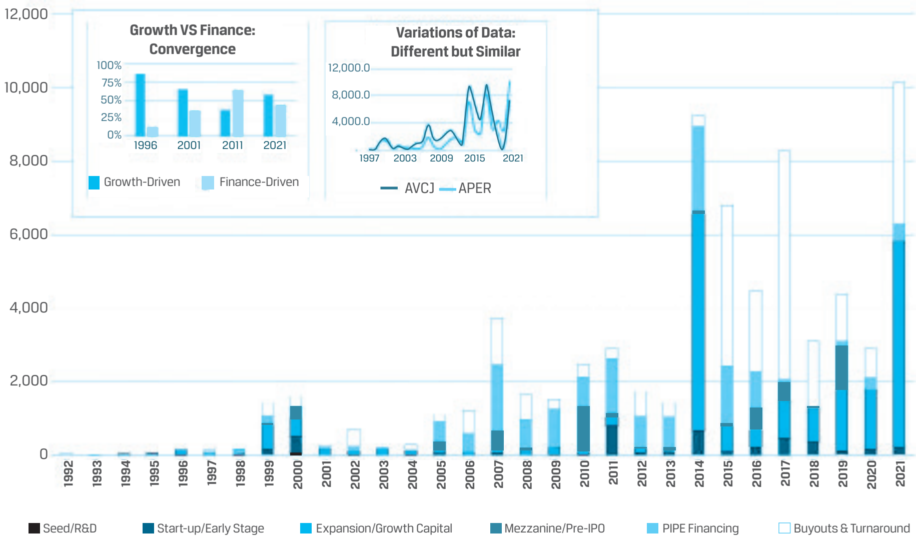

Figure 5.2.2: Investment Pace classified by Stage of Financing (U.S.$ m)
Source: AVCJ (and APER for the right insert)

A few observations can be made. Firstly, while it has been said that Hong Kong was not a home to start-ups or venture investing, the data shows a more balanced picture. We divide the above six categories into two halves, with the first three types considered to be more growth-driven, and the second half, finance-driven. From the first small insert on the left, we can see that Hong Kong has not fared badly. Over the years, we have witnessed a convergence, from growth-driven (predominantly expansion capital) in the mid-1990s[2] to one where growth and finance deals are head-to-head. Secondly, a more sobering thought might be justifiably raised about whether these investing activities reflect the investors' need for diversification. On this account, it is less clear that PE is counter-cyclical. Thirdly, APER, another data source, provides parallel data points, as seen in the small insert on the right.

Now let's get down to the businesses.

3. The Crack of Dawn

In Hong Kong, one of the early PE vanguards was founded in 1972 by three Harvard Business School classmates. Their debut fund was a meager USD 1 million, completed 15 investments, and brought McDonald's, Ikea, and Compass to the city. This so-called "transfer model" essentially replicated proven business models from elsewhere, locking horns locally with the "incredibly arrogant and so impossibly British" business establishments (Au and White, 2010, p.154; AVCJ, 2012, p.12-14).

Early successes, however, were rare relative to the numbers used to be seen in firms with headquarters located in, say, New York. Even for behemoths like the bank from Shanghai, its first Asian PE fund amounted to just USD 35 million in 1989. The fund's focuses were, in this order, Southeast Asian exporters and Hong Kong manufacturers relocating to Guangdong (AVCJ, 2012, p.20-22). Hong Kong, however, served well as a regional hub in which notes were compared and practitioners gathered.

PE deals were hitherto called "direct investments" because of the funds' direct participation in operating companies. Deals were incredibly competitive beneath the collegiate surface. This was because investable deals were few—Asian and Hong Kong businesses were foreign-controlled or local family-owned. India and mainland China were not yet on the map. While having a substantial presence in Hong Kong, several prominent foreign-originated VC firms were more attuned to investing in electronic upstarts in Taiwan, a rival dragon.

However, these small investments into the Hong Kong manufacturers who embraced the challenges across the border bore fruits, resulting in many IPO candidates for the local bourse. A "largest" fund in Asia was closed at USD 150 million by a French bank in the city in 1988. This threshold was soon surpassed by a landmark USD 1.7 billion infrastructure fund in 1994. Investments in infrastructure projects such as airports, highways, and power plants were the name of the game. The push in telecom infrastructure also sowed the seeds for the emergence of Huawei and ZTE, two telecom giants in Shenzhen. Some even traced the early days of QQ, a pc-based communication portal, to these infrastructure frenzies.

With the establishment of the local industry association, the game-changing development gathered pace, and the terms PE and VC replaced "direct investment." The first chairman of the industry body was appropriately assumed by a leading figure representing the third generation of a Hong Kong business family. For over 11 years until 1997, he headed up the U.S.-originated, Hong Kong-headquartered PE fund, which subsequently went for an MBO. Having accumulated many "shopping" experiences, he moved back to oversee the family's global sourcing and logistics group to drive a breakneck buying spree. Many were written into the four Harvard Business School case studies (Li & Fung Research Center, 2003).

4. AFC and Dotcom

Behind the headlines, and breathtaking volatility in currency and stock indices, immediately after the AFC, the Hong Kong PE space did not retreat much, albeit from a very small base. Indeed, lower public market valuations drew many newcomers to the party. U.S. and European shops set up their operations in Hong Kong to hunt for distressed and buyout opportunities around the region.

Not very dissimilar to the use of public money to shore up public equity, the post-handover/ AFC Hong Kong government found a focus in promoting local industries. This was in stark contrast to the non-interventionism of the previous administration. Policy debates on setting new government-sponsored VC funds, previously brushed aside, quickly began to surface. The discussions resulted in a combined HKD 1 billion fund for four different VC managers in 1998-9. Counting the policies relating to VC or SME (small to medium-sized enterprises) financing, a researcher shows ten policy initiatives after 1997, against only one before (Klingler-Vidra, 2018). In addition, the establishment in 1999 of the Growth Enterprise Market as a second board in the Hong Kong Stock Exchange provided further impetus to venture investing.

However, the industry was still in its adolescence, so the size of the AFC and later the burst of the dotcom bubble somewhat eclipsed it. For example, the government-sponsored funds suffered and "left a grudge between the industry and the government" (Au and White, 2010, p.159). The public outcry over housing prices and other economic issues also overshadowed what lay underneath: a new breed of investors who were on the ground scouting for growth companies.

Rise to merge with the hinterland

The Hong Kong capital market began to feel the southbound breeze blowing from the hinterland going into the millennium.

Let's not forget that the listing of mainland Chinese companies in HK dates back to 1993, when Tsingtao Brewery celebrated its H-share listing with a pop (Wu, 2018, p.166). Nevertheless, until the 2000s, these companies were predominantly state-owned enterprises. The listing process was under a stringent approval procedure for the H-shares. There were some red chips, i.e., mainland companies with Hong Kong-based representative companies for historical reasons. Even today, and under the listing rules, red chips are considered offshore companies. Their listings face fewer hurdles than H-shares. In the early 2000s, red-chip listings of privately-run Chinese onshore companies became practicable despite ad hoc notices or procedures. These notices include, non-exhaustively, the requirement of a “No-Action Letter” until 2003 and the promulgation of the 2006 Round-Trip Rule and subsequent refinements.[3]

Therefore, private enterprises at the time enjoyed the triple tailwind of the WTO’s induced export opportunities, a rapidly rising domestic market, and a receptive capital market. Companies from software and IT (Kingdee, Tencent) and consumer products (Mengniu Dairy, Huiyuan Juice), to F&B services (Fu Ji Catering[4] and Little Sheep), to name just a few, were funded by PE managers headquartered or operated out of Hong Kong. These companies obtained listing in HK rather than in the A-shares exchanges (Au and White, 2010, p.160; Beijing Venture Capital Consulting Co., Ltd, 2020, p.3-15).

The U.S. market was another overseas listing route. The summer of 2006 saw the New York Stock Exchange’s listing of New Oriental Education & Technology Inc. (thereafter “New Oriental,” (Yu, 2019)). The company raced ahead of the aforementioned red-chip rules, and its listing was an important milestone.[5] This deal and other followers revitalized an asset group hitherto forgotten after the doldrums left behind by the decline of Sina and other early vanguards. The post-New Oriental line-ups, mostly listed under the variable-interest enterprise (VIE) structure (Luk, 2016) create a separate and significant asset group, conveniently called Chinese-concept stocks listed in the U.S. Most of these companies involved VC or PE investors from Hong Kong, the mainland, and the U.S.

From these, it emerges that Chinese companies have become the primary source of IPOs for Hong Kong, and beneficial for other overseas bourses. Note that except in 2014, when Alibaba was listed in New York, the favorite destination of overseas listing was Hong Kong.

The ship sailed on from this point. Hong Kong's PE industry began its journey to merge with the business landscape in mainland China. Before this time, the city's PE was a class of its own. Under some calculations, it was on a par with Japan, the regional leader, with Singapore and other centers further down the table (Au and White, 2010). After the third iteration and with mainland China's homegrown PE industry also picking up and maturing after the 2010s, the transition has catapulted the industry to a stage where there is little point in distinguishing a Hong Kong PE player from a Greater China one. So, let's move northbound.

5. Emergence of Chinese Partners

According to a personal account, a PE industry event in the late 1990s took place in Guangzhou's Garden Hotel, the landmark hotel famously enshrined by China's late President Yang Shangkun for its foundation building. That gala dinner could not fill up a table! 20 years later, the industry became the "red sea," when the number of VCs led the world (PEDaily.cn, 2017, p.2). In 2018, some 170 funds raised USD 25.6 billion (including RMB and USD funds). Compared to about 10,822 firms in 2016, in 2018, about 22,887 investment firms were making PE investments in mainland China.[6] About 26% were VC, 57% PE, and 17% a mix of both (China Venture Capital Research Institute, 2019).

The contrast between that night in Beijing and what the above data of 2018-9 suggests could not be more dramatic.

Vigor-Chaos cycle

In the early 1990s, modern PE was an "import" to China (PEDaily.cn, 2017, p.6). Reportedly, the first foreign VC firm made its first investment in the country in a sports equipment maker in January 1989. (PEDaily.cn, 2017, p. 7; CITIC Securities, April 2021, p. 2).[7] Ten years later, in 1999, the internal team of this foreign company was formally incorporated into a partnership structure common to most PE players, while 1999 was also the inaugural year of the China VC Investment Forum, organized by Zero2IPO, an onshore databank. The timing was just one year after the famous "Proposal No. 1," announced by Professor Chen Siwei, then the vice-chairman of the Chinese People's Political and Consultative Conference (CPPCC), at the 9th CPPCC National Committee meeting. The proposal triggered the first boom cycle for domestic VC firms.

The first boom in the industry resulted in some landmark investments, pre-IPO "ambush" by funds, and wealth creation events. Participants were eagerly waiting for the landing of a new listing board or stock exchange, a Chinese answer to Nasdaq. The hype soon evaporated following the global meltdown triggered by the internet bubble burst in 2001. The "China Nasdaq" proposed by Professor Chen did not materialize until a decade later, unusual in an era that was used to the pace of high-speed trains. This down cycle, however, was crucial. This downtime in the mainland allowed the red-chip route in HK to be tested and haphazardly pushed forward, much like crossing the river by stepping stones. The ultimate breakthrough was achieved by the concerted efforts of foreign PE players, Chinese lawyers, investment bankers, and enterprising business owners.

With the onshore regulators keeping a half an eye on developments, successful China PE deals were consummated, new household names made, and returns banked.

Despite the listing venue being in Hong Kong (and to a lesser extent, New York, Singapore, and even Malaysia), these essentially "mainland Chinese" deals in the mid-2000s were important. Institutional investors worldwide began to taste the return potential through Hong Kong and other conduits. Greater China's PE began to appear on the radar screen of global institutional investors.[8]

6. 2008 Crisis and the PE Version of QE

The Global Financial Crisis (GFC) significantly weakened financial institutions across the globe, forcing banks and financial companies to reduce their exposures to equity investments. However, the pictures in Hong Kong and mainland China could not be more different. Internal logic drove China's capital market developments, which had meandered between relaxation and tightening.

According to a near-official account (Leung, 2015), Hong Kong experienced a swift recovery after the GFC, benefiting from the worldwide phenomenon of quantitative easing (QE). In mainland China, the crisis was met by the "Four-trillion Rescue Package," which was later admitted even by Beijing to be the "liquidity that floods the system" (大水漫灌).

Let's take a step back. Before 2008, the controversial Split-Shares Structural Reform in 2005-06 (Allen, Qian, Shan, and Zhu, 2020) supplied the first lifeline to the struggling domestic PE funds. These early-2000s vintage funds had almost given up as their funds approached their end. Although inducing a one-year suspension of new IPOs, the share reform provided a much-needed twist and inspired hope. In conjunction with the launching of the SME board in 2007, these reforms provided the policy boosts and incited another cycle of boom and vigor. As a result, in June 2006, for example, Shenzhen Coship Electronics Co., Ltd (002052.SZ) became the "first-ever exit" of a major Shenzhen-based domestic VC fund (PEDaily.cn, 2017, p.56-57).

While these capital market reforms provided the backdrop, some specific PE-related reforms beat the curtain-raising drums. The 2007 partnership laws laid down the legal basis of the corporate structures efficient for fundraising, investment, and exit. Before this, domestic and foreign managers had to rely on some convoluted administrative, often local, rules to set up the pass-through entities to administer the pooling of capital, execution of investment, and repatriation of returns.[9] The partnership laws and the associated notes made these structures formally tax-efficient. Further impetus was supplied shortly after the rescue package came on board. October 2009 saw the belated banging of gongs in Shenzhen's ChiNext Board, the so-called "China Nasdaq" advocated a decade ago. Twenty-eight companies achieved listings on the last day of the month and registered an average 106% first-day rally. A leading domestic PE firm took three portfolio companies public on the day, crowning it "the biggest winner of ChiNext" (PEDaily.cn, 2017, p.80-83).

In addition to the more established funds that survived the previous boom and bust cycles, many grassroots firms also sprung up to stage their arrivals in slightly unorthodox ways. Some of these new entrants adopted a factory conveyor-belt style investment and divestment process, a national hiring and firing recruitment strategy, generous deal commissions, and often, were the bidder of the last and highest prices. One firm had mastered these skills so well that it earned from critics the title of "public enemy No. 1." The firm's 2015 listing in the very illiquid "New Third Board," or NEEQ, an over-the-counter trading board, was unprecedented. Using that shell company, the fund manager acquired a Shanghai-listed property company to complete its glossy makeover, earning them the title of "first A-shares listed PE manager" (PEDaily.cn, 2017, p.88).[10]

Partly because of the publicity and partly because everyone was awash with liquidity, PE could no longer remain private. An article summed this up well using the four-character phrase "Everyone has PE Fever (全民PE熱)" (Caixin Weekly, May 2010). Note that no translation is needed! Fundraising in onshore domestic markets in many subsequent periods exceeded the value of USD fundraising. In the ten years up to 2008, RMB funds accounted for roughly 20% to 35% of the total amount raised for investment in China. In the ten years afterward, however, in no year did RMB funds account for less than 2009's 68%. If the data is correct, RMB funds at their height in 2017 represented 92% of the industry monies (Huang and Tian, 2020)!

Super-connector for Going-Out and One-Stop Shop

Having merged into mainland China, Hong Kong PE continued to bring something to the table in the early 2010s second rise. When domestic talents rich in industrial or engineering backgrounds were honing their skills in their homeland, the addition of the Hong Kong and other overseas players added a talent pool to the onshore industry eager to champion the "Going Out" strategy. Some liken this phenomenon to a software upgrade from "VC 1.0" to "VC 2.0", attributing the ascent partially to the availability of this pool (PEDaily.cn, 2017, p.174).[11] Some also, however, see these "exports" as the reflections of the monolithic nature of HK's talent pool. Having built their careers in banks, audits, or law firms, these generations of PE practitioners moved across and turned into the barbarians at the Forbidden City.

"Going Out (走出去)" as a policy has been on Beijing's agenda for some time. However, it was roughly in 2013, when Going Out married the One Road and One Belt strategy, that created the real impetus. Firing on all cylinders, public and private groups embarked on overseas shopping sprees. In the PE universe, interestingly, "going out" crystalized under a slightly different name, "sailing out (出海)." Not too far behind the corporate buyers were the PE shoppers who sailed out to release the newfound buying power under their purses. These players use the talent pools from Hong Kong, leveraging its history as a super-connector, replacing the colonial reference to "entrepot." Many investments, such as the bolt-on investments in Southeast Asia in 2016 by the Hangzhou-headquartered, dominant e-commerce giant, were done in this light (CY Zone, 2019).

Another feature of the mid-2010s was the emergence of the one-stop PE powerhouses present in Hong Kong, with significant operations on the mainland. These firms would have started from growth-capital investing or buyouts in China or North Asia. They could be start-ups themselves or evolving from existing platforms. However, with the blossoming of the e-commerce and consumer tech industry and the changing SOE landscape in the mainland, these firms seized the day and rose to the occasion. Not only did they raise funds and deploy capital efficiently, they also grew product offerings to become one-stop shops, going after the market's size leader in Japan. These umbrellas could house venture, growth, buyout, restructuring, private credits, real estate, hedge funds, and others (PAG, 25 March 2022; Zhang, 2020). In many cases, Hong Kong offered the advantages of being a magnet to capital of global, regional, and mainland origins needing to diversify. At the same time, its legal and tax structure was sufficiently efficient.[12]

2018 New Regulation

The second rise of PE reflects the spillover effect of a dramatic leveraging-up of China by so-called shadow banking, a stigma of the era. Many have traced the origin of shadow banking in the mid-2010s to the rescue package (Chen, He, and Liu, 2020). Concurrent with the drastic expansion of fiscal spending and the blossoming of local government financing vehicles, a contractionary monetary policy was meant to contain the financial system. However, the side effects of the contractionary monetary policy pushed banks to tread a thin line between achieving growth and maintaining asset quality. The snowball effect of the "banks-trusts lending" or "banks-securities companies-trusts lending," and many variants of wealth-management products caught Beijing by surprise.

With 2015's self-inflicted 35% collapse in A-shares[13] still vivid in memory, Beijing's "decision-making layers" resolved to restrain the systemic leverage. "Deleveraging" (去槓桿) came high on the policy agenda. Among others, a bomb was dropped in the capital market—the 2018 New Regulation on Asset Management ("the Regulation").

While the primary targets of the Regulation were shadow banking and public equity, its spillover effects on the private markets could be clearly felt. For example, up until 2020 (three years after the Regulation), none of the following indicators recovered from the 2017-8 peak: new fund amount raised, number of new managers, new investment amounts, and number of new investments (CITIC Securities, April 2021). The very speedy establishment of another new board, the STAR Market in Shanghai in 2019, provided some breathing space for cash-strapped companies and their investors. However, the average PE firms and portfolio companies still found themselves in an "ice-and-fire double heavenly world" where both abundant liquidity and the phenomenon of "hard to finance" coexisted paradoxically.

Competition rubbed salt into the wound. A handful of leading domestic players raised funds from the reduced pool of high net-worth investors and government-dominated guidance funds. Specifically, of the RMB 1.2 trillion raised in 2020, 42% of the PE firms raised an amount below RMB 100 million. The top ten firms raised 30% of the funds (CITIC Securities, April 2021, p.7). The "heads" would continue their heady rises, leaving the "tails" in the dust.

7. COVID-19-led Capital Winter and Beyond

The Sino-US trade war broke out when the onshore PE industry was adjusting to life under the Regulation. In Hong Kong, unprecedented social unrest was triggered by the city's government's later-aborted extradition bill. These events were quickly followed by the outbreak of COVID-19 in 2020. As events unfold at the time of writing, we will give some broad outlines to illustrate the more salient features.

Enter the State-Capitalists

Like viewing through a kaleidoscope, a slight twist in the angle may result in wholesale change. Depending on one's starting position, some may view the latest developments as empowerments or regressions. At the tail end of the 2010s, there have been many sudden rein-ins by the regulators of the new economy. On the one hand, China is not alone. It is a global phenomenon that regulators worldwide have begun to get a handle on what many e-commerce or social media giants mean to their respective economies and civil societies.

On the other hand, perhaps unique to China, communal, societal, or national values have become overriding policy principles. Replacing the "harmonious society" (和諧社會) in the previous era, "common prosperity" (共同富裕) has come to the forefront with a much sharper blade. Government agencies have produced "iron fist policies" (鐵拳政策) to police the "chaotic expansion, barbaric evolution" (無序擴張、野蠻生長) of platform companies. Sometimes, entire sub-industries with many private equity backers have been cut off overnight.

In PE, the same force took place subtly. The Regulation has exacerbated the relative rise of local government-backed (sometimes central ministry-backed) institutional investors, or limited partners (LPs).

Historically, raising foreign or societal capital has long been part of the missions of local governments. The dotcom bust in the 2000s did not deter post-WTO capital-starved China from learning fundraising the VC way. Treating the Silicon Valley model as a developmental strategy, replications were speedy and pilot programs, many. In the early 2010s, following many policies and guidelines aimed at streamline incentives, it became clear to many local bureaucrats that forming guidance funds was one way to achieve annual targets. Besides, private capital ranks last in the pecking order in an economy where savings have largely been channeled into government or SOEs' investment programs. Capital-hungry PE managers know where to ring when push comes to shove. Therefore, when shadow money retreats, state capital advances.

According to some counts, there were about 1,000 government-guided funds in 2015. By the end of 2021, there were 1,988 guidance funds managing some RMB 6.2 trillion capital (Zero2IPO, 2022). Another report suggests that government-controlled institutions, enterprises, or vehicles contributed about 54% of capital to the domestic PE firms with formal registrations in AMAC[14] in 2020 (Zero2IPO, May 2021). Also, these guidance funds accounted for 90% of the money managed by the funds of funds (another group of LPs who place money in the hands of the PE managers), a dramatic rise from only about 30% in 2015.

What is remarkable is the relative prowess of these government funds vis-à-vis the local private rivals whose modus operandi resembles the international peers. Globally, money talks. At the critical moment, implicit power and connections walk the talk. Observers spoke of the "can-open-doors" advantage of the guidance funds worldwide. The drawback is that these funds may be "squeezing out other LPs." In China, as elsewhere, their agendas may not be just about returns. Theirs would also include measures like tax revenue coming into the districts or, if the target companies are the pre-profit (loss-making) type, then the domiciliation of these companies. Aiming to fight the threat of being "strangled" (卡脖子) in supply chains, these guidance funds from national to county levels help to channel funds into companies that are "specialized, niche, distinctive, and new" (專精特新). "Hardcore technologies" (硬核科技) are fashionably preferred to consumer tech.

Lately, signs have emerged that these government — backed LPs have rolled up their sleeves. Usually dubbed "mother funds," they have set up their direct investment arms, initially tagging for co-investments. When in pairs, they learn the trade from their "offspring funds" through monthly reports, customized trips, and investor conferences. After these mother-figures become carnivorous, they inevitably hunt for the same opportunities that their offspring crave. The difference is that the mothers carry all their dry powder in the strollers.

The impact of the shifting powers of LPs vis-à-vis GPs is still to be assessed. It is not uncommon to hear the cry of "involution" (內捲), a term in anthropology initially used to describe the stagnation of agricultural productivity. It is now used to mean business hitting a bottleneck. Even the king or queen of finance cannot escape from involuting. Many GPs lament that the current capital winter is most severe because their competitors are not price-sensitive and write large checks. The euphoria of the post-pandemic rebound in mid-2020 was very short-lived. Since 2021, the deterioration of the property market, a significant revenue source for local governments, has worsened the winter as GPs must live with LPs' inability to fund commitments.

HK Hi-Tech train

In Hong Kong, a congruence of factors helped to bring new entrants and energies to the start-up and venture scene.

Importantly, Hong Kong's long-established capital raising capability continues to evolve. Feeling the loss of Alibaba to rivals in 2014, the stock exchange has resolved to twist the listing rules to cater to dual-class shares common for high-tech companies. The new rule and a gutsy opening to the pre-revenue biotech companies under the new Chapter 18A in 2018 provided a strong impetus. The PE space suddenly turned broader and brighter. Relative to onshore domestic listing routes, Hong Kong IPOs are more certain and transparent. Although the mainland bourses have begun to adopt the registration model, its “barrier-lake” (堰塞湖) and the various ad hoc measures still deter listing hopefuls. At the time of writing, the stock exchange may further address the need for loss-making high-tech companies, a welcome move to mitigate the negative effect of 2021’s controversial uplift of profit requirements.

In addition, the paths of several high-profile VC-backed companies have injected much-needed positivity into the start-up space of the territory. These include an HKUST-backed, now Shenzhen-based, drone maker and the rapidly growing, AI-powered facial recognition company tracing its origin to CUHK, another tertiary institution in HK. The club of unicorns, or private companies with a USD 1 billion value, has grown in membership. These led a local crowd-funding platform to write, “Contrary to popular belief, HK’s start-up community is one of the fastest growing ecosystems in the world” (WHub, 2019). Several PE firms that benefit from these rounds of exuberance and have managed to raise billion-plus new funds in 2022 are perhaps better prepared to face the challenges of macro headwinds.

8. New Tram to the Peak

We begin our journey where PE arrived from developed economies to the entrepot. When development in China came of age, the center of gravity moved to the mainland. The circle was part-completed when mainland players began to “Go Out” and invest through this super-connector. The newfound belief also helps the city in start-up investing in biotech and other sectors. The current progress faces challenges with globalization under siege amid big nations’ politicking on the one hand and the headwind of inflation-recession-(de)leveraging on the other.

Looking through the skylight ceiling of the newly decorated tram going up the Victoria Peak, we may take heed from a Hong Kong legend.

> "If you put water into a cup, it becomes the cup. You put water into a bottle, and it becomes the bottle. Now, water can flow, or it can crash. Be water, my friend," said Bruce Lee.

Hong Kong's agility has propelled the city to rise above past crises. Under "one-country two systems," the super-connector must continue to electrify new connections. As Henry Kissinger recently wrote,

> "[T]he willingness to enlarge the sphere of concern from [one's] self to the society...evoke the generosity of public services...[and] inspires sacrifice."
> "Faith in the future was...indispensable...No society can remain great if it loses faith in itself or if it systematically impugns its self-perception" (Kissinger, 2022, p.328).

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References

Chinese Publications (English Translation by the author)

Beijing Venture Capital Consulting Co., Ltd. *Classic Investment Cases of PE/VC in China*. 2020. Beijing: Tsinghua University Press. (北京創投諮詢有限公司,《 中國PE/ VC經典投資案例集》 2020, 北京:清華大學出版社 。)

Caixin Weekly. "Everyone has PE Fever", *Caixin Weekly*, May 2010. (財新週刊, 10.05.2010: "全民PE熱" ,《 財新週刊》, https://magazine.caixin.com/2010-05-10/100142403.html。)

Chen, Siyuan. *Mainland Enterprises Listed in Hong Kong*. 2019. Beijing: Law Press. (陳思遠,《內地企業香港上市》2019, 北京：法律出版社。)

China Venture Capital Research Institute. *China Venture Capital Yearbook 2018*. 2019. Beijing: China Development Press. (中國風險投資研究院 《中國風險投資年鑒2018》 2019, 北京: 中國發展出版社。)

CITIC Securities. "Creating an Era, Investing in the Future - China's Private Equity Investment Industry Entering a Golden Age." April 2021. (中信證券：《創時代，投未來——中國股權投資市場步入黃金時代》 21.4.2021, 中信證券, 中國資本市場深度研究。)

CY Zone. "Research Report on China's Sailing-Out Investment in 2019." 2019. (創業邦研究中心, 《2019中國出海行業研究報告》2019, https://zhizhi88.com/wp-content/uploads/2019/10/2019中國出海行業研究報告.pdf。)

Kunwu Jiuding. "Announcement on the Company's Directors' Receipt of the Notice of Registration from China Securities Regulatory Commission" September 2021. (昆吾九鼎,《關於公司董事收到中國證券監督管理委員會立案告知書的公告》昆吾九鼎投資控股股份有限公司, 29.09.2021, http://www.sse.com.cn/disclosure/listedinfo/announcement/c/new/2021-09-30/600053_20210930_1_oeIOtdAJ.pdf)

Leung, Julia. translated by Lu, Feng. *Disordered Capital*. 2015. Hong Kong Economic Daily Press. (梁鳳儀著, 盧峯譯《失序的資本： QE 後遺症，重建亞洲金融新秩序》, 2015, 香港經濟日報出版社。)

Li & Fung Research Center. *Supply Chain Management: Practical Experience of Li & Fung Group. 2003*. Hong Kong: Joint Publications. (利豐研究中心編著.《供應鏈管理：利豐集團的實踐經驗 》2003, 香港：三聯書店。)

PEDaily.cn. *A Brief History of China's Venture Capital*. 2017. Beijing: People's Posts and Telecommunications Press. (PEDaily.cn 《中國創投簡史》, 2017, 北京:人民郵電出版社。)

Wu, Yunxian. *China's Financial History 1978-2018*. 2018. Beijing: Social Science Literature Publishing. (巫雲仙《中國金融史1978-2018. 》2018, 北京: 社會科學文獻出版。)

Yu, Minhong. *I Was On The Verge Of Collapse*, 2019. Beijing: CITIC Publishing Group Co., Ltd. (俞敏洪《我曾走在崩潰的邊緣》2019, 北京：中信出版集團股份有限公司。)

Zero2IPO. "2021 China Equity Investment Fund LP Market Trend Analysis - and 2021 China Equity Investment Fund Investor's White Paper." May 2021. (清科 "2021年中國股權投資基金LP市場趨勢分析——暨2021年度中國股權投資基金出資人白皮書", 05.2021, www.pedata.cn。)

Zero2IPO. "Review and Prospect of China's Equity Investment Market in 2021." 2022. (清科, 2022. "2021年中国股权投资市场回顾与展望", www.pedata.cn。)

Zhang, Lei. *Value*. 2020. Hangzhou: Zhejiang Education Press. (張磊《價值》, 2020, 抗州: 浙江教育出版社。)

English Publications

Allen, F., Qian, J., Shan, C. and Zhu, J. 2020. “The Development of The Chinese Stock Market,” in Amstad, M., Sun, G. F. and Xiong, W. (ed.) 2020. *The Handbook of China’s Financial System*. Princeton University Press.

Au, Kevin. & White, S. 2010. “Hong Kong’s Venture Capital System and the Commercialization of New Technology.” in Fuller, D. ed. *Innovation Policy & the Limits of Laissez-faire: Hong Kong’s Policy in Comparative Perspective*. UK: Palgrave Macmillan.

AVCJ. 2012. “25 Years of Asia Private Equity & Venture Capital, 1988-2012.” *Asian VC Journal*. https://www.avcj.com/digital_assets/6239/AVCJ25thAnniversary_online.pdf

Chen, Z., He, Z. and Liu, C. 2020. “The Financing of Local Government in China: Stimulus Loan Wanes and Shadow Banking Waxes.” *Journal of Financial Economics*, 137(1), 42-71.

Charltons Law. 2021. “Listing PRC companies on the HKEX.” https://www.charltonslaw.com/legal/ipo/Listing-PRC-companies-on-the-HKEx.pdf

Conyers Dill & Pearman. November 2020. “Conyers advises New Oriental Education & Technology Group Inc.” https://www.conyers.com/

Harvard Business School. 3 Aug 2007. “Case Study: Fu Ji Food and Catering.” *Harvard Business School Publishing*. 9-208-004.

Huang, Z. and Tian, X. 2020. “China’s Venture Capital Market,” in Amstad, M., Sun, G. F. and Xiong, W. (ed.) 2020. *The Handbook of China’s Financial System*. Princeton University Press.

Jao, Y.C. 2001. *The Asian Financial Crisis and the Ordeal of Hong Kong*. London: Quorum Books.

Kissinger, Henry. 2022. *The Leadership: Six Studies in World Strategies*. New York: Penguin Press.

Klingler-Vidra, Robyn. 2018. *The Venture Capital State: The Silicon Valley Model In East Asia* (Cornell studies in political economy). Ithaca: Cornell University Press.

Luk, Simon. 2016. *Private Equity in Hong Kong and China*. Second Edition. LexisNexis.

Napier, Russell. 2021. *The Asian Financial Crisis 1995–98: Birth of The Age of Debt*. Hampshire: Harriman House.

PAG, 25 Mar 2022. “Prospectus – Application Proof.” www.hkex.com

Swensen, David. F. 2009. *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment* (Fully Revised and Updated). New York: Free Press.

“Private equity in China: Serving a higher purpose,” *The Economist*. 5 June 2021, www.economist.com

WHub. 2019. “Hong Kong Fintech White Paper, V.3.” https://www.whub.io/

Yong, Kwei-Ping. 2012. *Private Equity in China. Singapore:* John Wiley & Sons.

Notes

1 While the term “financial capitalism” has long existed in Marxist writings, we use it to denote “a form of capitalism that combined individualism with aggressive use of balance sheet management for…profit” (Napier, 2021).

2 Before 1996, datapoints for sub-categories were quite sparse.

3 See Charltons Law (2021) and Chen (2019) for a summary of Document No. 10 and Document No. 75. Some observers (Yong, 2012) see these rules as “challenges”. My answer is a “yes-and-no”. These cumbersome requirements create opportunities for PE managers, and they prosper further when the VIE becomes popular after the 2010s.

4 The early history of the Shanghai-headquartered caterer, a company this author’s employer funded, was written into a case study (Harvard Business School, 3 August 2007). Its decline later resulted from over-leverage.

5 A leading law firm on offshore matters wrote that it was “the first red-chip Chinese company listed on the New York Stock Exchange” (Conyers Dill & Pearman, November 2020).

6 Data of investment firms before 2015/16 are not comparable.

7 According to Huang and Tian (2020), the first domestic VC firm was China New Technology Start-up Investment Company, and it bankrupted in 1998.

8 It was roughly at this time when endowments, such as the Yale Model, in the US marked their allocation to dedicated Chinese PE. Their early successes were derived from exits in Hong Kong (Swensen, 2009; Zhang, 2020).

9 The biggest of such domestic partnership funds was located in Bohai, Tianjin. The author was the legal representative of a Beijing based foreign-invested venture capital investment enterprise, which was among the first batch of FIVCIE at the time. Others, often much bigger with parents from the U.S., were set up in Shanghai and Beijing (Yong, 2012).

10 The firm’s subsequent decline was swift. In September 2021, the A-share listed company announced that its chairman and co-founder was under investigation by the CSRC, the securities watchdog (Kunwu Jiuding, September 2021).

11 For example, a major U.S. franchise lost its 23-year China chief representative to a local platform while another major player, also from the U.S., saw its China head taking several senior colleagues with him to form a new firm (PEDaily.cn, 2017, p. 172).

12 Although not entirely ideal, Hong Kong’s legal and tax infrastructure have since 2018 become more friendly to investment funds with reforms on open-ended funds, partnerships, and carried interests.

13 Many pointed to regulators’ inexperience, the rash attempts to buttress indexes by “national teams,” and the circuit breaker mechanism as the reasons for the crash (Allen et al., 2020).

14 The Asset Management Association of China is an organization supervised by the CSRC.

5.3

Opportunities under the Third Wave —Our Role in China's "Mixed" Economy

— Scott D. Peterman, CFA

Wave upon wave of change is swirling around us, disrupting our daily lives, our jobs, our relationships, and even our own sense of self-identity. How can we accept, let alone embrace, the disruption around us? Yet, if we are to thrive in the coming years, embrace it we must, and let disruption happen. How will Hong Kong prosper? Looking at China's Fourteenth Five-Year Plan, summarized below, there are meaningful opportunities for multiple collaborations and partnerships, both with the "winners" of yesterday and the "winners" of the future. In fact, developing partnership skills will allow us to disrupt and promote ourselves, while thriving and influencing the status quo. Consider the bold plans envisioned by the Fourteenth Five-Year Plan.

> *With the Thirteenth Five-Year Plan drawing to an end, China has shifted its development focus from quantity to high quality. Yet, imbalance and inadequacy still exist, and the task of reform in key areas and core links remains arduous. The goals of the latest mid-to long-term development plan are of historical significance with three 'NEWs' being the core. The first 'NEW' is the new stage of development. From 2021 onwards, China will embark on a new journey to fully build a modern socialist country and enter a new stage of*

development. According to the goals set, China's economy, science and comprehensive national strength will rise to a new level by the year 2035. GDP per capita will reach the same level as that of a moderately developed country.

The second 'NEW' is the new development concept. China will pursue innovative, coordinated, green, open and inclusive development. Innovation is the driving force for development. Coordination is the inherent character of healthy development. Green is the common format of sustainable development. Openness is the chosen road through which to further development. Inclusive development means that all of society will share the fruits of development. All in all, with common prosperity as priority, China is dedicated to providing a better life to all Chinese people.

The third 'NEW' is the new development pattern. China will quicken the pace to establish a new development pattern that will nurture a strong domestic market, with an emphasis on domestic circulation and at the same time letting the domestic circulation and international one reinforce each other, spurring investment and consumption in an all-round way. Rather than closing its doors, China will further the opening-up and leverage the advantages of its huge market to further promote international cooperation with win-win results.[1]

Given Hong Kong's position in the Greater Bay Area ("GBA"), it can reasonably expect to participate (to some degree) in China's three "NEWs." Does that imply, for example, that Hong Kong will increasingly be a home for science and *innovation, that Hong Kong will become more "green," that Hong Kong's status as an international financial center will continue to prosper, or that Hong Kong will increasingly come to resemble "modern socialist countries" like the Scandinavian countries which can trumpet low Gini coefficients (Iceland, 26.8; Norway, 27; Finland, 27.4; Denmark, 28.7; Sweden, 28.8)[2]. The motivating force of these "NEWs" is the resolution by Chinese socialism of the Principal Contradiction, redefined to be the "contradiction between unbalanced and inadequate development and the people's ever-growing needs for a better life."[3] In Sinicized Marxist dialectic, the "principal contradiction" is what defines a society. By identifying and solving it, society develops peacefully. Left unsolved, it can lead to chaos and eventually, as Marx predicted, to revolution.*

Our readers will naturally be more interested in Hong Kong's continued and continuing status as an international financial center. Where can we prosper? We focus on three areas where Hong Kong can contribute: (1) venture capital, (2) capital markets, (3) wealth management and the development of the GBA.

Venture Capital—China's Focus on Homegrown Innovation, Science, and Technology

China needs and relies on foreign direct investment. In particular, China seeks to sponsor and cultivate entrepreneurship by giving greater scope to the role of government-funded venture investment through its Mass Entrepreneurship and Mass Innovation initiative.[4] Of course, governments have been involved with the promotion of venture capital at least since

1946, when a consortium of the Bank of England and leading British banks combined to create the British firm 3i as a vehicle to make long-term investments in smaller firms.[5] As with many plans governing Hong Kong's future, the integration of Hong Kong into the GBA is important. In connection with Hong Kong start-ups seeking outward expansion into China, the Global Innovation Index 2020 ranked the Guangzhou-Shenzhen-Hong Kong science and technology cluster, formed by the innovation and technology industries in the three cities, second in the world, trailing only the Tokyo-Yokohama science and technology cluster.[6]

Hong Kong is already home to a number of private equity and venture capital firms. What can our local talent pool bring to these government-funded or private-funded startups? Hong Kong's investment professionals and their legal teams are very familiar with all forms of venture financing: venture capital, venture debt, asset-based financing, revenue based financing, receivables financing, supply chain financing, inventory financing, bank loans, staged financing techniques, seed financing such as SAFE, KISS, and SAFT documents (of which there are U.S. and non-U.S. versions) and their various iterations and innovations, including Y-Combinator's "Handshake Deal Protocol." All these financing techniques were pioneered outside of Hong Kong but enjoy wide currency locally. Additionally, our VC investors can tap into professional support communities such as NVCA, BVCA, and our own HKVCA, which provide training and sophisticated model documents for no cost. The model documents are very comprehensive, which make them sound perfect. However, these documents are not appropriate if one is raising a pre-seed or seed round of, say, less than USD 1 million. Nevertheless, that is where investment professionals can make a difference. The funding documents—any funding document—should be tailored for each particular venture investment. Several important changes to these documents may require rethinking if traditional venture funding techniques are to be yoked to the harness of the government-funded Mass Entrepreneurship and Mass Innovation initiative. Venture capital financing has real limitations in its ability to advance substantial technological change. This is due to several factors. There is a narrow band of technological innovations that fit the requirements of institutional venture capital investors. That may be largely due to venture capital in its current stage of development being optimized for a narrow slice of technological innovation. Venture capital funds used to have terms of 12 to 15 years. It is now uncommon to see venture capital funds with terms that exceed ten years. This period implies that venture capitalists are drawn to investment opportunities where ideas can be commercialized and their value realized within a reasonably short period. Software and service businesses (such as platforms, which often have short development times and can benefit from quick market feedback) are amenable to this approach.[7] It is unlikely that the government-funded Mass Entrepreneurship and Mass Innovation initiative will have much of an appetite for these businesses, especially where track records are not established. If so, this implies that the current raft of Asian-oriented venture financing documents will need to be modified not just by lengthening the term of these venture funds, but more importantly, by adjusting the governance models currently in use. Governance will become more robust, and demonstrably socially beneficial.

Capital Markets—Deepening Our Linkage with China's Capital Market

As an international financial center, Hong Kong's capital market must serve global investors by providing financial connections between Asia and the rest of the world. Hong Kong can boast a deep and sophisticated talent pool coupled with robust regulatory and supervisory frameworks. It should not be surprising that the strength and interconnectedness of Hong Kong's equity and debt capital markets should have especial appeal to Chinese companies seeking funding. Now is a particularly appropriate time for these companies to turn to Hong Kong.

> At the end of 2020, China's foreign debt, including U.S. dollar debt, stood at roughly USD 2.4 trillion. Corporate debt is USD 27 trillion, while the country's total public debt exceeds 300% of GDP. China's public debt is already 60% higher than the average across other countries, and the debt-to-GDP ratio is growing at a rate of about 11% per year. As China's GDP has grown by less than 11% annually for the past 11 years, its debt is outpacing its GDP growth.[8]

Increasingly, mainland companies seeking to go public will choose to list in Hong Kong. Consider these facts:

- The overall market capitalization of listed companies on the Hong Kong Stock Exchange (HKSE) was HKD 42 trillion by the end of 2021.
- The average daily turnover between mainland China and Hong Kong through Stock Connect increased to more than RMB 150 billion.
- Total funds raised in Hong Kong are expected to reach HKD 180-200 billion in 2022.
- The HKSE has topped global IPO fundraising for seven of the last 13 years.
- The number and proportion of U.S.-listed Chinese enterprises in Hong Kong has increased significantly.
- Hong Kong Exchanges and Clearing Market Limited plans to open offices in the United States and Europe next year.[9]

As one of the world headquarters for IPOs, the HKSE is seeking to develop IPO pipelines throughout Asia, in high growth countries such as India, Indonesia, and Vietnam, expanding the role of Hong Kong as a regional financial center. What other steps can Hong Kong take to facilitate a GBA-merged capital market? Here are some opportunities for us:

- Promote cross-boundary capital flows by promoting the RMB as a transaction and settlement currency.
- Make it easier for mainland businesses to conduct foreign trade in Hong Kong. Current currency exchange and trading is not operationally efficient.
- Ease restrictions on capital flow in the GBA.
- Continue to promote and facilitate innovative regulatory responses to a rapidly-changing economic environment.
- Invest in fintech to reform the means by which financial services and goods are provided.

Developing the GBA by Opening the Doors of Wealth Management

Does the GBA represent the greatest wealth-management opportunity in a generation? Looking at the numbers alone, the answer appears to be "yes." Consider the figures below.

- 452,010 high-net-worth (HNW) families have more than RMB 6 million in investable assets across Guangdong, Hong Kong and Macau. Their aggregate estimated investable assets have reached at least RMB 2.7 trillion, making the GBA the wealthiest megalopolis in the world.[10]
- More than 450,000 HNW families live in the GBA.[11]
- In Guangdong alone, over 165,000 households have investable assets above RMB 10 million.[12]

- The GBA is home to a population of 72 million residents and has a gross GDP of USD 2.2 trillion. This GDP is already comparable to other world-class bay areas and is projected to grow to USD 4.6 trillion by 2030. This would mark the highest GDP among other bay areas, making the GBA's output more than the San Francisco Bay Area and the New York metropolitan area combined.[13]
- The GBA is home to 20% of China's ultra-high-net-worth (UHNW) and HNW households, while 70% of the region's UHNW and HNW individuals have expressed strong interest in capitalizing on the GBA and increasing their investments in foreign financial products as they become available.[14]
- In 2021, more than 25 enterprises in the GBA were listed among the Fortune Global 500, and more than 60,000 high-tech enterprises are clustered in Guangdong alone.[15]

The picture one gets from the above is one of increasing prosperity and wealth generation that is nonetheless being frustrated by a relative lack of investment in products and services. To serve these developing needs, the Cross-boundary Wealth Management Connect Scheme in the Guangdong-Hong Kong-Macau GBA ("WMC") is one of the key initiatives under the mutual market access schemes between the capital markets of Hong Kong, Macau, and the mainland. The scheme allows eligible mainland, Hong Kong and Macau residents in the GBA to invest in wealth management products distributed by banks in each other's market through a closed-loop funds flow channel established between their respective banking systems.[16] To ensure that the scheme starts life with a reasonable amount of de-risking limitations, products offered through WMC offer simple public fund structures representing low to medium risk, such as bond funds. The recently-announced and introduced "ETF Connect" is a welcomed and much needed addition to the overall WMC scheme. Currently, using the existing Stock Connect scheme, international investors can invest in any of 83 mainland-listed ETFs, 53 in Shanghai and 30 in Shenzhen. In keeping with the de-risking limitations of the WMC, for the sake of "safety," not all ETFs listed in Shanghai, Shenzhen, and Hong Kong are eligible for trading under Stock Connect. Eligible

ETFs must meet certain criteria, such as requirements on their trading currencies, asset sizes, length of listing, and specific conditions related to the benchmark indices. Synthetic ETFs and leveraged and inverse products listed in Hong Kong are not eligible securities under Stock Connect. What will be interesting to watch over the next several decades is the degree to which investors choose to grow their wealth through financial products and services, rather than investing in apartments and commercial real estate, which has been the traditional wealth-creation activity among Hong Kong and mainland investors alike.

The numbers above are compelling, to say the least, and yet there are impediments and challenges if the full-blown vision of the GBA Outline Development Plan is to be realized. Moreover, in this connection, in several important aspects, the COVID-19 pandemic and the policy response to it has highlighted key areas that need to be addressed. At the heart of the Outline Development Plan are geographic and cultural integration, infrastructural connectivity, financial integration, and an emphasis on State-guided innovation and technology development. In particular, the COVID-19 policy response showed the linchpin of the GBA vision to be open and to have free borders. This will eventually be resolved. However, a more challenging notion is trying to get a grip on understanding the influence of the free flow of information in the development of the GBA as an integrated hub, especially in connection with the development of services industries of all types, and most especially in terms of promoting homegrown innovation. Connectivity is key. Let's look at some issues to flesh out this theme:

Travel must be unrestricted and timely. It will be important to keep travel times between all nine major areas of the GBA to one hour or less. Border controls between Hong Kong and China and, between Macau and China, must be relaxed. Smart card identity documents coupled with Hong Kong's thumbprint recognition system would be ideal.

Assuming border control can be relaxed and—at some point—optimized for efficiency, what kind of tax measures and adjustments will be necessary to address the challenges faced by people living and working across the GBA on a daily or weekly basis, as many did pre-COVID? Can an optimally harmonized tax system remove the frustrating day-count regimes currently in place to ensure tax is paid properly? Should there simply be a regional and common tax system in the GBA? Steps are being taken in this direction. For example, the Hengqin New Area of Zhuhai has rolled out a range of preferential tax policies that include reductions to corporate income tax for companies in 150 industries and individual income tax reductions and waivers for skilled talent and Macau residents.[17] There is some recognition that in the absence of a harmonized tax system, it will be difficult to attract talent.

Turning to related areas where "accommodations" are required, there is a need to harmonize corporate law and audit standards. As an observation, countries governed under common law regimes have developed more robust and deeper financial services industries than have those countries operating under civil law. One of the key differences in investment contracts drafted under a "judge-made" legal system (common law) compared to those same contracts under a "code-based" legal system (civil law) is the more lengthy and detailed, and more descriptive manner, of the former. In this connection, is it better to have a unified legal system in the GBA that reflects elements of both civil and common law? Or, should Hong Kong's common law system be adopted for corporate, transactional work and the rest be relegated to China's civil codes in much the same manner that Dubai has done? Dubai uniquely caters to both Shariah-compliant financial services, and civil and commercial matters using English-language common law at the Dubai International Financial Centre

(DIFC) courts. Operated as an independent English-language common law judiciary, DIFC courts have jurisdiction to hear civil and commercial disputes regionally and internationally. They do not get involved in criminal, family or matrimonial matters.[18]

If some meaningful degree of harmonization could be adopted, it would be helpful to ease doing business in the region, as would relaxing even more (and more predictively so) current regulatory barriers to foreign investments in China. It remains to be seen whether and to what degree Chinese Company Law and the Negative List will be adjusted in the future. In any event, whether any such harmonization, accommodations, or adjustments ever occur, it will be important that policies and regulations be made clear and unambiguous, the better to promote certainty, predictability, and compliance. This has been a common and persistent complaint among foreign firms established, or seeking to be established, in China.

The GBA plan can be seen as a "holding action," in that if the plan were fully realized as envisioned in the Framework Agreement on Deepening Guangdong-Hong Kong-Macau Cooperation in the Development of the GBA, it would be instrumental in moving China away from a low-skilled manufacturing center to a technical and innovation center. If successful, the GBA model could also be used to develop other metropolitan areas of China. While there are many challenges in forming a fully realized merged market, opportunities lie in addressing and resolving these challenges. Our history in Hong Kong has been characterized by continuous disruption and adaptation, exploiting change "in the margins." Working and living in the margins requires a willingness to experiment, to reinvest a business or paradigm with new energy and direction. This kind of disruption is a rupture from the past, giving us the creative space that rupture creates. In this sense, disruption functions as strategy, helping us to reimagine our future while still connecting us to our unique Hong Kong culture.

Notes

1 Tang Rui, Chargé d'Affaires to Malaysia, "China's New Development Opens Up New Opportunities for the World," 17 December 2020. Accessed on 26 July 2022, https://www.mfa.gov.cn/ce/cemy/eng/sgxw/t1840912.htm#:~:text=The%20first%20%E2%80%9CNEW%E2%80%9D%20is%20the,level%20by%20the%20year%202035.

2 Habib Ur Rehman, "5 Socialist Countries that Have Succeeded." Accessed on 6 July 2022, https://www.insidermonkey.com/blog/5-socialist-countries-that-have-succeeded-964429/?singlepage=1.

3 XU Lingui, "Xinhua Insight: China embraces new "principal contradiction" when embarking on new journey," in China Daily October 21, 2017. Accessed on 26 July 2022, http://www.chinatoday.com.cn/english/spc/2017-10/21/content_749120.htm.

4 "Opportunities Arising from China's 13th Five-Year Plan: An Overview" published by the Hong Kong Trade Development Council. Accessed on 27 July 2022, https://hkmb.hktdc.com/en/1X0A5OJH/hktdc-research/Opportunities-Arising-from-Chinas-13th-Five-Year-Plan-An-Overview.

5 Josh Lerner and Ramana Nanda, "Venture Capital's Role in Financing Innovation: What We Know and How Much We Still Need to Learn." Accessed on 27 July 2022, https://www.hbs.edu/ris/Publication%20Files/20-131_fc73af76-3719-4b5f-abfc-1084df90747d.pdf.

6 HKTDC Research, 22 February 2021, "Hong Kong Start-Up Survey: Opportunities and Challenges in the Greater Bay Area." Accessed on 5 August 2022, https://research.hktdc.com/en/article/NjczMTQyNzM0.

7 Lerner and Nanda, "Venture Capital's Role," 7-12.

8 Antonio Graceffo, "Could China's Massive Public Debt Torpedo The Global Economy?" 2 December 2021. Accessed on 28 July 2022 https://warontherocks.com/2021/12/could-chinas-massive-public-debt-torpedo-the-global-economy/.

9 PricewaterhouseCoopers, "Hong Kong's capital markets continue to flourish 25 years after the handover." Accessed on 28 July 2022, https://www.pwchk.com/en/press-room/press-releases/pr-080622.html.

10 Deloitte, "Get ready for Wealth Management Connect in the Greater Bay Area," November 2020, citing the Hurun Wealth Report 2019. Accessed on 29 July 2022, https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/financial-services/deloitte-cn-fsi-greater-bay-area-wealth-management-connect-publication-en-201130.pdf.

11 HSBC, "The Greater Bay Area: Opening Doors for Wealth Management," undated. Accessed on 29 July 2022, https://sponsored.bloomberg.com/article/hsbcwealth/the-greater-bay-area-opening-doors-for-wealth-management.

12 Bank of East Asia, "Investment Preferences of Mainland and Hong Kong High-Net-Worth Individuals," 5 May 2021. Accessed on 22 August 2022, https://www.hkbea.com/pdf/bea-economic-research/202105/2105-economic-presentation-en.pdf.

13 World Economic Forum in collaboration with Oliver Wyman, "From Sandbox to Bridge: The Role of the Greater Bay Area in Connecting China with Global Asset Management," September 2021. Accessed on 29 July 2022, https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2021/sep/the-role-of-the-greater-bay-area-in-china-asset-management_en.pdf.

14 World Economic Forum in collaboration with Oliver Wyman, "From Sandbox to Bridge."

15 "Greater Bay Area surpasses 12 trillion yuan GDP mark in 2012," published on 19 April 2022. Accessed on http://www.cnbayarea.org.cn/english/News/content/post_895560.html on 2 August 2022.

16 Hong Kong Monetary Authority, "Cross-boundary Wealth Management Connect Scheme in the Guangdong-Hong Kong-Macau Greater Bay Area." Accessed on 4 August 2022, https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/wealth-management-connect/.

17 Arendse Huld, "Investing in Guangdong—Preferential Tax Policies in Hengqin New Area, Zhuhai," 13 July 2022. Accessed on 15 August 2022, https://www.china-briefing.com/news/investing-in-guangdong-preferential-policies-in-hengqin-new-area-zhuhai/.

18 "About the Shariah Law & DIFC Courts British Common Law." Accessed on 4 August 2022, https://www.visitdubai.com/en/business-in-dubai/newsroom/news-insights/about-shariah-law-difc-courts-british-common-law.

5.4

Reminiscences of Two Financial Professionals Across Three Crises

— Victor Yeung, CFA, and Patrick Ma, CFA

Prelude

Since after the Second World War, the development paradigm has favored niche seeking. General surgery, for example, has diversified into cardiothoracic surgery, ophthalmology, and other disciplines that deal with specific organs. Society welcomes this change as more specialized doctors would be more knowledgeable about the specific organ needing treatment, improving the overall medical discipline.

Similarly, manufacturing companies have outsourced components to specialized vendors. A car manufacturer, for example, might engage over a thousand vendors to manufacture a car. In their respective areas of expertise, vendors can develop economies of scale, which lower the final product cost over time. Occupying a niche with superior expertise is a sound business strategy, as customers often have no realistic alternative, and much wealth is made for both the entrepreneurs and the financial investors.

However, the paradigm is not without flaws. As supply chains were disrupted over the last two years, vertically integrated companies, which have better control over their manufacturing process, maintained a better production program. Tesla, for example, has integrated its production out of necessity: an electric car often needs parts that are just ever so slightly different from the standard parts, leading to better outcomes if Tesla manufactures and combines standard parts. But, as a result in the last several quarters, Tesla has continued to increase its production levels while most other car manufacturers have seen production shortfalls. The Economist has called this change in paradigm “Teslafication.”

Finance has also evolved through a period of niche specialization. For most of my career, I have focused on institutional real estate, including Real Estate Investment Trusts, Commercial Mortgage Backed Securities, and en bloc commercial assets. Valuation of real estate is tied to supply and demand dynamics, which in term is driven by inflation, population growth, and other economic factors. We as real estate specialists often reference market economic factors so that we can spend our time with real estate specific issues. During normal times, this strategy works well.

But as my colleague Patrick Ma has written in the next few pages, none of the last three financial crises was directly related to commercial real estate, yet all three times commercial real estate performance was greatly impacted. During these times, it often takes a cross-sector perspective to understand our niche’s performance and to arrive at the correct strategy given the circumstances.

In addition, during economic expansion, competition can come from areas outside of one’s immediate coverage. For example, web retailing competed directly with malls, which were long seen as the premier assets within the commercial real estate markets. Nowhere is this more apparent than China, which saw the mall-centric culture destroyed before it was really developed.

Silo vision could miss the development of web commerce and not see its implication to real estate. Thus, a real estate investor who survived through the last 15 years would have to accept that factors external to real estate are often as important as internal ones.

In the next ten years, the energy industry could be transformed into a mineral-based one, where deployments of solar, wind, and battery storage technologies are limited only by the society's ability to generate the necessary material. Electric cars may also become mainstream and gradually replace the 2 billion cars currently on the roads. The further the society is along this transformation, the more decoupled the energy market will be from energy commodities. Oil and gas will still have industrial uses, but their price fluctuations will no longer impact home energy prices. This would change the dynamics of inflation.

Further down the road, self-driving cars and humanoid robots are currently being prototyped, which when successful could replace many repetitive jobs. If managed well, this can reduce labour shortages in some sectors, while allowing humans to take on more challenging opportunities.

Both changes above will decrease the scarcity of important inputs to our economy. But when that happens, other scarce resources may see even more demand. For example, Hong Kong's Peak District will stay the same size, and the demand will only increase as new wealth is created by the next wave of technological advances. I am bringing up these advances not as investment advice, but to point out that technological and other transformations can change even industries as old as real estate.

This is especially true for younger financial analysts and investors. The personal computer took 30 years to impact our lives; yet the smartphone took only 15 years. Technological advances in the next 40 years will be even faster than that in the last 40 years. Those of you who are joining the industry now will be served well to adopt a Renaissance Person stance, and develop knowledge across different sectors.

By Victor Yeung

Asian Financial Crisis (1997-98)—from Jubilant Handover to Seven Lean Calves, with Deflationary Scars

Right before the handover of Hong Kong to China on 1 July 1997, I had come back to Hong Kong from Canada after completing my MBA and was getting into the financial industry as a sell-side analyst in an Asian brokerage firm. At that time the mood of Hong Kong was one of jubilation about Hong Kong's post-1997 outlook as China would maintain Hong Kong's prosperity as a successful showcase of "one-country, two systems." Especially, there was a strong belief that China would keep Hong Kong asset prices strong as a corollary of a successful "one country, two systems." It was a cliche at the time that a typical Hong Kong family owned a home, bought the second one as rental property, and speculated on the third. As one of my friends put it at the time, if all 26 Chinese provincial governments decided to buy an office building each in Hong Kong, how could the property market collapse?

Such positive sentiment had contributed to bull runs in both the Hong Kong stock market and the property market, even as some signs of weakness emerged. I recalled that after watching the handover ceremony on the midnight of 1 July, I woke up on the morning of 2 July, turned on the morning TV news, and watched the Thai government being forced to float the Thai baht as its foreign reserves depleted and it was no longer able to defend the baht. The fall of the baht marked the beginning of the Asian Financial Crisis, but it went unnoticed among the Hong Kong people. Some further signs of weakness emerged in the form of surprise weakness in Hong Kong visitor arrivals—June 1997 visitor arrivals dropped 14% to 0.79 million, amid expectations of strong tourism demand from the handover. In the following months, news of currencies in Malaysia, Philippines, Indonesia under pressure made the headlines, but Hong Kong remained in a boomtown mode; even the introduction of the "85,000 housing supply" program by the Chief Executive at the time had not moderated such a red-hot market. It was against such a backdrop that I joined an Asian brokerage house as a research analyst in October 1997.

Indeed, it was an interesting time to join the Hong Kong financial industry. The HKD dollar peg was under challenge, and the pressure fed to both the peg and the stock market. The Hang Seng Index lost almost 30% in October alone. By late October, the HKMA decided to raise the overnight HIBOR from 8% to 23%, and at one point 280% to defend the peg. As things moved from bad to worse, salespeople and analysts alike were increasingly at a loss to explain what drove the markets, to clients and more importantly, to themselves. In one late evening, my research director and I had an in-depth discussion about what caused the fall of the market. Both of us, like most people in Hong Kong who had not witnessed such volatile markets, tried to count every possible cause. As we dismissed every probable cause, exhausting both the options and ourselves, my research director reached the last probable cause available, "Hey, it all boils down to confidence, doesn't it?"

Yes, it all boiled down to confidence. While financial historians can write in the future about how excessive credit expansion in Asia (especially the asset-liability mismatch in the form of USD debt/local currency assets and overstretched balance sheets) caused the Asian Financial Crisis, investors and the people at large have to live with the present, especially the one amid the wreckage caused by the financial crisis. The year 1998 started with the continued two-prong attack in the form of shorting the Hong Kong dollar and stock futures in the knowledge that HKMA would unleash the interest rate hike to defend the peg that contributed to stock market declines. Things took a change in late August when the market rumored that Hong Kong was intervening directly in the stock market. Later Financial Secretary Donald Tsang and HKMA Chief Executive Joseph Yam came out and announced that Hong Kong would mobilize Hong Kong's own massive foreign reserves for direct purchase of stocks and futures in a bid to squeeze the "speculators." The Hong Kong government ended up buying approximately HKD 120 billion (USD 15 billion) worth of shares in Hang Seng Index constituents by the end of August, when the squeeze ended with the closing of the August Hang Seng Index futures contract. The move, which contrasted with Hong Kong's well-known principle of "big market, small government," had led Hong Kong onto uncharted waters at the time, uncertain at times about where Hong Kong would go or whether the market slides would be arrested after the intervention. The intervention, and the collapse of LTCM following the Russian government debt default, had given Hong Kong the breathing room it wanted.

While the stock market impact of the Asian Financial Crisis ended with the Hong Kong government's victory in defending the HKD peg and supporting the stock market, the crisis had a long-lasting impact on Hong Kong economy and psyche. The Hong Kong residential property market started to fall by early 1998, culminating in a 65% fall from the 1997 peak by mid-2003 when SARS hit Hong Kong. Economic growth went from +5.1% growth in 1997 to -5.9% in 1998. Unemployment shot up from 2.2% in 1997 to 4.6% in 1998 and peaked at 7.86% in 2003 before starting to fall off. Thousands of homeowners fell into the “negative equity” trap. Rapid deterioration of the household balance sheet and weak prospects of income growth had led to a deflationary mentality among the Hong Kong populace. Consumption dropped rapidly: I recall that at one point my wife and I went to a restaurant which had been full of customers only to find that we were the only ones in the restaurant. Hong Kong people had started what I called “climbing down the ladder” in terms of consumption and lifestyle: chasing the best coupons and discounts; Shenzhen, Dongguan and Macau became popular destinations for Hong Kong people.

More importantly, the Asian Financial Crisis and its deflationary effect had led to a change of the Hong Kong business psyche. Hong Kong businesses pre-1997 had been one built on the back of asset value: household wealth built upon home values and household leverage, business financing backed by physical assets. The Asian Financial Crisis has pushed the businesses, as well as the government, to look for other non-traditional/non-asset-heavy ways to survive and prosper. The period of 1998-2003 had seen new trends emerging: investment and expansion into new businesses, especially internet-related businesses (partly fuelled by the global dotcom bubble up to the early 2000s); and further expansion into China, especially for manufacturers who took advantage of China’s entry into the WTO in 2000. We also saw local property developers moving away from a pure home-builder business model with increased investment in commercial rental properties, with rental income being a built-in cash cow. By post-SARS 2003, the Hong Kong business scene and households had become leaner and meaner, when a renewed round of monetary loosening from the U.S., and new waves of China tourists and corporates coming to the world, with Hong Kong as their first stop, arrived.

The Global Financial Crisis (2008-09) — Throwing Money at the Problem, with Differing Outcomes and Differing Assessments.

By 2008, Hong Kong had washed off the remaining effects of the deflationary years of 1998-2003 after the Asian Financial Crisis and SARS. The combination of low interest rates from the U.S., China's entry into the WTO, and increasing flows of Chinese corporates and tourists towards Hong Kong and the rest of the world, had made Hong Kong an international financial center and the bridge between China and the rest of the world. As Hong Kong picked up from 2004 onward with liquidity abundant, speculative fever, which has been dormant since the Asian Financial Crisis, revived. The market sentiment obtained its strongest boost in November 2007 when the idea of the "through train" scheme, or direct linking of the Hong Kong and China stock exchanges, was first floated. At that time, I had already been a buyside analyst for several years and just joined a Chinese fund house that happened to plan to launch a multi-billion dollar QDII (Qualified Domestic Institutional Investor) fund to focus on Hong Kong and regional markets. Talks within the firm were about how big the QDII fund could be, and how big such business would be for the brokers when the commission dollars were counted. At that time I saw numerous industry talents drawn into the firm and other fund houses like that one, all in anticipation of the huge fund flows coming into the market.

In the midst of such bullish sentiment, a friend of mine asked me about the merit of investing in an MBS (mortgage backed securities) fund promoted by his wealth manager. I took a look and noticed that the U.S. housing market had been slowed significantly after a long bull run, and thought that investing in an MBS that linked to a slow housing market seemed unwise. My friend took my advice and exited from the fund, but little did I know at the time that the MBS from the U.S. was one of the starting points of what came to be known as the Global Financial Crisis (GFC). As I started working at the Chinese fund house in early 2008, the focus from the U.S. was the imminent collapse of Bear Stearns, which was saved by the U.S. Fed's intervention and eventually folded into JP Morgan. News of weakness at different financial institutions had been around but most people at the time oscillated between "someone would save them" and "the through-train scheme would lift the market." Thus, the collapse of Lehman Brothers on 15 September 2008 sent the market into a selling frenzy amid a sense of an opening abyss. I had an appendicitis operation on that morning in September and woke up from the operation to learn the news about the U.S. government's rescue operation of AIG. When I called my office manager to learn what had happened in the office, it was chaotic: our team was busy moving our assets under management from our U.S. prime broker to a European one, as we worried about the health of all U.S. financial institutions. (It was no laughing matter: a hedge fund founded by a friend of mine had seen its assets in Lehman Brothers frozen, only to be released years later, by which time my friend's fund had already closed down).

The initial months of the GFC, as it unfolded, brought out the worst memories from the Asian Financial Crisis—deflation, rising unemployment, falling property prices, draining liquidity. When our firm's QDII fund was finally launched, the fund size had been reduced substantially. Hong Kong property prices had dropped by about 20% from the pre-GFC peak.

By early 2009 market sentiment had hit rock bottom with the news of an HSBC rights issue at HKD 28 per share. However, it was also the time that "unorthodox" monetary and fiscal policies took place: in the U.S., the Fed had already started quantitative easing in November 2008 with buybacks of MBS; in China, the Beijing government unveiled the RMB 4 trillion (USD 586 billion) stimulus package with spending on infrastructure and social welfare. Under such unprecedented liquidity injections, stock markets and asset prices started to rebound, restoring market confidence in a relatively short period of time, to the surprise of most people.

While the monetary and fiscal stimulus from the U.S. and China were likely helping the world to avoid a rerun of Asia Financial Crisis on a global scale, the longer-term impact of such remedies still lingered on. The initial success of quantitative easing and fiscal stimulus in zapping the deflationary threats had led to repeated usage of the same policy tools, ushering the world into an era of cheap money. Since then, we have seen this new abundance of liquidity fueling investments in new areas such as internet and high-tech industries globally and exposure towards China's economy and rising consumers, as well as pure speculative activities.

The GFC has also led to a shift of mindset among investors and others, especially outside the Western world. Since the 1990s the world in general has accepted capitalism and market economy, with low levels of government intervention and adherence to market-driven principles and mechanisms, as the default system for the global economy. The unfolding of GFC, beginning with a wild expansion of credits and new unproved instruments and ending with massive intervention by the U.S. Fed and U.S. government, had raised questions about the validity of such a system, especially with the U.S. being viewed as not practising what it had preached. In a sense, the GFC marked the beginning of doubts towards globalization. Non-Western countries and firms began to shift from global and open views towards the world towards ones with more local and nationalistic characteristics, with impacts still felt today.

COVID-19 Pandemic (2020-present) — Throwing Money at a Non-Financial Crisis, Solving It or Storing Up Trouble?

Unlike the Asian Financial Crisis and the Global Financial Crisis, the economic crisis/challenge caused by the COVID-19 pandemic is not one that is rooted on economic or financial industry-related factors, though the economic conditions of the time play a role in how the economic aspects of the pandemic played out. From the end of the GFC in 2010 up to the end of 2019, the world economy grew more and more embedded in low interest rates and asset price support. The world started to live with the phenomenon of rising asset prices, be it the U.S. stock market or global housing prices. Hong Kong, which many still viewed as the international center and the prima donna of unbridled capitalism, had been increasingly under pressure from conflicting forces, from rising asset prices versus a hollowing economy, to globalization versus Sino-U.S. trade wars. The year 2019 saw all these underlying currents erupted into social protests. While the year 2020 started with a seeming truce among all conflicting forces, the emergence of the new pandemic posed new challenges to Hong Kong, and the rest of the world.

In early January, there had been signs that a new type of pandemic emerged from Wuhan, China, among other places. However, the reaction of government officials had been slow, especially in comparison to people's reaction towards this "new" pandemic. I recalled that when I went off to the shops at Nathan Road to buy some household items, queues of people had already lined up for masks, sanitizers, and wipers, with most of them going empty-handed. At the beginning, most people initially took it as an event with limited impact for a short period of time. However, with new cases emerging from different countries and rising numbers of cases across the globe, the market reacted at first slowly and then panicked in discounting the risk of COVID. Now as a portfolio manager helping run a regional REIT fund, I started to get a sense of this new pandemic's global impact when the news of of it spreading across a cruise ship near the shores of Japan broke, with the Japanese government seemingly at a loss in how to handle it. At that moment our portfolio had some exposure to the Japan hospitality sector, and as the news started to get noticed, we scrambled right after Chinese New Year to sell our positions in this sector, which we had built quite some time ago in anticipation of a tourism boost from the upcoming Tokyo Olympics.

While we got away from this episode, we started to see the global impact of the pandemic from our home base. Our positions in Singapore and Australia, which we thought to be more insulated from the pandemic, still were hit significantly by it. By March 2022, my son had left the campus of his boarding school in the U.S. and came back to Hong Kong. Soon enough we started a period of stay-at-home as my wife and I worked from home, and my son and daughter had online schooling. Besides occasional infighting as we were all stuck in the same place, we all found ourselves increasing usage of wifi, cloud computing, remote access to work and school, zoom meetings, food delivery services and Netflix. While we found ourselves becoming increasingly captive customers of online stores and services, we witnessed the impact on real economies and the property market first hand. Empty stores sprang up across what were once bustling tourist districts, with few pedestrians and even fewer tourists. Offices became a fraction of their former selves as more office workers chose to work from home. Not surprisingly, under our portfolio, the data center REITs and logistics REITs were the outperformers, and the traditional blue-chip office and retail REITs underperformed.

In reaction to the economic challenges from the pandemic, the governments' reactions were predictable—throwing money at them. The U.S. had taken the lead in cutting interest rates to ultra-low levels and offering rescue packages to the populace at large. Other developed countries followed. Even Hong Kong had offered a HKD 10,000 consumption voucher to stimulate local consumption. Predictably, amid a widespread pandemic with the vaccine still under development, global stock markets rallied in the second half of 2022. However, this rally was soon under pressure, as repetitive quantitative easings since 2009 had finally unleashed what had been expected all along—accelerating inflation, aided by bottlenecks in supply chains that led to further cost pressure.

More importantly, I believe the pandemic has further pushed what I would call the undercurrents of the time to the surface. The pandemic had further led the world away from the globalized world that existed since 1991 when the Berlin Wall fell. Fear of spreading pandemic and corresponding quarantine policies by various countries disrupted both passenger travel and transportation of goods, which further caused troubles along the supply chain. Supply chain disruptions and further deterioration of geopolitical situations had further contributed to corporates' reorientation of supply chains and manufacturing bases towards local bases.

Lessons—Be Agile, Keep A Healthy Balance Sheet, and Always Be on the Lookout for New Leaders

From the point of view of an investor that has gone through three different crises, my lessons over the years, or rather observations, are:

Most people are at the wrong side of the balance sheet when the crisis hits—a crisis situation tends to develop when what is usually termed a "sure thing" become the crowded trade at the latter end of a market cycle, and as a result investors tend to bulk up in assets that had been proven winners until the market cycle turns. Leverage, linear thinking, and group think/inertia tend to aggravate the crisis when it hits.

We tend to fight yesterday's war, at least at the beginning—usually when the crisis erupts, investors and governments tend to draw lessons from previous crises and react accordingly, often without thinking through the implications of the ongoing crises and taking actions accordingly. One obvious example has been the various governments' monetary and fiscal stimulus since 2008 in a bid to fight off deflationary threats that were the mainstay of Asian Financial Crisis, and in the end we are in an increasingly inflationary environment that left little room for the governments to stimulate the economy.

Crisis often breeds new leadership in the investment universe—crisis → destruction of old guards → government to the rescue (either fiscal or monetary loosening) → new habits formation/new opportunities emergence → new market cycle until next crisis. In 1997, the key corporate leaders in the regions were various conglomerates and banks that dominated the local economies; by 2022, the internet platform companies and major manufacturers in key high technology industries are the titans.

Thus, the real lessons we can learn from the crises? Be agile, keep a healthy balance sheet, and always be on the lookout—for new leaders.

By Patrick Ma

5.5

Bursting of the Real Estate Bubble and Big Picture Opportunities

— **Ace Liu**

In China, the pandemic-led crisis took place at a time when the government was engaged in deleveraging. Besides fighting COVID-19, the nation has been battling against another crisis deep down in its socioeconomic foundations. It is the crisis triggered by the bursting of the property bubble. In this paper, I will discuss the crisis in the property sector and the impacts on the offshore high-yield bond markets. Besides, I will discuss the prospects for us arising from these crises.

The crisis in mainland China's economy is attributable in part to the real estate industry. There are also spillover effects on Hong Kong's high yield ("HY") bond market, as the mainland's developers are the main issuers of Asian HY bonds. The USD HY investors enjoyed a decade of high returns with a low default rate before this crisis happened. There should be nothing new about the risks materializing.

Does this crisis really hurt China's economy fundamentally?

There are several thoughts regarding this:

(1) The leverage burden of real estate developers is real, but these developers are not the full picture of China's real estate industry.

Considering the sector's employment level was only about 2.6% of the national total (China National Bureau of Statistics 2021), this suggests that even if the developers are in crisis, more than 90% of employees are working in other sectors. Therefore, household capabilities to pay mortgages will only be affected to a limited extent. However, developers are in fact facing difficulties to repaying their HY bonds/loans. Hence, these real estate HY bonds might not come back again for the similar scale and risk/ return profile. There will be a ripple effect on Chinese banks, but I believe the impacts are also overestimated.

(2) The Chinese government and regulators have a clear perspective on the developers' leverage crisis. Just let us recall how leveraged these real estate developers have been. This is very different from the crisis triggered by the U.S. subprime mortgages in 2008. In the current Chinese context, the regulators proactively set the "Three Red Lines" as the risk control measures to deal with the situation before it became unmanageable.

At the same time, with China IPO policy reforming from 2013 to 2021, Chinese listed industry firms' domestic capital formation increased significantly from RMB 20.4 trillion to RMB 90.1 trillion, with market valuations still attractive. This trend provides impetus to tackle the real estate crisis.

The distinction between the unanticipated U.S. crisis-led rescue and China's pre-emptive rescue package should translate into investors' expected returns. Speculation cannot be the primary way for households to achieve capital accumulation, with the misconception that property prices will always go up. Also, considering the equilibrium of money supply and demand, money demand is influenced by real economic transactions and financial transactions. When individuals' or households' expectations of property prices change, aggregate economic, financial and physical transactions will also change in response. That enables the PBOC to apply modest monetary easing with less concern about excessive money supply, which could further fuel the leverage of the property sector.

If we revisit the Global Financial Crisis of 2008, why did Goldman Sachs survive while Lehman Brothers fell? The two had totally different balance sheets: the former absorbed equity investment using leverage; the latter was embroiled in real estate derivatives. Does that mean that leverage on equity could be more resilient? I think the answers to this question might be diverse, but fundamentally, prudentially based on the real cash flows and business continuity to decide leverage level will be a better, more resilient option.

(3) The Chinese real estate-led crisis has been magnified by the pandemic measures to counter the spread of the virus. The COVID-19 pandemic is expected to have a profound negative effect on the global economy, potentially for years to come, with substantial drops in GDPs accompanied by increases in unemployment around the world.

However, some aspects of ESG will be benefited from the slowing economy, as business wastage is reduced. The reduction of air pollution and other economic damage associated with unfettered economic growth have recently been documented.,

In the context of the real estate-led crisis, Hong Kong fixed income managers have been suffering from the loss in value of HY bonds. Now, we should master our emotions, sit back and think prudentially. Are there any opportunities for the investment management industry in the city while we are merging into China's economy?

Here are my two cents.

China Is Opening Up A USD 30 Trillion Market to Offshore/Foreign Investment Managers

In 2020, China set out to eliminate restrictions on foreign ownership of fund management firms. If we assume GDP growth of 5%, my discussions with regulatory and senior executives of investment management firms in China suggest this: by 2023, the country's total addressable private or household financial wealth will reach USD 30 trillion, which will include USD 3.4 trillion AUM in Chinese publicly-registered funds, and USD 1.8 trillion AUM in private funds.

The above estimate is based on the current wealth allocation for Chinese mutual funds, while bank savings are also the chief component of household savings.

There is another opportunity, related to China's pension dilemma. Forecasts by the Chinese Academy of Social Science (CASS) predict a significant pension gap over next 30 years. As the aging society arrives with birth rates declining, by 2035 the basic pension system might face a substantial shortfall. In this regard, mainland regulators are pushing the investment management industry to change wealth management products so that their returns would be tied to market value, instead of fixing investment returns guaranteed by financial institutions. Besides, mainland regulators have also learned from the U.S. individual retirement account (IRA) system, which was formed in the late 1970s.

The pension dilemma provides the opportunity to changing the structure of savings, particularly allocations between bank savings and fund investments. For example, data from the Hong Kong SAR shows that bank assets are much smaller than the value of the capital markets, while the mainland case shows the opposite pattern.

Table 1-Mainland China: Savings & Wealth to Direct/Indirect Financing

Sectors	Mainland China (trillion RMB)
Commercial Banking's Total Assets	244.8(72.7%)
Capital Market Valuation	91.7(27.3%)

Source: People's Bank of China, Ministry of Human Resources and Social Security, Shanghai Stock Exchange, Shenzhen Stock Exchange, The Asset Management Association of China (2021).

Table 2 - HKSAR: Savings & Wealth to Direct/Indirect Financing

Sectors	HKSAR (trillion HKD)
Commercial Banking Total Assets	26.4(35.6%)
Capital Market Valuation	47.8(64.4%)

Source: HKMA; HKEX 2021

The Hong Kong MPF System as a Leading Sample

Hong Kong's local mutual fund industry has been boosted by the MPF system, while foreign capital inflows have also added to total AUM. If the mainland wants to structure and reduce the burden of its pension system, it must launch a reform of individual pension accounts. As such, the Hong Kong investment management industry, with decades of experience in handling the industry's cooperation with the government to prudentially manage these pension assets, as well as the CFA and investment community, could contribute its experience to such reforms.

Table 3 - HKSAR Pension System and Asset Management Inflows

Sectors	HKSAR (trillion HKD)
MPF individual accounts aggregated	1.2
HK SFC declared asset management AUM (local inflow)	8.6
HK SFC declared asset management AUM (mainland, foreign inflow)	22.6

Source: Hong Kong SFC, MPF ratings 2021

Table 4 - Mainland China:
Basic Pension System and Asset Management Industry Allocation

Sectors	Mainland China (trillion RMB)
Mainland Basic Pension Funds	6.8
Investment Banking/Securities Firm total assets	12.3
Insurance firms' total assets	24.9
Capital Market Valuation	91.7
Public Fund AUM	25.6
Private Fund AUM	19.9

Source: People's Bank of China, Ministry of Human Resources and Social Security, Shanghai Stock Exchange, Shenzhen Stock Exchange, The Asset Management Association of China (2021).

Opportunities in the Implementation of a Stock Issuance Registration System

Following the 2013's Third Plenary Session of the 18th Central Committee of the Communist Party of China, the Science and Technology Innovation Board (STAR Market) and the ChiNext of Shenzhen welcomed the first batch of companies listed under the new registration system on 22 July 2019 and 24 August 2020,

Table 5 - Mainland China:
Capital Market Growth Since the Reform Proposal

	2013	2021
A-shares market Cap (trillion RMB)	6.8	91.7

Source: Wind

According to IMF data, in 2021 China GDP was USD 19.91 trillion comparing to the U.S.'s USD 25.35 trillion. However, by the end of 2021, U.S. market cap reached RMB 439 trillion (WIND data), i.e., around USD 62 billion. This comparison shows that China's money supply is reasonable, and securities issuance has not been excessive. The problem, instead, is weak direct financing comparable to legacy over-reliance on indirect financing. More fundamentally, indirect financing favors large SOEs who like to deal with large financial intermediaries when conducting their business. On the contrary, direct financing, particularly stock market transactions, are conducted by small-to-medium-sized market participants like asset managers, issuers, and brokers.

Table 6 - Capital market & GDP comparison between U.S. and Mainland China

	Value of Market Cap 2021 (trillion RMB)		IMF GDP 2021 (trillion USD)	
Mainland China	91.7	17.3%	19.9	44.0%
U.S.	439.4	82.7%	25.3	56.0%

Source: Wind data, IMF

Two Pictures, One Question

If we consolidate all the above discussions, two pictures emerge: (1) The huge commercial banking's balance sheet assets need structuring in favor of investment banking/asset management sectors; (2) the gaps between the Chinese and U.S. stock/GDP ratios create room for China's capital market to grow.

The question is, how can Hong Kong's asset management industry get involved in these two aspects?

I believe that a proper question will lead to positive answers. Some answers have already materialized.

5.6

Together We Fight the...!

— **Priyanka Sanchania, CFA**

I faced Mumbai floods every year.

During the rainy season, it was a major undertaking to go to the office when the roads were flooded with knee-deep water, open drainage holes, and stuck vehicles. Sometimes we were prevented from going back to home from the office due to safety issues. But many could not afford to stay at the office post working hours due to younger kids, or older parents that needed attention. So eventually people used to take their lives in their hands to just go back home in the floods.

Once the floods were over, we faced all types of flu and mosquito-related diseases. I always thought that the lack of resilient infrastructure and city planning was what led to this inconvenience, but was there something more that I was missing?

So, when I moved from India to Hong Kong, I decided to change my career path and become an ESG professional. Fortunately, living in Hong Kong and experiencing the pandemic as a Hong Konger has shown me a path. As quoted by Albert Einstein, “In the midst of every crisis, lies great opportunity,” and then these opportunities can transform businesses, individuals, and economic systems.

Infrastructure, Investments and Nature

When Hong Kong faced the pandemic in 2020, it was probably the only territory in the world which was well equipped to face this challenge, whereas all other countries struggled to first understand it and then in taking corrective steps. Credit goes to its managing SARS back in 2002-04.

However, other than supportive infrastructure and positive attitudes towards cleanliness, this time the crisis opened another set of opportunities in the digital world which were previously unthinkable.

1. Office Buildings: Moved Online to Work from Home
2. Schools: Moved to Home Schooling
3. Networking: Zoom Meetings, LinkedIn LIVE and Facebook LIVE
4. Travel: Converted to Virtual Tours, Virtual Park Visits and Virtual Museum visits
5. Restaurants: Deliveroo and Food Panda Food Delivery to Homes

When the entire world moved to digital formats, nature started burgeoning, with news coming from different locations about beautiful skies, and appearances of rare animals and birds. The world's most polluted cities saw clear skies and clean air for the very first time in generations.

This is also the time when people realized the importance of beautiful and clean environments, while affirming that certain aspects of the pandemic were associated with human interference with wildlife.
Like the pandemic, climate change is posing an existential threat, and market participants are prioritizing investments in sustainability. In the U.S., total money in climate mutual funds and ETFs hit USD $31 billion at the end of 2021, a 45% increase from roughly USD 22 billion a year

earlier, according to Morningstar.[1] In 2021, BlackRock's CEO Larry Fink's letter addressed to CEOs mentioned how climate change is threatening humanity, and like the pandemic will alter our lives.

But How Is Hong Kong Placed to Face This Climate Change? Would It Lead This Time?

According to a Financial Services Development Council (FSDC report), Hong Kong companies recorded the best overall performance in Asia for environmental sustainability (2019).[2]

Hong Kong has an early start advantage, as it stated its goals, back in 2012, to achieve clean air for the benefit of its people.
Some of the goals that it targeted at that time were[3]

1. Reduce roadside pollution
2. Reduce marine emissions
3. Reduce coal dependency for energy

The above goals gave it an advantage to move towards the next level of reducing carbon emissions. Now Hong Kong has set up new set of goals for 2035 as:[4]

1. Green Transport
2. Comprehensive Emission Reduction
3. Liveable Environment
4. Clean Energy
5. Scientific Management
6. Regional Collaboration

So, while the pandemic has given way to life online, the challenge of managing climate risks poses another crisis, and the answer may lie somewhere in between digitization, carbon offset solutions and technologies.

The Bank for International Settlements (BIS) Innovation Hub Hong Kong Centre and the Hong Kong Monetary Authority (HKMA) recently joined forces with the technology industry. They built a prototype digital infrastructure that enables green investments, and improves transparency for the use of proceeds to help meet regional and global environmental and sustainability goals.[5]

While all this looks good from an institution standpoint, there is one more advantage that everyone in Hong Kong should recognize while fighting the Pandemic.

The Missing Stakeholders

Remember the line "Together, We Fight the Virus," which was published across websites and public places in Hong Kong.

Hong Kongers have certainly played an important role in fighting this virus, along with other measures. We kept social distance, followed mask rules, and maintained hygiene in public and private places. While other countries struggled to put restrictive conditions on people, here, people themselves came forward in supporting the measures.

But what is the role of people in fighting climate change?

Well, it's the key stakeholder that is missing from ESG plans and sustainability.

Millions of consumers are contributing to the top line of listed companies. Why can't we drive emission "reduction"?

Thousands of unlisted small businesses contribute to economic growth, yet they are not required or nudged to reduce carbon emissions. Why are they not questioned about their strategy to reduce emissions?

The most common reason is that it comes under Scope 3 emissions, which are not very clear and are voluntary. However, if climate change is an existential threat, then why can't everyone be part of the solution?
The pandemic has driven digital transformation and it may also help in fighting climate change. Various studies have pointed out that emissions were reduced during the lockdown period in many countries. One of the studies measured that carbon emissions in 184 countries were reduced by 438 Mt in 2020 as compared to 2019.[6]

So, some of the digital solutions can work if implemented at a larger scale in a consistent manner. However, this needs cooperation from consumers and small businesses. Though many companies have since moved to hybrid or flexible models, realizing not just environmental but also cost benefits, the impact seems lower since this is not done at scale. Hence this calls for concerted and coordinated efforts from all the citizens, stakeholders, and communities residing in the city.

In one of the book club gatherings organized by CFA Society Hong Kong, I heard a fellow member say, "there is no single solution, but the real solution lies in multiple ways." We can build renewable energy power plants, reduce our dependency on coal by moving to nuclear power, and implement electric vehicle schemes for new or existing cars and taxis. However, we cannot deny that a lot of things can still be done by the consumer and small unlisted entities.

We could involve consumers and small businesses to innovate along with offering them correct incentives. This may open new economic and "wellbeing" opportunities.

Time Value of Action

There is another important aspect, which is the value of timely action. This point can be illustrated using the trend of Hong Kong's vaccination rate. We spent two years with a low infection rate and low vaccination rate amongst the elderly, the most vulnerable section of the population. But it changed due to a sudden increase in infection during February-March 2022, which forced people to line up for vaccinations. The large wave of the Omicron variant affecting the elderly could have been prevented by taking timely action.

From a climate change perspective, we are at a point where some agree that it needs immediate action while others have a different opinion. However, actions need to come from people of all sorts before reaching the tipping point where there is no turning back.

There is a need to educate consumers about the pressing needs. Data like how much emissions have been sequestered and offset, how much the entire territory is emitting, in metric tons per month, need to be disseminated to listed companies, government, and small consumer in simple language.

Climate Change Money in Bits and Pieces

We cannot expect consumers to make costly, environmentally conscious choices or change their habits for free.

During the pandemic, our government distributed consumption vouchers and incentives to increase the vaccination rate. On similar lines, there are many subsidy programs to incentivize businesses to move towards a carbon-neutral world.

For example, the Green Item Subsidy,[7] on top of the subsidy for general repair works,[8] is granted to building owners. Typical examples are the installation of energy-saving lighting systems, the implementation of which can help to reduce the running costs of the building.[9] Buildings accredited as Excellent by The Hong Kong Green Building Council are offered a maximum subsidy of HKD 100,000[10]

To promote Electric Vehicles, our government offers first registration tax (FRT) concessions. The enterprises that procure EVs are allowed 100% profits tax deduction on the capital expenditure.

As above, there are many subsidies and incentive programs by the government to promote green products and build a carbon-neutral economy. On the other hand, listed companies struggle with the limited number of good carbon offset projects. Many other projects have little transparency and less understanding on how the money is being used, backed by many consultants pitching for climate money.

However, a standardized offset contract approach that facilitates trading along with incentivizing small businesses or consumers to uptake the initiative of reducing energy consumption may go a long way.

With standardized offset and emission contracts traded on the existing stock market infrastructure, a transparent financial channel among various stakeholders can be facilitated. Various subsidies from the government and funds can be channelled via this platform to reduce carbon emissions. The aim of this market is to build a long-term ecosystem comprising large and small businesses undertaking carbon offset projects, along with tracking emission reduction progress within the HKSAR.

Conclusion

By including the missing stakeholders, i.e., average Hong Kongers, while fighting the pandemic, Hong Kong has shown the way to fight climate change. But in addition to that there is the need for constant and transparent information dissemination about the status of carbon neutrality on a month-to-month basis, and a market to facilitate carbon offset trading between retail and institutional parties.

We should be nudged again and again, the way we were reminded to fight the pandemic.

"Together, We fight Climate Change." This is the future that Hong Kong needs to build.

An inclusive, collaborative, and diverse society. It is how Hong Kong will rise from the impending crisis.

Notes

1 https://esgclarity.com/climate-funds-assets-double-report-2021/

2 pg-3, Hong Kong – Developing into the Global ESG Investment Hub of Asia, July 2020, FSDC Paper No. 44, https://www.fsdc.org.hk/media/egvher4d/fsdc_paper_no_44_hong_kong-developing_into_the_global_esg_investment_hub_of_asia_eng.pdf

3 pg-3, A Clean Air Plan For Hong Kong, Environment Bureau, March 2013, https://www.eeb.gov.hk/en/files/New_Air_Plan_en.pdf

4 P g-2, Clean Air Plan For Hong Kong 2035, June 2021, https://www.eeb.gov.hk/sites/default/files/pdf/Clean_Air_Plan_2035_eng.pdf

5 https://www.forbes.com/sites/hongkong/2021/11/01/hong-kong-backs-sustainable-development-with-esg-focus/?sh=454882f33d21

6 pg-12, What is the impact of COVID-19 pandemic on global carbon emissions? Author : Ram L. Ray a,*, Vijay P. Singh b, Sudhir K. Singh c, Bharat S. Acharya d, Yiping He, https://www.sciencedirect.com/science/article/pii/S0048969721065815

7 Up to HKD 1,500 per unit; up to HKD 600,000 per Owners' Corporation

8 Up to HKD 3,000 per unit; up to HKD 1,200,000 per Owner's Corporation

9 https://brplatform.org.hk/en/sustainability-in-building-rehabilitation/green-item-subsidy

10 https://www.hkgbc.org.hk/eng/beam-plus/incentive-funding/incentive-funding.jsp

11 HSBC, "The Greater Bay Area: Opening Doors for Wealth Management," undated. Accessed on 29 July 2022, https://sponsored.bloomberg.com/article/hsbcwealth/the-greater-bay-area-opening-doors-for-wealth-management.

5.7
The Most Important Offshore RMB Hub

— **Ming Liang, CFA**

As China's most important offshore RMB hub, Hong Kong will continue to matter within the next three decades. Over the past three decades, Hong Kong has largely been a major beneficiary of globalization. Free trade, free capital flows, and free movement of people have been the cornerstones of Hong Kong's success in the past. As China and the U.S. decouple from each other, the trend of globalization of the past seems to have turned into the other direction—deglobalization. And people start to question whether the city can remain prosperous or not. And the ongoing COVID-19 pandemic has cast yet another cloud of doubts on the city's future.

Over the past two years, a lot of my friends and colleagues have left Hong Kong for opportunities elsewhere. However, I remain optimistic about Hong Kong's future.

Hong Kong is unique. Unlike Singapore, Hong Kong is a part of China. To Beijing, holding sovereign rights to Hong Kong means that the U.S. dollar or euro foreign exchange reserves parked in the SAR are considered much safer than those parked in Singapore. Unlike Shanghai, Hong Kong largely adopts the common law system. To Western companies, contracts signed in Hong Kong are more reassuring than those signed in Shanghai. Singapore is never a part of China. And the common law system won't be adopted in Shanghai. These two things can't and won't change for the foreseeable future. Therefore, Hong Kong will be able to retain its unique position, even in a world defined by deglobalization.

William Overholt, a senior research fellow at the John F. Kennedy School of Government at Harvard University, reportedly said on the topic: "Hong Kong will continue to be a very rich city even if foreign executives move out or refuse to locate there because there are enormous numbers of very wealthy Chinese and powerful Chinese companies who are enthusiastic to move there…For many Westerners, it's going to feel like another Chinese city. For the Chinese —individuals and companies—Hong Kong is still this wonderful airlock to the world from outside the mainland. It's where the legal system is predictable, political pressures on business are a lot less than they are on the mainland." (Suranjana Tewari,29 June 2022).

As the competition between China and the U.S. broadens and deepens, it is inevitable that they will decouple. There are at least three major decoupling trends going on: financial markets decoupling, technology decoupling, and supply chain decoupling. The decoupling processes could take years or even decades. Hong Kong has important roles to play for at least the first two fronts (financial markets and technology).

The most recent developments with China and the U.S. reaching early agreements on the Public Company Accounting Oversight Board (PCAOB) are just one more confirmation that Hong Kong has a key role to play in that area, as most of the inspections will take place in the city.

Over the past decade, Hong Kong has already evolved into the Middle Kingdom's single most important offshore RMB hub, with market depth and breadth growing every year. Consider the major developments of recent years listed as follows:

- Launch of the Shanghai-Hong Kong Stock Connect (2014)
- Mutual Recognition of Funds (2015)
- Shenzhen-Hong Kong Stock Connect (2016)
- Bond Connect (2017)
- Cross-boundary Wealth Management Connect (2021)
- The inclusion of ETFs in Stock Connect (2022)

One recent connect program to be launched is a Swap Connect for investors to hedge interest rates. Essentially, the idea of having Hong Kong as an offshore RMB hub is that investors from all over the world can do almost the same things in Hong Kong with their offshore RMB holdings as they do in the mainland with their onshore RMB holdings.

On 4 July 2022, only three days after China's President Xi Jinping left Hong Kong for the celebration of the 25th anniversary of the handover of the city to China, the PBOC and HKMA signed an agreement in early July to expand the RMB/HKD currency swap facility from the original scale of RMB 500 billion to RMB 800 billion. The PBOC also made the facility a standing one, meaning the HKMA doesn't need to go through additional approval procedures from the PBOC if the swaps take place within this limit.

The size of this standing currency swap (RMB 800 billion) represents 72% of existing RMB deposits in Hong Kong according to the latest HKMA statistics (HKMA half-yearly monetary and financial stability report, March 2022). Seen in this light, the PBOC basically aims to provide a very large pool of RMB liquidity to the HKMA, paving the way for Hong Kong to become China's single most important offshore RMB hub. And this is the very first standing currency swap that the PBOC has ever signed. Can the PBOC choose Singapore to do this? I don't think so.

Hong Kong is a crucial part of Beijing's long-term efforts to internationalize the RMB. Beijing hasn't made this a very high-profile initiative, because making it very loud would lead to backlashes from the U.S., which prefers to see the dollar's status unchallenged. Nonetheless, a recent report (Eichengreen, Macaire, Mehl, Monnet and Naef, 24 June 2022) analyzed Beijing's ambitions on the offshore RMB and the importance of Hong Kong in its overall plan.

In the paper, the authors discussed a potential way of RMB internationalization with Chinese characteristics—the internationalization of RMB in the absence of capital account convertibility of the mainland. This is a Chinese route to currency internationalization without historical precedent. In short, with the offshore RMB and its hub in Hong Kong—a part of China since 1997, the PBOC now needs to provide enough dollar liquidity for the offshore RMB market, which is just 0.5% of all RMB deposits (onshore and offshore). In other words, the offshore RMB convertibility would reduce dollar liquidity needs for offshore RMB convertibility from 100% (both onshore and offshore RMB deposits) down to 0.5% (Eichengreen, et. al., p. 21).

The research draws an interesting parallel between offshore RMB in Hong Kong today and the U.S. dollar in London back in 1950s (under Bretton Woods). Here is an excerpt:

> ...the situation of the RMB today is not unlike that of the dollar in the 1950s and 1960s. Both the London gold market in the 1960s and the offshore RMB market today are products of a similar problem, namely the imperfect convertibility of an international currency (the dollar then, the RMB now) into the ultimate reserve currency (gold then, the dollar now). Convertibility of RMB into dollars today

> is limited by capital account restrictions, while convertibility of dollars into gold [then] was restricted by U.S. monetary law under Bretton Woods. Just as the London gold market was a safety valve for dollar holders, the Hong Kong offshore RMB market is a safety valve for RMB holders. It is a barometer of confidence in the RMB, and the Chinese authorities have no choice but to monitor it and hold dollar reserves enabling them to intervene there, if they want foreign central banks to accept and accumulate RMB without fully opening the Chinese capital account. To support internationalization of their currency, the Chinese authorities must ensure… convertibility into dollars as needed on the offshore [RMB] market…(p. 24).

Over the past three decades or so, Hong Kong has nurtured an increasingly larger and more important financial industry, serving investors from both the West and the mainland. The numbers speak for themselves. Financial services contributed 23.4% of Hong Kong's GDP in 2020, more than doubled from its share of c. 10% in 1997. About 273,700 people worked in the sector in 2020—as much as 7% of the city's labor force. Employment and the value added of financial activities grew by 4% and 12%, respectively, between 2018 and 2020.

Hong Kong now has the world's largest offshore RMB pool—estimated at nearly RMB 1 trillion now—having grown by 14 times from 2009. About three-quarters of the world's offshore RMB payments were settled through Hong Kong in May 2022. Of the 2,500 companies currently listed on the Hong Kong Stock Exchange, over 40% are based in the mainland, and they together account for nearly 80% of the exchange's total market capitalization.

Last but not least, if history is any guide, the loss of the city's population to the rest of the world is nothing to worry about. There are 1.4 billion people in the mainland. Many would believe that they and their money will have more freedom in Hong Kong than if they park them at home. Anyway, the city's largest wave of migration was by those coming from the mainland after World War II. Hong Kong's population grew from just about half a million in 1945 to 2.0 million in 1951. It is a natural thing in terms of geopolitics: for an island economy, the origin of its people, businesses, and money, has always been the largest mainland next to it.

References

Suranjana Tewari, "Why business is still optimistic about Hong Kong," BBC, 29 June 2022,https://www.bbc.com/news/business-61961891

Zhou Mo and Ao Yulu, "Hong Kong still the place to make a mint," China Daily, 1 July 2022, https://www.chinadailyhk.com/article/278656#HK%E2%80%99s-still-the-place-to-make-a-mint

HKEX to Launch Swap Connect in Partnership with CFETS and SHCH, Hong Kong Exchanges and Clearing Ltd., 4 July 2022, https://www.hkex.com.hk/News/News-Release/2022/220704news?sc_lang=en

Barry Eichengreen, Camille Macaire, Arnaud Mehl, Eric Monnet, and Alain Naef, "Is Capital Account Convertibility Required for the Renminbi to Acquire Reserve Currency Status?" Centre for Economic Policy Research, 24 July 2022, https://cepr.org/publications/dp17498

List of Contributors

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Ronald holds Bachelor of Science degrees in Finance and Accounting from the Stern School of Business at New York University. A contributor to Bloomberg Opinion and Financial Times Chinese, he is also the author of two books: Behind the Berkshire Hathaway Curtain: Lessons from Warren Buffett's Top Business Leaders (2010), and The Value Investors: Lessons from the World's Top Fund Managers (2012 and 2021).

Water Cheung, CFA, joined StormHarbour, a global boutique investment bank, as founding CEO/Senior Partner Asia Pacific in 2010. Prior to StormHarbour, Water was hired by RBS to build up its emerging market presence in Asia in 2007, and led the integration with ABN AMRO, part of the largest bank M&A in history. Previously, Water ran DBS' investment banking and treasury business in Greater China and successfully expanded its REIT business. Earlier, Water was the Managing Director in CIBC's Financial Products team in Singapore, and Head of Regional Derivatives Trading at Chase Manhattan Bank in Hong Kong.

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Sean is also a Fellow Chartered Accountant, Fellow Chartered Professional Accountant, and the Past-Chairman of CPA Canada Hong Kong and Macau Chapter.

Alvin Ho, CFA, is an investment principal with a track record in private equity. He currently splits his time between managing a portfolio of private investments and institutional investing, and handholding start-ups and grown-ups seeking new iterations. He also serves as a board member for listed companies and an investment committee member for funds and private organizations.

Alvin holds an EMBA degree from Tsinghua University and Masters in Finance from London Business School, and is on course to complete a Ph.D. with the Shanghai University of Finance and Economics. He has authored two books in Chinese, including 超級巨星經濟學 (Superstar Economics).

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Eric holds multiple master's degrees, and started pursuing yet another master's degree in data analytics in 2021. Eric has authored a new book in Chinese, 港股追勢36計 (36 Key Indicators in the Hong Kong Stock Market), published in early 2022.

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Among the contributors are board members of CFA Society Hong Kong. Alvin is the Vice President, and James serves on the Advisory Board of the Society. David, Alfred and Felicia are Executive Directors. Janet, Ning and Erwin are Non-Executive Directors.

This is the end of the ebook.