Discovery Issue

HKVCA **Journal**

Fourth Issue | Spring | 2017

Where experts go for expert advice.

John Batchelor
Senior Managing Director
Corporate Finance & Restructuring
+852 3768 4670
john.batchelor@fticonsulting.com

Cara O'Brien
Senior Managing Director
Strategic Communications
+852 3768 4537
cara.obrien@fticonsulting.com

Greg Hallahan
Managing Director
Global Risk and Investigations
+852 3768 4539
greg.hallahan@fticonsulting.com

FTI Consulting professionals help clients minimise the risks and maximise returns through all phases of the private equity life cycle, with particular focus on:

- Investigative, financial, operational and governance due diligence
- Enhancing portfolio company performance
- Transaction communications, issues management and crisis communications

www.fticonsulting.com

EXPERTS WITH IMPACT

HKVCA Journal I 4th Issue

Editors

Alain Fontaine
Ocean Equity Partners

Joseph W. Ferrigno III
AMCG Partners

TK Chiang
Orion Partners

Chairman of Research Committee

Denis Tse
Asia-IO Advisors

All rights reserved. This book or any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of the HKVCA except for the use of brief quotations in a book review.

DISCLAIMER
HKVCJ Journal will tolerate wide differences of opinion. Its articles will not represent any consensus of beliefs. What is demanded of them is that they shall be competent and well informed, representing honest opinions seriously held and convincingly expressed. It does not accept any responsibility for the views in any articles, signed or unsigned, which appear in its pages. What is does accept is the responsibility for giving them a chance to appear.

HKVCA Secretariat Team

Secretary General
Joanne Yuen

Director, Marketing and Operations
Celine Chan

Research Director
Alfred Lam

Membership Manager
Shire Xie

Assistant Committees and Communications Manager
Colin Tam

Marketing Executive
Kamy Chan

Marketing Executive
Kin Kwok

Administration and Executive Assistant
Suri Tang

Accountant
Kimie Leung

www.hkvca.com.hk

Room 2001, Wilson House, 19-27 Wyndham Street, Central, Hong Kong
Tel: +(852) 2167 7518 • Email: hkvca@hkvca.com.hk

HKVCA Mission Statement

The HKVCA's mission is to stimulate a vibrant venture capital and private equity industry in Asia while promoting the role of member firms in value creation, innovation and economic development.

The HKVCA provides a forum for networking and experience sharing for its members, promotes industry professional ethics, international best practices and standards, and represents the views of its members before governmental and other relevant bodies.

2 HKVCA's Mission

3 Table of Content

4 Mapping the Fintech Ecosystem in Hong Kong: Identifying Participation by Government, Financial Services and Entrepreneurs
Interview: Duncan Wong, ASTRI;
Benedite Nolan, SFC;
Evangelos Kotsovinos, Morgan Stanley

7 From Academic Research to Venture Capital – Keys to Building a Linked-up System
A. Sinclair Dunlop, Epidarex Capital

10 Hong Kong Infrastructure: Realities and Opportunities
Joseph W. Ferrigno III, AMCG Partners

17 Can Co-living Spaces be the Solution to Hong Kong’s High Cost Real Estate?
Interview: Girish Jhunjhnuwala, Ovolo Hotel Group

19 Private Equity: Joining the Pension Debate?
Philip Tso, Willis Towers Watson

22 An Update on the HKMA's Long-term Growth Portfolio and Future Fund
Interview: Eddie Yue, HKMA

24 Family Divestitures: Can Private Equity Play a Role?
Interview: Christina Gaw, Gaw Capital Partners

26 Hong Kong’s New Future Fund Creates Opportunities to Build “Brand Hong Kong” and Secure Its Position as An International Financial Centre
Christine Wood, FTI Consulting

Mapping the Fintech Ecosystem in Hong Kong: Identifying Participation by Government, Financial Services and Entrepreneurs

Interview: Evangelos Kotsovinos, Morgan Stanley
Benedicte N. Nolens, SFC
Duncan Wong, ASTRI

Fintech[1] continues to capture the attention of business and governments across the globe, with investors and even countries eager to board the financial technology bandwagon. And little wonder. Fintech has the potential to revolutionize the way financial institutions operate and offers untold opportunities for wealth creation. Governments see the ability to attract disrupters as an important way to bring reforms to the financial sector through innovative technology and greater wealth to its citizens.

As one of the world's leading financial hubs, Hong Kong stands to gain considerably from government policies that seek to encourage and promote the city as the leading fintech hub in Asia. This is especially so given that roughly 18 percent of Hong Kong's GDP was generated by the financial sector in 2015.

Government Participation

The Hong Kong Applied Science and Technology Research Institute (ASTRI) was established by the government in 2000 with the mission of enhancing Hong Kong's competitiveness in technology-based industries through applied research. The Institute currently employs close to 500 staff, with 400 research and development professionals and almost 90 back-office employees.

The government views ASTRI as playing a fundamental role in the development of a local fintech ecosystem. Led by Dr. Duncan Wong, Vice President of Financial Technologies, the fintech team focuses largely on cybersecurity, blockchain, big data and artificial intelligence, and mobile authentication.

Among the projects they are pursuing is the publication of a white paper, together with the newly created Fintech Facilitation Office (FFO), to investigate the potential applications of so-called distributed ledger technology (DLT) - or what is more commonly known as blockchain technology. The aim of the paper is to examine the possible risks and potential of DLT and the relevant regulatory framework that might be established. It is envisioned that the paper's initial findings

[1] Financial technology, also known as FinTech, is an industry composed of companies that use new technology and innovation to leverage available resources in order to compete in the marketplace of traditional financial institutions and intermediaries in the delivery of financial services.

will include a report on DLT in mortgage loan applications, trade finance and digital identity management.

The FFO was formed in early 2016 under the auspices of the Hong Kong Monetary Authority (HKMA). According to Norman Chan, Chief Executive of the HKMA, the office will have three primary functions: operating as a platform for the exchange of ideas with fintech stakeholders; providing an interface between market participants and regulators to help improve the regulatory landscape; and initiating industry research into the potential application and risks of fintech solutions.

The HKMA is also hoping to encourage the use of online payment platforms as a matter of ordinary practice by members of the general public. Hence, starting in the second half of 2016, both Apple Pay and Google Pay are now accepted for debit and credit card holders. The HKMA has also implemented a licensing regime for stored value facilities and a designation regime for retail payment systems under the Payment Systems and Stored Value Facilities Ordinance.

The Securities and Futures Commission (SFC), meanwhile, has set up the Fintech Contact Point to enhance communication with businesses involved in the development and application of fintech in Hong Kong. Operated by the Risk and Strategy Unit of the CEO's Office, Benedicte N. Nolens, Senior Director and Chair of the Fintech Advisory Group of the SFC, said the mission of the Fintech Contact Point was very much a "two-way-street" - to facilitate the fintech community's understanding of the current regulatory regime and to enable the SFC to stay abreast of the latest developments.

Conservative Government Policies

Despite some progress, there are still many who believe the government has been too slow to embrace innovation in the financial sector. Equity crowdfunding, as a form of alternative finance in particular, is one area where the government has to date failed to act on the regulatory front. However, the SFC has recently indicated that they do not have specific objections to crowdfunding platforms where companies have the appropriate licensing, are in compliance with regulations and have adequate controls in place consistent within the current regime.

Financial Institutions Play a Key Role

Morgan Stanley alone has close to 20,000 technology related jobs globally, including in-house staff and outsourcing technicians, with nearly half of them located in Morgan Stanley Asia, including in Hong Kong. Evangelos Kotsovinos, Asia CIO of Technology Infrastructure, notes that his team proactively seeks innovative IT companies that can deliver enterprise solutions and engages with them to facilitate technological innovation.

Financial institutions globally are aggressively developing digital client platforms that will help banks better serve their clients. Digitized client-based solutions should improve ease of use; allow the banks to gather accurate intelligence on market data; compile intensive predictive analytics; enhance security; and identify threats.

Fintech Startup Community

Hong Kong has begun to see a number of successful fintech startups: Welab, which raised US$160 million in financing in early 2016; Futu5, which in 2015 raised US$60 million from investors that included Tencent, Matrix Partners

and Sequoia Capital; and Moneyhero, which raised US$40 million from Goldman Sachs, Nova and ACE & Co in 2015.

International event organizers, such as NextMoney Fintech Final, Websummit RISE and Finovate conference, have also begun to pay attention to Hong Kong as a location for hosting large-scale global fintech conferences. Such activities are sure to help raise the profile of Hong Kong and encourage talent to set up in the city.

Hong Kong's Fintech Future

The outlook for fintech in Asia remains strong: China is working on its own cryptocurrency; India is demonetizing the Rupee; Japan is a leader in the development of robo-advisor platforms; and Singapore is offering subsidies to startups that move there. What then should be the approach of Hong Kong if it is to retain its status as an international financial centre?

Morgan Stanley's Kotsovinos believes that the development of B2B fintech is a natural direction for Hong Kong, as it has one of the highest concentrations of banking institutions in the world. He notes Hong Kong's skilled local workforce, in particular its strengths in maths and statistics, and its strong sales skills. However, Hong Kong continues to have a shortage of top technology talent suitable for senior management roles, says Kotsovinos, who believes the government needs to do more to attract such talent from overseas or develop it locally.

DLT – or blockchain technology - is also a promising area for development in Hong Kong. The SFC's Nolens identifies two areas in particular that are gaining traction, namely digital identity and biometric authentication. It is through digital identities that we can create a wallet-free world, where people will use a single e-identification to open various accounts and make payments, e.g. bank accounts, memberships cards, etc. Biometric authentication, on the other hand, validates human characteristics and enhances DLT architecture and security.

Dr. Wong agrees that biometric authentication will be vital, noting that ASTRI has been conducting research into the development of recognition technology for quite some time. Facial, fingerprint and voice recognition capability will be essential, he believes, to prevent cyberattacks on digital transactions.

Melissa Guzy, Managing Partner of Arbor Ventures, which invests exclusively in fintech, believes regulatory technology – so called regtech – will be a major disruptor within the next five to ten years.

Yet despite these positive signs, Hong Kong must begin to take more steps to create a truly thriving fintech ecosystem or it risks falling behind, both globally and regionally. It is imperative that the government do more to attract venture capital and private equity investors willing to invest. The Innovation Technology Venture Fund is a very good start, but there is a lot more that needs to be done to put Hong Kong on the world's fintech map.

Duncan Wong, ASTRI

Dr Duncan Wong is in charge of the Financial Technologies (FinTech) Initiative of the Hong Kong Applied Science and Technology Research Institute (ASTRI) and leading the Security and Data Sciences technology division of ASTRI through developing strategic plans, engaging industrial and governmental partners, and leading R&D activities with the mission of establishing Hong Kong as a FinTech Hub in the Asia Pacific Region.

Bénédicte N. Nolens, SFC

Bénédicte N. Nolens is Senior Director and Head of Risk and Strategy (R&S) of the Hong Kong Securities and Futures Commission (SFC). Bénédicte joined the SFC in 2012 to establish a new, centralized unit, overseeing risk identification and related strategic planning.

Evangelos Kotsovinos, Morgan Stanley

Evangelos Kotsovinos is Asia CIO of Technology Infrastructure and Managing Director at Morgan Stanley. He leads technology strategy and execution with a strong focus on business impact. He combines deep expertise in the technology sector with a solid quantitative finance background and experience in entrepreneurship and startup financing.

From Academic Research to Venture Capital – Keys to Building a Linked-up System

A. Sinclair Dunlop, Epidarex Capital

Some venture capital ("VC") have secured a significant proportion of its deal flow from strong linkages with academia on both sides of the Atlantic. An early stage healthcare venture fund - Epidarex Capital is one of the examples, approximately 75% of its current portfolio of US and UK start-up companies are successful university spin-outs. This commercialisation is driven by the close working relationships that venture capital enjoys with many of its university partners, including in some of the less ventured markets in Europe and the U.S. Hong Kong's venture investors would benefit from developing similarly strong linkages to local sources of research-driven innovation.

There is a differentiated venture model in that its research university partners are not just a source of innovation to be funded. For example, four of the UK's leading research universities are actually direct investors in Epidarex. King's College London and the Universities of Edinburgh, Glasgow and Aberdeen have committed their own capital, alongside a diverse array of other private and public sector investors (including, pharmaceutical giant Eli Lilly, the European Investment Fund and several private family office investors) that have also embraced the early stage model.

The appetite of these leading universities for investing in a venture fund was partly largely driven by the lack of capital available for early-stage innovation on both sides of the Atlantic. This kind of venture fund provides a vehicle that facilitates commercialisation of these and other institutions' world class research. This core linkage has firmly cemented early stage venture fund's commitment to a more proactively collaborative and involved model than later stage venture investors.

In Europe, Epidarex has recently led the successful funding of new spin-out companies from the Universities of Edinburgh, Glasgow, Aberdeen, Southern Denmark, Strathclyde, Sussex and The University Medical Centre Hamburg-Eppendorf (UKE). Epidarex's U.S. portfolio contains highly successful spin-outs from the Universities of Maryland and Pennsylvania amongst others. In building this transatlantic portfolio, the two most important links are those between the innovator and funder and then between the company (formed around innovation seeded by the funder) and its ultimate market. Whilst most venture capitalists are typically more focused on the second link, the differentiated venture model is centrally involved in supporting both links.

There are various commercialisation routes that University technology transfer offices may wish to take but at the end of the day, to get an innovative technology from the research lab to ultimately benefit an end-user (often the patient), the University's links with providers of scalable risk capital is critically important. Typically, there is significant work to be done

before even the most exciting academic research project can be translated into a fundable start-up company. And in many cases this translation should never be attempted. VC works with its university partners to help determine which research offers the most commercial potential. For example, the commercial value of some research may be limited to a single asset or 'widget' with relatively narrow market applications. Such research might be better translated via a single licensing arrangement direct with industry. It is also critical that all stakeholders appreciate the difference between technologies that represent the potential for creating a small business versus a truly scalable venture opportunity. In the past, several leading EU and US research universities have overstated their commercialisation success by citing the number of spin-outs (quantity) rather than focusing on the commercial potential (quality) of those same companies. The Hong Kong venture community can support its local research partners and innovators by ensuring the distinction between quality and quantity of spin-outs is clear. To be able to make such distinctions, and to be well placed to pick and then fund the potential 'winners', investors must roll up their sleeves and get more involved at the ground level.

Throughout these interactions it is key for investors to avoid overbuilt technologies offering 'solutions in search of a problem' as well as innovation that may, ironically, be too far ahead of the market to offer the prospect of commercial success. Both researchers and funders should be careful not to fall in love with a technology simply because 'it's cool' as this risks losing sight of the scale of market need or, for example, potentially insurmountable user adoption challenges.

The accurate categorisation of research along these lines is a critical success factor, and knowing whether you're looking at a single product play rather than a broadly disruptive technology is critical before deciding whether to launch a new spin-out company. Early stage funders, including in Hong Kong, should support researchers by bringing this type of commercial insight 'onto campus' as early as possible in the development process.

Hong Kong investors should also be engaging directly with the funders of research, at origin, to build a more effective innovation-funding 'ecosystem'. In the UK, academic grant funding schemes have introduced specific initiatives and mechanisms aimed at bringing industry, investors and academia together. Investors generally see this as having a positive downstream impact. Several of Epidarex's EU spin-out companies have benefited from the support of such schemes, but that is only part of the story.

The evolving role of the VC in the spin-out process is important in that several funders are becoming increasingly close to the sources of innovation. This involvement ranges from setting up regular visits and road shows, sitting on grant review panels to hot-desking or taking on Entrepreneur in Residence ("EIR") roles at the University. This coupled with attendance at University focussed conferences and networking events creates an environment which strengthens the linkages between academic founders and spin-out investors.

Local investors in Hong Kong may want to consider the possible advantages replicating this increasingly "hands-on" approach to the funding (and often pre-funding) of spin-outs. Almost all of Epidarex's recent investments involved a high degree of pre-investment collaboration with the relevant researchers, often over a lengthy period. Whilst this can be resource-intensive and time-consuming it is a prerequisite to successfully bringing interesting (but early) academic research to spin-out stage. Such pre spin-out collaboration can take several forms and universities tend to differ on their preferred model. Liaisons are greatly enhanced by the involvement of individuals with deep domain expertise from industry.

These interactions can also identify younger (and as yet unnoticed) researchers working on highly innovative projects. Hong Kong investors may also wish to seek out such 'rising stars' in the local research institutions, in order to offer commercial guidance that might not have been previously available to them. It could well be in both the researcher and his or her institution's interest to take such free advice on board and to then stay in regular contact as the research matures.

Several EU universities and research institutions are now developing bespoke, 'on campus' funding vehicles. For example, in 2016, University College London launched the £50m UCL technology fund, which is backed by the European Investment Fund and Imperial Innovations (originally the venture

arm of Imperial College London). Seed stage, spin-out funds need to be of sufficient scale and should be managed by parties other than those running the institutions from which the seed opportunities are sourced. Independence of investment decision-making is key. And for such funds syndication with less traditional co-investors is often necessary and sometimes preferable (for example, non-dilutive government sources and charitable, often disease-specific foundations).

Regardless of the vehicle of choice however, Hong Kong investors should avoid any illusions that successful early-stage investing is anything other than a labour and resource-intensive process. Choosing to 'walk the halls' of top universities and research institutes, primarily to meet key academics, and to improve its understanding of early and emerging research that may have relevance across, in Epidarex's case, life science and related markets. Epidarex also supports research grant applications which in turn provides additional insight on novel concepts for the longer-term. For more developed research, 'investor readiness' support involves helping develop the business plan, investor syndication, market positioning strategy, recruitment of an experienced management team and a broad array of ongoing activities designed to empower the investee company towards commercial success.

Caldan Therapeutics is an informative example of an early, novel drug discovery company developing innovative treatments for Diabetes. The company's core technology was spun out from the University of Glasgow and Southern Denmark University and is based upon the deep expertise of Professors Graeme Milligan (Glasgow) and Trond Ulven (SDU). Established in October 2015, Caldan was able to translate these academic research programs into industry standard drug development programs. VC worked closely with the management team and academics to devise a development plan complete with critical success factors, capable of delivering a preclinical drug candidate. These development plans are commercially driven and executed by an experienced group of recently recruited drug developers, the academic founders and a leading UK Contract Research Organisation. Encouraging progress has been made against key milestones and further key data is expected within the coming months.

In the case of Caldan, VC works very closely with the founding scientists at both universities to shape, structure and launch this exciting new Diabetes drug development company. Links with other stakeholders such as Eli Lilly were very helpful, particularly given Lilly's deep and relevant industry expertise. The effective collaboration between researchers, universities, funders and future industry partners was critical to the successful execution of the Caldan transaction. VC's catalytic role, in providing 'value-added' and scalable risk capital has been recognised by various parties.

The route to wealth creation via spin-out funding, and within these linkages, is varied and diverse. However, it is a universal truth that, unless this route is informed by investor and market feedback as early as possible, then spin-outs are much less likely to achieve success. The input of follow-on investors that may provide 'the next money in' (post spin-out) is also very important.

Across most EU and US markets only a small share of available venture capital takes on the challenge of converting academic research into fundable innovation. By continually nurturing and strengthening the linkages between its growing research base, its innovators and its early-stage funders, Hong Kong is well placed to match, if not exceed, spin-out company performance in other parts of the world.

A Sinclair Dunlop, Epidarex Capital

Mr. Dunlop has over twenty years of experience successfully delivering competitive returns to international investors. Prior to co-founding Epidarex Capital, Mr. Dunlop raised and managed MASA Life Science Ventures, LP ("MLSV").

Hong Kong Infrastructure: Realities and Opportunities

Joseph W. Ferrigno III, AMCG Partners

Introduction

Given the unfortunate realities affecting the implementation of infrastructure projects in Hong Kong over the past several years, and the many new projects being inspired by the PRC "Belt and Road Initiative", there is a compelling need for considering increased private sector participation in the infrastructure sector. Potentially highly attractive opportunities for Hong Kong-based advisers, developers, engineers, contractors, suppliers, lenders, debt and equity institutional and fund investors, as well as specialist infrastructure debt and equity funds, are becoming available.

Large cost overruns, long delays, political pressures and questionable benefits for society from some high-profile conventionally-managed projects in Hong Kong should motivate the Hong Kong Government to increasingly utilize the capabilities of private sector firms. It should thoroughly assess and determine which projects could and should be better implemented by public-private partnerships ("PPPs") than by the Government alone. PPPs are innovative project management and financing schemes in which governments and government-controlled corporations do not have controlling roles in planning, building and operating infrastructure and other public services facilities; and do not provide most of the funding. Government entities and the society are therefore not so fully exposed to the adverse effects of overruns and delays, as well as political pressures, which can be detrimental to society at large and also undermine confidence in Hong Kong.

The huge requirements for, most importantly, complex project management and risk control and absorption capabilities, as well as for the capital necessary to successfully implement the larger public infrastructure facilities projects all over the world far exceed what governments can provide. For some projects, certain costs, risks and management responsibilities can be transferred to private sector partners via the judicious use of appropriately-structured and well-managed PPPs. PPPs can be utilized for all stages of projects, such as design, finance, construction and operation; or only for certain stages, such as finance and operation. PPPs do however need to be structured appropriately and there are many examples of successful, as well as unsuccessful, PPPs in both the developed and developing countries.

The Hong Kong Government should consider taking greater advantage of the opportunities to utilize PPPs to obtain the substantial potential benefits for the users of particular projects and for society at large. The benefits include more innovative designs which are more economic, lower capital and operating costs resulting in lower usage fees, shorter construction periods that stimulate higher economic growth earlier, the allocation of certain risks to the private sector; and lower funding required by government and government-controlled corporations. The higher

financing costs of PPP-type projects should be assessed, on a case-by-case basis, and determined as to whether they are an acceptable trade-off against the lower project implementation and operation risks to the Government as these risks are largely allocated to the private sector partners.

Government should also consider privatizing existing infrastructure facilities to allow for the release of substantial funds for purposes which provide current benefits to society. In the view of many, Government should not use current surpluses to fund projects with very long useful lives. Surpluses should instead be used to provide greater social benefits currently, such as for improved housing for the less-advantaged, better health services, larger pensions and better educational opportunities and should not be used for building new projects or maintaining existing infrastructure facilities that those who contributed to the surpluses, will not be able to enjoy for long or at all.

Unfortunate Realities – Cost Overruns, Delays and a Tarnished Reputation

Hong Kong has had a well-deserved reputation as the premier Asian financial center with extraordinary transport infrastructure. Major projects were designed, built and operated highly efficiently through the close collaboration of Hong Kong Government departments and corporations together with private sector developers, contractors, equipment suppliers and investors. Over the past several years that bright reputation has been somewhat tarnished due to substantial cost overruns and delays on some high profile major projects, such as:

- **Hong Kong-Shenzhen-Guangzhou Express Rail Link ("XRL"): HK$85 billion**

  Construction of this large complex project that will enhance Hong Kong's status as a gateway to the Mainland and is of high strategic importance began in 2010. It was due to be completed in mid-2015. However, management, technical and political problems have led to a two-year delay with services now not expected to start until 2018. Initially estimated to cost HK$65 billion in 2010, the cost has already risen to HK$85 billion and will likely increase with further additional delays expected. All involved share some responsibility.

  The Hong Kong Mass Transit Railway Corporation ("MTRC") was contracted by the Government as the Program Managers and, according to the views of many in the industry, they are largely responsible. Although the original Government brief to the MTRC lacked clarity in defining the scope of the scheme, the MTR design was considered by some to be highly ambitious and should not have been accepted by the Government. According to these views, the MTRC may not have applied its historical tradition of strong professional project management and leadership, cost control, logistics planning and the avoidance of scope creep.

  Formal enquiries into the problems encountered indicate that there was a lack of clarity of accountability and overlapping responsibilities. The reporting procedures were not robust enough and, indeed, failed to properly inform the MTRC Board and Government in a timely fashion, which hindered mitigation measures and control of contingency funds. *[Report of the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link Independent Expert Panel, December 2014; Report by the Legislative Council's Select Committee on*

the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link project ("XRL"), 6 July 2016]. The MTRC rejects many of the allegations in these Reports for which there is no specific evidence. It has made significant changes in its project management processes to more closely monitor and control progress; and to report to Government with greater transparency.

It should be noted, that the necessary decisions over where immigration facilities would be located and the identity of the railway operator have still not been determined, which has severely exacerbated problems for the MTRC, the consequences of which were beyond its reasonable control. In addition, unforeseen ground conditions, extreme weather events and other factors beyond the reasonable control of the MTRC have been factors in the delays.

- **Hong Kong – Zhuhai – Macao Bridge ("HZMB"): HK$83 billion**

This tripartite development project between the governments of Hong Kong, Macao and Guangdong Province began construction in December 2009. The total cost of the whole project – including the offshore bridge, tunnel, link roads, boundary crossing facilities and two artificial islands was estimated to be approximately HK$130 billion, to be shared between the three regional governments.

Hong Kong was expected to contribute HK$83 billion. However, it is now believed that the cost of the bridge to Hong Kong will rise further and that there will be additional delays. Construction was delayed for over two years by a series of judicial reviews of objections all of which were overturned. During the period of delay rates and prices escalated and the original budget became insufficient. In the view of some experts familiar with the project, if the bridge had been implemented by means of a PPP scheme, similar to that proposed by Sir Gordon Wu many years ago, it is likely that it would have been successfully implemented on time and on budget long ago.

- **West Kowloon Cultural District; Kai Tak Cruise Terminal: HK$31 billion**

Other examples of Government-managed projects which did not take advantage of private sector participation, which could have been attracted, include the West Kowloon Cultural District that is expected to exceed the original budget of HK$23 billion; and the Kai-Tak Cruise Terminal: HK$8 billion, much higher than initially estimated and which has been under-utilized.

It should be noted that some of the particular problems which have adversely affected the planning and building of some new infrastructure in Hong Kong by Government and Government-controlled corporations were and are beyond their reasonable control, including:

1. Limited availability globally of technically competent and adequately experienced project engineers and managers, especially in the rail sector due to a building spree.
2. Acute shortage of skilled construction workers, due to unrealistic immigration policies, the availability of which is critically important.
3. Unrealistic estimates of costs and completion time due to political pressures.
4. Delays in approvals for government funding due to conflicts within Government.

A general systemic problem is that when governments and government-controlled corporations are fully responsible for all stages of the planning and implementation of large complex projects, constant pressures on government managers and officials can result in a blame culture which does nothing to encourage them to take ownership of problems and develop positive and timely solutions and encourage innovation. In sharp contrast, the private sector encourages the

latter and rewards success. This problem can be mitigated by the use of PPPs.

Notwithstanding the problems and difficulties caused by these realities, there are numerous cases of public-sector entities successfully implementing major infrastructure projects in Hong Kong. For example, the MTRC has had recent successes in opening a number of new lines in Hong Kong within or close to budget and on time. It funded these directly and was therefore able to assess and determine risk, return and contingency without political pressure. The MTRC has also contributed to the success of railway projects, some under PPP schemes, in the Chinese Mainland, in Europe and in Australia.

Another example is the Airport Authority of Hong Kong. In recent years it has completed several significant projects within time and budget. It has awarded and is managing contracts for the formation of the land to facilitate the third runway well within budget which contracts are not being funded by the Government.

Attractive Opportunities – Greater Use of the Private Sector

When infrastructure projects have the fullest possible participation of firms in the private sector for both new and existing facilities there can be substantial benefits to all parties and to society at large, such as:

1. More appropriate and, sometimes, innovative designs, which can be more economic,
2. Lower capital and operating costs which can result in lower usage fees,
3. Shorter construction periods which stimulate economic growth earlier,
4. Allocation of design, construction and operating risks away from Government to the private sector; and
5. Limited or no funding by government and government-controlled corporations. The higher level of private financing costs vs. government financing costs that are inherent in PPP-type projects should be assessed, on a case-by-case basis, and determined on whether they are an acceptable trade-off against the lower project implementation and operation risks as these risks are largely allocated to the private sector partners; as well as the greater availability of funds for other government purposes.

For example, in Hong Kong during the late 1980's, the HKD 4.5 billion Eastern Harbour Crossing ("EHC") combined road and rail tunnel was the first successful fully privately-financed BOT project during the late 1980's. The EHC was proposed in 1984, the same year that the Sino-British Accord was signed, by a joint venture of the Japanese construction company, Kumagai Gumi Co. Ltd., and the MTRC. Earlier, the Central Cross Harbour Tunnel had been proposed to be fully privately financed but political disturbances in 1967 required a UK government guarantee for a substantial portion of the cost.

The Hong Kong Government responded correctly to the EHC proposal by requiring international competitive bidding and did not allow the MTRC, which was then 100% government-owned, to joint venture with Kumagai. Kumagai's financial advisers, the Lehman Brothers International Project Advisory Group, then formed an international consortium, the "New Hong Kong Tunnel Consortium", which included Kumagai and Hong Kong, British and Mainland Chinese parties, to compete for the 30-year franchise. The Consortium was granted the franchise, developed, fully financed, constructed and operated the tunnels, which opened ahead of schedule in 1989 on budget at no cost or risk to the Hong Kong Government. Modest tolls were charged and the tunnels greatly stimulated the development of the eastern parts of Hong Kong island and Kowloon. The tunnel was transferred back to the Government in August 2016.

A different type of PPP scheme was also used in Hong Kong when private sector companies proposed, financed, built and operated the Western Harbour Crossing ("WHC"), which opened in 1997 and provided a more efficient western route to the new the new Hong Kong International Airport on Lantau Island. It should be noted that the Hong Kong Government has not yet honoured its promise to increase tolls at the Central Harbour Tunnel to promote traffic volume at the WHC and enable the investors to earn a reasonable rate of return.

The private sector was also involved when the Hong Kong Government securitized the income

streams from some of its infrastructure assets to help generate funds for other purposes as well as to develop a Hong Kong Dollar bond market. In May 2004, the Government raised HK$6 billion via the sale of bonds backed by toll revenues from five tunnels and one bridge to finance other infrastructure assets.

Most Hong Kong utilities are listed companies which are fully or partially owned by the private sector and are regulated by the Government. In general, debt and equity securities which they issues are considered highly suitable for investment by retail and institutional investors, e.g.: sovereign wealth funds, insurance companies, mutual funds and endowments.

Indeed, institutional investor assets are well-matched to fund many types of existing and new infrastructure facilities once they have been completed and risks have been reduced; as well as to fund the privatisation of existing infrastructure facilities, which can release money back to the Government for other uses. Given the long-term stable nature of cash flows from certain types of infrastructure facilities, they are natural assets for pension funds and other institutional investors which have long-term liabilities and the need for current income to service on-going and growing obligations.

The Hong Kong Government and Government-controlled corporations have not taken full advantage of the attractive opportunities for substantial benefits from collaboration with private sector firms on infrastructure projects and businesses over the past many years as it did highly effectively in the more distant past. The Hong Kong Government must once again consider planning and implementing major infrastructure projects via different types of PPPs. Their use can mitigate the potential adverse impacts on the Government and society of major project risks so as well as enable the Government to take greater advantage of the extraordinary economic development opportunities that may be initiated by private sector firms which might otherwise be lost. PPPs can also help avoid the political pressures associated with government financing and funding.

Various contractual models can be custom-formulated to satisfy the circumstances and unique requirements of the public and private partners for particular projects via PPPs, such as:

- *Design Build Finance Operate Transfer Concession: Availability Payments Model*
- *Design Build Finance Operate Own Transfer: Ownership Model*
- *Design Build Finance Operate Own Transfer: Purchaser Model*
- *Design Build Lease Operate Transfer: Lease Model*

Source: Infrastructure as an Asset Class: Investment Strategies, Project Finance and PPP by Barbara Weber, Hans Wilhelm Alfen, Wiley Published Online: 17 OCT 2015

International experience has shown that these and other basic models can be tailored and utilized for all infrastructure sectors, with sector-specific characteristics primarily being reflected in the respective contractual provisions of the individual unique projects. Indeed, PPPs have become popular infrastructure project management and financing models globally and are funded by a combination of public sector sources, such as development banks, and by private sources, such as infrastructure debt and equity funds. There are many examples of successful, and unsuccessful, PPP projects in the United States, Europe, Australia/NZ and Asia, e.g. India, Pakistan, Japan, Korea, Thailand, Malaysia, the Philippines and Indonesia.

It is important to understand that the successful use of PPPs depend on these elements:

1. **High importance of project development and management capabilities:** The implementation of PPP projects, which typically involve multiple parties of different nationalities, is highly complex and requires special expertise and experience and is more of an art than a science. The "packaging" for such projects, getting them ready for construction start, is highly risky, quite difficult and requires dealing with many challenges and problems which must be solved during the long project development periods. Many private sector firms have the necessary project development and management capabilities.
2. **High importance of appropriate PPP types:** As noted above, various types of PPPs can be tailored to the particular characteristics and circumstances and have different commercial and financial structures. The

private partners can be involved in the entire project or in different elements and stage and contribute ideas, absorb risks, contribute expert project management capabilities and capital using the most appropriate type of PPP model adapted to the particular project.

3. **Appropriate returns expectations:** Private investors understand that public services infrastructure projects have elements of public good that generate substantial social and economic benefits that are valued by the society more highly than the direct commercial and financial returns targeted by private sector partners. Therefore, they require the public sector partners, governments as well as national and multi-lateral development banks, to provide long-term low-cost funding for an appropriate portion of the total costs of projects to the extent necessary for the prospective returns on the private capital and management resources invested to be reasonable for the risks taken. Returns expectations by the private partners should be directly related to the stage of a project. For example, expectations for returns should be highest during the long project development periods when the risks are highest prior to the "shovel ready" stage and financing has not yet been obtained. Returns expectations are lower after financing is in place but prior to commissioning of a project and still lower during operation.
4. **Critical role of government:** Governments need to structure PPP arrangements based on transparent and appropriate principles to attract private sector firms as partners which can contribute the special capabilities and resources which government does not possess. As noted above, governments must sometimes provide a portion of the financing required for certain projects to be commercially viable either up front or via limited availability-type payments during operation. It is also highly advisable that governments maintain a non-controlling equity stake in PPP projects. This insures that the approval processes for investing tax payers' money is followed and, importantly, also results in accountability for the successive generations of government officials to see to it that government obligations are fulfilled throughout the long term lives of concessions/franchises. Government would typically have control over projects through oversight that ensures compliance with concession and franchise requirements. If necessary to reduce project risk to acceptable levels for the private partner, governments and development banks can provide guarantees and, if appropriate, involve quasi-sovereign entities.
5. **Key role of banks:** Private sector commercial banks and state-owned banks are critical to provide bridge financing during construction and need to be assured that their loans will be taken-out by longer-term lenders and investors. The involvement of such banks and lenders insures a disciplined assessment of the feasibility of proposed projects and of the capabilities of proposed contractors, equipment suppliers and operators.

Due to the contractual incentives and penalties to which the private sector firms are exposed, PPP projects generally have more appropriate and innovative designs, lower costs and shorter completion periods; as well as more efficient operation compared to government planned and implemented projects. Those benefits sustain the attractiveness of PPPs for the multiple stakeholders in spite of the many difficulties and challenges in implementation.

Long delays and big cost overruns for major transport infrastructure projects in Hong Kong need not be unavoidable. Appropriate PPP schemes highly motivate private sector partners via incentives and penalties to manage them well to on-time and on-budget performances. All projects are affected by exogenous variables that are not directly controllable by the project owners and managers. Indeed, it is inevitable that some stakeholder relations, government regulations, economic factors and legal developments will change during the long lives of the planning and implementation of major projects.

However, apparently unexpected events

are often predictable and manageable on an on-going basis. Private sector firms which have significant capital resources committed and, critically important, their reputations at stake, are much more likely to better manage unexpected events related to exogenous factors which can adversely impact projects than government entities. When such factors and related potential risks are identified, assessed and closely monitored, actions can often be taken to mitigate adverse effects on project costs and completion schedules. Constant vigilance is required to identify new exogenous variables that can arise after the initial planning stages. The "unknown unknowns" can become known by frequent monitoring and re-assessments so that actions can be taken to mitigate adverse impacts.

Conclusions

For certain Hong Kong infrastructure undertakings, it is clear that not all the blame for the realities of underperforming projects fully rests with the Government and Government-controlled corporations. It is also clear that PPPs should be considered and assessed, and possibly determined to be the preferable approach for certain existing and proposed new projects as against the conventional approach. Both approaches can and should be fully utilized, as and when appropriate, and can both be successful in parallel.

In addition, there are an increasing number of opportunities for Hong Kong to play a "Super-implementer" role for PPP projects stimulated by the Belt and Road Initiative due to Hong Kong's strong advantages, i.e.:

1. Well-developed project services sectors, including expertise in infrastructure project development and financing, which are unique in Asia in terms of their international business orientation, depth of service, expertise and professionalism,
2. The leading global financial hub in Asia with sophisticated IT infrastructure, established rule of law, independence of judiciary, and proven record of capital mobility,
3. Deep working relationships with Chinese, regional and global fund managers, which are interested in the funding of Belt and Road –related projects,
4. The largest offshore RMB center; and
5. The largest offshore IPO center for PRC corporates.

It is clear that the Hong Kong Government must again take as full advantage as possible of the capabilities of the private sector in the planning, implementation and operation of infrastructure facilities in Hong Kong for the benefit of society; as well as continue to provide support for private sector firms in Hong Kong to play leading roles in Belt and Road Initiative projects wherever they are located.

These should be top priorities for the new Government taking office next July.

Joseph W. Ferrigno III
AMCG Partners and Member of HKVCA Committees: Research, Education, Real Assets

Ferrigno has played leading roles in direct investment funds, acquisitions and the development and financing of PPP infrastructure projects in the US, Europe, Australia, Hong Kong, the Philippines and Thailand. He has held positions with the Chase Manhattan Bank, Lehman Brothers, the Bechtel Group and Prudential Financial during periods in New York, London and Hong Kong.

He led the formation of the New Hong Kong Tunnel Consortium, which members included Kumagai Gumi Company of Japan, China International Trust and Investment Corporation, Paul Y Construction Co. of Hong Kong and Liley Construction Co of the United Kingdom. The Consortium was awarded the franchise, financed, built and operated the US$600 million Hong Kong Eastern Harbour Crossing, the first BOT-type PPP project in Asia. He also organized a consortium to develop, build and operate the US$1.1 billion Bangkok Second Stage Expressway and managed a mezzanine infrastructure fund which invested in the Delhi-Noida Toll Bridge. He has also been a director of the Manila North Tollroad Company and was involved in the financing of the Sydney Harbour Tunnel. Ferrigno has also advised clients on several other major infrastructure projects in Asia and the United States.

Ferrigno is a graduate of the Wharton School and is the Founding President and Governor of the Wharton Club of Hong Kong. He is a member of the American Club in Hong Kong, the Hong Kong Club, the Royal Hong Kong Yacht Club, the Shek O Country Club and the New York Yacht Club.

Can Co-living Spaces be the Solution to Hong Kong's High Cost Real Estate?

Interview: Girish Jhunjhnuwala, Ovolo Hotels

Hong Kong property prices have been consistently high over the past decade. According to the US-based Demographia International Housing Affordability Survey 2016, Hong Kong is the most unaffordable city in which to buy a home for the sixth straight year[1]. The average housing rental cost was HK$32.6 per square foot as of the end of October[2]. The cost of living is a significant issue for the local market, and this in turn works to discourage startups and business professionals from making Hong Kong their home. While a lack of supply may lead to ever higher property valuations, the recent growth in so-called "co-living spaces" may offer a solution to the city's housing problem.

What is Co-living?

Co-living is a form of homesharing in which individuals choose to live together with other likeminded people. It is particularly attractive for young urban entrepreneurs who prefer to have an office and or home that provides them with a greater degree of flexibility at a relatively lower cost compared to more traditional housing options. High profile examples include the Collective in London and WeLive in New York and Washington DC.

1 http://www.demographia.com/dhi12-media.pdf

2 http://hk.centanet.com/home/ArticleTemplate4.aspx?id=70932

Recent discussions in Hong Kong have begun to focus on whether the co-living approach might be an effective solution to the high cost of space for startups. At the same time, co-living also provides an opportunity for entrepreneurs to interact with each other, sharing not just office and living space, but ideas and innovation as well.

Indeed, a number of private equity firms have expressed interest in developing and renovating property that would operate as both co-working and co-living spaces in Hong Kong. Phoenix Property Investors, for example, now rents several floors to WeWork, which opened its first location in Causeway Bay in September 2016.

Existing Co-living Cases

Ovolo Hotels, founded by Girish Jhunjhnuwala, revamped its luxury hotels located in Hong Kong and Sydney to incorporate live-in co-workspaces. "We looked at our highly-praised offering of all-inclusive hospitality, took advantage of our unique business model as an owner and operator hotelier, and decided to create a co-workspace environment directly in a selection of our properties", said Jhunjhnuwala, adding that such an arrangement offers entrepreneurs and like-minded disruptors an environment in which to thrive.

Co-living spaces are not exclusively for startups, in fact, Asia already has similar types of co-living spaces for students and workers in the form of dormitories. Pamfleet invested few dormitories for foreign workers in Singapore; Gaw

revamped Telstra's building to create a student dormitory in Perth.

Private equity firms have also been involved in building co-living spaces for students in Hong Kong. Campus Hong Kong, which is part of Bay Bridge Serviced Apartments located in Tsuen Wan, provides 48 rooms for student housing. The property was acquired by Gaw Capital Partners in 2012.

Co-living spaces have also proved popular for employees. Gaw Capital was involved in the purchase of a bankrupt property in a prime location in Seoul in 2014. The property was subsequently turned into a two-tower block with facilities for offices, "officetel" and retail. Co-living space will be provided to employees who are working in Seoul, but whose homes are located outside of the city.

Jhunjhnuwala believes that the concept offers tremendous opportunities for the hotel sector. "You see players like Marriott joining the game with their new Moxy brand, targeted at Millennials with a co-living concept in mind. All of these co-living spaces are being designed around the changing nature of how people live and travel. A lot of them are of course modelled on appealing to millennials, but the reach is much further - seasoned travelers enjoy this effortless, co-living concept just as much."

Jhunjhnuwala believes that it helps to increase the value proposition of a hotel. The co-living space is not limited only to entrepreneurs, but is freely available to all regular guests. "What we've done is create an extended living room for our guests - providing them with a communal space they can really enjoy, and expanding their interaction with our hotels."

Beyond Co-living

The advent of co-living spaces may offer a solution for those individuals primarily in the market to rent rather than buy. Most of the time, these lower credit borrowers have difficulty in borrowing money for financing their house, thus a peer-to-peer mortgage platform may be an alternative way to solve the issue. This kind of lending platform provides lower interest rate as well as more lenient requirements than conventional lenders, such as banks.

To reduce the property prices, increasing the supply of land and housing is more effective than rising stamp duty and limiting the loan-to-value ratio in the long run. There is hope that the Government will act to encourage private investors to develop and make available more of such living spaces in Hong Kong.

Girish Jhunjhnuwala, Ovolo Hotels

Girish Jhunjhnuwala, Winner of 2016 EY Entrepreneur of the Year for Hong Kong & Macau Region, is the lifelong entrepreneur, founder and visionary behind Ovolo Hotels in Hong Kong and Australia. From his start in the family watch business to the discovery and development of the first Ovolo in 2002, Girish has always been about challenging industry convention, thinking differently and creating intuitive new concepts that deliver from a genuine customer's point of view.

Private Equity: Joining the Pension Debate

Philip Tso, Willis Towers Watson

Universal pension has been a hot topic within the Hong Kong society and is expected to continue to be the government's top priority in the near future. Stripping out the political agenda, this is mainly due to the increasing awareness of the ageing issue. Our life expectancy is one of the highest in the world and people have been focussing more and more on living a healthy life. Generally, people would hope to retire in their 60s and spend at least another 20 years in retirement. The challenge to many of us is how we can have sufficient assets to support our post retirement expenses.

In Hong Kong, many of us are covered by some kind of retirement protection. It largely depends on the employers for whom we work for. Some employers offer a voluntary retirement arrangement named Occupational Retirement Schemes Ordinance (ORSO), a scheme that can take the form of either a defined benefit or a defined contribution structure. Also, the majority of the working population is now covered by the Mandatory Provident Fund (MPF) since 2000. According to the Mandatory Provident Fund Authority's (MPFA) statistics as at 30 September 2016, the latest assets for the ORSO and MPF have reached HK$309 billion and HK$655 billion respectively.

Given that Hong Kong has a working population of only 3 million, the HK$964 billion of pension assets has its significance, proportionally speaking. Although the concept of saving is not uncommon in Hong Kong, the general interest has shown that property and stock investing are more popular than saving for retirement whilst the former is illiquid and the latter is volatile. What has been observed is that the general retirement saving concept has been enhanced, albeit at a slow pace. It is better than having no concept at all. Having said this, does it mean that we will all have sufficient assets to support our retirement life? Two levers will have significant influence on our future, namely investment results and contributions. The latter is a function of individual's financial situation and employers' benefit philosophy. Those who can afford to save more than the statutory minimum will definitely have an advantage. Although contributions, in no doubt, will account for a sizeable portion of the retirement assets, investment returns are equally important especially when the asset pool gets larger in size over time.

Investment returns are driven by the type of assets invested. According to a Willis Towers Watson's survey, most of the Hong Kong pension assets have only been invested in equities and bonds. Over the last 20 years, investing in bonds has generated mostly positive returns. Equities, although having had a few significant corrections, have also delivered decent results. So up until today, investors should be fairly satisfied with the outcomes. However, in today's environment of geopolitical uncertainty and changing monetary policies, the question investors, especially pension investors, should ask is whether a portfolio with just equities and bonds will repeat history with a

decent result. The answer is NO. Investors need to think beyond traditional assets to generate a good outcome for themselves.

The key to the future success in investment relies on one word – Diversification. We have observed that a portfolio without any diversified assets has suffered more than that with alternative assets such as private equities, hedge funds, properties, infrastructure, etc. These assets, in isolation, could be risky, but when these are put in a portfolio with traditional assets of public equities and bonds, the volatility of the diversified portfolio is significantly reduced. One can imagine what would happen if the market was to experience a severe correction, such as the 2008 Global Financial Crisis, while one is approaching retirement. With an investment in listed equities alone, one's retirement package could be half of what would have been reasonably expected otherwise. Having a diversified portfolio would allow investors to have multiple return drivers for the return generation and, at the same time, have multiple risk exposure, which ultimately would help investors limit their losses through different types of market cycle.

Liquidity is always a concern for investors when considering alternative assets. Indeed, private equities are not liquid. It may create challenges to investors if they need to liquidate their investments when needed. Generally, no investor would simply put the entire portion of their assets in private equities or other types of alternative assets. A 10% to 20% exposure would serve a good purpose of risk reduction. The rest of the portfolio could continue to invest in liquid assets such as equities and bonds and serve to meet any outflow over time. Hence, in determining how much illiquid investments investors can tolerate, they should consider the horizon of their portfolio and evaluate the flexibility of the cash flow management required.

Having said that, it is important to note that alternative assets such as private equities are relatively complex. Investors without financial knowledge could find them difficult to understand and manage on an ongoing basis. Investors need to ensure that there is a proper professional investment management team in place to manage the portfolio with adequate internal resources and time. A good decision making process is also important to ensure that investors would not miss out on good opportunities over time.

In general, we view that having alternative assets such as private equities can create additional risk premium, illiquidity, while at the same time, achieving better diversification and presumably better returns. This is particularly important in today's investment world where downside risks are significant. Investors need to make sure that their portfolios are well prepared for any unexpected events at all times.

However, in practice, there is only a small portion of the Hong Kong pension assets invested in private equities. Investors are typically held

back by all the reasons stated above. Although some of the concerns are valid, investors shouldn't just ignore the benefits of diversification and not explore how they can implement private equities. Nowadays, there are products or vehicles that can potentially address some of the concerns.

Within the MPF space, given that the end savers are the general public, it is understandable that the current product offering does not have any private equity exposure. Willis Towers Watson would not be supportive of having a standalone private equity fund offered as one of the MPF funds within an MPF scheme. Investors just don't understand the investment philosophy and management of a private equity fund. In addition, the return delivery and risk profile of a private equity fund is not something that a retail investor would fully accept. However, this doesn't mean that private equities should not be one of the assets within an MPF mixed assets fund. Mixed assets funds, which are the most attractive funds within an MPF scheme, comprise equities and bonds. The inclusion of private equities would offer diversification benefits and would deliver better risk adjusted return over time. Should the mixed assets funds also have exposure to other types of alternative assets, the results would be expected to be further improved over the long term. The most important benefit is that the mixed assets funds could have a less adverse impact during a significant market downturn.

Under the current MPF regulation, all the funds have to be approved by the MPFA. Hence, to promote a better investment strategy for the MPF investors, the regulator buy-in is essential. It is possibly viewed as premature to allow private equities and other alternative assets to be within a mixed assets funds at the moment. We view that this shouldn't be something that is completely dismissed under the regulator's agenda. Fees, of course, would be an issue as these types of assets are more expensive than that of equities and bonds. With the continual developments in this space, there could be solutions in the market that also meet the objective of cost effective offerings.

There has been a debate in the market whether the Hong Kong Monetary Authority (HKMA) should be managing the MPF assets given all the critics about the MPF, i.e., low returns and high fees We view that this should be carefully thought through. Although the HKMA has in-house expertise in investment management and especially in alternative assets, this doesn't mean that they would have the capabilities in managing retirement assets as it has a different objective compared to other portfolios such as the reserve. It is also important to understand the purpose of the HKMA. The existence of the HKMA does not aim to serve the purpose of managing retirement assets for the general population. In addition, given the political environment in Hong Kong, it will be a sensitive mandate for the HKMA to take on and it could cause the HKMA to lose focus on its core duty and responsibility.

In summary, we do think that there is a case for investing in private equities and even other types of alternative assets into a retirement portfolio, but that it should be subject to the proper governance of professional fund managers if one is to have such an exposure. Investors should diversify to better protect their portfolios in an investment environment where bonds and equities are not giving returns like they did in the past. One option is that having alternative assets such as private equities can help but it needs to have strong governance in order to add value over time.

Philip Tso, Willis Towers Watson

Philip Tso is the Director of Investments at Willis Towers Watson in Hong Kong. He joined Willis Towers Watson Hong Kong in 1996 after graduating from Canada. He is responsible for advising institutional clients on a full range investment related services, including investment strategy, asset allocation, benchmark design, manager structure, selection of investment managers, and ongoing monitoring.

An Update on the HKMA's Long-term Growth Portfolio and Future Fund

Interview: Eddie Yue, HKMA

The HKVCA spoke with an HKMA representative to get the latest updates on the Government's Future Fund and their strategy for this inaugural alternative investment program.

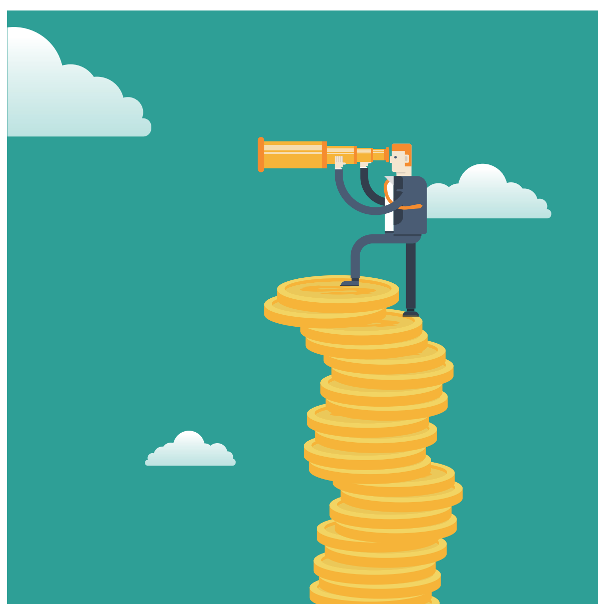
The Future Fund, Hong Kong's sovereign wealth fund, makes long term investments with the goal of achieving higher returns for the territory's fiscal reserves. The Hong Kong Monetary Authority (HKMA) has managed the fund since its inception in January 2016.

Because the return profile for private equity is more robust than that of conventional liquid asset classes, sovereign wealth funds, including the National Pension Service of Korea (NPS) and Japan's Government Pension Investment Fund (GPIF), have been increasing allocations made to private equity funds. This enthusiasm is echoed by numerous investor sentiment reports claiming that LPs are deploying more capital to private equity funds, a trend that will continue in the near future.

It was against this backdrop that the Hong Kong Government announced the establishment of the Future Fund. With an initial endowment of HK$219.7 billion, the fund has been placed with the Exchange Fund for an initial 10-year investment period. Roughly 50 per cent of the Future Fund is set aside for incremental placement with the Exchange Fund's Long-Term Growth Portfolio (LTGP), to be built up gradually over a period of around three years and which includes private equities and investments in properties outside Hong Kong. The remainder of the fund is placed with the Exchange Fund's Investment Portfolio or other investment assets, such as public equities and bonds.

Investment Strategy

The portfolio allocation strategy for the LTGP is dependent upon a number of factors, including the latest market conditions and the overall return objectives of the LTGP portfolio. Wary of market sensitivity, the HKMA declines to disclose the specific allocation details of the LTGP portfolio. However, it has stated that diversification is an important consideration



in the construction of the portfolio. When identifying their target markets and sectors, they are careful not to gain exposure to investments that may compromise or conflict with the HKMA's existing roles. For instance, as a banking regulator in Hong Kong, it is likely that they will avoid investment opportunities in Hong Kong's real estate market.

The HKMA's LTGP has, since 2009, allocated a portion of the Exchange Fund to alternative asset classes comprising global private equity and non-Hong Kong real estate. The LTGP has performed well - the return since inception is 12 percent as of 2015. Global private equity and real estate 5-year benchmarks during the same period have delivered 12.7 percent (AIC – Bison Private Equity Benchmark) and 9.2 percent (MSCI – IPD Global Property Index) respectively.

Typically, the private equity fund portfolio performance follows a so-called "J-curve" pattern, with the funds delivering a negative net cash flow in the early stages followed by positive cash flow with investment gains thereafter. Mitigating this J-curve has been a priority for the HKMA as it constructs its LTGP portfolio, and prudent use of leverage is an essential strategy to deal with the effect. Additionally, the timing of the portfolio's inception (i.e. after the global financial crisis) and the purchase of private equity secondaries have played a significant role.

With the new capital from the Future Fund, the HKMA will continue to evaluate its staffing requirements periodically to ensure that its resources are commensurate with the scale and complexity of the portfolio, and that adequate and suitable professionals are deployed to manage the LTGP investments. While the HKMA has declined to disclose specific details of their investment strategy, they are always open-minded about new investments opportunities that present positive risk-adjusted returns. They will continually assess the LTGP portfolio in the context of evolving market conditions and adjust its composition and strategy as appropriate.

Divestment Approaches

The investment period of the Future Fund will be concluded at the end of 2025, though the LTGP will make a decision about divestment either before or at that time. Because of its diversified portfolio, the Future Fund is not expected to have a material impact on the disposal decision. Indeed, most private equity funds begin generating distributions well ahead of the expiry of their fund life.

Responding to Emergencies

The Future Fund is a long-term savings scheme and withdrawal before 31 December 2025 is generally not allowed except in emergencies. Where it is envisaged that the operating and capital reserves (i.e. balance of the fiscal reserves net of the Future Fund) is likely to drop to or below six months' equivalent of gross government expenditure, and where the Financial Secretary sees a need to withdraw funding from the Future Fund, the Financial Secretary may direct that the ten-year placement be aborted, in whole or in part, whereupon the Future Fund placement shall be released to the Land Fund and the General Revenue Account respectively within a reasonable period. The HKMA expects that the arrangements for withdrawal of the portion of the Future Fund linked to the investment portfolio will be similar to the existing arrangements applicable to the fiscal reserves. As for the portion linked to illiquid investments, such as private equity and real estate, these will require a longer period to cash out. The HKMA will discuss the specific withdrawal arrangements with the Hong Kong Government should such a need arise.

Eddie Yue, JP, HKMA

Eddie Yue is responsible for reserves management, external affairs and research. Mr Yue began his career as an Administrative Officer in the Hong Kong Government in 1986. He joined the HKMA in 1993 as a Senior Manager, and was subsequently promoted to Division Head in 1994. He has worked in a number of divisions, including Monetary Management, External Relations, and Banking Development, and has served as Administrative Assistant to the Chief Executive of the HKMA. Mr Yue was appointed Executive Director in 2001 and to his present position in September 2007.

Family Divestitures: Can Private Equity Play a Role?

Interview: Christina Gaw, Gaw Capital Partners

Christina Gaw, partner of Gaw Capital Partners, a leading private equity real estate firm in Asia Pacific, shares her thoughts on the role that private equity can play in family divestitures in Hong Kong.

Reasons for Disposal of Family assets

There has been a growing trend towards an increase in divestitures by family offices in Hong Kong. There appear to be several reasons for this, notes Christina Gaw, partner of Gaw Capital Partners, perhaps chief among them a general declining growth rate in the region. It is also true, she adds, that normal practice dictates the sell-off of assets as a regular part of the investment cycle and that many family offices are uncomfortable holding certain kinds of assets over the longer term.

Another reason often cited for divestiture is that second or third generation family members are simply not interested in the family's core businesses and, even when they do join the family business, may be reluctant to maintain the status quo, whether due to pressure from more experienced colleagues or because of restrictions based on existing policies and realities. Of course Gaw is aware that younger generations may have their own business ideas or indeed the traditional family business may not itself be suited to a changing economic environment. They must assess both the benefits and opportunity costs of continuing the traditional family business (for example, textiles) versus pursuing a new business model (such as investment in real estate). It may be true too that the first generation were by nature more conservative and less inclined to adopt new initiatives.

This is not to say that Hong Kong's family offices are incapable of innovation and change, Gaw says. There are many examples of businesses that have not only been successfully passed down through generations, but have in fact grown beyond their original enterprise. One such example would be that of Michael Wu, a third generation member of the family which owns Maxim's Group. Michael inherited the food catering business from his grandfather and, apart from expanding Maxim's core business, ensured the Group's continued success by appealing to a new generation of customers. Today, approximately 30 percent of Maxim's revenue comes from m.a.x concepts, Genki Sushi and Starbucks, and the remainder from Maxim's traditional business and other investments.

Why Select Private Equity?

Given the current investment climate, Gaw is keen to show why private equity is more attractive than ever for traditional family offices. Firstly, it can provide added value to the extent that PE firms can carefully evaluate the profitability - financial, operational and asset-level - of every investment decision. For example, Gaw Capital purchased the Jordan, Hong Kong-based, Novotel Hotel with CSI Properties and Partners Group for HK$2.37 billion in 2012. While some in the industry believed the LaSalle Asia Opportunity Fund had already captured

the highest return possible from the property (it bought the hotel for HK$1.69 billion in 2007), Gaw Capital still managed to generate 20 percent IRR in two years.

Gaw sees the necessity of identifying and then unlocking the potential hidden value of a property. Successful investors should explore ideas and not be limited to entrenched schools of thought. For instance, conventional wisdom held that retail outlet malls, which originated in the West, would not prove to be similarly popular in China. However, the opposite proved to be true and following the success of Florentia Village in Wuqing, Guangzhou, Shanghai and Wuhan, Chinese real estate firms have been rapidly adopting the business model.

Undertaking the enhancement, renovation or even changing the function of a real estate asset, Gaw believes, can have a profound impact on the profitability of an investment. She points to the example of Bay Bridge Serviced Apartments, which Gaw Capital acquired from Hang Lung Properties for HK$1 billion in 2012. After a complete renovation of the asset (Campus HK), rents rose by more than 20 percent.

At Gaw Capital there is no hierarchy and, as Gaw herself insists, "analysts are encouraged to voice any suggestions they might have to every one of the partners." Moreover, nurturing talent is important to building confidence. Private equity firms in particular tend to prefer to attract new talent to the industry (hence the importance of the HKVCA's PE fundamental courses, which are offered to MBA students and junior level PE professionals) and local fund houses keenly offer placements to recent graduates.

The various roles undertaken at private equity firms tend to be diverse. At Gaw Capital, for example, these roles are well-distributed between partners: some are more involved in networking and the production of new ideas, while others work on the operational and investment aspects of the business and still others concentrate on fundraising. The partnership structure that tends to exist in GP firms offers a diversity of talent that works to optimize their business.

Finally, the limited partnership structure of private equity fund houses more readily lends itself to success because partners have a stake in creating profits for their business. The general partner invests its money along with the LP's commitment, and they thus share both the risk and return with their investors. Carried interest schemes as well, Gaw notes, can provide ample motivation for investment teams, given the potential impact on the team's compensation.

Limited Partners and Family Offices

Family offices do not tend to lack the capital required to fund their own ventures and, therefore, may initially be less interested working with private equity and venture capital firms for investments. Because of this, Gaw believes that joint venture vehicles approach is an alternative way for private equity firms and family offices to work together. She points to the recent successes of InfraRed NF as a case in point, a joint venture fund established to manage private equity real estate investment in Greater China. The fund is managed by InfraRed Capital Partners and the Nan Fung Group, a Greater China-focused real estate owner, operator and developer, and capitalizes on the synergies created by InfraRed's investment management and governance experience with Nan Fung's real estate development expertise and local relationships.

Gaw's support for such joint venture projects would seem to be well placed. Nevertheless, from a fund manager's perspective, the investment committee would be heavily influenced by a sole LP, and hence, the GP may lack the flexibility to make independent decisions.

Christina Gaw, Gaw Capital Partners

Ms. Christina Gaw is Managing Principal and the Head of Capital Markets at Gaw Capital Partners. Prior to joining Gaw Capital Partners, Ms. Gaw had been with Goldman Sachs and UBS as a Managing Director, with responsibilities as Head of Asian Regional Sales and latest capacity as Head of APAC Capital Introduction team within Prime Brokerage.

Hong Kong's New Future Fund Creates Opportunities to Build "Brand Hong Kong" and Secure its Position as an International Financial Centre

Christine Wood, FTI Consulting

Last year, the Hong Kong government established two sovereign funds, the Future Fund investing in private equity and properties outside Hong Kong and the Innovation and Technology Venture Fund to stimulate private investments and increase deal flow in local Hong Kong technology start-ups. Given the intense competition for good opportunities, high quality assets and the great responsibility that these funds hold in their hands, this article explores what could be considered as best practice for sovereign funds in how they build their reputation, develop trust and communicate effectively with all of their stakeholders.

Why are Communications Important – What can They Achieve if Done Well and What are the Consequences of Failing to Create a Clear Engagement Plan?

Looking at it from the professional investor point of view, why would communications be important to them? Surely the GP is in the driving seat when it comes to deploying capital? However, as the current situation stands, with so much money looking for superior returns, looking for a home essentially, it's not as simple as that. The onus is on the investor to prove that it is the right partner – responsible, professional, able to add value, etc. If you get these things right then experience suggests that the good opportunities will find you.

Sovereigns have one of the most complex stakeholder groups of any fund. Their main stakeholder group is the people whose money it is, to whom the investment outcome really matters – the general public. This group of people have high expectations when it comes to holding those in charge to account. They are highly motivated and the speed at which they can gather and express their disapproval using the social media tools available to them, for example, has changed the way in which we, as professional communicators, think about this, forever.

As sovereign funds look more closely at the role they play in society, aligning their investment strategy to what's important to their stakeholders, they too need to demonstrate they are doing the right thing whether that is socially responsible investing or supporting the economic development of their home market, amongst many other considerations.

So, as a sovereign fund, how do you demonstrate you are doing the right thing? Is a glossy annual report covered in green leaves, for example, sufficient? I exaggerate here as I think visuals have a part to play, even if you have the luxury of being around for many years and have

enormous scale and size. But even these mega state funds which receive such a huge amount of attention every time they may be bidding for an asset or making an investment typically have a very carefully considered communications plan in place. The stakes of not communicating correctly are so much higher when you start to think about cross border transactions and government involvement in decision making. If something goes wrong, it's on a world stage and can impact the reputation of the country, not just a loss on the bottom line. So, in this age of global, speedy communications, while a basic tool, an annual progress report isn't really sufficient. There needs to be greater transparency surrounding the investment goals and decisions the fund makes.

There is an added incentive for Hong Kong here when you look at the race between a number of countries, especially in Asia, which want to position themselves as the regional hub for financial services and especially as centres for fund management and fintech.

As outlined above, communications has a role to play in protecting a sovereign's aims and with proper thought should be able to powerfully underpin them with tangible results.

Who is Doing It Well and What are They Doing?

Which sovereign funds have built a trusted brand for themselves and how did they do it? I think different things come into focus depending on the size of the fund. Let's take Singapore's Temasek and the CPPIB, for example. Both are of a significant size and because of their size and track record, they receive a lot of attention already and don't necessarily need to court attention in perhaps the same way others do. It's more important that they protect the reputation they have built, pick the right partners to associate with, demonstrate they have a clear plan and communicate the success of their investment decisions.

If you look at Temasek's communications collateral you can clearly identify the positioning they are striving for. They are talking about stewardship, trust and the concept of investing over generations across every communication. They are using social media channels in a way which talks directly to their stakeholders. As an example, their Instagram page asks "At Temasek, our eyes are on tomorrow. How do you think the world tomorrow will look like?" On the YouTube site, there is one video which particularly stands out using the conceit of a Singaporean drama to describe a tale of family hardship and how it's important to look towards the future.

CPPIB, the Canadian pension fund has charted a course which closely aligns how it invests with the interests of the Canadian people putting sustainable investing at the heart based on the belief that organisations which manage Environmental, Social and Governance (so-called 'ESG') factors effectively are more likely to endure and create sustainable value over the long term.

At some point the organisation also decided that it had a responsibility to look much further and beyond its own walls. They have joined forces with other sovereigns and created a number of platforms to promote long-term investing. One example is a stock index that identifies companies with strong balance sheets, good governance etc. There are other examples of forums which they have created in which to teach and exchange ideas about the principles of sustainable investing. These efforts are communicated extensively across all stakeholder groups using a number of different channels.

What's the result of this type of communication and sharing of information? I would say that globally today, CPPIB is seen as an authority for sovereign funds on sustainable investing. This must have a measurably positive impact on them benefitting from the pick of investment opportunities; there is a definite halo effect of partnering with them and being invested into by them.

The CPPIB website states: "…we are an organization that is trusted around the world for our integrity and dedication to the highest standards of quality and professionalism." To me, that positioning is some way away from how traditional private equity businesses are often viewed by the media and yet they have very similar end financial objectives.

These two examples of large, established funds ably illustrate the power of a carefully considered communications strategy and are still very much applicable to what smaller, newly established funds need to consider.

Best Practice in Communications for Sovereign Funds

Building brand reputation and credibility takes careful crafting over time but can be destroyed very quickly. Under consideration for newer funds is that it takes time before investments can generate meaningful long term returns and even then, not all of them will achieve desired outcomes.

So, what could be considered best practice for making a brand stand out in the right way? Is it important to create more impact than the others? What if it is a smaller sovereign fund, how does it make sure it gets in on the 'good' deals and opportunities? Should it be getting involved in the local community in which it operates? How does it become appealing, an attractive partner for asset sellers?

There has certainly been a big movement towards transparency in the sovereign fund world as their growing influence in capital markets steps up. Also, by becoming more involved in the communities they operate in as a way of demonstrating that they care about the potential for impact – positive or negative. Explaining what they are doing and why, in a clear and transparent way, has moved to the fore.

With the above examples and considerations in mind, below is an outline of a five stage approach to establishing a clear communications framework.

Stage One: Identifying stakeholders and appropriate channels

The first step is to really think holistically about who your stakeholders are. When you look at sovereign funds, this typically means groups of people whose interests aren't necessarily completely aligned e.g. the investors, the investment community such as bankers, lawyers, co-investors; also the asset sellers and foreign governments, etc. The greater detail into which you can segment your audience, the better understanding you will have on what's important to them, how to tailor your message, create content and decide which channels to use to disseminate your information. Think about how to best use social media to engage with a broader group of stakeholders on track record, etc.

Stage Two: Crafting the message

What do you stand for and what do you want to be known for? Brand Hong Kong, for example, has already looked at this in some detail and there is some fantastic language around Hong Kong's competitive strengths that could be applied to the Future Fund's communications – dynamic, entrepreneurial, strategically located, global connectivity, security and rich diversity, etc. In alignment with the competitive strengths, you then need to decide on a tone of voice, a look and feel.

Stage Three: Meaningful content

Then you need to look at the collateral you have available to you, identify any gaps, think about what you might need to create and how best to package everything in order to convey the message and achieve your desired positioning. Prioritisation and identifying risk are important components of this stage and testing the robustness of what you are planning in a safe forum.

Stage Four: Crisis preparedness

When you engage publicly it comes with risk and so it's important to be prepared to handle any eventualities. Most organisations will have a plan in place and will look at what the external and internal risks are to the fund and how they would manage an issue.

Stage Five: Measurement and evaluation

Outlining what you want communications to achieve and then making sure you are on track to deliver, with the facility to fine tune or change direction as you go through is integral to any communications plan. There are many tools out there that enable you to benchmark and demonstrate tangible results.

What can Hong Kong Look Forward to? Drawing Some Conclusions

There is no doubt that we are seeing greater transparency and recognition for more overt accountability and governance and this has led to a change in how many of these funds communicate.

You can't simply rely on an annual report or review anymore. You have to set out your stall, creating a clear rationale. You have to be seen to be active and present. Whether that's at a high level of sophistication and engagement in terms of communicating investment rationale, the role the fund plays in society or the position it holds in this environment of tremendous competition for assets or all three together.

As we've established, though it's not just about transparency, it's about securing good investment opportunities, being seen as a trusted partner. Sovereign funds are experiencing increasing levels of scrutiny, they aren't operating as traditional private equity when they invest internationally and they are often seen as the face of a country, a national symbol of success if you will.

The way to enhance and protect the 'brand' is to make sure there is a clear engagement policy in place that enables it to communicate objectives, deal with any issues and conflicts and ensure there is buy-in to its existence.

Overall, I believe that good communications plays a key role in securing their success over the long term. When it comes to Hong Kong, so much is in its favour, it is an established international financial centre, strategically located and globally connected, with a dynamic economy and an environment that fosters entrepreneurialism. Any newly launched fund has the opportunity to use communications as a very powerful tool to get across their purpose and proposition to their various stakeholder groups.

Christine Wood, FTI Consulting

Christine Wood is a Senior Managing Director in the Strategic Communications segment of FTI Consulting and she is based in Hong Kong. She heads the financial services practice in Asia. As such, she is responsible for providing strategic guidance and high level account management to the firm's financial services clients in the region. She joined FTI Consulting in 2001 in London and transferred to the firm's Hong Kong office in 2008.

WE NEED YOUR COMMENTS…

We offer various commentaries sharing our thoughts on the fascinating private equity topics impacting our communities. We often get feedback from readers saying, "You should write on this or I don't agree with that."

Consider This: You deserved an opportunity to speak out! If you have an opinion and would like to share it with us, we encourage you to send the filled evaluation form to research@hkvca.com.hk.

Name: ____________________ Company: ____________________

GENERAL EVALUATION

Please rate the following aspects of the Journal (please circle as appropriate):

	Strongly satisfied 4	3	2	Strongly dissatisfied 1
1. The Journal overall	☐	☐	☐	☐
2. Stories covered	☐	☐	☐	☐

STORY EVALUATION

Please rate the following stories of journal:

	Strongly satisfied 4	3	2	Strongly dissatisfied 1
Mapping the Fintech Ecosystem in Hong Kong: Identifying Participation by Government, Financial Services and Entrepreneurs	☐	☐	☐	☐
From Academic Research to Venture Capital – Keys to Building a Linked-up System	☐	☐	☐	☐
Hong Kong Infrastructure: Realities and Opportunities	☐	☐	☐	☐
Can Co-living Spaces be the Solution to Hong Kong's High Cost Real Estate?	☐	☐	☐	☐
Private Equity: Joining the Pension Debate?	☐	☐	☐	☐
An Update on the HKMA's Long-term Growth Portfolio and Future Fund	☐	☐	☐	☐
Family Divestitures: Can Private Equity Play a Role?	☐	☐	☐	☐
Hong Kong's New Future Fund Creates Opportunities to Build "Brand Hong Kong" and Secure Its Position as An International Financial Centre	☐	☐	☐	☐

WHAT OTHER TOPICS YOU ARE INTERESTED IN?

OTHER COMMENT & SUGGESTIONS

ADDITIONAL INFORMAITON

☐ I would like to learn more about Journal Sponsorship Opportunities

☐ I would like to learn more about HKVCA Membership

Hong Kong Venture Capital and Private Equity Association
Room 2001, Wilson House
19 – 27 Wyndham Street, Central, Hong Kong
Tel: (852) 2167 7518 Fax: (852) 2167 7530
Website: www.hkvca.com.hk