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Building Hong Kong as a Cradle for Successful Entrepreneurship

**Our Hong Kong Foundation
Public Policy Institute**

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Executive Summary

Purpose

This report examines the critical enabling factors for fostering successful entrepreneurship in Hong Kong. It highlights the strategic importance of start-ups in fuelling Hong Kong's economic growth and innovation. The report shows that start-ups are not just self-employment vehicles but also key in generating broader employment opportunities as they expand. Data from the World Bank reveals that a 10% increase in the number of new business start-ups results in a 2.4% growth in GDP per capita and a 2.9% rise in patent filings in the subsequent year, underscoring start-ups' impacts on both economic and innovative development.

Hong Kong's status as one of the world's most open economies presents numerous benefits, including robust infrastructure, renowned research universities, free capital movement, and strategic market access. To position itself as a premier innovation and technology (I&T) hub, Hong Kong must actively address and overcome the hurdles in its start-up landscape, maximising its potential as a conducive environment for entrepreneurial success.

This study adopts a people-centric approach, drawing insights from thorough interviews and focus group discussions with a varied pool of 73 stakeholders. This group comprises entrepreneurs, venture capitalists, professors, technology transfer professionals, incubator and research institute representatives, government authorities, and legislative councillors. A total of **14 recommendations** across 5 key areas including education, technology transfer, financing, market expansion as well as talent and enterprise attraction, are formulated to support policy efforts to build Hong Kong as a cradle for successful entrepreneurship with both regional and international appeal.

Challenges

Despite Hong Kong's favourable business environment, it only ranks 12th in the Global Startup Ecosystem Index 2023, trailing cities like Beijing, Shanghai, and Bangalore. Further analysis reveals two particular areas that need to be addressed by concerted policy efforts.

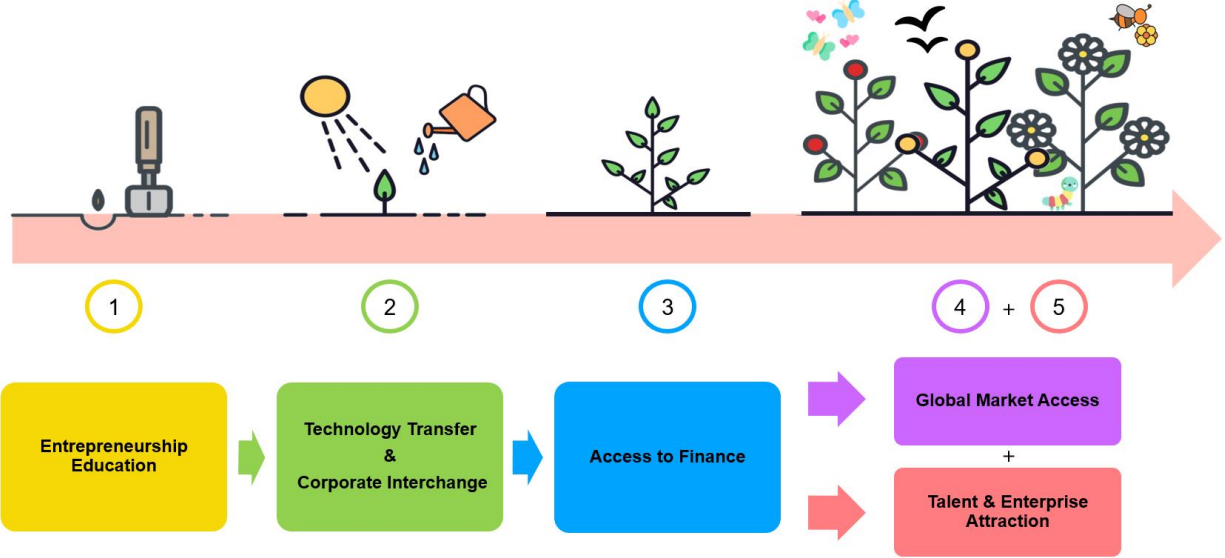
Firstly, the number of local unicorns — start-ups valued at over USD1 billion — is relatively low. With only 18 unicorns, Hong Kong lags behind Beijing's 91, Shanghai's 71, and Shenzhen's 32. This underscores the potential for growth and the necessity to foster a more supportive ecosystem.

Secondly, there is an imbalance in Hong Kong’s financing landscape. Despite priding ourselves as one of the top IPO arenas worldwide, venture capital (VC) investments in early-stage local start-ups remain relatively low. Addressing this imbalance in financing activities is essential for nurturing a robust start-up ecosystem. Enhancing venture capital access and promoting a culture of risk-taking and innovation are key to attracting more investments and supporting the growth of local start-ups.

Recommendations

To elevate Hong Kong as a hub of successful entrepreneurship, this report outlines a comprehensive strategy that supports start-ups from inception to maturity, as illustrated in **Figure i**. Our recommendations to the Hong Kong SAR Government (hereafter “the Government”) span across cultivating entrepreneurial talent, supporting technology transfer and corporate interchange, improving access to finance, aiding in global market expansion, and drawing in global talent and enterprises.

Figure i. Start-up growth cycle



Promoting Entrepreneurship Education to Cultivate Entrepreneurial Talent

Integrating entrepreneurship education (EE) within Hong Kong's educational framework is crucial for developing entrepreneurial competencies and inspiring start-up ambitions among youth. With limited exposure to EE during their formal basic education, Hong Kong’s university graduates display lower start-up intentions compared to their international counterparts, due in part to a lack of viable business ideas and being risk averse. Learning from Denmark and Finland where EE is systematically integrated into the early-stage school curricula, Hong Kong’s EE should be embedded at all educational levels, with tailored

curricular and extracurricular initiatives nurturing an entrepreneurial mindset from the outset. The strategy for EE should start broadly in basic education and gradually shift to hands-on venture creation experiences in Higher Education. Key recommendations include:

- **Embedding "Entrepreneurship" into the science curriculum at primary school** to encourage problem-solving and innovation through project-based learning, where students apply scientific concepts to develop creative solutions;
- Increasing secondary students' EE engagement by **collaborating with entrepreneurship programme providers within the Business-School Partnership Programme**, offering interactive business simulation and co-designed training programmes; and
- **Developing cross-border, joint entrepreneurship programmes** between Hong Kong universities and Greater Bay Area (GBA) institutions. This would involve studies at home institutions combined with 1-2 years of immersive training at partner institutes, culminating in final year projects immersed in real-world entrepreneurial settings, with access to industry resources and entrepreneur networks.

Facilitate Technology Transfer and Corporate Interchange to Help Start-Ups Grow

To translate research into successful start-ups, universities' technology transfer offices (TTOs), incubators, accelerators, and other institutions must work together. Challenges such as insufficient technology transfer experts, an imbalanced incubation landscape with nearly 85% of start-ups remaining in public incubators, and a lack of private and public engagement in procuring start-ups' products and services present significant obstacles. Policy measures include:

- Developing a diversified incubator ecosystem by **incentivising world-class private incubators to set up in Hong Kong**. Establishing an **incubator hub in the San Tin Technopole** will enable local start-ups to access global networks and create synergies between local and global incubators;
- Helping start-ups expand businesses and find the path to achieve financial independence through **facilitating start-up participation in public procurement processes**, by breaking down larger contracts into smaller, more manageable ones, and **increasing the public and private sectors' adoption of start-up products and services** by expanding the scope of user participation of the Smart Government Innovation Lab (Smart LAB);
- **Subsidising the recruitment and training of local and international technology transfer professionals** to address the understaffing of technology transfer professionals at TTOs, research institutions, local tech companies, etc., thereby strengthening Hong Kong's capacity to commercialise research; and

- **Forming a Technology Transfer Alliance** linking TTOs with leading research institutes and industry partners to create a centralised platform that optimises resource allocation and enhances research commercialisation.

Boosting Entrepreneurs' Access to Finance

Access to finance is crucial for start-ups' survival, especially in the seed and early stages where the lack of funding is most significant. With 79% of start-ups failing to secure funding beyond the seed stage, it is evident that investors are often concerned about the high-risk nature of seed and early-stage ventures. Particularly, government investments tend to favour late-stage companies, exacerbating the difficulty for early-stage companies to obtain capital. In terms of exit opportunities, the relatively high market cap requirements of Chapter 18C of the Main Board Listing Rules of the Hong Kong Stock Exchange (HKEX) hinder the listing of start-ups in Specialist Technology Industries. Furthermore, start-ups are unable to fully benefit from government funding programmes due to the rigorous and time-consuming application procedures, as well as the absence of upfront payments in some cases.

To enhance the flow of capital towards start-ups, this report suggests:

- **Establishing an angel fund of funds (FOF).** Similar to the Yozma Fund in Israel and the Shenzhen Angel Investment Guiding Fund. The proposed angel FOF could operate under the Hong Kong Investment Corporation Limited (HKIC). It would offer crucial seed-stage and early-stage venture capital to local start-ups through sub-funds jointly funded with private VC firms, with a stated priority in high-potential technology sectors such as life & health tech, AI & data science, advanced manufacturing & new energy;
- **Altering listing rules to facilitate capital market access.** The lack of companies listed under Chapter 18C of the Main Board Listing Rules of the HKEX points to barriers such as overly high market cap requirements. Referencing the Shanghai Stock Exchange (SSE) STAR Market, it is recommended to revise Chapter 18C to lower the market cap threshold and add criteria more suited to start-ups, in order to facilitate listings of Specialist Technology Companies (STCs) in Hong Kong; and
- **Accelerating disbursement of government funding schemes for start-ups.** Despite the availability of various funding programmes of the Innovation and Technology Fund (ITF), most Hong Kong start-ups prefer other funding sources due to the complex application process and time-consuming vetting procedures, as well as the fact that funds may only be available as cash reimbursement. To address this, the Government can consider allocating a reasonable percentage of the approved funding as upfront payment for projects up to two years and backed by at least one guarantor.

Supporting Start-Up Expansion to GBA Mainland Cities and ASEAN Countries

For start-ups to achieve significant growth, market expansion to GBA Mainland cities and ASEAN countries is crucial. However, regulatory barriers can pose significant challenges. Hong Kong investors are regarded as overseas investors on the Mainland and are not allowed to access some of the fields of biotechnology and information technology services industries, in which Hong Kong companies have an edge. Previous research shows that 43% of Hong Kong start-up respondents chose the different institutional systems, e.g., legal and tax systems, in GBA Mainland cities as the largest obstacle impeding market expansion. On the other hand, 77% of Hong Kong companies responded that regulatory barriers, including licenses, quotas, patents or tariffs, are the top challenge when tapping into the ASEAN market. To further support start-ups' market expansion, the Government can consider:

- Engaging with Mainland authorities to gradually **relax entry restrictions for Hong Kong businesses in Mainland China**, allowing companies to leverage the vast market potential;
- **Expanding incubation services** of the Hong Kong Science and Technology Parks Corporation (HKSTPC) and Cyberport to locations in the GBA and the ASEAN;
- **Enhancing policy and trade information support** through Hong Kong Economic and Trade Offices in the ASEAN region; and
- **Setting up a one-stop GoASEAN platform** similar to the GoGBA platform under the HKTDC to offer comprehensive resources and insights on ASEAN market entry.

Attracting Global and Regional Talents and Enterprises to Supplement the Start-up Ecosystem

Concerted efforts are needed to bolster Hong Kong's talent support infrastructure and alleviate economic barriers, i.e., the high costs of living and doing business, to boost Hong Kong's appeal to global talent and strategic enterprises. For example:

- **Enhancing Hong Kong Talent Engage as a “one-stop” comprehensive service hub.** This includes further broadening the range of service offerings such as talent market and business services, specialised support teams to aid talent in relocation, integration and professional development, expanding hostel supply, and providing workplace rental subsidies;
- **Introducing further preferential tax incentives**, especially in corporate tax, to target high-potential start-ups and strategic enterprises to set up operations in Hong Kong. These businesses bring talent and capital, and also serve as potential exit channels for local start-ups.

By addressing the critical challenges in the start-up ecosystem and implementing the recommended measures, Hong Kong can unlock its full potential for innovation and economic growth. The synergies created by enhanced educational initiatives, streamlined technology transfer, improved access to finance,

expanded market opportunities, and the attraction of global talent and enterprises will catalyse a vibrant entrepreneurial landscape. This will bolster Hong Kong's position as a leading hub for start-up success and contribute to the region's prosperity.

Summary of Policy Recommendations

Recommendation 1. Promoting Entrepreneurship Education to Cultivate Entrepreneurial Talent

- 1.1 Formulating a policy framework for entrepreneurship education in basic education
- 1.2 Encouraging cross-border, experiential entrepreneurship programmes at the tertiary level

Recommendation 2. Facilitating Technology Transfer and Corporate Interchange to Help Start-ups Grow

- 2.1 Establishing a private incubator cluster in the San Tin Technopole
- 2.2 Raising the adoption rate of start-up products and services by both government and private sector
- 2.3 Setting up a Technology Transfer Talent Scheme (TTTS)
- 2.4 Setting up a Technology Transfer Alliance (TTA)

Recommendation 3. Boosting Entrepreneurs' Access to Finance

- 3.1 Establishing an angel fund of funds to provide Hong Kong start-ups with seed and early-stage venture capital
- 3.2 Reducing the barrier for tech start-ups to be listed under Chapter 18C of the Main Board Listing Rules of the Hong Kong Stock Exchange
- 3.3 Accelerating disbursement of government funding schemes for start-ups

Recommendation 4. Supporting Start-Up Expansion to GBA Mainland Cities and ASEAN Countries

- 4.1 Relaxing entry restrictions for Hong Kong enterprises in Mainland China
- 4.2 Reinforcing support on start-up expansion in GBA Mainland cities and ASEAN countries
- 4.3 Setting up the GoASEAN one-stop platform to offer practical information on entering the ASEAN market

Recommendation 5. Attracting Global and Regional Talents and Enterprises to Supplement the Start-up Ecosystem

- 5.1 Offering comprehensive support to facilitate talent attraction
- 5.2 Providing tax incentives to start-ups and strategic enterprises

Chapter 1: Overview of Hong Kong Start-Up Landscape

As one of the world's freest economies, Hong Kong has been an ideal location for start-ups to launch, do business and scale up. With business advantages such as mature infrastructure, world-renowned universities, strong basic research capabilities, free flow of capital, information and talent, low tax rate and a simple tax system, accessibility to global and regional markets, as well as the unique advantages of "One Country, Two Systems", Hong Kong provides an attractive business environment for start-ups to thrive.

During the past two decades or so, the Government has devoted significant resources and effort to facilitating I&T development and nurturing start-ups. From 2018 to 2022, the Government has unprecedentedly invested over HKD150 billion to support I&T development. Promulgated in December 2022, the Hong Kong Innovation and Technology Development Blueprint sets out 8 major strategies for developing Hong Kong into an international I&T centre, including the one to diversify venture financing channels and support the development of start-ups and industries. The Chief Executive's 2023 Policy Address also introduces various I&T policy measures such as doubling the maximum funding provided for the Technology Transfer Office of each specified university to HKD16 million to accelerate research and development (R&D) outcome transformation.

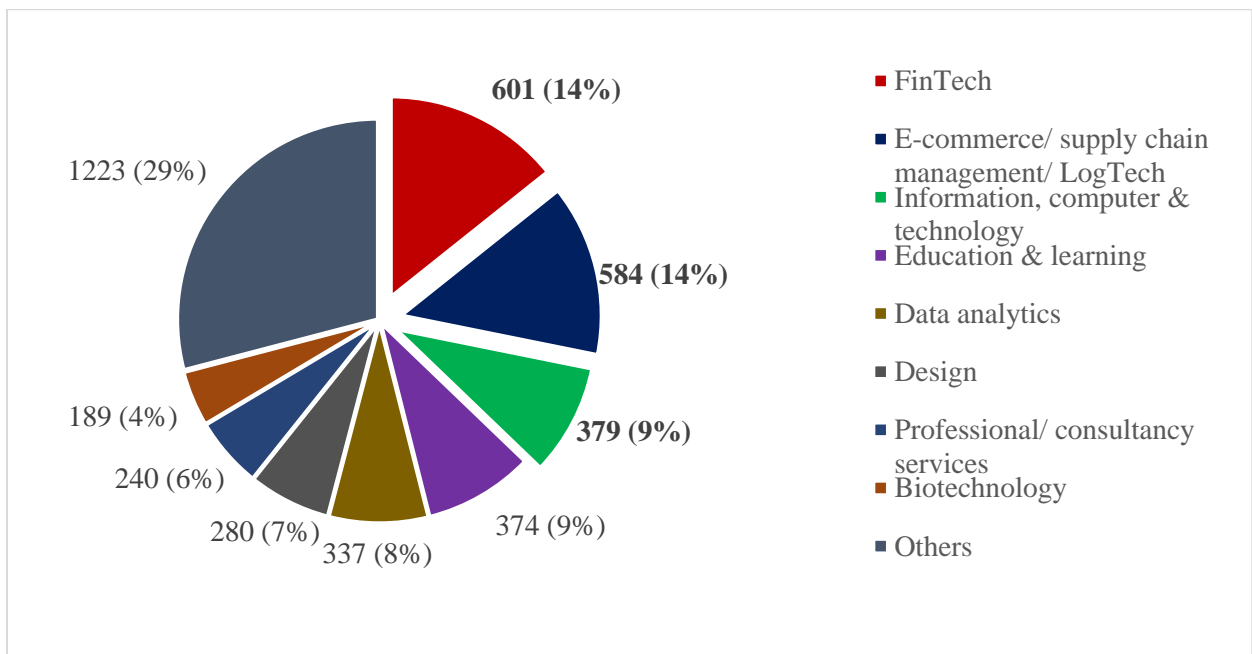
In recent years, Hong Kong's start-up ecosystem has become more and more vibrant with growing momentum. Between 2018 and 2023, the total number of staff (including founders) employed by local start-ups increased from 9,548 to 16,453 by around 72% while the total number of start-ups in Hong Kong rose from 2,625 to 4,257 by about 62% (**Figure 1**). Currently, Hong Kong's start-up ecosystem supports start-ups across a wide range of industries, with 601 FinTech start-ups (14%), followed by 584 start-up firms in the industries of e-commerce/ supply chain management/ logistics technology (14%), 379 engaging in information, computer & technology (9%) and so on (**Figure 2**).

Figure 1. Staff number of local start-ups and number of start-ups in Hong Kong (2018-2022)



Source: InvestHK (2022, 2024)

Figure 2. Percentage of local start-ups in Hong Kong by industry (2023)

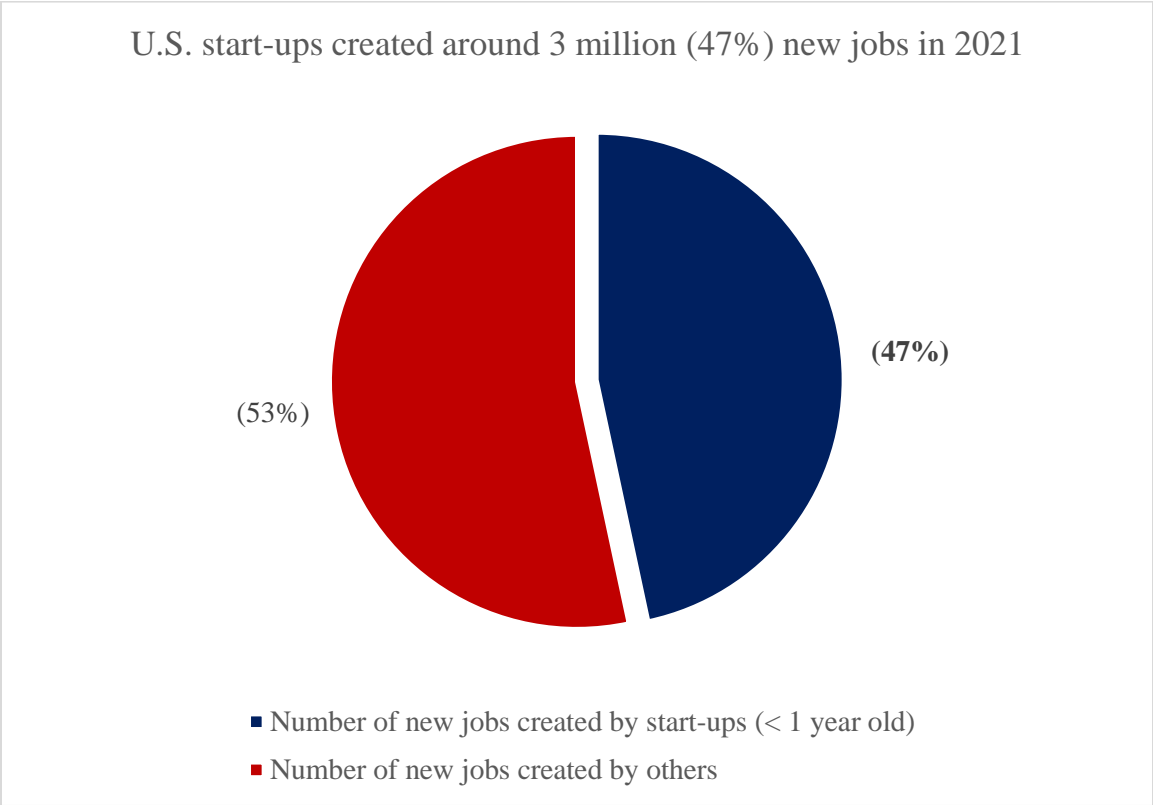


Source: InvestHK's 2023 Startup Survey

In fact, fostering the start-up ecosystem in Hong Kong to enable more successful entrepreneurship is not only conducive to driving Hong Kong’s economic growth but also important to innovation development.

Entrepreneurs create jobs for themselves and others. When individuals establish their own businesses, they become self-employed and have the potential to generate employment opportunities for other people. As start-ups grow, they often require additional manpower to handle various tasks and roles, leading to job creation that can alleviate unemployment and boost economic activities. Statistics from the United States show that U.S. start-ups that were less than 1 year old created around 3 million new jobs in 2021, accounting for around 47% of the total of 6.4 million jobs added in the same year (**Figure 3**).

Figure 3. Number of new jobs created by U.S. start-ups (2021)

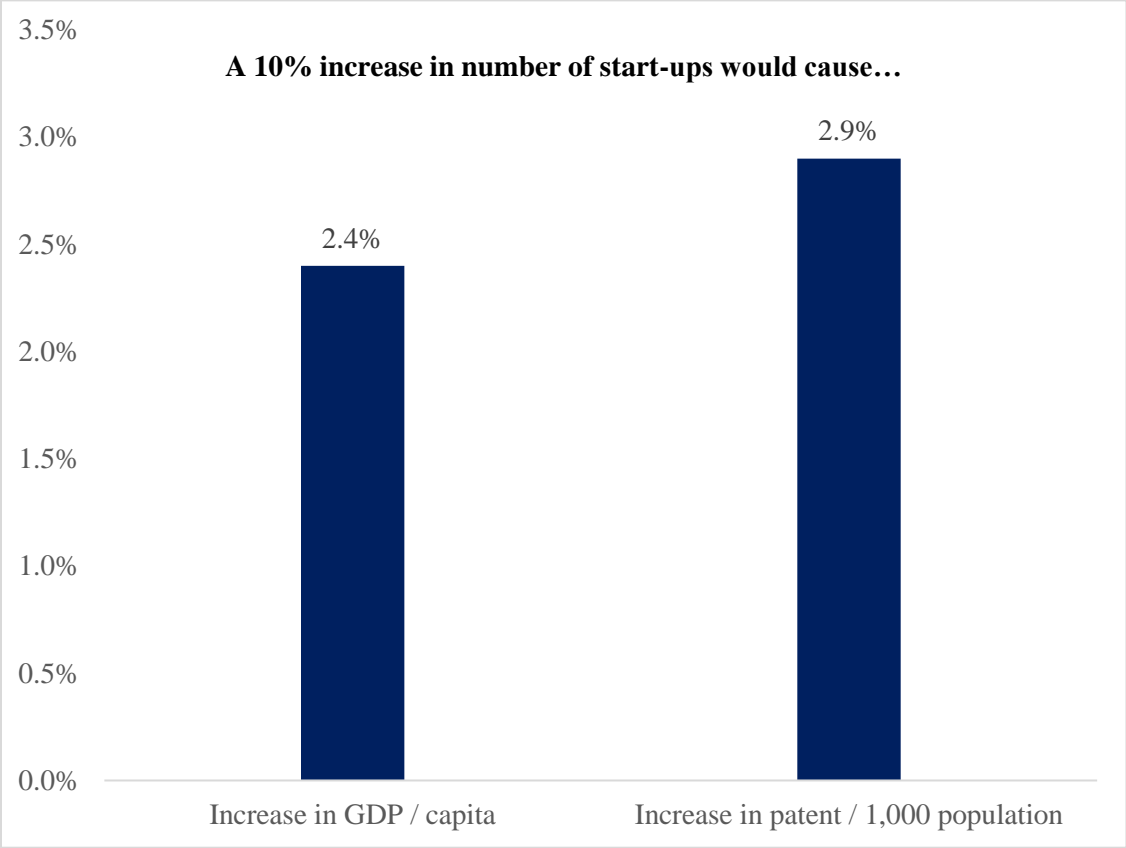


Source: Bureau of Labor Statistics (2021) and Bloomberg (2022)

Moreover, previous research based on the World Bank data consisting of start-ups in 125 countries from 2004 to 2011 supports the positive impacts of start-up growth on GDP per capita and innovation (Cumming, Johan & Zhang, 2014). The study revealed that a 10% increase in the number of new business start-ups in 1 year increases GDP per capita in the subsequent year by around 2.4% relative to the average values and

raises the number of patents¹ per 1,000 population by 2.9% (Figure 4). These findings highlight the important role that start-ups play in driving economic prosperity and fostering innovation.

Figure 4. Empirical impacts of a 10% increase in the number of start-ups



Note: World Bank dataset (start-ups in 125 countries)

Source: Cumming, Johan and Zhang (2014)

In addition, as more start-ups emerge in Hong Kong, a positive feedback loop could be established, leading to the creation of even more start-ups due to the interconnections and dynamics within the entrepreneurial community. As the start-up ecosystem continues to expand, network effects come into play. Start-ups often collaborate, partner, and share resources with one another. These interactions create a positive feedback loop, where the success of one start-up enhances the prospects of others. For example, successful start-ups may create demand for specialised services or products, leading to the emergence of other start-ups in different value chains to fulfil those needs. While founders and employees of successful start-ups may move

¹ A patent grants the owner exclusive rights to his or her invention for a specified period, typically around 20 years, offering protection and preventing others from using or profiting from the invention without permission.

on to create new start-ups or inspire aspiring people to do so, they may also become mentors, advisers, or even investors for new entrepreneurs.

However, international comparison of start-up ecosystems shows that Hong Kong is lagging behind in the global arena. According to the Global Startup Ecosystem Index 2023 published by StartupBlink, at the city level, Hong Kong was ranked 12th in the regional ranking in Asia Pacific, falling behind regional top cities such as Beijing, Shanghai, and Bangalore (**Table 1**).²

Table 1. Asia Pacific city ranking in the Global Startup Ecosystem Index 2023

Regional Rank	City
1 st	Beijing
2 nd	Shanghai
3 rd	Bangalore
4 th	New Delhi
5 th	Tokyo-Yokohama Area
...	...
12th	Hong Kong

Source: StartupBlink (2023)

The relative immaturity of Hong Kong's start-up ecosystem can be reflected in 2 aspects, i.e., the relatively low number of local unicorns³ and the relatively low amount of private venture capital invested in local start-ups (**Figure 5**).

² The ranking is based on the total score of each start-up ecosystem consisting of the sum of 3 sub-scores measuring quantity, quality, and start-up business environment.

³ A unicorn is a privately held start-up with a valuation of over USD1 billion.

Figure 5. Hong Kong’s start-up ecosystem is not yet mature



Low number of unicorns

- **18 (0.4%** of Hong Kong start-ups) vs. Beijing (**91**), Shanghai (**71**) & Shenzhen (**32**)



Minimal role in start-up financing

- Private VC investments in local start-ups: **USD1.4b** in FY19/20 (**0.5%** of global financing)*
- Hong Kong IPO proceeds: **USD51.3b** in 2020 (**18.9%** of global proceeds)**

* Around HKD10.9 billion (exchange rate: USD:HKD = 1:7.8); 2020 global VC investment was USD300 billion.

** 2020 global IPO proceeds totalled USD271.3 billion.

Source: Hong Kong X Foundation (2021), Hurun Research Institute (2021), KPMG (2020), Crunchbase (2021), EY (2023) and HKEX (2020)

First, according to the “Unicorns HK 2021” shortlist announced by the Hong Kong X Foundation, there were only 18 local unicorns in Hong Kong in 2021 (**Table 2**). In comparison, Beijing, Shanghai, and Shenzhen had 91, 71, and 32 unicorns respectively in the Global Unicorn Index 2021 released by the Hurun Research Institute, suggesting that Hong Kong has plenty of room for growth in its start-up ecosystem to catch up with these leading cities in terms of unicorn presence. In fact, the Hong Kong Innovation and Technology Development Blueprint also sets out the macro I&T development targets for Hong Kong until 2032 covering start-up reference development indicators including the accumulated number of local unicorns and the number of local start-ups operating in co-working spaces, incubators, and accelerators (**Table 3**).

Table 2. “Unicorns HK 2021” shortlist

Local unicorns in Hong Kong in 2021			
SenseTime	(Artificial Intelligence)	SmartMore	(Artificial Intelligence)
4Paradigm	(Artificial Intelligence)	CiDi	(Artificial Intelligence)
Lalamove	(Logistics)	GoGoX	(Logistics)

AfterShip	(Logistics)	WeLab	(FinTech)
Airwallex	(FinTech)	DJI	(Robotics)
Hai Robotics	(Robotics)	Googoltech	(Advanced Manufacturing)
Geek+	(Advanced Manufacturing)	GeneHabor	(Biotech)
Insilico Medicine	(Biotech)	SmartSens	(Semiconductor)
EcoFlow	(New Energy)	Klook	(Travel)

Source: Hong Kong X Foundation (2021)

Table 3. Start-up reference development indicators of the Government

Start-Up Development Vision	2016 (Figures of 2014)	2022 (Figures of 2020)	2027 (Figures of 2025)	2032 (Figures of 2030)
Number of unicorns (accumulative)	0	12	18	30
Number of start-ups operating in co-working spaces, incubators and accelerators	1,065	3,755 (in 2021)	Around 5,000	Around 7,000

Source: Hong Kong Innovation and Technology Development Blueprint (2022)

Second, Hong Kong plays a minimal role in start-up financing. Private venture capital investments in local start-ups were approximately USD 1.4 billion in FY19/20, representing only about 0.5% of global venture funding of USD300 billion in 2020. On the other hand, Hong Kong ranked as the top 2 initial public offering (IPO) market globally in 2020, with around USD51.3 billion in IPO proceeds from 154 IPO deals. This accounted for 18.9% of the global IPO proceeds of USD 271.3 billion in 2020. As one of the leading international financial centres, Hong Kong's significant presence in the IPO market highlights its strength in attracting and raising capital, while the relatively low venture capital investments underscore the need for further development and support to cultivate a robust start-up ecosystem in the city.

There is no doubt that with the clear support for Hong Kong's development into an international I&T centre indicated in the National 14th Five Year Plan and the ongoing commitment of the Government, Hong Kong will strengthen its position as a thriving centre for innovation and entrepreneurship in the years to come.

Still, a concerted effort by both the private and public sectors is required and the Government needs to increase policy efforts in order to build Hong Kong as a nurturing environment for successful entrepreneurs.

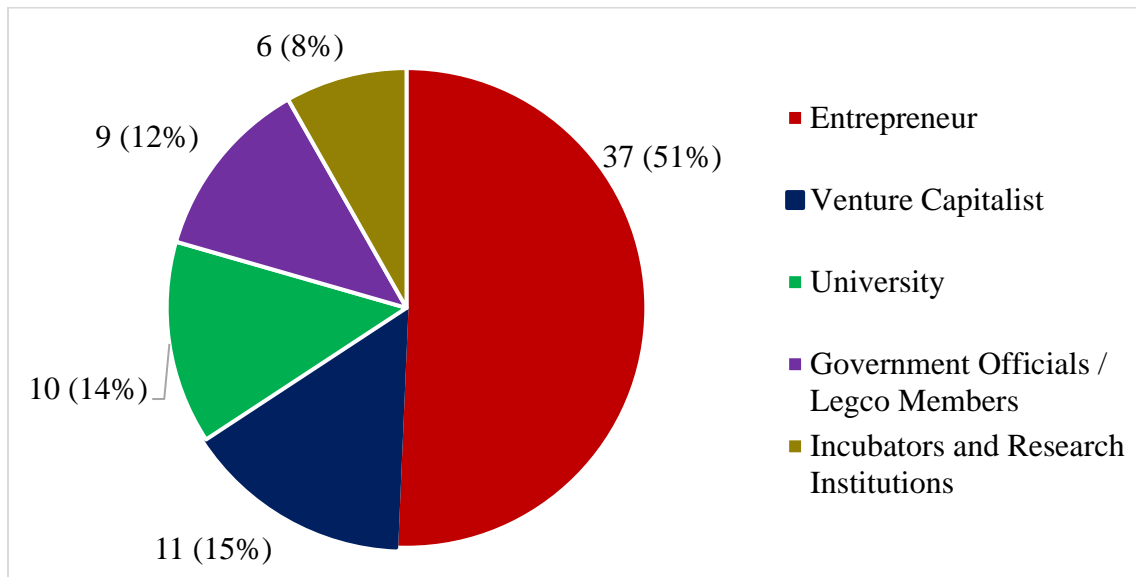
In view of the above, this report by Our Hong Kong Foundation (OHKF) in strategic partnership with Alibaba Entrepreneurs Fund (AEF), aims to understand the enabling factors for becoming successful entrepreneurs in Hong Kong, thereby offering industry insights to emerging or existing entrepreneurs and policy recommendations to the Government. The study is structured to start with a people-oriented angle to understand their aspirations and difficulties, and by having the right policies in place to overcome barriers, the research wishes to help build Hong Kong as a cradle for successful entrepreneurship with both global and regional appeal.

Chapter 2: Research Methodology and Report Framework

2.1 Research Methodology

This report is a one-year study carried out based on in-depth stakeholder interviews and focus group discussions to get a holistic view of the concerns and pain points faced by entrepreneurs. The 73 stakeholders comprise entrepreneurs, venture capitalists, professors, technology transfer professionals, representatives from incubators and research institutes, as well as government officials and legislative councillors (**Figure 6**).

Figure 6. Breakdown of interviewees for in-depth interviews (n=73)



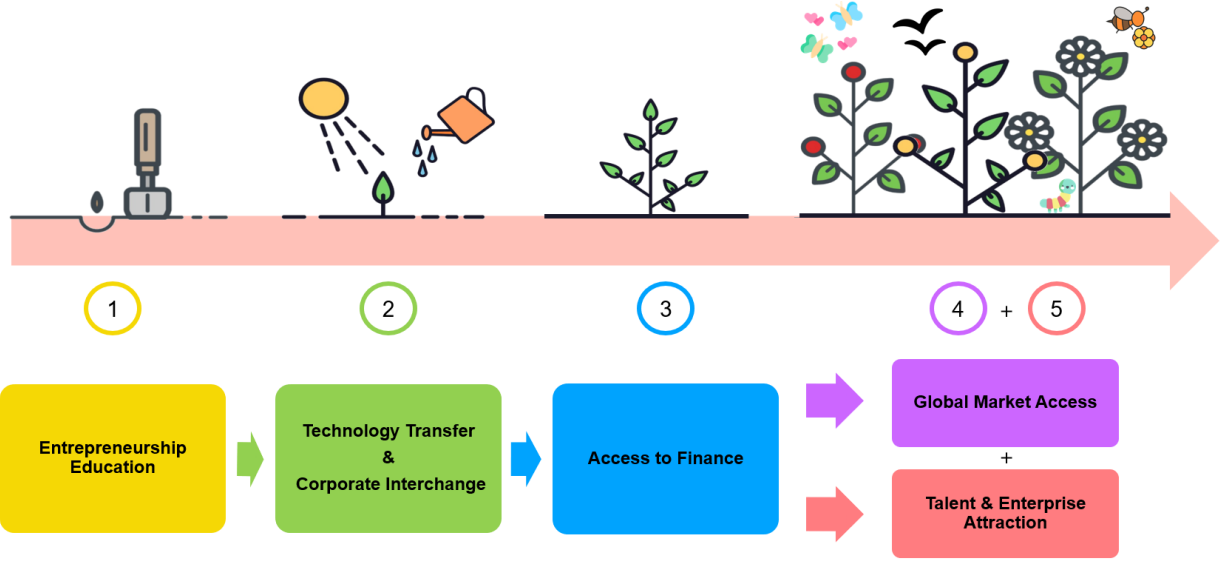
2.2 Report Framework

The progression of a start-up's lifecycle, from its nascent seedling stage to the stages of growth and eventual blossoming into maturity, is similar to the growth of plants. Each stage of the entrepreneurship journey presents unique challenges and opportunities, requiring different nutrients for growth.

To build Hong Kong as a cradle for successful entrepreneurship, this report has identified five areas to support start-ups from inception to maturity. For an idea to transform into a market-ready product, entrepreneurship education is essential to develop entrepreneurial skills and mindsets in motivating people to start doing business, and with technology transfer and corporate interchange enabling the conversion of

academic research and innovative ideas into commercially viable products and services for start-ups to generate revenue. Entrepreneurs’ access to finance is a vital nutrient to ensure start-ups with the capital necessary to scale up and eventually spread their roots and leaves into the GBA, ASEAN and even the international marketplace. Lastly, the start-up ecosystem is to be completed by attracting global and regional talents and enterprises. With the injection of expertise, capital and more exit opportunities, the process of cross-pollination is facilitated, enriching the entrepreneurial landscape and creating a robust and sustainable ecosystem where start-ups can thrive and compete on a global scale (**Figure 7**).

Figure 7. Start-up Growth Cycle



At the seedling stage, **entrepreneurship education** (Chapter 3) is needed to nurture the entrepreneurial spirit and boost the start-up intentions of Hong Kong’s youth. A comprehensive policy framework should be established to incorporate entrepreneurship education into early-stage primary and secondary education (Recommendation 1.1). Joint experiential entrepreneurship programmes, in collaboration with cross-border institutions, that provide practical entrepreneurship training should be offered at tertiary level (Recommendation 1.2) to equip students with the skills needed for running a business in a real-world setting.

Technology transfer and corporate interchange (Chapter 4) outline the process in which research findings from universities are transformed into commercial products through several stages, including technology transfer, incubation, and the acquisition of revenue through procurement. The Government should establish a private incubator cluster in the San Tin Technopole (Recommendation 2.1) to diversify Hong Kong’s incubator landscape to cater for start-ups’ different needs, facilitate public and private

procurement (Recommendation 2.2) for start-ups to progress towards financial independence, and enhance the technology transfer capacity of universities' technology transfer offices (Recommendation 2.3 and 2.4).

For start-ups to grow, **entrepreneurs' access to finance** (Chapter 5) is key to the survival of start-ups, especially those at the seed stage and early stage where funding shortage is most significant. Start-ups with limited track records are considered risky investments for the Government and VCs. To address the funding gap, the Government should establish an angel fund of funds that partner with selected private VC fund managers to form sub-funds in order to guide private capital to invest in seed-stage and early-stage start-ups (Recommendation 3.1). The barrier for tech start-ups to be listed under Chapter 18C of the Main Board Listing Rules of the Hong Kong Stock Exchange should be lowered (Recommendation 3.2) to increase start-ups' exit opportunities. Disbursement of government funding schemes should be accelerated (Recommendation 3.3) to maintain a stable cash flow for start-ups.

Market expansion to GBA Mainland cities and ASEAN countries (Chapter 6) is essential for start-ups to achieve substantial growth and reach maturity. With regulatory barriers being the major challenges encountered when tapping into other markets, the Government should strive for the relaxation of the entry restrictions for Hong Kong enterprises in Mainland China (Recommendation 4.1), reinforcing expansion support (Recommendation 4.2) and establishing a one-stop platform to offer practical information on entering the ASEAN market (Recommendation 4.3).

Attracting global talent and strategic enterprises (Chapter 7) enriches the start-up ecosystem's diversity. Collaboration between start-ups and established corporations, fueled by a skilled talent pool, is key to driving innovation and technological advancement. To better compete for talent and enterprises, enhancement of existing talent support infrastructures (Recommendation 5.1) to alleviate the financial burden that impedes talent settlement and business growth, coupled with tax incentives designed to lure potential start-ups and high-valued enterprises (Recommendation 5.2), thus complete and invigorate the start-up landscape.

Chapter 3: Promoting Entrepreneurship Education to Cultivate Entrepreneurial Talent

Entrepreneurship education (EE) is traditionally defined as a curriculum designed to prepare individuals to start and manage their own businesses (Farrell, Cooney, Benson, Palin, 2012). Typically, EE emphasises the development of skills and knowledge necessary for venture creation, business planning, financial management, and leadership. The European Commission (2016) recognises EE as integral to curriculum development, innovation in academia, and community engagement, promoting not only the skills necessary for business creation but also entrepreneurial mindsets applicable to various aspects of life. Beyond the practical aspects of forming new companies, the scope of EE is broader, focusing on cultivating competencies for identifying opportunities and creating value across social, cultural, and financial spheres. In short, EE is a form of teaching and learning aimed at developing entrepreneurial skills and mindsets to prepare individuals for future challenges and opportunities and support start-up cultivation (**Figure 8**).

Figure 8. Entrepreneurship education cultivates entrepreneurial skills and mindset



Source: Organisation for Economic Co-operation and Development (2015), European Commission (2014)

Empirical evidence affirms the effectiveness of EE in boosting entrepreneurial intentions and start-up rates among students, as well as generating a positive social impact. Research conducted by Deng and Wang (2023) indicates that students who underwent tertiary-level EE in China have an 86.34% higher intention to start a business. The European Commission (2015) observed a 50% rise in the number of higher education students who started their companies during their education after participating in EE. Students with entrepreneurial experiences are also more likely to become 'intrapreneurs,' driving innovation within their employment settings. An Organisation for Economic Co-operation and Development (OECD) report (2016) further highlights EE's economic and social advantages. For instance, Canada's Junior Achievement Programs yield a 45-fold annual return on social prosperity for every Canadian dollar invested, through entrepreneurial contributions to the economy and reduced state expenditures, such as unemployment benefits.

EE Has Been Widely Adopted in the Early-Stage Curriculum Design

Acknowledging the efficacy of entrepreneurship education in enhancing students' entrepreneurial mindsets and skills, many economies have incorporated entrepreneurship education into the early-stage curriculum, aligning with international educational trends to prepare next-generation entrepreneurs for the challenges of the 21st century.

Despite the recognition of entrepreneurial themes of the Education Bureau (EDB), there is no structural framework of EE in Hong Kong's education system with a notable absence of systematic EE in primary education and only fragmented inclusion in secondary education. Although the EDB cites "Fostering Entrepreneurial Spirit" as one of the 8 major renewal emphases (MREs)⁴ for curriculum renewal, schools are allowed to tailor the implementation to their contexts. The lack of a mandated approach leaves EE's integration into school development plans varied and unstandardised.

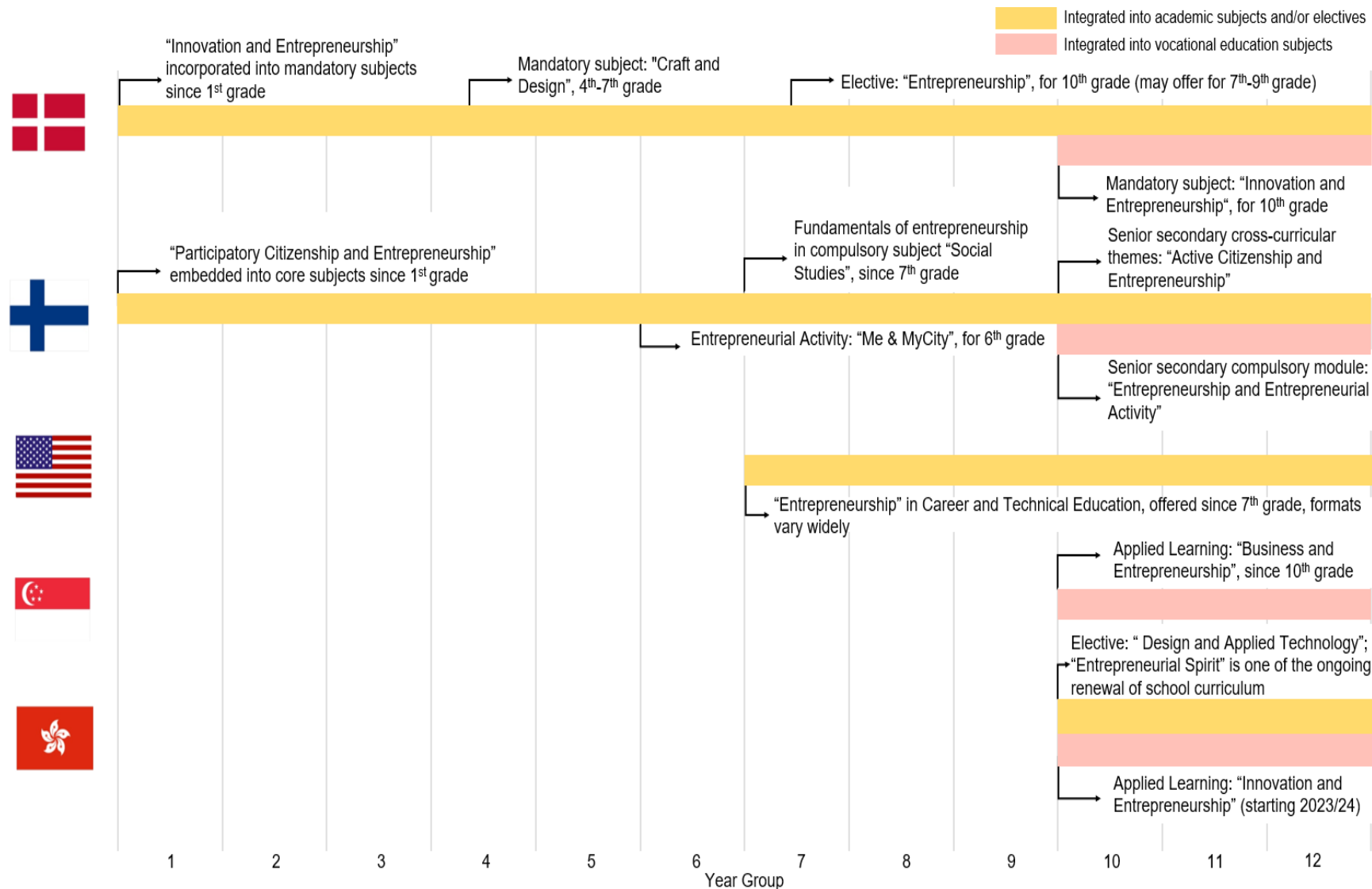
The EDB introduces a new Applied Learning (ApL) course titled "Innovation and Entrepreneurship", in the 2023/24 school year as a step toward exposing Hong Kong youth to EE. However, considering the grading cap at level 4 may not sufficiently incentivise students and not every school has the capability to

⁴ MREs include: 1. "Strengthening values education (including moral and civic education, and Basic Law education)", 2. "Reinforcing the learning of Chinese history and Chinese culture", 3. "Extending "Reading to Learn" to "Language across the Curriculum", 4. "Promoting STEM education and ITE", 5. "Fostering an entrepreneurial spirit", 6. "Diversifying life-wide learning experiences (including those for VPET)", 7. "Stepping up gifted education" and 8. "Enhancing the learning and teaching of Chinese as a second language".

offer ApL course within the senior secondary curriculum, it is difficult to foresee a substantial enrollment for the new ApL course. EDB currently offers the “Design and Applied Technology (DAT) as an elective for upper secondary students. The DAT emphasises graphical communication and information processing skills to develop problem-solving strategies, enhancing students’ entrepreneurial spirit and understanding of corporate behaviour. However, only 1.1% of DSE candidates registered for the DAT exam in 2024, which also reflects the limited reach of entrepreneurship education. The fact that EE is not accessible to a wider array of secondary students in Hong Kong further highlights the urgency for a comprehensive approach to embedding EE at various stages of Hong Kong youths’ educational journey.

Entrepreneurship education is widely acknowledged as a critical element within the education systems of numerous economies, particularly in Europe. Denmark and Finland are noteworthy for their systematic approaches to integrating EE at different educational stages. **Figure 9** provides examples of how different economies incorporate EE into their curricula:

Figure 9: Comparative examples of the integration of EE into the early-stage school curriculum in different economies



Note: Year Groups 1-6 are classified as primary education while Year Groups 7-12 are classified as secondary education.

- **Denmark:**

Entrepreneurship education has been central to fostering an entrepreneurial culture, integral to its growth and employment strategies, as outlined in the 2006 National Reform Program's first progress report. Upholding "Entreprenørskab for alle" ("Entrepreneurship for all"), Denmark demonstrates a commitment to infuse entrepreneurial thinking throughout the educational system. Starting from the 1st grade, "Innovation and Entrepreneurship" is integrated into mandatory subjects as a cross-curricular theme. Specific entrepreneurship-related courses, such as Craft and Design⁵, are compulsory for 4th-7th graders. These courses allow for practical applications, such as crafting products for local community organisations, thereby fostering innovation and responsiveness to user needs. Entrepreneurship is an elective in the 10th grade and can be offered for 7th-9th grades. At the vocational level, "Innovation and Entrepreneurship" is a core course for first-year students, reflecting the depth of EE's integration across Denmark's educational spectrum.

- **Finland:**

Finland has also incorporated EE throughout the curriculum of basic education. Finnish students receive an average of 12 years of EE programmes within their compulsory education. Following the Entrepreneurship Education Guidelines issued by the Ministry of Education and Culture in 2004, Finland aims to nurture an entrepreneurial spirit and position entrepreneurship as a viable career path. The theme "Participatory Citizenship and Entrepreneurship" is integrated into the core curriculum from the 1st grade onward. The innovative "Me & MyCity" programme for 6th graders teaches students enterprise-related information and offers experiences through simulation activities. Secondary education leverages "Social Studies" to introduce the fundamentals of entrepreneurship, while subjects such as Citizenship Education, Mathematics, and Economics at the upper secondary level include the theme of "Active Citizenship and Entrepreneurship." Moreover, a compulsory module on "Entrepreneurship and Entrepreneurial Activities" is provided in vocational studies.

- **United States:**

EE is integrated into Career and Technical Education (CTE) courses beginning in secondary education. The U.S. approach to EE is more decentralised, allowing individual states to develop their own standards and practices.

- **Singapore:**

EE is often conducted in informal settings and relies on private platforms for early entrepreneurship initiatives, such as the Tan Kah Kee Foundation's Young Inventors Award and the Spirit of Enterprise's Student Entrepreneur Program. Within the formal school setting, the applied learning

⁵ 'Craft and Design' are available as an elective from 7th to 9th grades.

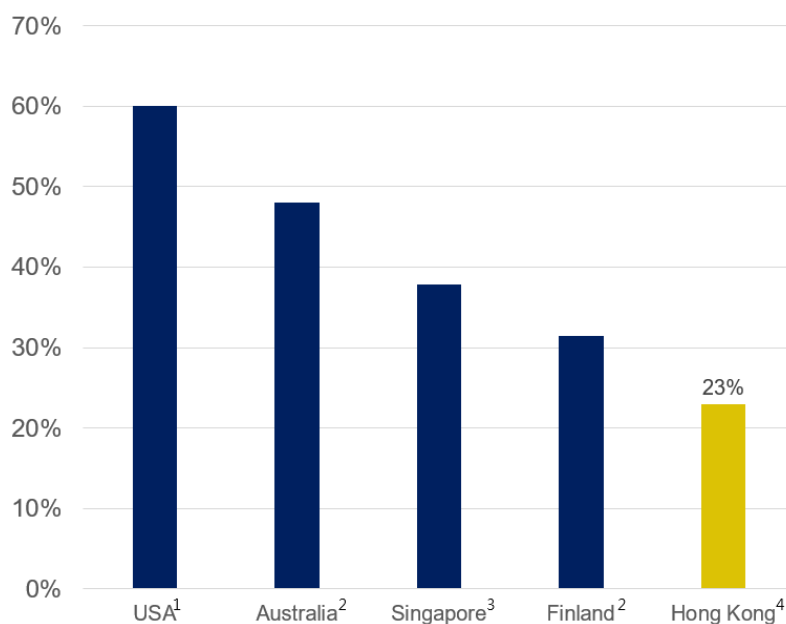
programme "Business and Entrepreneurship" is offered by a limited number of secondary schools, indicating that EE has not been made readily accessible to all students in schools.

Despite differences in the implementation of EE across these regions, they share common goals: to recognise the fact that entrepreneurship education is indispensable to cultivate an entrepreneurial mindset and to introduce EE at an early stage in students' education journey.

Hong Kong Needs Entrepreneurship Education to Boost Students' Start-Up Intentions and Skills

Entrepreneurship education fosters resilience, problem-solving and creativity among Hong Kong's youth, equipping them with the confidence to start their own businesses. EE is imperative for Hong Kong, given that our university graduates display lower start-up intentions compared to their international counterparts, as shown in **Figure 10**. This trend underscores the need for an increase in educational emphasis on entrepreneurial ideas and skills to nurture stronger start-up intentions.

Figure 10: Start-up intentions of university graduates by economy



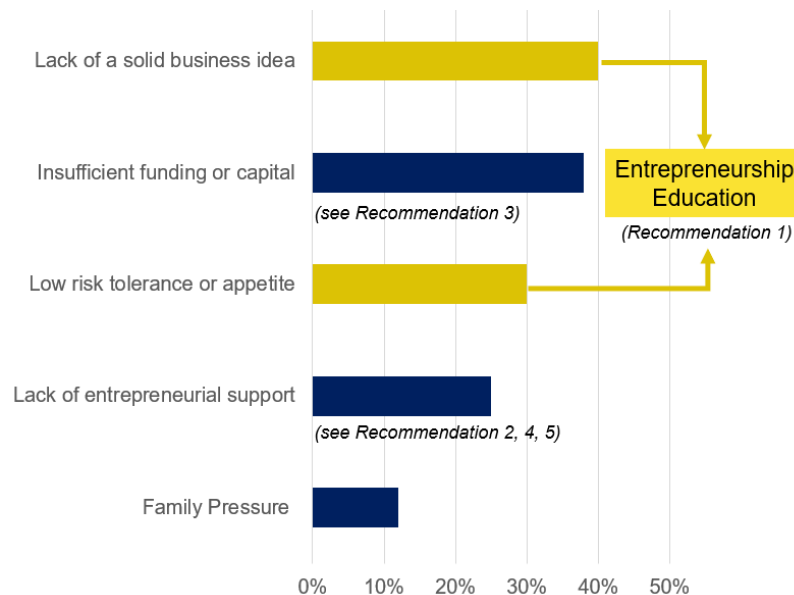
Note:

1. 2022 figure; includes graduates who are currently operating their own businesses, “planning on” and “considering” starting a business post-graduation.
2. 2018 figure.
3. 2019 figure, sampled from students at NUS Overseas Colleges Program.
4. 2021 figure.

Source: Intelligent (2022), NUS Enterprise (2019), GUESSS (2018) and Deloitte (2021)

This hesitance towards entrepreneurship is demonstrated in **Figure 11**. Other than funding concerns (to be addressed in Chapter 5), the low entrepreneurial intention in Hong Kong is due to a lack of viable business ideas and a general aversion to risk-taking. To address these challenges, EE serve as a pivotal strategy to enhance creativity, opportunity recognition, and risk management skills among potential entrepreneurs. However, the current fragmented approach to EE, which lacks a framework to coordinate its integration, impedes the development of students' willingness and capabilities to launch start-ups.

Figure 11: Major reasons for students not considering starting a start-up



Source: Deloitte (2021)

Recommendation 1.1 Formulating a policy framework for entrepreneurship education in basic education

To foster a culture of innovation and entrepreneurship, EE should be incorporated systematically into the primary and secondary education of all students. This requires the formulation of an education framework on EE at all levels. Starting with a broad-based approach to embed entrepreneurial principles into subjects of primary education and progressively advancing to more focused entrepreneurial experiences and experiential venture-creation opportunities at secondary and tertiary education levels.

- **Primary Education: Incorporate Entrepreneurship into Science Subject**

With the upcoming division of General Studies into separate Science and Humanities subjects in the 2025/26 academic year, we recommend **introducing "Entrepreneurship" as a theme into the Primary Science curriculum**, specifically within the "Science, Technology, Engineering, and

Society" strands⁶. Teaching entrepreneurship in science subjects leverages scientific knowledge to identify problems, analyse data, and draw evidence-based conclusions. It also utilises engineering skills to develop innovative solutions. Intertwining "Entrepreneurship" with the "Engineering and Design" theme within the same strand equips students not only with an understanding of scientific principles but also with the skills to apply them in entrepreneurial contexts.

For the Primary Science curriculum, the EDB could consider adopting a curriculum design similar to that of the Danish Foundation for Entrepreneurship⁷, which was established in 2010 under an inter-ministerial partnership to develop EE materials that promote entrepreneurial thinking through project-based learning. The EDB should encourage schools to implement project-based curricula, where students are guided to identify local issues and develop innovative solutions. Students should engage in hands-on activities, from creating prototypes using engineering skills to presenting their entrepreneurial projects.

By integrating entrepreneurship into Primary Science education, students will gain exposure to entrepreneurial concepts while applying scientific knowledge in real-world contexts. This approach cultivates a generation of innovators and entrepreneurial problem-solvers and lays the groundwork for more advanced entrepreneurial education at the secondary level.

- **Secondary Education: Real-life Exposure through the Business-School Partnership Programme (BSPP)**

The BSPP, launched in 2005, is designed to bridge the gap between academic theories and real-world business practice. It seeks to expand students' horizons by facilitating collaboration between schools and industry, offering students practical experience through talks, workplace excursions, and internship programmes to prepare them for future roles in society. To strengthen industry collaboration, the EDB launched the BSPP 2.0 in the 2022/23 school year. The enhanced BSPP 2.0 can serve as a platform for embedding EE exercises for young people, as the cultivation of entrepreneurial competencies in social and financial skills, knowledge and attitude is also paramount in augmenting employability, and enhancing job prospects.

The EDB should actively involve entrepreneurship education providers in the BSPP to allow the integration of EE into the curriculum for secondary students. The participation of EE providers

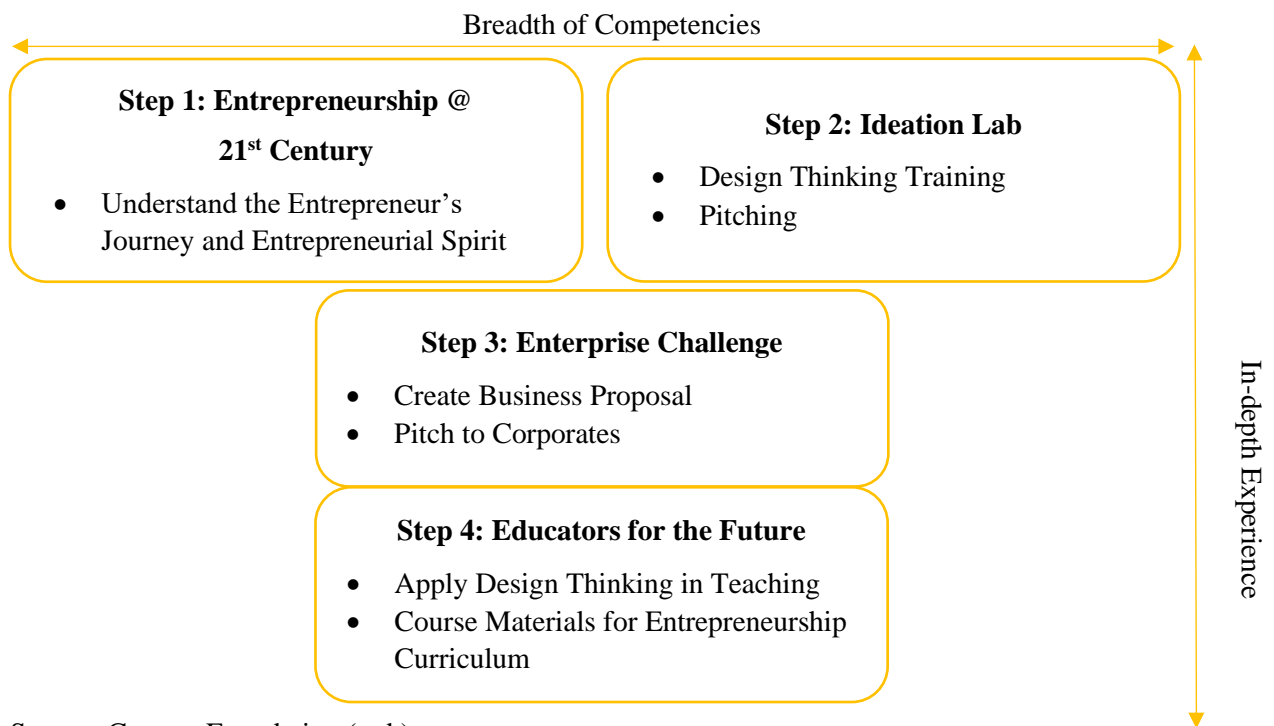
⁶ Other learning strands include: "Matter, Energy and Change", "Life and Environment" and "Earth and Space"

⁷ Danish Foundation for Entrepreneurship was established in 2010 under inter-ministerial partnership between the Ministry of Business, Ministry of Culture, Ministry of Education and Research, and Ministry of Children and Education.

is absent in BSPP 2.0. Current business partners mainly comprise chambers of commerce, professional bodies, small and medium enterprises (SMEs) and vocational and professional education and training (VPET) training providers. The activities offered also remain limited in entrepreneurial content. EE providers to offer training and work alongside existing partners to co-design BSPP’s Holiday Work Experience Programme to embody innovation, initiative, and risk-taking exercise within both simulated and real-world business scenarios.

Organisations such as Junior Achievement Hong Kong (JA HK) and Cocoon Foundation have extensive youth entrepreneurship training programmes that could serve as models. For instance, the Cocoon Foundation's Student Training in Entrepreneurship Programme (STEP), initiated in 2017, offers a year-long immersive experiential learning designed to possess a depth and breadth of knowledge in innovation and entrepreneurship for students and educators (**Figure 12**).

Figure 12. The structure of Cocoon Foundation's Student Training in Entrepreneurship Programme (STEP)



Source: Cocoon Foundation (n.d.)

An incentive mechanism can be set up to introduce more non-profit, non-governmental organisations as BSPP partners, to facilitate the development of EE training materials and curricula and to expand the scope of EE recipients in the current education system.

As an interdisciplinary concept that focuses on applying innovative initiative and risk-taking qualities in simulated and authentic business contexts, entrepreneurial education transcends conventional

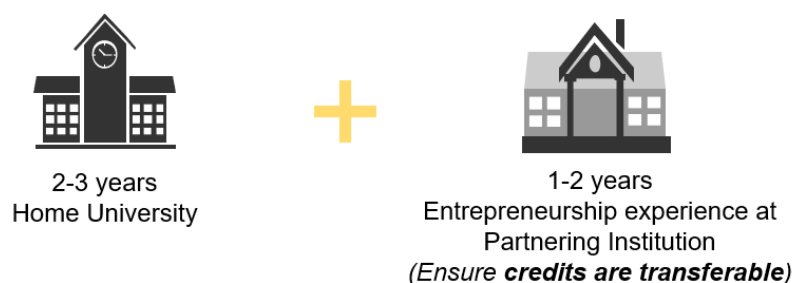
business studies. The EDB should harness the networks and expertise of private EE institutions to foster a supportive entrepreneurial ecosystem in schools for nurturing the next generation of entrepreneurs.

Recommendation 1.2 Encouraging cross-border, experiential entrepreneurship programmes at the tertiary level

While Hong Kong universities offer various entrepreneurship degrees and programs (**Appendix 1**), they tend to emphasise academic and theoretical business knowledge, such as accounting and management, over practical entrepreneurial skills. Practical entrepreneurship training, which mirrors the realities of starting and managing businesses, not only reinforces theoretical knowledge but also ensures that graduates possess essential entrepreneurship toolkits. These include innovative thinking and problem-solving skills necessary for running businesses in the real world, engaging with potential opportunities, and navigating the hurdles inherent in complex business environments.

To address this gap, **the EDB can facilitate partnerships between universities in Hong Kong and institutions in the Greater Bay Area (GBA) Mainland cities, in collaboration with the Ministry of Education, to provide joint entrepreneurship programmes** that balance foundational academic knowledge with intensive, practical venture-creation experiences. Students would first receive foundational engineering and business education at their home universities in Hong Kong, followed by 1 to 2 years of immersive entrepreneurship training at partner institutions in the GBA (**Figure 13**). Partner institutions could be incubators, universities, and entities strategically located near innovation and technology clusters, where students can access a rich pool of industry resources, and networks, and immerse themselves in vibrant entrepreneurial ecosystems. It is also crucial to ensure that the credits earned are recognised and transferable for degree completion in Hong Kong.

Figure 13. The model of cross-border joint entrepreneurship programme



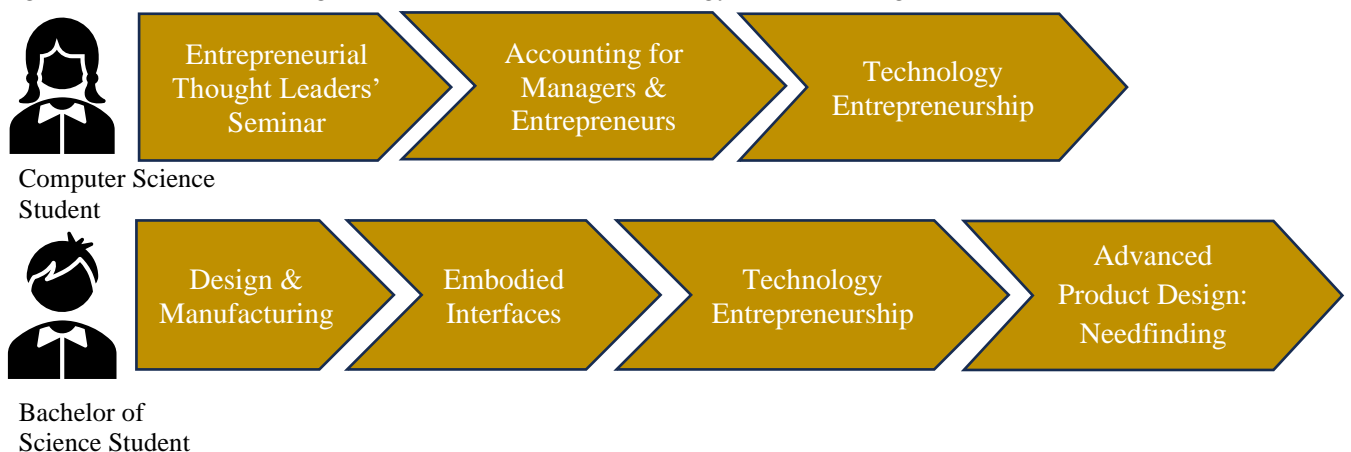
XbotPark’s “2+2” undergraduate programme, in collaboration with the Guangdong-Hong Kong Robotics Institute at the Guangdong University of Technology, serves as a prime example of successful

experiential learning integration. Year 3 and 4 university students stationed at XbotPark undergo a complete entrepreneurial process, receiving training in product definition, design, prototype production, and scaling up, and working alongside experienced entrepreneurs and technologists as mentors on their Final Year Projects. The Hong Kong University of Science and Technology (Guangzhou) has signed a strategic agreement with XbotPark for the Red Bird MPhil Program, which includes co-developing innovation and entrepreneurship programme materials and providing joint training for research masters and entrepreneurs.

The partnership with XbotPark, which is located near robotics facilities, allows students not only to apply their knowledge to entrepreneurial projects but also provides them with invaluable resources ranging from supply chain access to venture capital, fostering a conducive environment for developing robotics and intelligent hardware. To date, the base has incubated more than 60 start-ups in industries such as the Internet of Things, smart home, health, and environmental protection, with an over 80% start-up survival rate. By leveraging such school-industry partnerships, Hong Kong universities can cultivate entrepreneurial skills that are aligned with industry demands and provide students with the opportunity to simulate venture creation within their specific fields of interest.

From our interview with stakeholders in the tertiary education sector, some mentioned a lack of teaching resources designated for entrepreneurship and a lack of centralised force to coordinate the direction of EE within their institutions. **Universities are encouraged to offer entrepreneurial courses, activities and resources to students of all backgrounds, disciplines and experience levels**, making it more accessible to a diverse student body. For example, the Stanford Technology Ventures Program (STVP) at Stanford University offers entrepreneurship courses at various levels with contents ranging from financial management to technology ventures (**Figure 14**). Students can tailor their learning paths to their individual needs, filling in gaps in their entrepreneurial skill sets, thereby enhancing the practical aspects of EE and students’ exposure to entrepreneurship at universities.

Figure 14. Student Learning Paths of the Stanford Technology Ventures Program

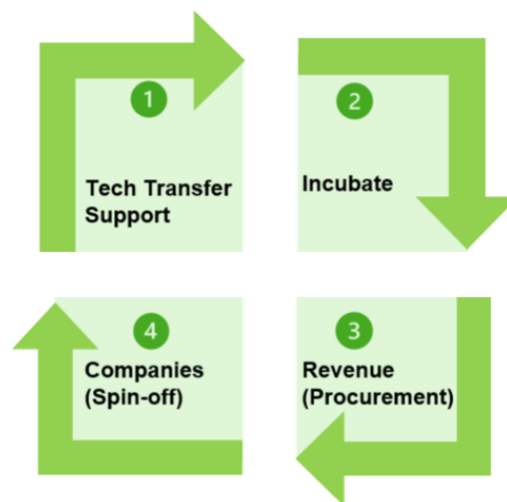


By facilitating experiential learning through industry collaborations in entrepreneurship programmes and offering flexible learning pathways, Hong Kong's tertiary institutions can equip students with the practical skills needed to navigate the complex world of business creation, thus creating fertile ground for successful entrepreneurship and innovation.

Chapter 4: Facilitating Technology Transfer and Corporate Interchange to Help Start-Ups Grow

To translate research findings from lab research to start-ups, and ultimately exert a profound impact to benefit society as a whole, entrepreneurs must embark on and go through a series of stages: from technology transfer of ideas into products, accelerating growth of start-ups through incubators, and generating revenue for start-ups through public and private procurement. The subsequent section will delve into the roles of technology transfer offices (TTOs), incubators and accelerators as well as public and private institutions in the start-up growth process, examining how underperformance at each stage accumulates and creates snowball effects that eventually impede start-ups' success (**Figure 15**).

Figure 15. The technology transfer process undergone by start-ups



Stage 1: Technology Transfer Support Provided by TTOs

Hong Kong's universities are internationally renowned for conducting world-class basic research, which forms a good basis for Hong Kong to be an innovation powerhouse. To exploit our advantages in R&D, knowledge transfer (here we discuss more specifically technology transfer (TT)) is the key to transferring and commercialising scientific findings or technologies from basic research to industry. With knowledge transfer being the "third mission" of higher education, alongside teaching and research, TT is commonly undertaken by universities' knowledge transfer offices (KTOs) or technology transfer offices (TTOs) in universities. TTOs will conduct TT through technology licensing, contract services, industry collaborative projects, intellectual property (e.g., patent) licensing and other legal means. The Government in recent years has taken a more proactive approach in chartering technology transfer in

universities, noticeably the Technology Start-up Support Scheme for Universities (TSU)⁸ launched in 2014 to provide funding support to TTOs, as well as the Frontier Technology Research Infrastructure Support Scheme⁹ announced in the 2024-25 Budget for procuring facilities and conducting I&T research projects on specific fields.

The work of TTOs requires extensive support from technology transfer experts, who are capable of understanding and identifying the technical and business aspects of the technologies, as well as knowledge of the legal and regulatory standards. Filing a patent is generally the initial step in the commercialisation of university research, and the number of patents granted is an indication of the ability of a university to produce unique and innovative technologies that could benefit society at large, which could be used as an indicator to access the performance of TTOs. Hong Kong universities' TT performance began to be comparable to their counterparts, as evidenced by the number of patents granted globally in the year 2021/22 (**Figure 16**). Some of the universities in Hong Kong still lag behind their peers in the United Kingdom and the United States, showing that there is still room for improvement of TTOs in facilitating technology transfer.

The commercialisation capability of TTOs may fall short due to an insufficient number of technology transfer professionals within TTOs. The number of professional staff in TTOs¹⁰, with an average of 1.87 tech transfer staff¹¹ per 100 faculty members, is much lower in Hong Kong universities than in top universities in the United States and the United Kingdom (**Figure 17**). Research commercialisation requires not only inputs from academic staff but also adequate business and legal support from TTOs for the realisation of the research impact through market acceptance of technology and innovations. The lack of business and industry experience talents poses constraints on HK's TTOs' capability in technology transfer, undermines the ability of universities to fully realise their commercialisation potential and ultimately hinders the creation of start-ups and spin-offs.

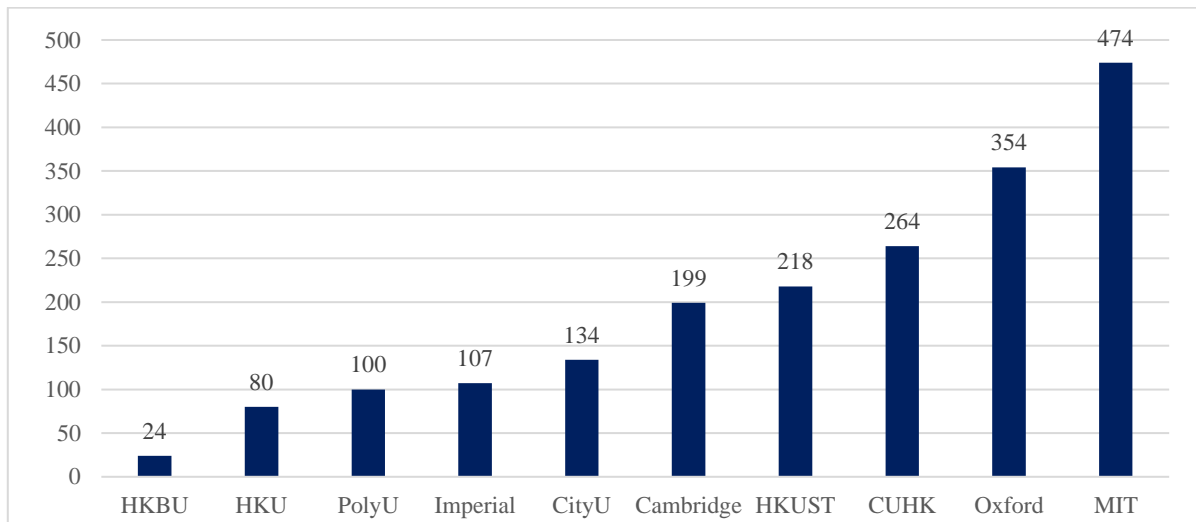
⁸ The Government doubled the Technology Start-up Support Scheme for Universities (TSSSU) annual funding for each TTO from HKD8 million to HKD16 million in 2023/24. The Government also launched the HKD10 billion Research, Academic and Industry Sectors One-plus Scheme (RAISE+) in October 2023, to fund at least 100 research teams in eight University Grants Committee's universities, which have good potential to become successful start-ups.

⁹ The HKD3 billion Frontier Technology Research Infrastructure Support Scheme will be launched to assist the eight University Grants Committee (UGC)-funded universities, on a matching basis, in acquiring facilities and in undertaking research projects across a range of areas, including quantum information, AI, integrated circuit, clinical medicine and health, and gene and biotechnology.

¹⁰ Professional staff in TTOs which excludes administrative, finance and IT personnel.

¹¹ 1.87 is an average derived by the number of technology transfer staff of HKU, CUHK, HKUST and CityU's TTOs.

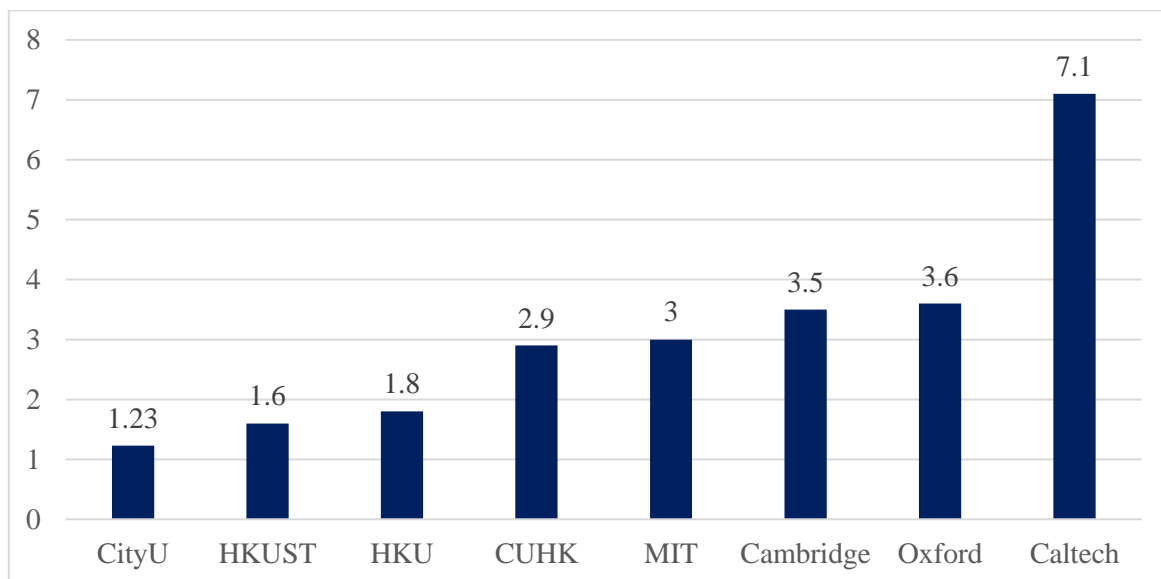
Figure 16. Total number of patents granted globally, by university (2021/22)



Note: The universities are Hong Kong Baptist University (HKBU), University of Hong Kong (HKU), the Hong Kong Polytechnic University (PolyU), Imperial College London (Imperial), City University of Hong Kong (CityU), University of Cambridge (Cambridge), Hong Kong University of Science and Technology (HKUST), Chinese University of Hong Kong (CUHK), University of Oxford (Oxford), and Massachusetts Institute of Technology (MIT).

Source: UGC (2024), HESA (2023), MIT TLO (2022)

Figure 17. Number of professional staff in TTOs per 100 faculty members (as of Jan 2024)



Note:

1. Caltech stands for California Institute of Technology.
2. Professional staff are defined as all staff excluding administrative, finance, operation and IT staff.

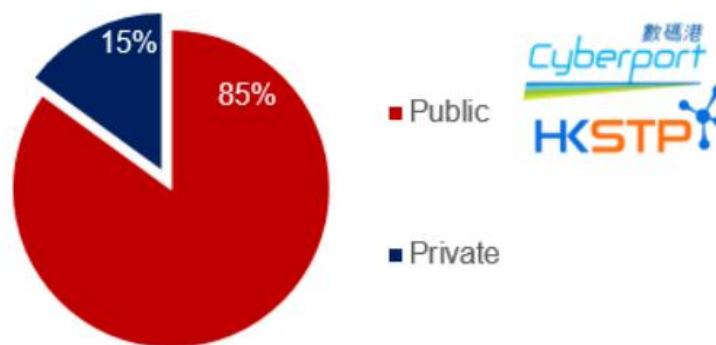
Source: Universities' websites

Stage 2: Start-ups Incubation

Incubation is an integral part of the start-up journey and is often the key to success for many start-ups. According to the World Bank (2014), incubators significantly enhance start-ups' survival rate with around 80% of the firms that have graduated from the incubators for 5 years still in business. This statistic is particularly noteworthy considering that 9 out of 10 start-ups typically fail. Incubation improves start-ups' access to resources, networks, and expertise that can help them gain a competitive edge. It provides a supportive environment for start-ups to refine their products and strategies with guidance from seasoned professionals. A robust incubation ecosystem encompasses various types, including government-led, university, private, and specialised incubators, each providing tailored support and mentorship to foster start-up growth.

According to InvestHK's 2023 Start-up Survey, Hong Kong has 132 locations of co-workspaces, incubators and accelerators available for the 4,257 Hong Kong start-ups. Government-initiated incubators, namely the Hong Kong Science and Technology Parks Corporation (HKSTPC) and Cyberport, are critical in supporting the I&T industry with around 85% of Hong Kong start-ups¹² incubated there, suggesting that there is a significant over-reliance of Hong Kong start-ups on public incubators (**Figure 18**).

Figure 18. Percentage of Hong Kong start-ups incubated in public incubators over private incubators



Note: Number rounded up to the nearest digit

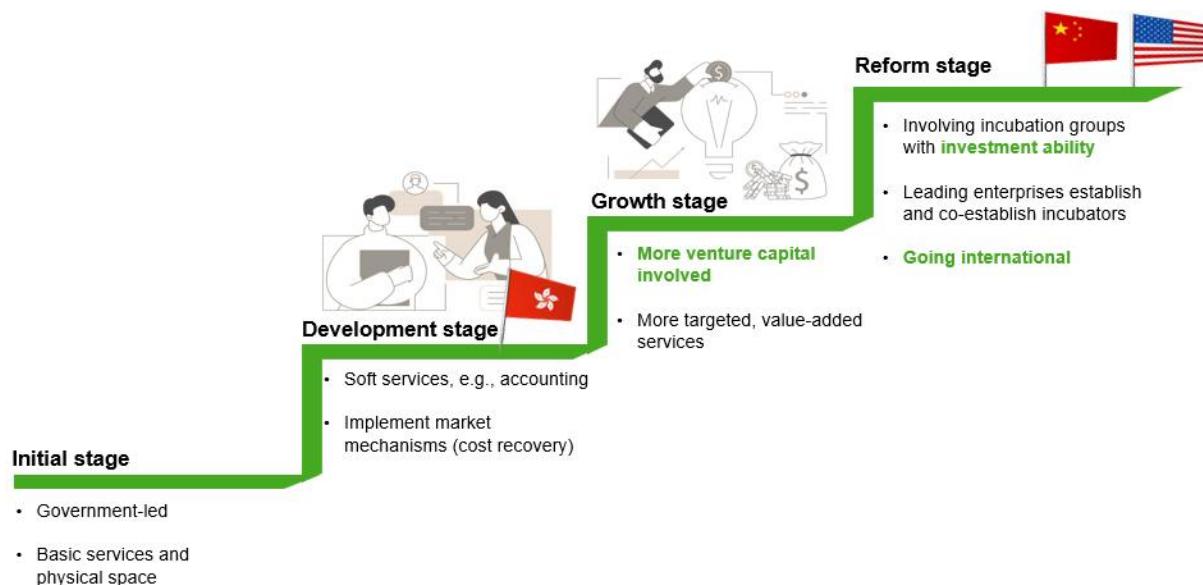
Public incubators face inherent disadvantages compared to their private counterparts in terms of market connectivity, efficiency, and profitability, all of which are crucial for start-up growth. Their operations are often entangled with government bureaucratic procedures, thus lowering administrative efficiency. Incubatees in our stakeholder interviews also reflected that account managers in public incubators lack

¹² Out of 4,257 start-ups in Hong Kong, 1,600 were incubated at HKSTPC and 900 at Cyberport, suggesting that 58.7% of Hong Kong's start-ups were supported by public incubators in 2023. If we also take into account the 1,100 start-ups incubated off-site by Cyberport, the percentage rises to 84.6%.

the marketing acumen and incentives required for business expansion and customer engagement, constrained further by inflexible personnel structures. In terms of service offerings, public incubators in Hong Kong also provide value-added services like management consulting, seed funding, and mentorship besides of mere provision of basic infrastructure and services. The profit model of public incubators in Hong Kong is based primarily on rent and property management (**Appendix 2**), in contrast to the market-driven and profit-oriented private incubators established by large enterprises. Private incubators are often better at strategising business development, brand management and market promotion for start-ups, as they have direct access to extensive venture capital and human resources of their industries. It is also common for private incubators to take equity stakes in start-ups, which motivate incubators to scale up start-ups when their profit is associated with incubatees' market value.

Global trends suggest that successful incubation models integrate networking and market liberalisation, and bring together venture capital and professional mentors to cultivate a competitive, resource-rich start-up incubation environment, which requires the efforts of both private and public incubators. While Hong Kong's incubation ecosystem is struggling to transition from the development stage to the growth stage, the United States and Mainland China have already established relatively mature incubation landscapes (**Figure 19**). The two economies have undergone similar processes in promoting start-up incubation, with specific characteristics of each phase detailed in **Appendix 3**.

Figure 19. The 4 stages of incubation development



To advance Hong Kong's start-up incubation environment, the development of incubators needs to shift from a government-led model to an international, business-driven model. Leveraging the forces of market mechanisms, a more prominent presence of private incubators — often accompanied by active venture capital activities — can improve the efficiency and efficacy of incubators, align more closely

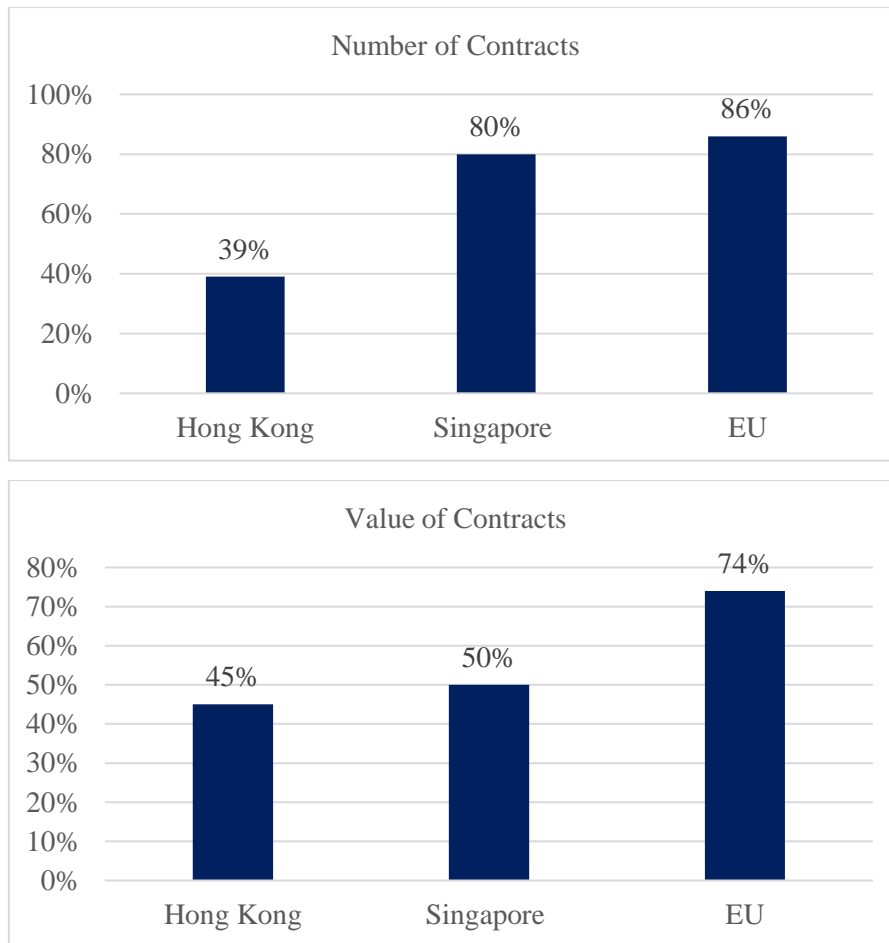
with the needs for start-ups' strategic growth and contribute to a more dynamic and internationally competitive start-up environment.

Stage 3: Generating revenue from procurement

Start-ups will eventually graduate from incubation and progress towards financial independence. They can greatly benefit from government contracts. As the largest procurer of goods and services in many economies, the government can provide stable demand that assures a regular income stream for start-ups. The winning of government contracts also serves as a reference and enhances start-ups' market credibility, opening doors to businesses in the private sector. Moreover, engaging with public procurement exposes start-ups to complex projects and stringent requirements, offering them a chance to upscale their operations and acquire invaluable experience. Thus, government support for start-ups in public procurement is beneficial to their long-term growth and stability.

Start-ups usually fall under the category of Small and Medium Enterprise (SMEs) given their employment size. Comparing the engagement of SMEs in public contracts across different jurisdictions in terms of the number and value of contracts awarded, as an indicator to measure the effectiveness of the government's role in facilitating procurement for SMEs and even start-ups, the participation of Hong Kong's SMEs in public procurement, especially in contract numbers, is notably lower compared to Singapore and the EU (**Figure 20**). This indicates that Hong Kong's government procurement policies may not be sufficiently inclusive of SMEs, including start-ups. The disparity suggests that these smaller enterprises encounter significant barriers when attempting to access government contracts, especially for start-ups due to their scale and relatively higher administrative burdens. Hence, there is a need to facilitate start-up integration into public procurement processes, ultimately supporting their growth.

Figure 20. Comparison between Hong Kong, Singapore, and the EU in terms of the number and value of government contracts awarded to SMEs



Note:

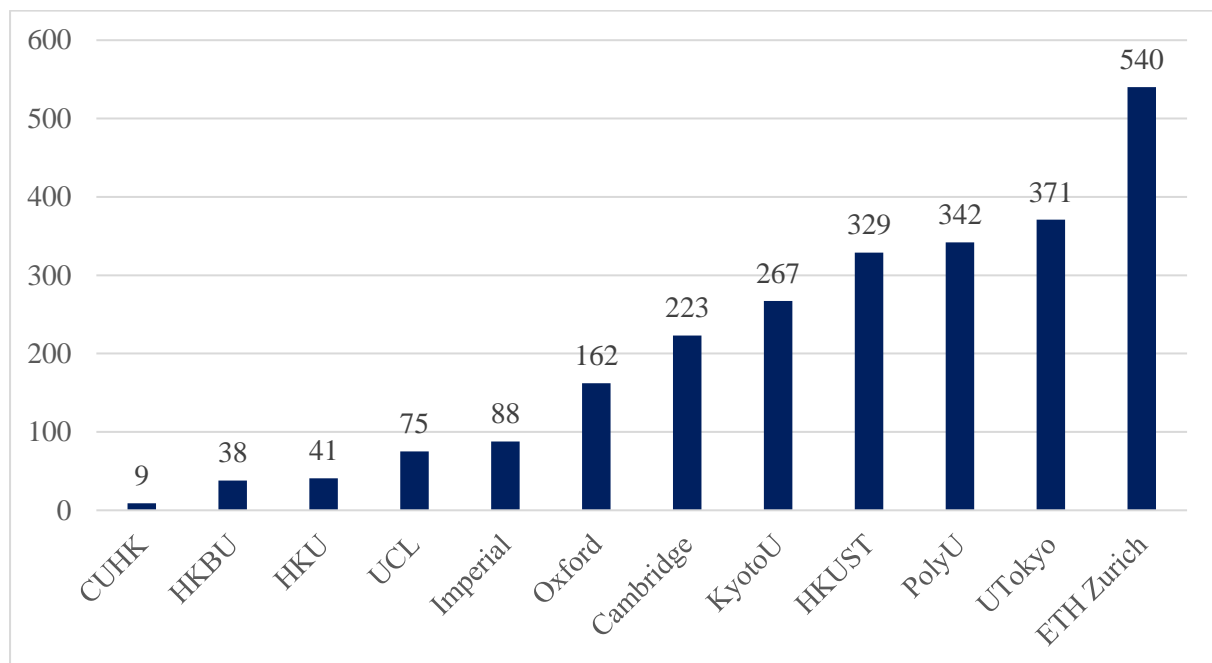
1. SMEs are generally defined by their employment size: SMEs in the EU are enterprises which employ fewer than 250 persons, with employment size under 200 for Singapore, and employment size below 100 for Hong Kong.
2. Hong Kong's figures are the participation of SMEs in the Minor Group (value of individual contract not exceeding HKD3 million) under Categories 2 (On-going Services) and Categories 3 (Implementation & Combined System Development Services) of the Standing Offer Agreement for Quality Professional Services (SOA-QPS) in 2019-2020.
3. Singapore's figures are government contracts awarded to SMEs annually.
4. EU's figures are SMEs' share of below-EU-thresholds contracts (EUR4.845 million for works contracts and EUR125,000 for supplies and EUR193,000 for services) awarded in the 11 member states from 2011 to 2017.

Source: Beijing Business Today (2017), European Commission (2019), Singapore Ministry of Finance (2023), and HKSAR Government (2020)

Stage 4: Number of spin-off companies

Hong Kong’s technology transfer processes are hindered by insufficient support in staffing, incubation and procurement. The underperformance of the previous stages stifles the sustained development of entrepreneurship, as evidenced by the lower number of active spin-offs¹³ from Hong Kong universities compared to those of the U.K., Japan and Switzerland, suggesting the relatively less active start-up landscape in Hong Kong (**Figure 21**).

Figure 21. Total number of active spin-off companies by university (2021/22)



Note: KyotoU stands for Kyoto University, Utokyo stands for University of Tokyo, and ETH Zurich stands for Swiss Federal Institute of Technology Zurich.

Source: UGC (2024), Universities’ websites

Given the circumstances, this chapter puts forward 4 recommendations targeting the role of technology transfer offices (TTOs), incubators and accelerators, and public and private institutions in the first 3 stages of the start-up growth cycle to foster a vibrant entrepreneurial ecosystem for start-ups.

Recommendation 2.1: Establishing a private incubator cluster in the San Tin Technopole

Since public incubators alone cannot provide all the necessary services for the successful incubation of start-ups across diverse industries and needs, it is crucial to have a balanced presence of both private

¹³ Spin-off companies are a subset of start-ups that utilise technologies discovered within universities.

and public incubators in the start-up ecosystem. This balanced presence allows them to complement each other, reinforcing the overall entrepreneurial support ecosystem. In alignment with the Chief Executive’s 2023 Policy Address, which calls for attracting “more renowned Mainland and overseas start-up services agencies to provide incubation services and development guidance in Hong Kong”, we recommend **establishing a private incubator cluster in the San Tin Technopole**. The Government could attract global and local incubators to the San Tin Technopole by offering attractive policy terms, service coordination and financial support.

The Northern Metropolis Development Strategy released in 2021 put forward the proposal for the San Tin Technopole, to be positioned as a clustered I&T development hub that creates synergy with the Shenzhen I&T Zone and contributes to the development of the “South-North dual engine (finance – I&T)”. The San Tin Technopole with an area of 627 hectares mainly comprises of an I&T Park and San Tin Town Centre. This area is set aside for enterprises engaged in cutting-edge R&D and production activities. Leading tech firms and start-ups of different I&T fields, such as life and health technology, artificial intelligence and data science, advanced manufacturing and new energy technology, will be accommodated as land parcels of different sizes are designed within the I&T Park to provide flexibility to cater for I&T facilities of different scales, including some sizable ones for start-ups.

The strategic positioning of a private incubator cluster within the San Tin Technopole, which is near the university town in the Northern Metropolis¹⁴, offers significant advantages that catalyse the growth of the Hong Kong start-up ecosystem. The proximity to academic institutions allows private incubators to benefit from shared access to state-of-the-art facilities, high-tech infrastructure, advanced research resources, and a broad spectrum of expertise from leading-edge anchor companies, research institutions, and start-ups, and to gather innovative ideas and entrepreneurs. The formation of a private incubator cluster fosters cross-industry collaboration and facilitates commercialisation. In turn, global incubators such as Techstars, 500 Global (formerly 500 Start-ups), and Y Combinator (**Figure 22**) with large global networks can enable Hong Kong start-ups to engage with international companies and top-tier mentors worldwide, and offer them opportunities for investment and global customer acquisition.

Local incubators and accelerators, such as HKAI Lab and G-rocket, can also be invited to establish branches in the San Tin Technopole. There, they could be encouraged to form partnerships or joint ventures with global incubators, which can offer new insights into different business cultures and

¹⁴ According to the Northern Metropolis Action Agenda published on 30 October 2023, the Government will develop the “Northern Metropolis University Town” by reserving more than 60 hectares of land in Hung Shui Kiu / Ha Tsuen (HSK / HT), Ngau Tam Mei and New Territories North (NTN) New Town, encouraging post-secondary institutions to strengthen co-operation with renowned Mainland and overseas institutions, and achieve greater synergy through resources sharing and complementary industry development within the region.

practices, facilitating local incubators and accelerators to provide Hong Kong start-ups with a diverse range of support.

Figure 22. Potential incubators in San Tin Technopole



To capitalise on market forces brought about by private partnerships between global and local incubators, the Government should provide extensive measures targeting the financial, operational, and strategic needs of these organisations, to support the building of a private incubation cluster. In the case of Tech Central, Sydney’s Innovation and Tech hub, the Government of New South Wales (NSW) undertook substantial efforts to attract Techstars, a global investment incubator and accelerator, to launch its Techstars Accelerator within the Tech Central precinct. The NSW Government demonstrated its commitment to fostering innovation by offering a substantial 3-year package, including funding, resources and policy support, to incubators and pledged to create a favourable environment for them. Referencing the successful elements of Sydney’s TechCentral and the establishment of I&T hubs in other parts of the world, the Government could offer incentives from the following aspects to establish a private incubator cluster in the San Tin Technopole:

1. Incubator attraction:

Offering an initial rent-free period helps to lower the barrier to entry for private incubators. This incentive makes it financially more viable for incubators to establish their presence in a new location without the immediate pressure of rental costs. It provides them with the flexibility to invest more resources into their services and portfolio companies. Other value-added services, such as talent introduction programmes that connect incubators with top local talent, can also be a significant draw.

2. **Service coordination:**

A dedicated service commissioner can be assigned to incubators or accelerators by acting as a liaison between the incubators and various local stakeholders. Modelled on Shanghai’s “High-Quality Incubator Cultivation Implementation Plan”¹⁵, where service commissioners are to address incubators’ operational needs, can help private incubators and accelerators navigate local regulations, and connect them with necessary resources.

3. **Financial support:**

Pre-construction operation subsidy can be offered to alleviate the financial burden on private incubators. Other financial incentives, such as funding for the initial operation of incubator facilities and reimbursement of operating expenses on expenditures incurred for the provision of R&D and operation venues, shared facilities and incubation services for start-ups, can also be considered. Take the “Shenzhen Science and Technology Business Incubator and Maker Space Management Measures”¹⁶ as an example. The Shenzhen Government provides subsidies to recognised incubators and maker spaces, subsidising 50% of their operating cost for 2 years.

By demonstrating a clear vision for the future of technology and start-ups in Hong Kong and establishing the requisite support structures, the Government can make San Tin Technopole an attractive location for world-class private incubators and accelerators. Complementing the support of local public incubators, partnerships between global and private incubators can drive the sustainable growth of Hong Kong’s incubation landscape and significantly enhance the range of support for start-ups.

Recommendation 2.2: Raising the adoption rate of start-up products and services by both government and private sector

To further support the growth of start-ups, it is crucial to go beyond just offering subsidies or grants and instead focus more on offering start-ups business opportunities that yield revenue and drive long-term growth. Just as the old Chinese proverb goes, “Give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime”, the Government can empower start-ups by **increasing their participation in public procurement through splitting large-scale public contracts into bite-size procurement and expanding the services of Smart Government Innovation Lab (Smart LAB) to encompass public institutions and private sectors.**

¹⁵ 《上海市高品質孵化器培育實施方案》

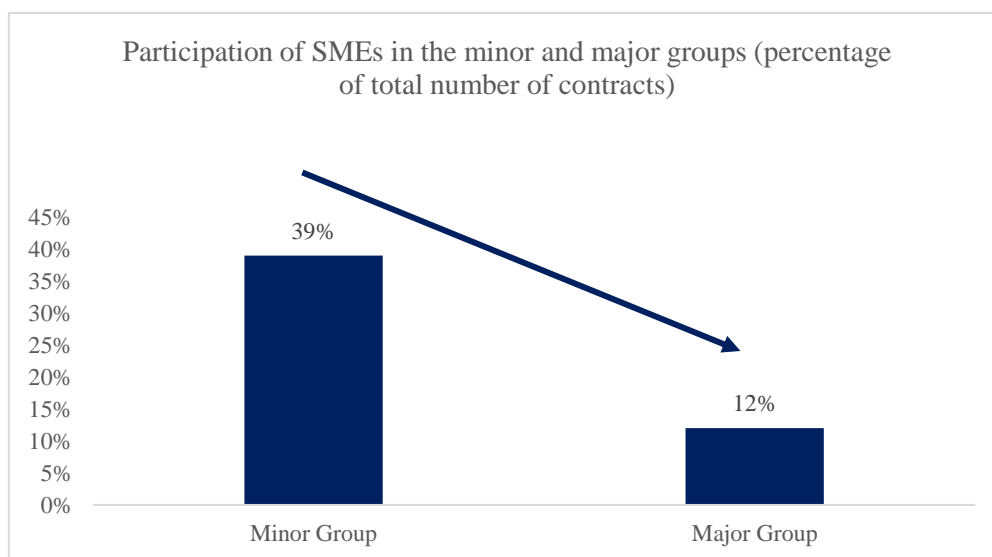
¹⁶ 《深圳市科技企業孵化器與眾創空間管理方法》

- **Split Large-Scale Contracts into Bite-Size Procurement**

Public procurement acts as a catalyst for start-ups, offering them a platform to scale, innovate, and establish themselves in the marketplace. However, start-ups often face challenges in fulfilling administrative and compliance requirements and managing the financial and operational scale of government contracts when participating in public procurement.

While the Government has introduced measures to facilitate SMEs' and start-ups' participation, such as requiring the procuring departments not to set tenderers' experiences as an essential requirement¹⁷, and implementing pro-innovation government procurement policies that uplift technical weighting¹⁸ and bringing down the price weighting¹⁹, start-ups still face inherent disadvantages due to their size and capacity when contending with larger corporations for substantial contracts. **Figure 23** illustrates the significant drop in the participation of SMEs in contracts of larger value, in terms of the percentage of the group's total number of contracts and contract sum under the Standing Offer Agreement for Quality Professional Services (SOA-QPS)²⁰ in 2019-2020.

Figure 23. Participation of SMEs in the minor and major groups²¹ under SOA-QPS in 2019-2020



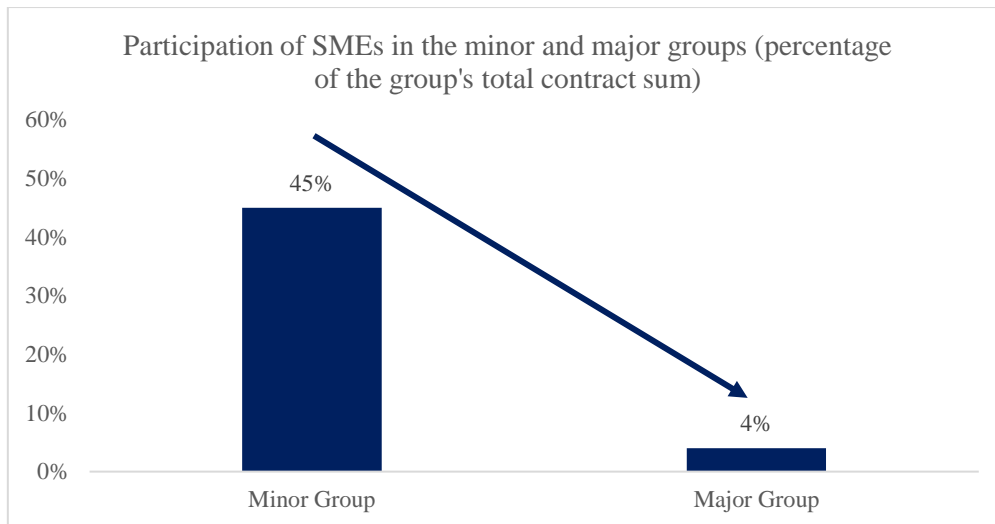
¹⁷ The government set a cap of 15% to the weighting of tenderers' experience of the total technical marks.

¹⁸ Technical weighting increased from normally 30%-40% to 50%-70%.

¹⁹ Price weighting decreased to 30%-50%.

²⁰ SOA-QPS is a scheme to award contracts to companies for the provision of information technology professional services to the Government.

²¹ Minor Group covers work contracts valued up to HKD3 million, while Major Group covers contracts valued over HKD3 million but below HKD20 million.



Source: HKSAR Government (2020)

Dividing contracts into lots is one of the measures that have been undertaken by many countries to reduce start-up barriers. A study carried out by the European Commission (2019) stated that the use of lots is associated with a 9% increase in SMEs' share among contract awardees. Singapore's government, which is also a signatory to the Agreement on Government Procurement of the World Trade Organization (WTO GPA)²² like Hong Kong, managed to achieve an annual rate of 80% rate of government contracts awarded to SMEs, as they control the size of contracts under SGD90,000 at quotation level to avoid the more complicated WTO GPA tendering process. While the Government has identified splitting large-scale contracts into smaller ones as one of the ways to facilitate the participation of SMEs and start-ups in government procurements, such practice applies mostly to the public works contracts and works-related consultancy agreements issued by the Development Bureau. We suggest that **the Government carry on measures to unbundle tenders issued by different bureaux and departments**, to allow start-ups and SMEs of different services and industries to play a part in government projects.

The Government can also consider other measures such as **introducing set-asides and bid price preferences for SMEs**. For example, SMEs in China benefit from bid price preferences wherein their bid prices are reduced by 10-20%, effectively enhancing their competitiveness against larger firms. The Ministry of Finance published the "Notice on Further Strengthening Government Procurement Support for SMEs" in 2022, to call for the employment of a set-aside policy for government procurement projects.

²² The WTO GPA aims to provide open and fair competition amongst domestic and foreign suppliers and service providers. A set of requirements covering non-discriminatory treatment of goods, services and service suppliers, qualification of suppliers, tender procedures, tender specifications and challenge procedures has been prescribed and applied to contracts meeting certain values.

Additionally, for contracts that are valued over RMB4 million and suitable for SMEs, on the premise of adhering to the principles of openness, the procurement budget is increased from 30% to 40% of the reserved share of the procurement budget to SMEs. Such policies incentivise SME engagement by levelling the playing field, and can significantly boost the involvement of start-ups and SMEs in government procurement processes, opening up new avenues for their growth.

- **Expand Services of Smart LAB to Encompass Public Institutions and Private Sector**

Governments are increasingly looking to procure innovative solutions to public challenges. Start-ups, which are often at the forefront of innovation, have the potential to offer novel products and services that meet these needs. The Smart Government Innovation Lab (Smart LAB), launched by the Office of the Government Chief Information Officer (OGCIO) in 2019, is a platform to connect the service needs of various departments with innovative solutions from the IT sector, particularly local start-ups and SMEs, to enhance public service delivery and operational efficiency. The Smart LAB serves as a testing ground for start-ups to conduct proof-of-concept and technology testing, and as a showroom to increase the visibility of start-ups' products. However, the services are currently limited to government departments and bureaux, which restricts the visibility and adoption of start-up products.

We recommend that **the OFCIO include public institutions, such as hospitals, schools and universities, as well as the private sector in the Smart LAB's services.** It helps open new markets for start-ups and enables a wider range of organisations to benefit from innovative solutions. Financial incentives can be offered to participating start-ups for successful proof-of-concept projects that demonstrate potential for widespread adoption to encourage start-ups' active involvement in providing innovative products and services and to promote the Smart LAB among the start-up community.

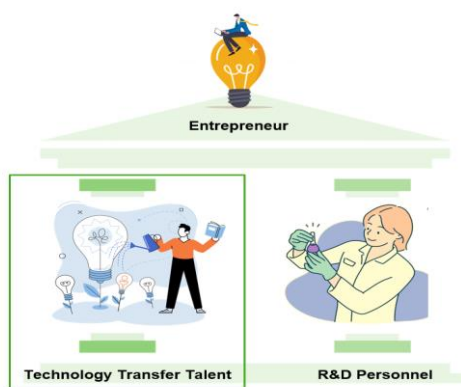
Take Singapore's Open Innovation Platform, as an example. It is a crowd-sourcing platform that connects and matches the needs of business owners with I&T solution providers, allowing even large firms to tap into a network of over 12,000 solutions providers under the Infocomm Media Development Authority. Tech solvers on this platform are awarded monetary prizes and connected with public institutions like the Singapore Land Authority and key industry players, such as Singapore Airlines and Panasonic.

Acting as an "online marketplace", the Smart LAB can connect start-ups with government departments and bureaux, public institutes and even the private sector, allowing them to draw industry insights and get a grasp on the industry's future development to reform their products and services. It can also promote corporate interchange where start-ups can potentially establish long-term partnerships with leading enterprises or even be acquired by them.

Recommendation 2.3: Setting up a Technology Transfer Talent Scheme (TTTS)

The presence of skilled R&D personnel along with technology transfer experts who translate innovative ideas into market-ready products and services are critical components to the success of start-ups (**Figure 24**). While there is an insufficient supply of TT professionals in Hong Kong, as evidenced by the understaffed TTOs in universities, it is important to groom local talents and attract foreign experts to Hong Kong to address this gap. **The Government can establish a Technology Transfer Talent Scheme (TTTS) under the Innovation and Technology Commission (ITC)**, referencing the Research Talent Hub (RTH).

Figure 24. Start-ups require the support of both R&D and TT talents



Aiming to encourage more talent to pursue careers in the I&T field, the Innovation and Technology Fund (ITF) launched the Research Talent Hub in 2020, providing funding support for organisations and tech companies to hire local and foreign research talent to conduct R&D work. Monthly salary allowances²³ scaled by education levels, and additional living allowance for doctoral degree research talents, for a duration of up to 36 months are provided to help organisations recruit necessary research talents to drive innovation.

Building on the RTH's model, the proposed TTTS can focus on subsidising TTOs, research institutions, local tech companies, and especially start-ups under ITF-funded projects and those incubated in HKSTPC and Cyberport, and even private incubators to recruit and retain individuals with specialised knowledge in technology transfer. The TTTS could cover the costs associated with salaries and potentially living allowances for local and non-local talents.

²³ Maximum of 4 research talent can be engaged at any one time with the maximum monthly salary allowance is HKD20,000 for research talents with a bachelor's degree, HKD23,000 for those with a master's degree, and HKD35,000 and monthly living allowance of HKD10,000 for those with a doctoral degree for maximum 36 months.

The TTTS can also sponsor TT training programmes organised by TTOs to enhance the skill set and career trajectory of university students who are interested in the commercialisation and entrepreneurship sector, and groom the TT talents they need. A prime example of TT talent training programmes is the Commercialization Academy at Johns Hopkins Technology Ventures (JHTV). This programme offers a two-year paid fellowship to full-time students of diverse academic backgrounds, allowing them to work closely with entrepreneurs to gain hands-on knowledge in technology development and enhance their understanding of the commercialisation process.

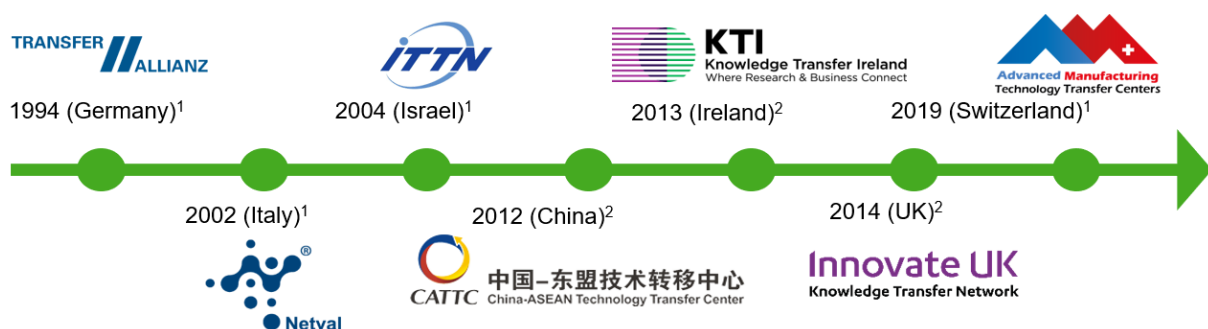
To address the shortage of TT talents in Hong Kong’s start-up ecosystem, the TTTS can play a crucial role. It can not only provide financial assistance for hiring TT professionals to facilitate commercialisation but also invest in training initiatives. This ensures the establishment of a sustainable pipeline of technology transfer talents, fostering the long-term development of start-ups in the I&T sector.

Recommendation 2.4: Setting up a Technology Transfer Alliance (TTA)

To enhance operational efficiencies and the technology transfer capabilities of Technology Transfer Offices (TTOs), **the Government should foster the establishment of a joint Technology Transfer Alliance, which serves as a centralised platform connecting individual university TTOs with the industry and specialises in the later stage of research commercialisation.**

In fact, TTAs have been established in many countries (**Figure 25**), with diverse management structures and ownership models. Some are government-led, while others are consortia formed by universities, research institutes, and other transfer service providers, such as NETVAL in Italy and TransAllianz in Germany.

Figure 25. TTAs established worldwide



Note:

1. Consortiums among universities, research institutes and associations

2. Initiated and managed by government

Drawing on examples of international TTAs, **the proposed TTA in Hong Kong should encompass not just university TTOs, but also research institutes and leading industry partners.** By facilitating the later stages of technology transfer, the TTA can promote the development of university-industry networks, organise roadshows and competitions, and provide legal and business consultancies to align more closely with industry demands. This alliance can optimise resource allocation, reduce operational costs, enhance access to specialised commercialisation expertise, and increase the visibility of start-up products and services for industry partners.


The TTA could also help with start-ups' market expansion to the GBA and the ASEAN and beyond (to be discussed further in Chapter 6), by **forming strategic partnerships with other international TTAs.** The China-ASEAN Technology Transfer Center (CATTC), founded in 2012 with the support of the Ministry of Science and Technology, is the only ASEAN-oriented technology transfer agency on the national level in China and has established bilateral relationships with technology transfer centres in 9 ASEAN member states. The CATTC has organised 7 China-ASEAN Technology and Innovation Cooperation Conferences, hosting over 70 domestic and international technology transfer activities, and facilitating the signing of nearly 500 cooperation agreements. The CATTC has demonstrated the potential for TTAs to serve as networking channels and catalysts, enhancing cross-border technology transfer collaborations and driving Hong Kong start-ups' presence on the international stage.

The formation of a TTA can address the issues currently plaguing Hong Kong TTOs' technology transfer capabilities, such as inconsistent performance, lack of coordination, and inadequate staffing. As a centralised platform, it can mitigate the information asymmetries that hinder the commercialisation process. By doing so, the TTA would not only streamline the path for start-ups to scale up but also support their market expansion efforts, paving the way for Hong Kong start-ups to escalate their presence in international arenas.

Chapter 5: Boosting Entrepreneurs' Access to Finance

As the number of start-ups in Hong Kong continues to grow, entrepreneurs' funding demand will become more and more significant. Start-ups typically go through 6 stages of funding rounds and the funding amount generally rises with each stage (**Table 4**). Most start-up investors anticipate exiting through an IPO, acquisition, or later fundraising rounds.

Table 4. Overview of start-up funding rounds

	Pre-seed	Seed	Series A	Series B	Series C +	IPO
						
Typical Company Stage	- Ideation - Work towards a minimum viable product (MVP)	- Improve MVP - Develop product-market fit	- Have working product - Refine product-market fit - Refine business model (path to profits) - Scale up business	- Established product-market fit - Scale up business - Grow customer base - Work towards Profitability	- Optimise business for profitability - Large-scale operation - Put firm on IPO track - Consider other exit options	- Offer shares to general public - No longer a start-up
Average funding	Below USD1m	~ Less than USD5m	~ USD5m – 30m	~USD10m – 60m	~ More than USD20m	N/A
Typical funding sources	- Start-up owner - Family & friend - Angel investor - Incubator - Government grant & subsidy	- Angel investor - Venture capitalist - Incubator & accelerator - Government grant & subsidy	- Venture capitalist - Accelerator - Super angel investor	- Venture capitalist	- Venture capitalist - PE investor - Bank	- General public

Source: Crunchbase (2022); Deloitte (2023)

In Hong Kong, the government funding support in the form of grants or subsidies²⁴ for I&T start-ups at the pre-seed and seed stages is abundant. Since its establishment in June 1999, the Innovation and Technology Fund (ITF) administered by the Innovation and Technology Commission (ITC) has been

²⁴ In general, grants or subsidies are not considered as equity investments.

the main source of government funding support for I&T start-ups. The ITF now manages 18 funding programmes across 5 areas, including supporting R&D, facilitating technology adoption, nurturing technology talents, supporting technology start-ups, and fostering an I&T culture.

One prominent example is the HKD10 billion “Research, Academic and Industry Sectors One-plus Scheme” (RAISE+ Scheme) launched in October 2023. The RAISE+ Scheme aims at funding, on a matching basis, at least 100 research teams from the 8 designated UGC-funded universities²⁵ which have good potential to become successful start-ups to complete their projects in 2 stages within about 5 years²⁶.

Recently, the Government has also stepped up efforts in private equity (PE) and late-stage VC investments. In 2022, the Government established the Hong Kong Investment Corporation Limited (HKIC) to further optimise the use of financial reserves for promoting the development of industries and the economy. The HKIC now manages the investment activities of:

- **Hong Kong Growth Portfolio (HKGP):** The HKGP was established in 2020 using the HKD22 billion funding allocated from the HKD220 billion Future Fund set up in 2016 to make strategic investments in projects with a Hong Kong nexus. On top of the existing target size of HKD22 billion, additional funding of HKD10 billion was allocated to the HKGP in 2022, of which HKD5 billion was used to establish the Strategic Tech Fund (STF)²⁷. The remaining HKD5 billion was used to set up the Greater Bay Area (GBA) Investment Fund, focusing on GBA investment opportunities.
- **Co-Investment Fund:** The HKD30 billion Co-Investment Fund was established in 2022 to attract enterprises to set up operations in Hong Kong and invest in their business.

However, for Hong Kong start-ups, the funding shortage during the seed stage and early stage²⁸ is the most significant. Investments in seed-stage and early-stage start-ups are generally considered riskier than investing in mature or late-stage start-ups. These start-ups often have limited track records, unproven business models, and higher failure rates. As the Government’s philosophy of making investments and providing grants generally reflects lower risk tolerance and requires allocating limited

²⁵ The 8 universities are the University of Hong Kong, the Chinese University of Hong Kong, the Hong Kong University of Science and Technology, City University of Hong Kong, Hong Kong Baptist University, Lingnan University, the Education University of Hong Kong, and the Hong Kong Polytechnic University.

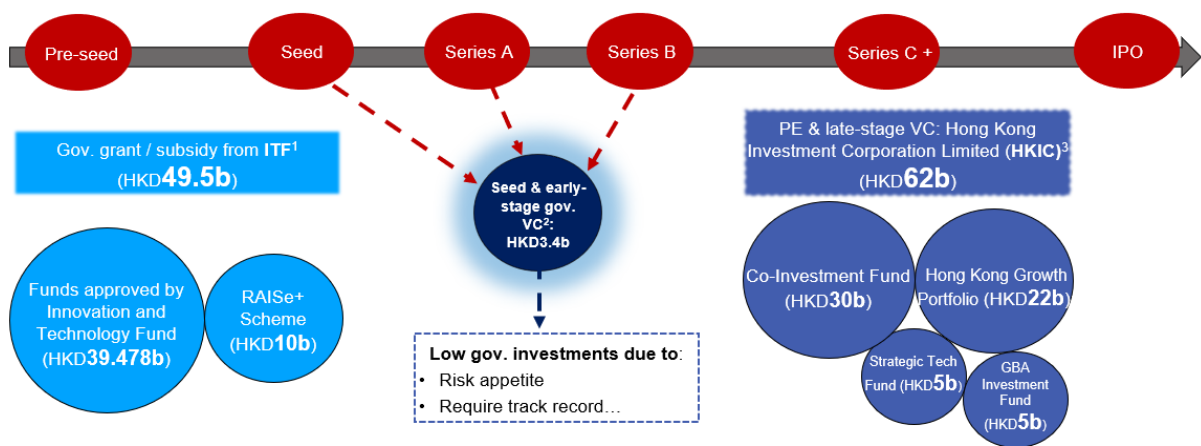
²⁶ The 1st stage concerns the transformation and realisation of R&D outcomes within about 3 years while the 2nd stage concerns the initiation of R&D outcome commercialisation within the remaining project time frame.

²⁷ The STF invests in mid-stage I&T start-up companies worldwide, empowering them to scale their business in Hong Kong and beyond.

²⁸ The early stage includes Series A and Series B.

public resources more effectively, the Government tends to: 1) focus more investments on companies that have already demonstrated some level of success and stability to mitigate the inherent risks associated with seed-stage and early-stage investments; and 2) utilize limited resources more effectively by providing grants to help these start-ups overcome initial hurdles, rather than making direct investments that often fail and require ongoing monitoring (e.g., KPI tracking) as well as support (e.g., mentorship). As evidenced in **Figure 26**, compared with government grants offered in the pre-seed and seed stages as well as government PE and late-stage VC investments, the Government’s VC investments in seed-stage and early-stage local start-ups (HKD3.4 billion) are relatively low.

Figure 26. Conceptual illustration of different government funding support and investments



Note:

1. Include funds approved by ITF since 1999, e.g., HKD10 billion for InnoHK, (HKD39.478 billion as at 30 November 2023) & funding of RAISE+ Scheme launched in 2023 (HKD10 billion)
2. HKIC (Hong Kong Investment Corporation Limited) was established in 2022 (asset size: HKD62 billion).
3. Include ITVF (Innovation and Technology Venture Fund, founded in 2017): HKD2 billion; CVF (HKSTP Corporate Venture Fund, founded in 2015): HKD1 billion; CMF (Cyberport Macro Fund, founded in 2016): HKD0.4 billion

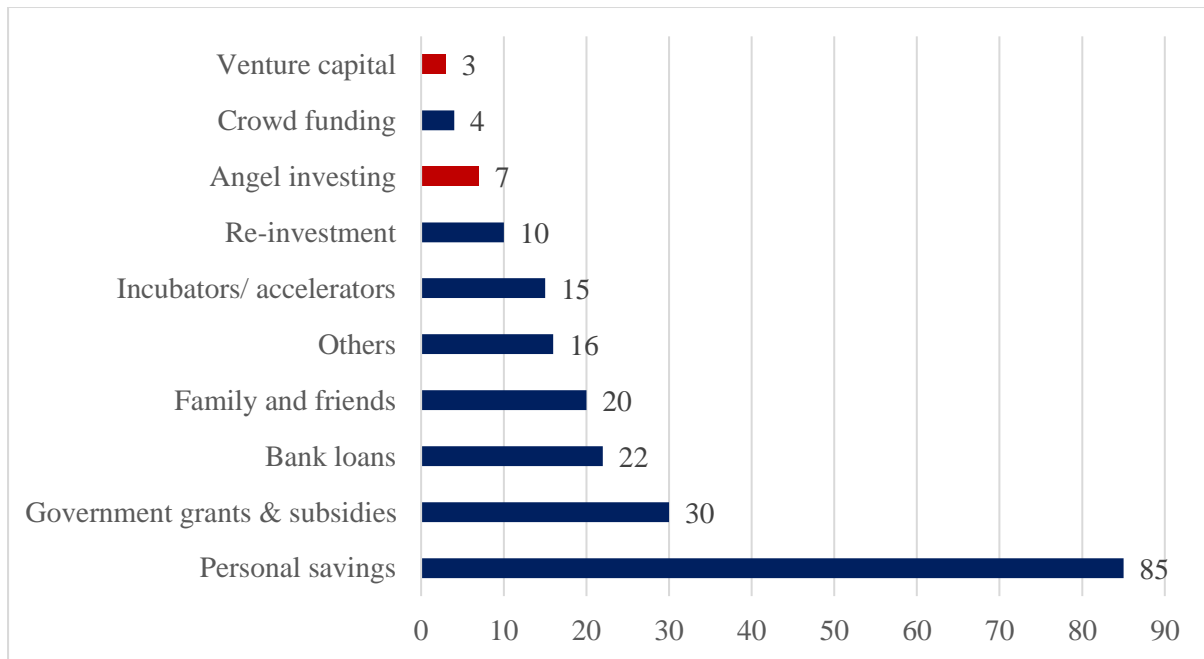
Source: OHKF staff compilation

Previous research shows that around 79% of start-ups fail to raise funding beyond the seed stage²⁹, suggesting investors are often hesitant to commit to seed-stage and early-stage ventures due to the high

²⁹ The sample consists of 35,568 start-ups established from 1990 to 2010. Only around 19% of them eventually exited through IPOs or acquisitions.

risk involved. In Hong Kong, as shown in **Figure 27**, few local start-ups were able to obtain angel investment (7%) and VC (3%). To attract more VC firms to co-invest in local start-ups, the Government set up the Innovation and Technology Venture Fund (ITVF) in 2017. In addition, the Hong Kong Science and Technology Parks Corporation (HKSTPC) and Cyberport established the Corporate Venture Fund (CVF) in 2015 and Cyberport Macro Fund (CMF) in 2016 respectively to co-invest with private investors in start-ups supported by the HKSTPC and Cyberport respectively on a matching basis.

Figure 27. Funding sources of Hong Kong start-ups (% of start-up respondents)

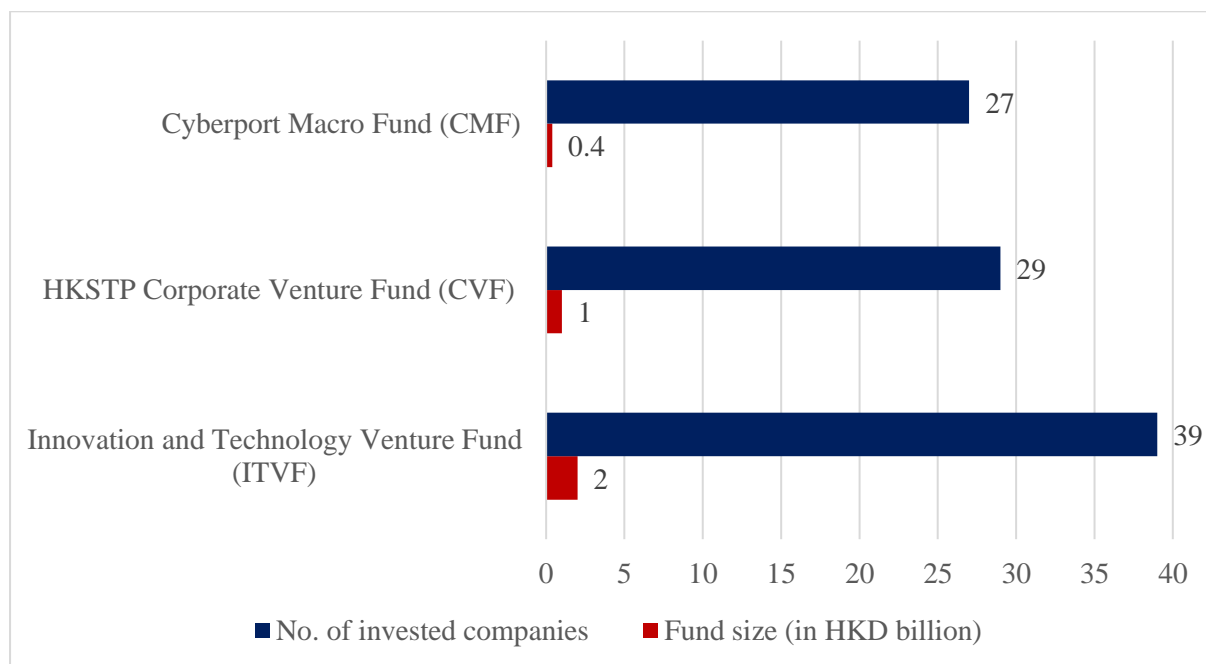


Note: Sample size = 200

Source: HKTDC Start-up Survey 2020

However, the support offered by these government VC funds to local start-ups is limited. **Figure 28** shows that the total number of invested companies of the CMF, CVF and ITVF is only 95 while the total fund size is just HKD3.4 billion.

Figure 28. Fund size and number of invested companies of key government VC funds in Hong Kong



Note: CMF (as of 31 October 2023); CVF (as of 14 July 2023); ITVF (as of 12 December 2023)

Source: OHKF staff compilation

Recommendation 3.1. Establishing an angel fund of funds to provide Hong Kong start-ups with seed and early-stage venture capital

Compared with only relying on direct co-investments with private VC firms, the angel fund of funds (FOF) model has contributed to the success of start-up ecosystems worldwide. Angel FOFs are government-owned FOFs that partner with selected private VC fund managers to form sub-funds in order to guide private capital to invest in seed-stage and early-stage start-ups.³⁰ Angel FOFs have the following advantages over direct co-investments:

Risk diversification: Angel FOFs invest in multiple sub-funds managed by different private VC firms. This provides greater risk diversification across various start-up funding stages, different private VC fund managers as well as a wide range of start-ups and sectors, reducing the risk associated with individual investments. In contrast, government co-investments with private VC investors typically involve investing in specific start-ups or alongside specific VC firms, which may be riskier due to concentrated exposure.

³⁰ Here, angel investments refer to investments targeting seed-stage & early-stage (Series A & Series B) start-ups.

Holistic performance evaluation: Compared with direct co-investing that focuses on deal-by-deal performance evaluation, the model of angel FOFs emphasises more on the review of overall sub-fund investment performance instead of the success or failure of every single start-up investment. Hence, as long as the total valuation of portfolio companies of a sub-fund shows an upward trend, the sub-fund can be considered as successful.

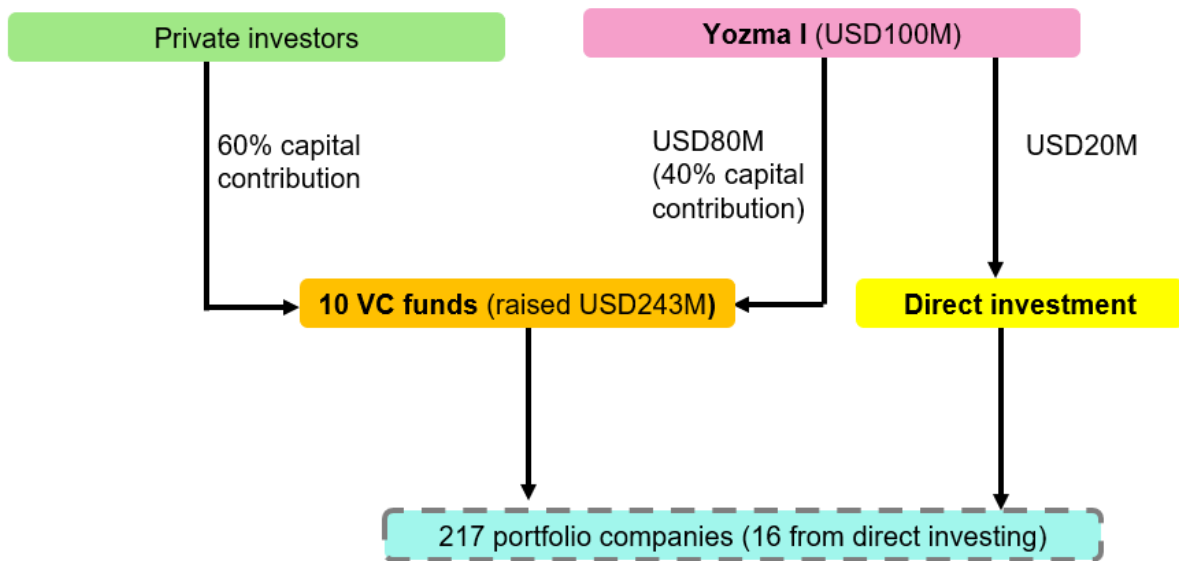
Autonomy over investment decisions: The model of angel FOFs can provide private VC fund managers with greater autonomy in making investment decisions. It also helps streamline the investment process and reduce administrative burdens for the government. Instead of evaluating and managing individual investments, the government takes the role of a limited partner and relies on the due diligence and investment decisions made by the sub-fund managers, who act as the general partners of sub-funds. This allows the government to focus on strategic oversight and leverage the expertise of sub-fund managers, granting them more autonomy in investment decision-making.

Access to expertise: Angel FOFs can provide broader access to the expertise and networks of multiple private VC firms than direct co-investing. By investing in sub-funds managed by experienced VC firms, angel FOFs can leverage the knowledge, industry insights, and connections of these VC firms to support the growth and success of the start-ups in their portfolios, such as providing valuable guidance and mentorship to portfolio companies.

Alignment of interests: Angel FOFs align the interests of the government and private VC firms by co-investing in sub-funds. This form of alignment encourages more sustainable and longer-term collaboration between the public and private sectors than direct co-investing, fostering a more supportive start-up ecosystem. The shared interests can lead to more effective utilisation of resources and enhanced cooperation in supporting the growth of portfolio companies.

A successful reference for the angel FOF model is the government-led initiative Yozma in Israel. Yozma I was the Israeli government's 1st FOF that successfully catalysed the Israeli VC industry during the early 1990s. Yozma I was active from 1993 to 1998. During this period, it focused on early-stage investments in Israeli high-tech start-ups in the industries of communication, information technology and life science. The initial size of Yozma I was USD100 million, of which USD80 million was used to set up 10 different sub-funds, and the remaining USD20 million was used for direct investments in innovative start-ups (**Figure 29**).

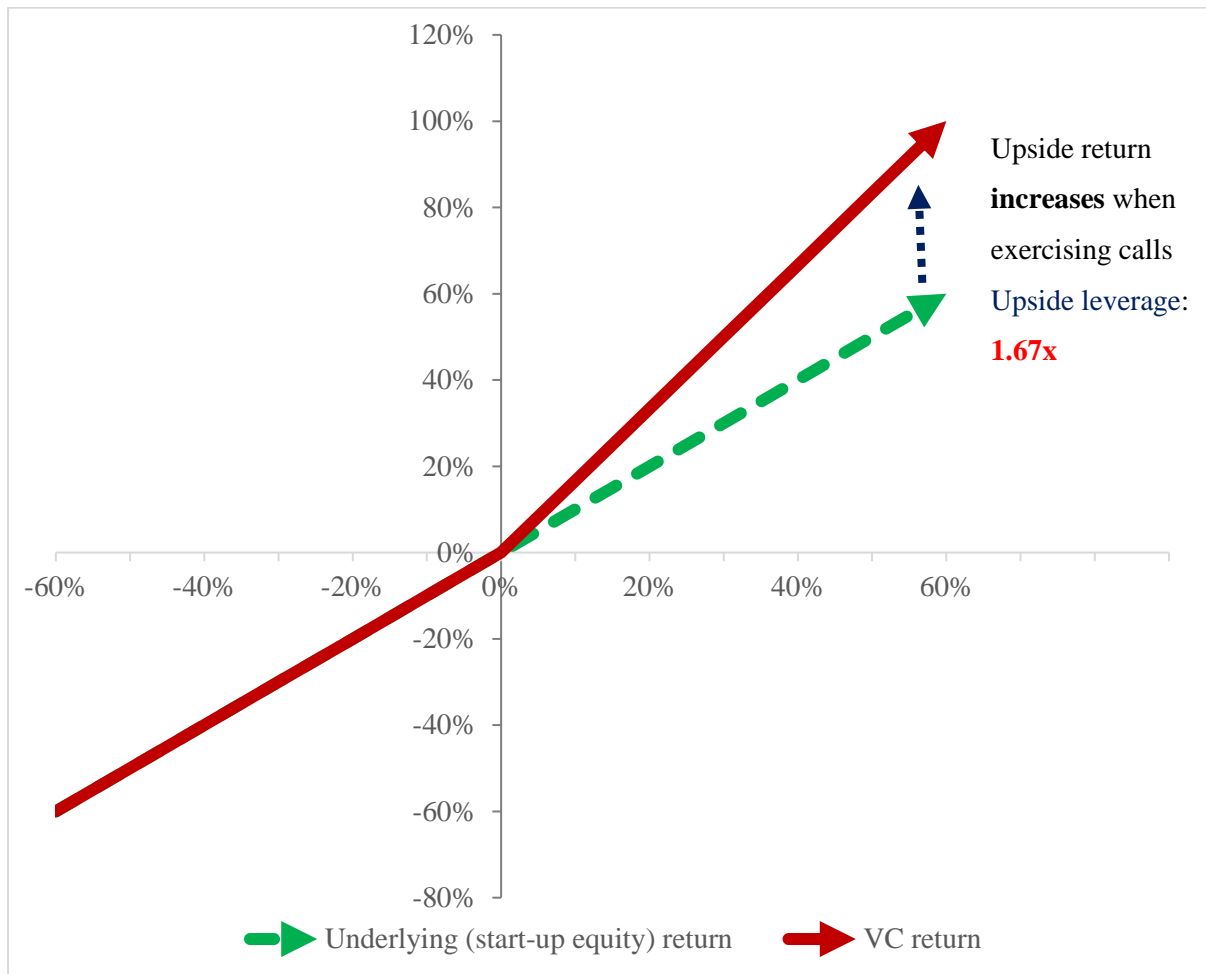
Figure 29. Yozma I's structure



Source: Avnimelech (2009)

An attractive feature of each sub-fund was the upside incentives provided to private VC investors. Each Yozma I sub-fund provided private VC partners with call options on government shares of the sub-fund at cost plus interests for a period of 5 years, meaning that if the operation is successful, the government will transfer its sub-fund shares to the private VC investors at the original price with some interests; if the operation fails, the government and investors will share the risk proportionally (**Figure 30**).

Figure 30. Illustration of upside leverage of call options on government shares of a sub-fund



Note:

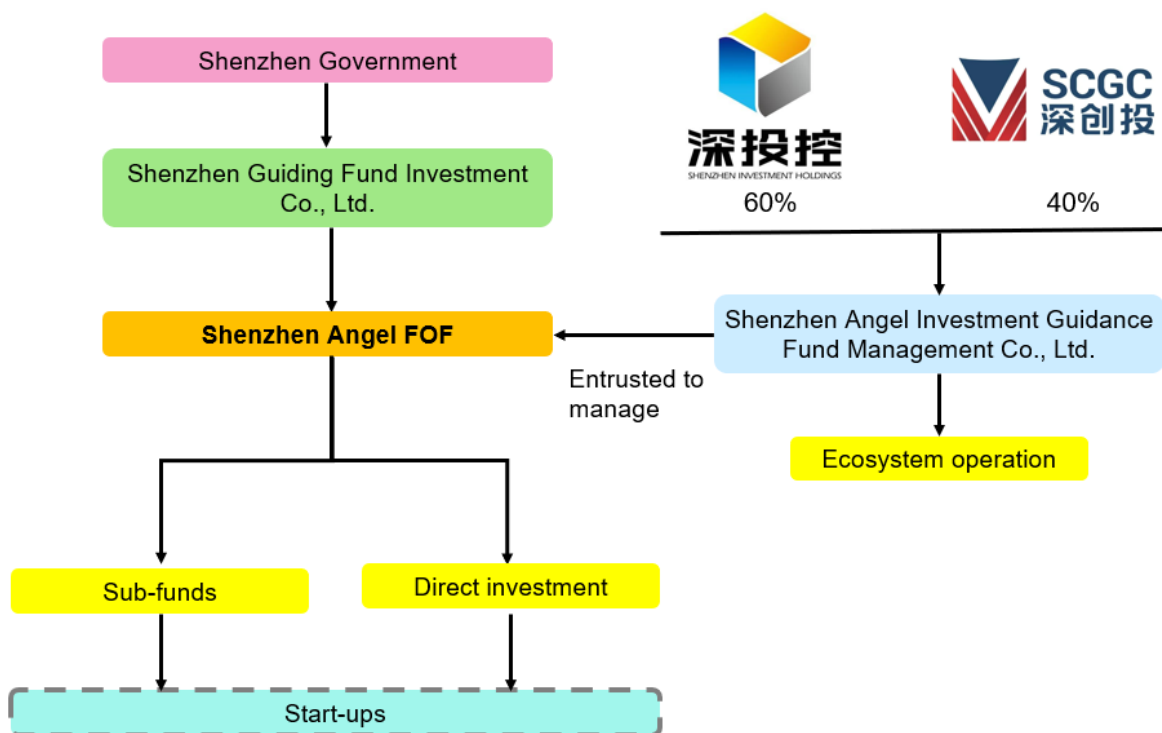
1. Assuming a scenario where the government contributes 40% of capital and the private VC investor contributes the remaining 60%
2. The call options can have a finite life (e.g., 5 years).
3. The government can charge interests on its investment. In that case, the return of the private VC investor will decrease by the interests.

Impressive results were achieved by Yozma I. In 1996, Yozma 's value increased to USD250 million, representing a remarkable growth of 150%. The fund successfully invested in a total of 164 start-ups. 60% of sub-funds generated an internal rate of return (IRR) of over 100%.

Another good reference is the Shenzhen Angel Investment Guiding Fund (Shenzhen Angel FOF), the largest angel investment government guidance fund in China. Initiated by the Shenzhen Government in

2017 to invest in local seed-stage and early-stage start-ups³¹ with a fund size of RMB10 billion, the Shenzhen Angel FOF is managed in a market-oriented manner and focuses on 20 strategic emerging industrial clusters³² and 8 future industries³³. For each sub-fund, Shenzhen Angel FOF contributes at most 40% of capital and provides a full transfer of excess returns to eligible private VC investors. **Figure 31** shows its fund structure.

Figure 31. Structure of Shenzhen Angel FOF



Source: Shenzhen Angel FOF (2021)

As at end-October 2022, RMB12.491 billion of private capital was raised with a total of 76 sub-funds. Also, the Shenzhen Angel FOF nurtured 3 unicorns and 112 potential unicorns³⁴ and created jobs for more than 34,000 people as at end-June 2022.

³¹ The Shenzhen Angel FOF invests in start-ups established for fewer than 5 years when the sub-fund makes investment decisions, or the sub-fund investment is within the investee’s first 2 rounds of financing from external institutions.

³² The 20 strategic emerging industrial clusters cover such fields as network and communications, semiconductors and integrated circuits, ultra-high-definition video display, intelligent terminals, smart sensors, software and information services, digital creativity, fashion, machine tools, intelligent robotics and laser additive manufacturing.

³³ The 8 future industries include: 1. synthetic biology; 2. blockchain; 3. cells and genes; 4. aerospace technologies; 5. neuroscience and brain-inspired intelligence; 6. underground and deepwater explorations; 7. visible light communication and optical computing; 8. quantum information.

³⁴ Here, a potential unicorn refers to a privately held start-up valued over USD0.1 billion.

By taking reference from Israel and Shenzhen, we recommend that **the Government establish an angel fund of funds to provide Hong Kong start-ups with seed and early-stage venture capital (Figure 32).**

Fund ownership: As the HKIC currently consolidates various government investment portfolios, the proposed Hong Kong Angel FOF could be nested under the HKIC with a suggested initial fund size ranging from HKD5 billion to HKD10 billion. The funding can come from the Future Fund.

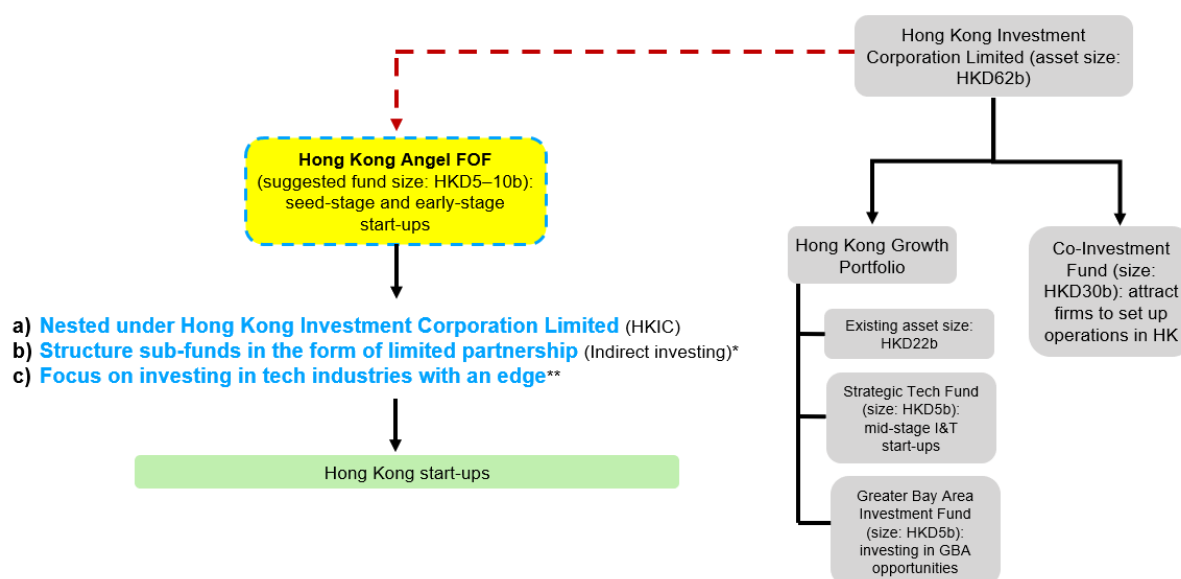
Fund structure: The Hong Kong Angel FOF should partner with different local and international VC firms with qualified track record to establish sub-funds. To ensure that the sub-funds operate in a market-oriented manner, the Government should act as a limited partner of sub-funds and should allow its private VC investors to take responsibility for daily management and specific investment decisions of sub-funds. The government investment in each sub-fund shall not exceed 40%, ensuring that at least HKD7.5 billion from private capital could be attracted if the initial fund size of the Hong Kong Angel FOF is HKD5 billion.

Investment focus: The sub-funds should invest in local seed-stage and early-stage start-ups in Hong Kong and focus on investing in technology industries with an edge as mentioned in the Hong Kong Innovation and Technology Development Blueprint, such as life & health tech, AI & data science, advanced manufacturing & new energy technology industries, etc.

Upside incentives: The private VC partners should be provided with call options to buy the Government's sub-fund shares at the original price plus accrued interests³⁵ for a certain period, e.g., 5 years. In addition, competitive carried interest on a whole fund or on a deal-by-deal basis could be offered to private VC investors to increase the attractiveness of investing in sub-funds with the Government.

³⁵ Take the call options of the ITVF offered to Co-investment Partners as an example. The interest rates are defined by the rates of fee payable by the Exchange Fund to Government funds and statutory bodies for placements which are published by the Hong Kong Monetary Authority in respect of the relevant years.

Figure 32. Suggested structure of the Hong Kong Angel FOF



Note:

1. A small proportion (e.g., 10% - 20%) of investment can be direct investment in the form of co-investment in start-ups.

Recommendation 3.2. Reducing the barrier for tech start-ups to be listed under Chapter 18C of the Main Board Listing Rules of the Hong Kong Stock Exchange

As start-ups grow and mature, founders and investors may explore different exit strategies to exit their investments. Typical exit opportunities include IPO³⁶, mergers and acquisitions (M&A), etc. As one of the most pursued exit strategies, IPO provides start-ups with an opportunity to raise substantial capital, often used to fund R&D, expand operations and so on. Moreover, going public can enhance a firm's credibility, visibility, and reputation.

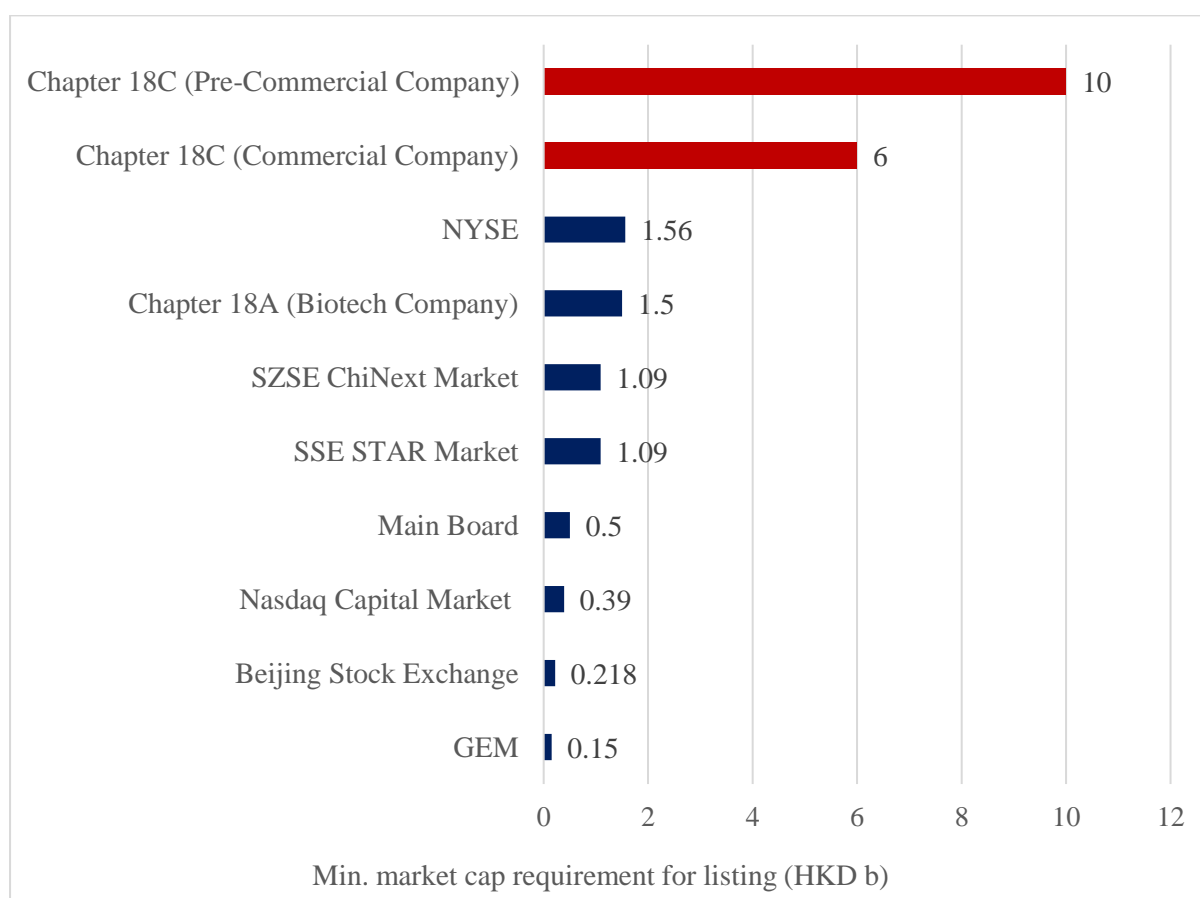
To attract Specialist Technology Companies (STCs)³⁷ worldwide to list in Hong Kong, Chapter 18C of the Main Board Listing Rules of the Hong Kong Stock Exchange (HKEX) came into effect on 31 March 2023. Under Chapter 18C, eligible STCs at the pre-commercial or commercial stage can apply for listing on the HKEX.

³⁶ By going public through IPO, a firm offers its shares to the public for the first time, allowing individual and institutional investors to become shareholders.

³⁷ STCs are companies primarily engaged (whether directly or through its subsidiaries) in the R&D of, and the commercialisation and/or sales of, product(s) and/or service(s) that apply science and/or technology within an acceptable sector of a Specialist Technology Industry. The 5 Specialist Technologies Industries include: 1. next-generation information technology; 2. advanced hardware and software; 3. advanced materials; 4. new energy and environmental protection; and 5. new food and agriculture technologies.

To date, however, no companies have been listed under Chapter 18C since its introduction. The relatively high market cap requirements of Chapter 18C could be one of the major causes of the phenomenon. **Figure 33** shows that Chapter 18C’s market cap requirements are higher than some major counterparts. Previous research also indicated that more than 84% (1,900) of 2,266 firms on the Main Board of the HKEX failed to meet the market cap requirement for Pre-Commercial Company (HKD10 billion).³⁸ In comparison, as at end-August 2023, 60 biotech companies with a total market cap of HKD574 billion have been listed under Chapter 18A³⁹ of the Main Board Listing Rules, which requires a minimum market cap of HKD1.5 billion at the time of listing (**Figure 34**).

Figure 33. Comparison of market cap requirements of different listing regimes



Note:

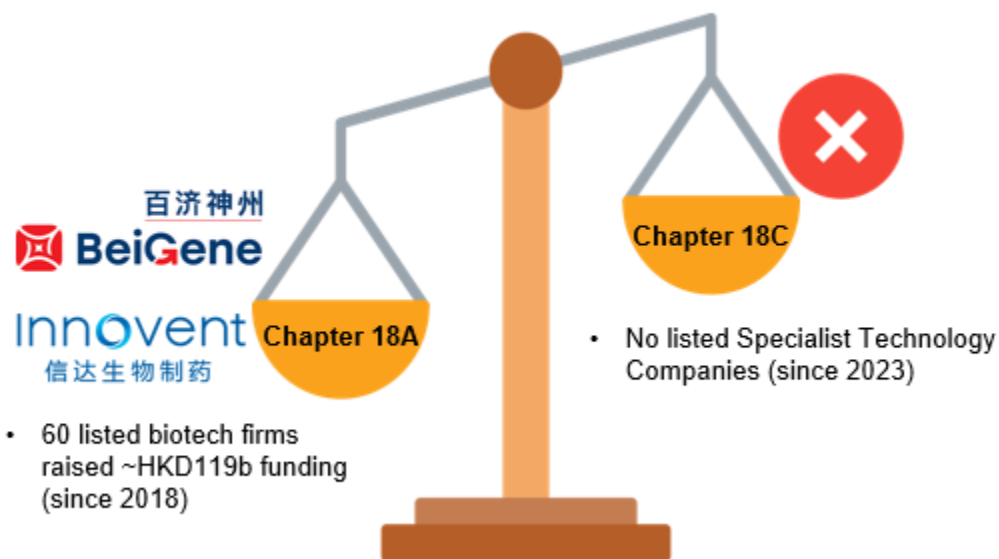
1. USD:HKD = 1:7.8; CNY:HKD = 1:1.09
2. Commercial Company: Revenue should be at least HKD250 million for the most recent audited financial year.

Source: HKEX, Beijing Stock Exchange (BSE), Shanghai Stock Exchange (SSE), Shenzhen Stock Exchange (SZSE), New York Stock Exchange (NYSE) and NASDAQ

³⁸ As of 12 May 2023

³⁹ Chapter 18A took effect on 30 April 2018 and targets listing of pre-revenue biotech companies.

Figure 34. Comparison of the number of listed firms under Chapter 18A and Chapter 18C



Note: Market cap (as of 26 Jan 2024): BeiGene (HKD131.8b) and Innovent (HKD53.7b)

Chapter 18C has a similar positioning to the Shanghai Stock Exchange (SSE) STAR Market, which has been attractive for hard tech companies. For example, 4 of the 5 Specialist Technology Industries specified in Chapter 18C have overlaps with the target industries of the STAR Market.⁴⁰ As at end-October 2023, there were 562 listed companies on the STAR Market, with a total IPO fundraising amount of nearly RMB900 billion and a total market value of more than RMB6 trillion.

The listing rules of the STAR Market are more inclusive. It adopts 5 sets of listing standards with different requirements for market cap, net profits, operating revenue, R&D investment, and net cash flow from operation (**Appendix 4**). Applicants must meet one of the 5 sets of financial indicators with the most basic requirement of having a market cap of at least RMB1 billion. The profitability and other requirements are further relaxed for firms with higher market cap.

Referencing the STAR Market, we suggest **reducing the barrier for tech start-ups to be listed under Chapter 18C of the Main Board Listing Rules of the Hong Kong Stock Exchange**. For Commercial Company, the current market cap requirement could be reduced while additional requirements should be added for firms with even lower market cap, e.g., the Market cap/revenue test and the Market cap/revenue test/cash flow test (**Table 5**).

⁴⁰ The STAR Market does not cover new food and agriculture technologies. It mainly supports high-tech industries and strategic emerging industries such as new generation IT, high-end equipment, new materials, new energy, energy conservation & environmental protection, and biomedicine.

Table 5. Example of reducing market cap requirement for Commercial Company

Commercial Company	Example
Reduce current market cap requirement	From \geq HKD 6b to \geq HKD 4b
Add requirements for firms with lower market cap	<p>Market cap/revenue test:</p> <ol style="list-style-type: none"> 1. Market cap \geq HKD3b 2. Revenue \geq HKD350m for the most recent financial year
	<p>Market cap/revenue test/cash flow test:</p> <ol style="list-style-type: none"> 1. Market cap \geq HKD2b 2. Revenue \geq HKD350m for the most recent financial year 3. Positive cash flow from operating activities (CFO) \geq HKD100 million in aggregate for the 3 preceding financial years

On the other hand, for Pre-Commercial Company, the current market cap requirement could also be cut and more requirements should be required for companies with even lower market cap, e.g., the Market cap/R&D result test (**Table 6**).

Table 6. Example of reducing market cap requirement for Pre-Commercial Company

Pre-Commercial Company	Example
Reduce current market cap requirement	From \geq HKD 10b to \geq HKD 6b
Add requirements for firms with lower market cap	<p>Market cap/R&D result test:</p> <ol style="list-style-type: none"> 1. Market cap \geq HKD5b 2. Main business / products: approved by relevant state / regional departments 3. The market is huge and the issuer has achieved initial progress 4. Have obvious tech advantages

By having more inclusive listing requirements, more tech start-ups will be able to list under Chapter 18C.⁴¹

⁴¹ For instance, using the examples in Table 5 and Table 6, STCs with a minimum market cap ranging from HKD2 billion to HKD6 billion will all have the chance to list under Chapter 18C.

Recommendation 3.3. Accelerating disbursement of government funding schemes for start-ups

Although the Government offers a wide variety of grants or subsidies for start-ups through the ITF, most start-ups are still dependent on informal funding sources. As shown in **Figure 27** previously, 85% of Hong Kong entrepreneurs rely on personal savings for starting businesses. Also, a recent study found that 35% of entrepreneurs not using government funding stated that the cumbersome application process is the key barrier.⁴² Not only that, vetting procedures are rigorous and time-consuming while the funding may be only available in the form of cash reimbursement.

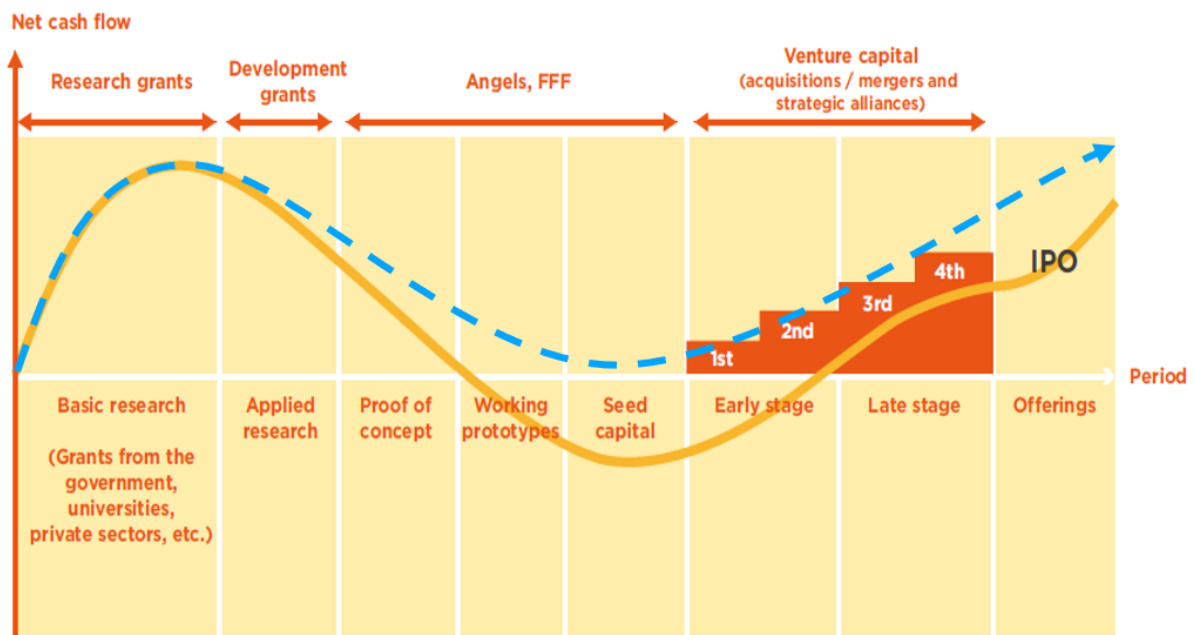
Take the funding programme Research Talent Hub for Incubatees and I&T Tenants of the HKSTPC and the Cyberport (RTH-SPC), which offers monthly salary and living allowances for eligible companies including start-ups to hire R&D personnel, under the ITF as an example. The monthly allowance is offered to the applicant company on a reimbursement basis after acceptance of the progress report and documentary proof that the tenancy/incubation period covered the reporting period of the engagement by the ITC (on a half-yearly basis in general).

Another example is the Public Sector Trial Scheme for Incubatees & Graduate Tenants of HKSTPC and Cyberport (PSTS-SPC), which provides funding support for production of prototypes/samples and/or conducting of trials in the public sector. No initial payment is offered to the applicant company. Instead, within 2 months after completion of the trial project, the firm should submit the following electronically to the ITC for reimbursement of the approved funding: (a) an application for reimbursement for actual expenditure; (b) evaluation report; and (c) an audited account for the project from an independent auditor.

The delayed payment of government grants or subsidies could be one of the main bottlenecks that hinder start-ups' further growth. The problem of running out of cash becomes exacerbated when government funding support is delayed, as start-ups struggle to cover their operating expenses and meet financial obligations. Therefore, we recommend **accelerating disbursement of government funding schemes for start-ups**. The upfront payment can be a certain reasonable percentage of the approved funding amount for projects up to 2 years and with at least 1 appointed guarantor. By advancing payment of government funding, the negative cash flow problems in the start-up death valley could be mitigated (**Figure 35**).

⁴² KMPG surveyed 134 Hong Kong-based entrepreneurs or start-up executives in 2020.

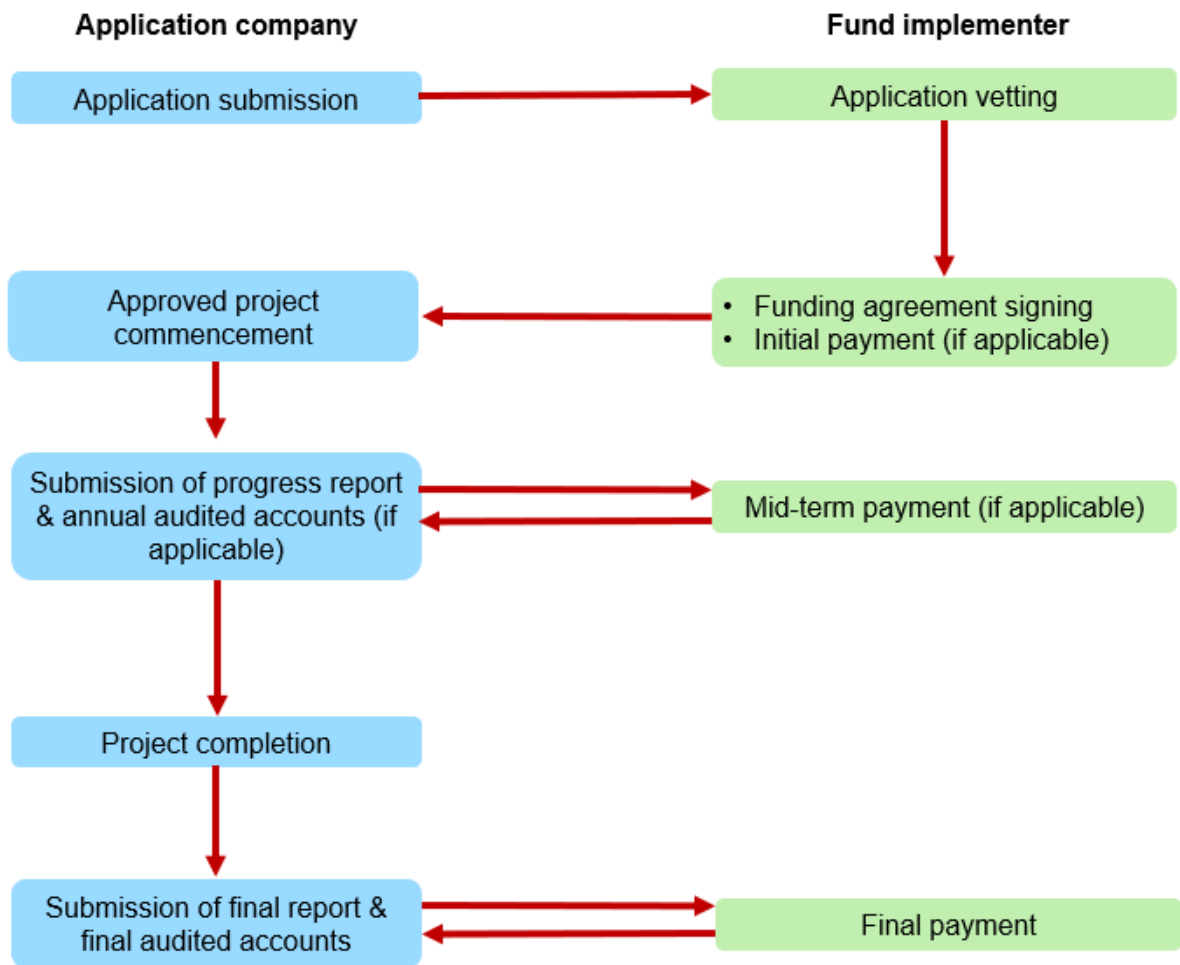
Figure 35. Start-up death valley curve



The Dedicated Fund on Branding, Upgrading and Domestic Sales (the BUD Fund) of HKD1 billion provides a good reference for accelerating funding disbursement. Set up by the Trade and Industry Department of the Government in 2012, the BUD Fund provides funding support for non-listed Hong Kong enterprises to undertake projects to develop brands, upgrade and restructure their business operations in Mainland China, ASEAN and other economies. Applicant companies can receive 75% of approved government funding for projects up to 24 months if they can appoint at least one guarantor to sign a separate guarantee agreement⁴³. **Figure 36** shows the application process of the BUD Fund.

⁴³ The guarantor signing the guarantee agreement should normally be a natural person and a major shareholder of the applicant (i.e., with shareholding of 30% or more). If there is no individual shareholder (direct or indirect) with shareholding of 30% or more, 2 or more individual shareholders who hold 30% or more of the shareholding in aggregate may sign the guarantee on a joint and several basis. If the major shareholder with 30% or more shareholding is not a natural person, the ultimate holding company of the applicant with shareholding of 50% or more may assume the role of a guarantor. If the ultimate holding company is a non-Hong Kong company, the applicant is required to provide a legal opinion from a law firm practising the law of the jurisdiction of that non-Hong Kong company to opine on the due execution and good standing of the guarantor.

Figure 36. Application process of the BUD Fund



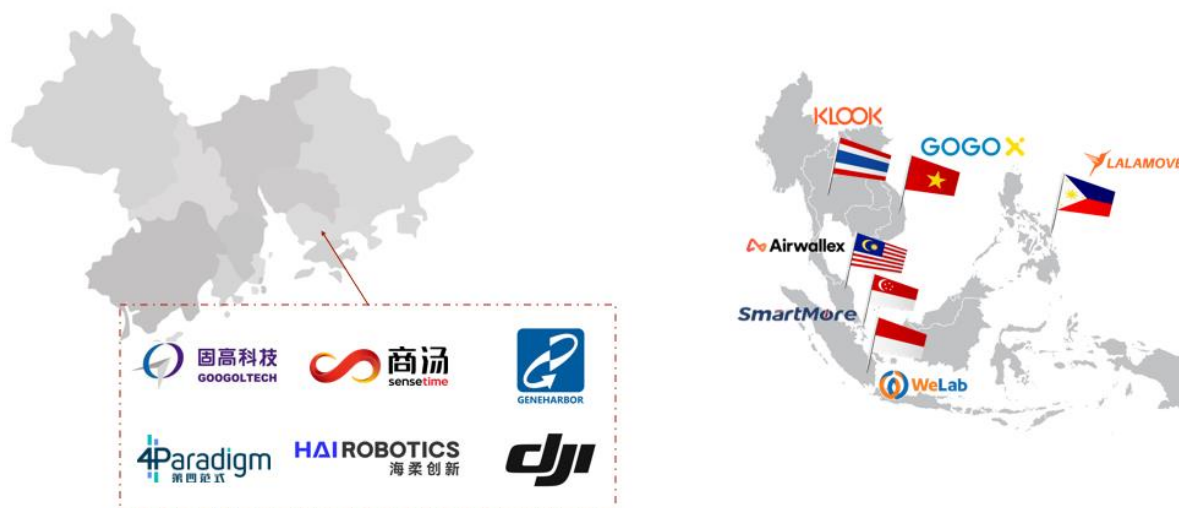
Source: Hong Kong Productivity Council (2024)

Chapter 6: Supporting Start-Up Expansion to GBA Mainland Cities and ASEAN Countries

Because of Hong Kong's small market size, start-ups must look beyond the local market to expand their reach and tap into new opportunities in other markets if they want to achieve substantial growth, attract significant investment, and establish themselves as global players in their respective industries.

During the journey to “go global”, the Guangdong-Hong Kong-Macao Greater Bay Area (GBA)⁴⁴ and the Association of Southeast Asian Nations (ASEAN)⁴⁵ present themselves as promising destinations for Hong Kong start-ups, offering vast opportunities to expand trade, sales, investment, production, and operations. In 2022, the GBA had a total population of over 86 million and a GDP exceeding USD1.9 trillion while the ASEAN had a population of 671.6 million with a GDP of over USD3.6 trillion. In fact, Hong Kong unicorns have expanded their markets in the GBA and the ASEAN, suggesting that the two regions hold immense promise for the continued expansion of Hong Kong start-ups (**Figure 37**).

Figure 37. Examples of Hong Kong unicorns that have expanded businesses in the GBA and the ASEAN



Note: 6 selected Hong Kong unicorns have business operations in Shenzhen within the GBA (left) while the other 6 selected ones have expanded into different ASEAN countries (right)

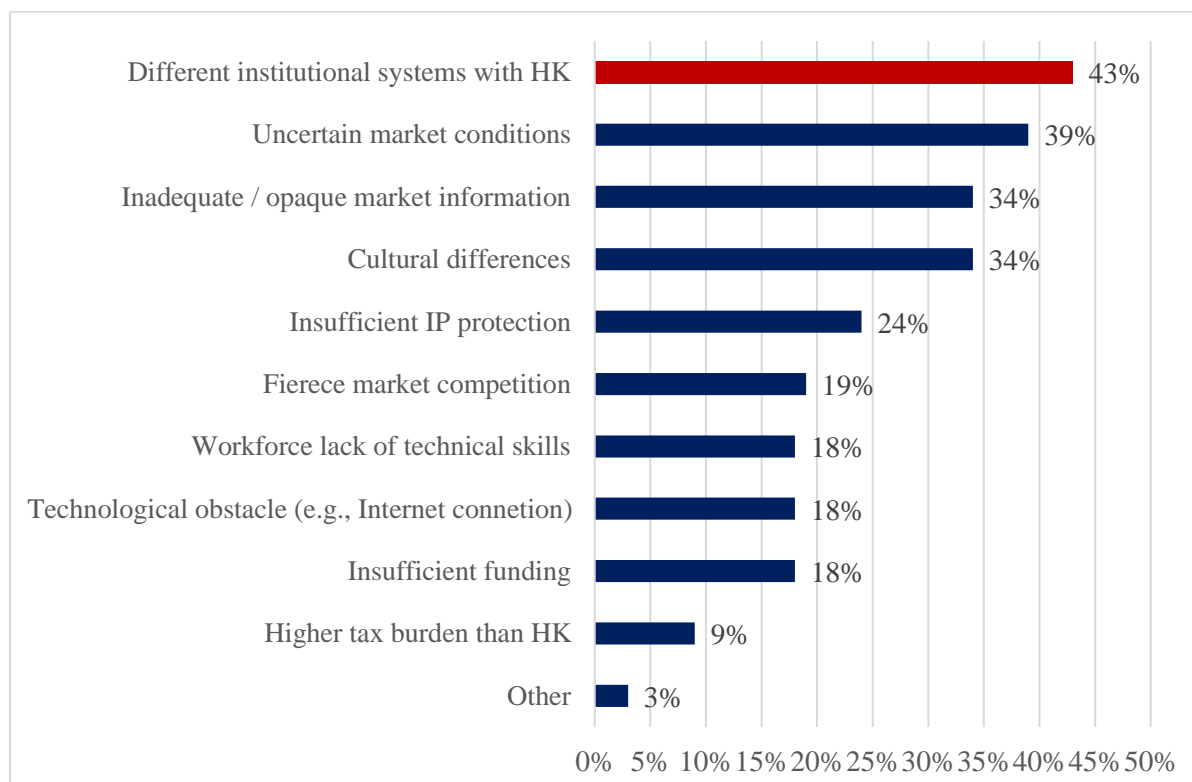
⁴⁴ The GBA comprises the two Special Administrative Regions of Hong Kong and Macao, and the 9 Mainland cities including Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing in Guangdong Province.

⁴⁵ The ASEAN consists of 10 Southeast Asian economies, namely Indonesia, Thailand, Malaysia, the Philippines, Singapore, Brunei, Vietnam, Laos, Cambodia, and Myanmar.

Source: OHKF staff compilation

Previous research on local start-ups in Hong Kong found that 20% of the respondents have established offices in GBA Mainland cities with 71% opting for Shenzhen and 22% choosing Guangzhou.⁴⁶ Another survey on Hong Kong companies showed that Malaysia (68%), Thailand (63%), Singapore (51%) and Indonesia (45%) were the top choices for market diversification of the respondents.⁴⁷ However, venturing into new markets can be challenging. Among various kinds of difficulties, regulatory differences are the biggest barrier hindering Hong Kong start-ups' expansion in the GBA and the ASEAN. Grasping and adapting to local business practices and workflows in the GBA and the ASEAN requires significant effort, often deterring Hong Kong start-ups due to the lack of financial resources, manpower, local networks, etc. **Figure 38** shows that 43% of Hong Kong start-up respondents chose the different institutional systems, e.g., legal and tax systems, in GBA Mainland cities as the largest obstacle impeding market expansion. On the other hand, 77% of Hong Kong companies responded that regulatory barriers, including licenses, quotas, patents or tariffs, are the top challenge when tapping into the ASEAN market (**Figure 39**).

Figure 38. Barriers hindering Hong Kong start-ups' further expansion in the GBA



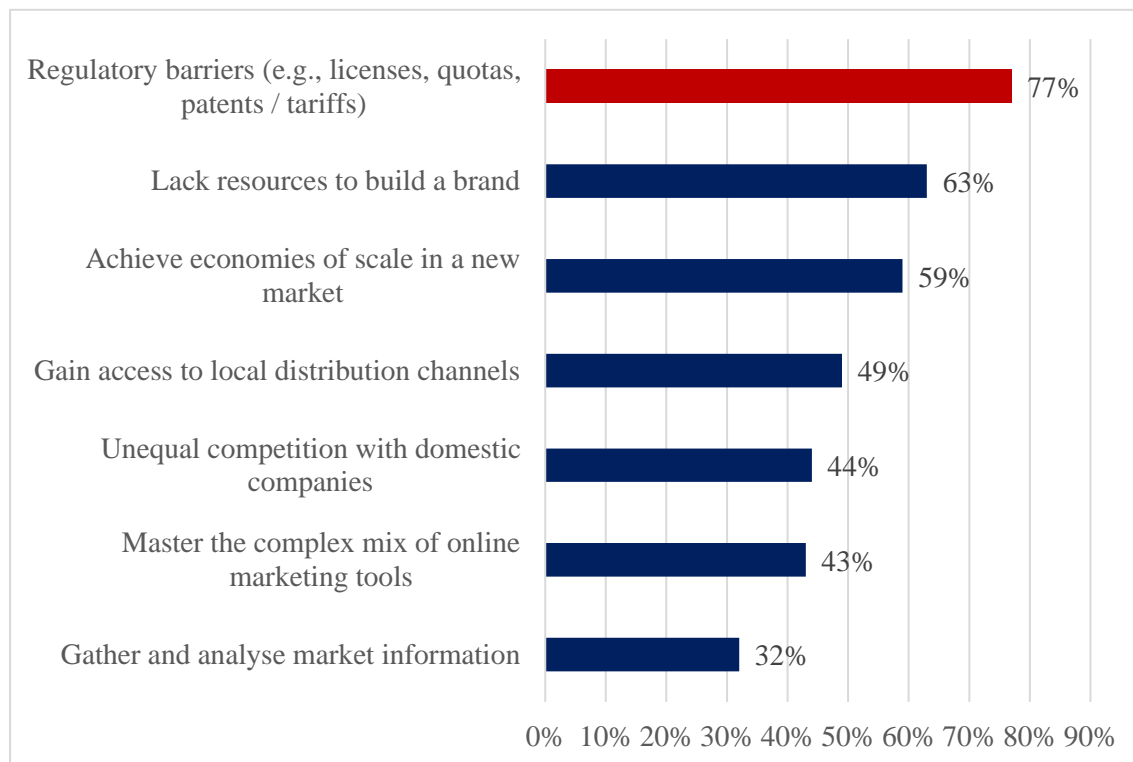
⁴⁶ The Hong Kong Trade and Development Council (HKTDC) surveyed 259 local start-ups in Hong Kong from June to July 2020.

⁴⁷ This trade survey conducted by the HKTDC in June 2020 also found that 25 out of 100 respondents had already established a presence in ASEAN.

Note: % of respondents; multiple selections allowed

Source: HKTDC Start-up Survey 2020

Figure 39. Challenges encountered by Hong Kong companies when entering the ASEAN market



Note: % of respondents; multiple selections allowed

Source: HKTDC (2020)

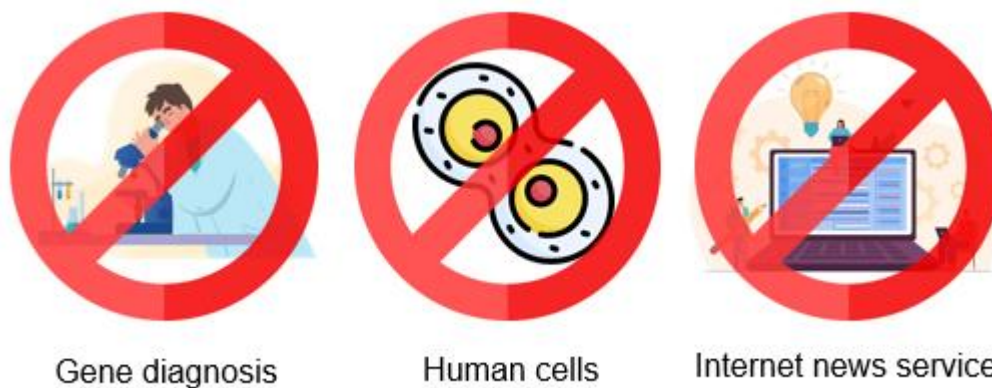
Recommendation 4.1. Relaxing entry restrictions for Hong Kong enterprises in Mainland China

Hong Kong companies currently face certain investment restrictions in Mainland China. Consequently, Hong Kong entrepreneurs may fail to actualise their aspirations on the Mainland even when entrepreneurial opportunities arise there. According to the “Special Administrative Measures (Negative List) for Foreign Investment Access (2021 Edition)”, Hong Kong investors are regarded as overseas investors on the Mainland and are not allowed to access some of the fields of biotechnology and information technology services industries, in which Hong Kong companies have an edge (**Figure 40**). For instance, it is prohibited to invest in the development and application of human cells and gene diagnosis and treatment technologies.⁴⁸ Also, investment in Internet news service, Internet publishing

⁴⁸ Currently, according to the Mainland and Hong Kong Closer Economic Partnership Arrangement, while Hong Kong service suppliers may set up healthcare institutions on the Mainland in the form of wholly-owned entity, or in the form of equity or contractual joint venture with Mainland healthcare institutions or enterprises, they are prohibited to launch services on genetic information, blood collection, pathological data, etc.

service, Internet audio-visual program service, cyberculture operation (except for music), and Internet information dissemination service (except for contents opened up in China’s WTO commitments) are prohibited. Hong Kong is home to many outstanding start-ups engaging in scientific research on advanced therapies, genetic diagnosis and treatment, and other I&T fields. Nevertheless, the restrictions of the Negative List hinder their expansion in Mainland China.

Figure 40. Examples of investment restrictions imposed on Hong Kong enterprises when entering Mainland China

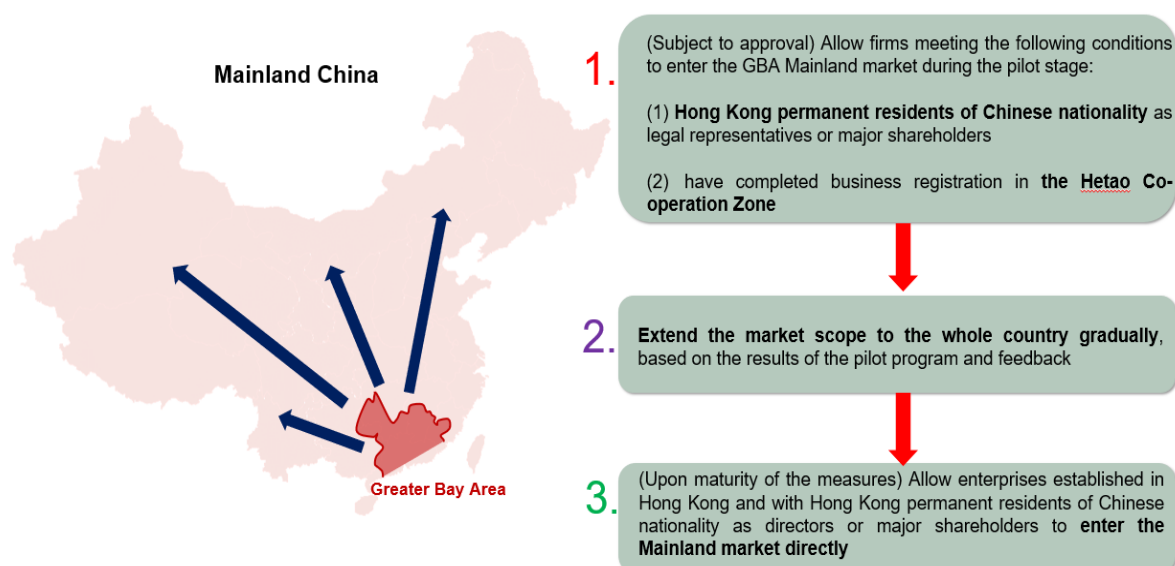


In fact, various important policy measures of science and technology benefitting Hong Kong have been launched in recent years to facilitate the effective cross-border flow of innovation elements between Mainland China and Hong Kong. Take the Hetao Shenzhen-Hong Kong Science and Technology Innovation Co-operation Zone (Hetao Co-operation Zone), which is the convergence point of the Northern Metropolis and the Guangzhou-Shenzhen innovation and technology corridor, as an example. On 29 August 2023, the Central Government promulgated the “Development Plan for Shenzhen Park of Hetao Shenzhen-Hong Kong Science and Technology Innovation Co-operation Zone” (Development Plan for Shenzhen Park), setting out the development positioning of the Shenzhen Park. The Development Plan for Shenzhen Park proposes to moderately relax the scope of business that Hong Kong-funded institutions can carry out in fields such as medical technology, big data and artificial intelligence, robotics, new materials, and microelectronics. Furthermore, the 2024 Chin’s government work report, which was announced on 5 March 2024, also stated that market access restrictions in services sectors, such as telecommunications and healthcare, will be reduced. To facilitate the market expansion of Hong Kong enterprises including start-ups and as mentioned in the research report titled “Unleashing Hong Kong Youths’ Potentials in Technology Innovation to Build a National Engine for Innovation and Entrepreneurship”, jointly published by OHKF and the Torch High Technology Industry Development Center of the Ministry of Science and Technology (Torch Center) in 2022, we recommend that **the Government strive for the Mainland authorities’ gradual relaxation of the entry**

restrictions for Hong Kong enterprises in Mainland China, so that they can be given the same treatment as that given to domestic-funded enterprises in the long run (OHKF, 2022).

As shown in **Figure 41**, the proposed relaxation measures can be carried out step by step and can be roughly divided into the following three steps. The 1st step is to allow firms registered in the Hetao Co-operation Zone and with Hong Kong permanent residents of Chinese nationality as legal representatives / major shareholders to enter the GBA Mainland market, subject to the approval from Mainland authorities. The 2nd step is to gradually extend the market scope to the whole country, based on the results of the pilot programme and feedback. Upon maturity of the measures, the 3rd step is to allow enterprises established in Hong Kong and with Hong Kong permanent residents of Chinese nationality as directors or major shareholders to enter the Mainland market directly.

Figure 41. The proposed three steps in relaxing investment restrictions of Hong Kong enterprises when entering Mainland China



Recommendation 4.2. Reinforcing support on start-up expansion in GBA Mainland cities and ASEAN countries

Expanding the geographical scope of incubation services and offering multi-faceted government support can foster cross-border innovation, entrepreneurship, and collaboration while creating new business opportunities for Hong Kong start-ups and strengthening the regional ties of Hong Kong’s start-up ecosystem with those of GBA Mainland cities and ASEAN countries. In this regard, we suggest that the Government **reinforce support on start-up expansion in GBA Mainland cities and ASEAN countries**.

First, we recommend **expanding the incubation services of HKSTPC and Cyberport in the GBA and the ASEAN**. In fact, Cyberport established the Cyberport Shanghai Representative Office in 2011. Also, HKSTPC has already made the first move to expand in the GBA through the Hong Kong Science Park Shenzhen Branch, which was officially inaugurated on 7 September 2023 and currently houses 16 I&T firms.⁴⁹ As a two-way gateway to the start-up ecosystems in Hong Kong and Shenzhen, the Hong Kong Science Park Shenzhen Branch offers co-working spaces, independent offices, wet/dry laboratories, and MICE⁵⁰ venues with a gross floor area of 31,000 square metres as well as various kinds of incubation services including:

- **Talent Recruitment & Nurturing:** nurturing tech leaders through the training and exchange platform “Talents Resources Centre”;
- **Business Growth & Industrial Expansion:** promoting cooperation between start-ups and innovation companies to develop into Mainland and global markets;
- **University Incubation Network:** creating a network with corresponding universities in the GBA to groom start-ups and talents;
- **Listing & Financing:** assisting firms with funding and growth;
- **Technology Collaboration, Manufacturing & Supply Chain:** supporting innovation firms end-to-end in capitalising GBA opportunities.

Techcode, a global incubator founded in 2014 and headquartered in Beijing, serves as a good example for providing global incubation services. With 30 incubators in 22 places such as Silicon Valley, Berlin, Seoul, Tel Aviv, Helsinki, Beijing, Shanghai as well as Shenzhen, Techcode is the first Chinese incubator to establish an ecosystem from a global perspective. It has signed several major strategic cooperation agreements with governments, enterprises and universities in the United States, Germany, Israel, South Korea, and other countries. Focusing on 6 industries including Artificial Intelligence, Internet of Things, Advanced Manufacturing, New Materials, Healthcare, and Intelligent Connected Vehicle, Techcode is dedicated to global start-up incubation and integration of global innovation resources and has been recognised and praised for its innovative industry incubation model at home and abroad. It has cultivated 1,811 worldwide innovation enterprises with a total valuation of RMB168.8 billion and a total financing amount of RMB13.5 billion. One of its major characteristics is the Techcode Global Unicorn Center, which serves high-growth start-ups valued at over RMB0.3 billion. The service system covers almost every step from entering new markets to successfully going public in China:

⁴⁹ The Hong Kong Science Park Shenzhen Branch is a joint initiative supported by the governments of HKSAR and Shenzhen. It aims at accommodating around 150 firms and paves the way for tech start-ups to enter the Mainland market and go global.

⁵⁰ Meetings, Incentives, Conferences and Exhibitions

- Obtaining government subsidies and preferential policies;
- Accessing financing & strategic investments;
- Engaging with global major corporate clients;
- Providing full services to get listed on the SSE STAR Market.

Building on the experience of the Hong Kong Science Park Shenzhen Branch and referencing the successful example of Techcode, the Government could encourage HKSTPC and Cyberport to set up liaison offices or branches in GBA Mainland cities and ASEAN countries to further support Hong Kong start-ups on seizing GBA and ASEAN opportunities. By establishing liaison offices or branches in GBA Mainland cities and ASEAN countries, HKSTPC and Cyberport can extend their reach as global incubators and provide localised support to Hong Kong start-ups in targeted markets. The diverse and cross-boundary physical presence will also strengthen the connections between the start-up ecosystems of Hong Kong, the GBA, and the ASEAN, further integrating the city's start-up ecosystem with the broader regional landscape.

Second, we suggest **strengthening the support of the Hong Kong Economic and Trade Offices in the ASEAN to Hong Kong enterprises, including start-ups, in the ASEAN**. The Government has established 14 Hong Kong Economic and Trade Offices (HKETOs) overseas under the Commerce and Economic Development Bureau to enhance global understanding of Hong Kong's unique advantages, advance Hong Kong's economic and trade interests, and support overseas enterprises in expanding business in Hong Kong. Currently, there are 3 HKETOs in the ASEAN⁵¹:

1. **The HKETO in Bangkok** is responsible for fostering the bilateral relations between Hong Kong and Thailand, Cambodia, and Myanmar;⁵²
2. **The HKETO in Singapore** aims to strengthen the bilateral relations between Hong Kong and 3 ASEAN countries including Laos, Singapore and Vietnam;⁵³ and
3. **The HKETO in Jakarta** represents the Government in matters between Hong Kong and the ASEAN as a whole. In particular, it handles matters between Hong Kong and 4 ASEAN countries, i.e., Indonesia, Malaysia, Brunei Darussalam and the Philippines. Together with the HKETOs in Bangkok and Singapore, it strives to further strengthen Hong Kong's ties with ASEAN countries and enhance Hong Kong's trade, economic and cultural relations with the ASEAN.

⁵¹ According to the 2024-25 Budget, the Government is also considering establishing an ETO in Kuala Lumpur, Malaysia.

⁵² The HKETO in Bangkok also covers Bangladesh although it is a non-ASEAN country.

⁵³ Though India is not within the ASEAN region, the HKETO in Singapore covers it as well.

At present, the HKETOs in the ASEAN are more focused on developing economic and trade relations and supporting firms interested in setting up or expanding presence in Hong Kong than offering support to Hong Kong companies operating or considering expansion in the ASEAN. To better support Hong Kong firms, including start-ups, on doing business in the ASEAN, the HKETOs in the ASEAN can compile and regularly update key economic and policy information relevant to doing business in the ASEAN region, such as regulatory and legislative updates, trade information, policy interpretation. By providing up-to-date and reliable information, the HKETOs in the ASEAN can assist Hong Kong companies in making informed business decisions and navigating the complexities of the ASEAN markets.

In fact, the Hong Kong Economic and Trade Office in Guangdong (GDETO) under the Constitutional and Mainland Affairs Bureau provides good examples on offering diverse support to Hong Kong enterprises, including start-ups. It currently covers 4 provinces including Guangdong, Guangxi, Fujian, and Hainan. Like other HKETOs, the GDETO aims to promote Hong Kong's economic and trade interests and seeks to attract direct investments into Hong Kong. Apart from promoting bilateral economic and trade liaison, attracting investments into Hong Kong, and other functions, the GDETO emphasises strengthening communication with Hong Kong businessmen operating in the 4 provinces and providing better support by obtaining and disseminating information on the 4 provinces' policies and legislation related to commerce and trade as well as their latest economic developments. Some specific initiatives include:

1. **Provision of economic and trade information:** The GDETO provides practical information on doing business and investing in the Mainland online. Every Friday, it also releases the "GDETO Newsletter," which provides up-to-date information on commerce and trade-related policies and regulations, as well as economic developments in the 4 provinces under its coverage. Additionally, the newsletter highlights major economic and trade activities taking place in the 4 regions. The newsletter is distributed not only to key chambers of commerce, semi-governmental organisations, and various subscribers in Hong Kong but also made available online for convenient access.
2. **Start-up initiatives:** To provide enhanced support for Hong Kong entrepreneurs venturing into Mainland China, facilitating their entry into Mainland markets, and introducing them to local chambers of commerce and business groups, the GDETO initiated the "Start-up Enterprises Directory" in 2022. This online directory focuses on Hong Kong start-ups operating in Guangdong and founded within 5 years. The GDETO also published the "Youth Entrepreneurship Map" to introduce major youth entrepreneurial bases recommended by local authorities of GBA Mainland cities. Moreover, in 2021, it organised the "Online Exchange Session on Youth Entrepreneurship in the GBA" to introduce policies for youth entrepreneurship and Hong Kong Chamber of

Commerce in Guangdong and offer tax and financing information as well as experience sharing for youth entrepreneurs.

3. **Seminars and study missions:** From time to time, the GDETO arranges seminars facilitating the business development of Hong Kong enterprises in the 4 provinces to improve their comprehension of local economic policies, regulations, and investment landscape. The seminars feature representatives from local authorities and industry experts who provide insights into relevant policies and address concerns of Hong Kong businessmen. Also, it organises study missions to the four provinces for Hong Kong enterprises. These missions provide participants with updates on economic and trade developments, and investment environments, and facilitate networking with local governments and business communities.

Recommendation 4.3. Setting up the GoASEAN one-stop platform to offer practical information on entering the ASEAN market

Established in 1966 as a statutory body, the Hong Kong Trade Development Council (HKTDC) aims at promoting Hong Kong's trade in goods and services as well as creating business opportunities, especially for SMEs. It has been dedicated to promoting Hong Kong's unique advantages as a two-way business platform to help Hong Kong firms expand globally. To strengthen support to Hong Kong SMEs in exploring the GBA Mainland market, the HKTDC launched in June 2021 the GoGBA one-stop platform with various practical services including:⁵⁴

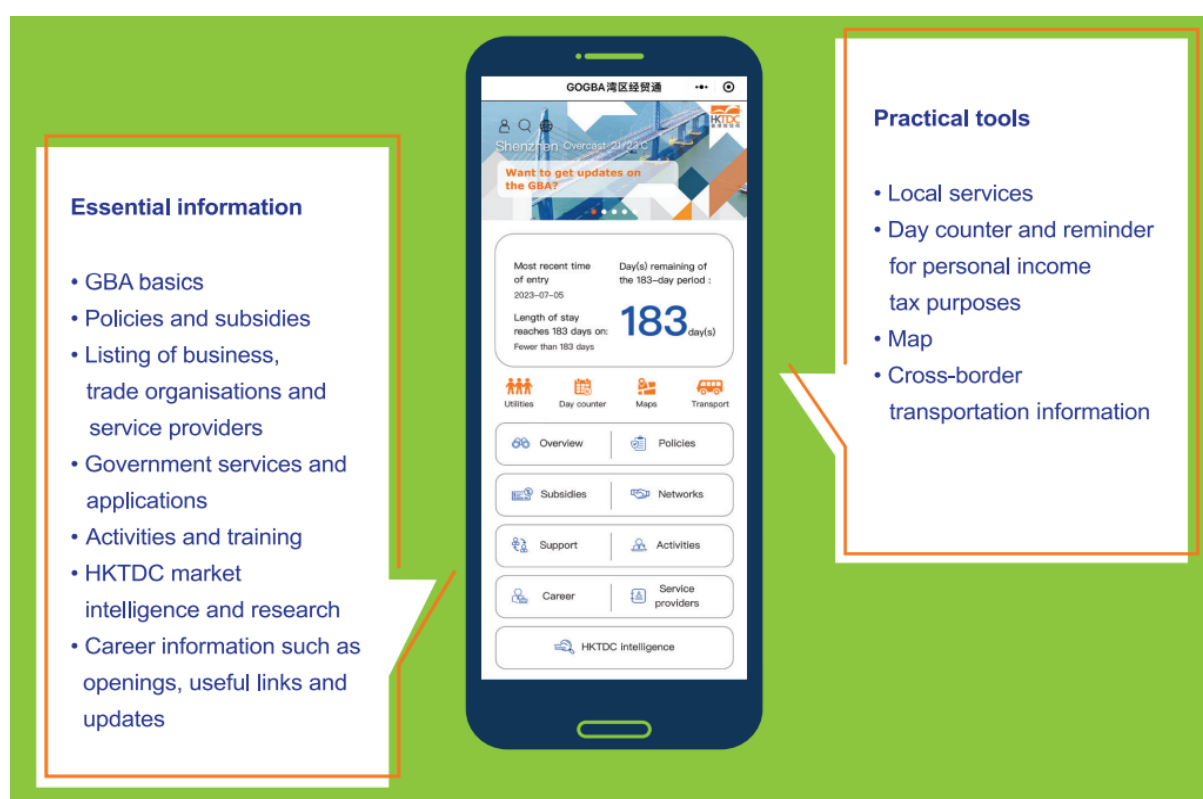
- **Digital platform:** The GoGBA website and the GoGBA WeChat mini-programme provide important GBA business and trade information like market insights, business networks, and practical tools for business trips (**Figure 42**). Practical tools, including weather forecasts, cross-border transportation information, interactive maps, details of public services, and income tax reminders, are also provided.
- **Advisory services and training:** Located in Shenzhen, the HKTDC GBA Service Centre organises activities such as seminars/workshops, professional training and business missions, and provides Hong Kong firms with consultation services, industry-related updates and business matching to improve their understanding of the Mainland's market, regulations, policies, concessions and institutions. Furthermore, the HKTDC has established jointly with its Mainland partners the GoGBA Business Support Centres in Qianhai (Shenzhen), Nansha (Guangzhou), Hengqin (Zhuhai), Dongguan, Zhongshan, Foshan, and Jiangmen to provide Hong Kong companies with

⁵⁴ Apart from the GoGBA one-stop platform, the HKTDC also has 2 offices in Guangzhou and Shenzhen in the GBA respectively as part of its global network.

policy and market consultation services. The HKTDC aims to introduce the support centres in all 9 GBA Mainland cities.

- **Events and activities:** The HKTDC holds various events and activities to facilitate business interactions and networking opportunities. One of the major events is the GoGBA Development Day held in November 2023. The event focused on introducing GBA entrepreneurial and employment opportunities as well as supporting schemes and measures offered by the Government. It also featured presentations by government officials and representatives of relevant organisations, as well as experience sharing by young entrepreneurs to help participants grasp the opportunities of GBA development.

Figure 42. Illustration of information and tools offered by GoGBA WeChat mini-programme



Source: HKTDC

Although the HKTDC offers multi-faceted business support in the GBA Mainland market, it currently lacks such support on a similar scale in the ASEAN region, which has diverse languages and cultures, different regulatory frameworks across countries as well as more fragmented markets and larger populations than those of the GBA.⁵⁵ As navigating these variations and understanding local market dynamics may require significant effort and resources, we recommend that **the HKTDC set up the**

⁵⁵ The HKTDC has 5 overseas offices in Jakarta (Indonesia), Kuala Lumpur (Malaysia), Bangkok (Thailand), Singapore, and Ho Chi Minh City (Vietnam) as well as a consultant office in Manila (the Philippines).

GoASEAN one-stop platform to offer practical information on entering the ASEAN market.

Referencing the successful experience of the GoGBA one-stop platform, the GoASEAN one-stop platform can support Hong Kong enterprises including start-ups on the ASEAN market expansion in the following ways:

1. **GoASEAN digital platform:** The GoASEAN digital platform in the form of a dedicated website and / or mobile application could be launched in collaboration with government offices in different ASEAN countries. The digital platform would serve as a one-stop online resource hub, providing practical information and tools tailored specifically for Hong Kong companies looking to expand into the ASEAN market. For instance, it can provide market insights, including industry trends, consumer behaviour, and regulatory updates across different ASEAN countries. It could also offer practical tools and resources essential for market entry and operations, including cultural guides, information on distribution channels and ASEAN government services, policy and subsidy updates as well as details on customs and import/export procedures specific to each ASEAN country.
2. **Consultant office:** Apart from the current 5 overseas offices and 1 consultant office in the ASEAN, the HKTDC can establish more consultant offices, which are on a smaller scale than its overseas offices, across ASEAN countries in major ASEAN cities or targeted cities of Hong Kong enterprises to form a support network connecting Hong Kong start-ups with partners and consultants in the ASEAN.
3. **Start-up events:** The HKTDC can organise both online and offline start-up events targeting the ASEAN region, such as seminars, workshops, conferences, promotional and business matching activities, exhibitions, and study trips. By participating in these events, Hong Kong start-ups can showcase their innovations, gain exposure, and explore potential collaborations and investment opportunities in the ASEAN market.

Chapter 7: Attracting Global and Regional Talents and Enterprises to Supplement the Start-up Ecosystem

In the rapidly evolving landscape of the global economy, the magnetic pull of a dynamic start-up ecosystem is a key factor in a city's competitiveness and economic vitality. Attracting global and regional talents, along with innovative enterprises, is crucial for injecting diversity, expertise, and creativity into the start-up ecosystem. Established firms play a pivotal role, serving as conduits for the flow of novel technologies and ideas stemming from start-ups. They can facilitate direct integration of cutting-edge technology and expertise through acquisitions, acting as incubators and accelerators that bring mentorship, industry resources and potential funding to the table, and direct calls for collaboration to invite start-ups to forge partnerships that drive innovation, contributing significantly to the entrepreneurial ecosystem.

The infusion of foreign talent also has a vital catalytic role in the growth of a start-up ecosystem, as it brings an abundance of diverse perspectives, specialised skills, and global experiences that can spark innovation and drive competitiveness. The synergy of talent and enterprises not only fuels the engine of innovation but also propels advancements in technology, business models, and market strategies, and elevates Hong Kong's international standing.

Hong Kong's ability to attract and retain global talents is being significantly hampered by the city's prohibitive living and operating costs. The IMD World Talent Ranking 2023, which assesses the economies' capability of cultivating, attracting, and retaining highly skilled workforce for the development of enterprises and the economy, serves as a stark indicator by placing Hong Kong at a middling 32nd place out of 64 economies in terms of its "appeal" to talent (**Figure 43**). This shows a glaring contrast to the rankings of global leaders such as Switzerland (ranked 1st), the USA (ranked 9th), and Singapore (ranked 14th). The high cost of living in Hong Kong is a primary constraint with the Report ranking Hong Kong at 61st out of 64 economies in the cost-of-living index⁵⁶. The ranking underscores a critical vulnerability in Hong Kong's quest to remain competitive on the international stage for global talent, a vital component of a thriving economy for start-ups.

⁵⁶ The cost-of-living index is an index of a basket of goods and services.

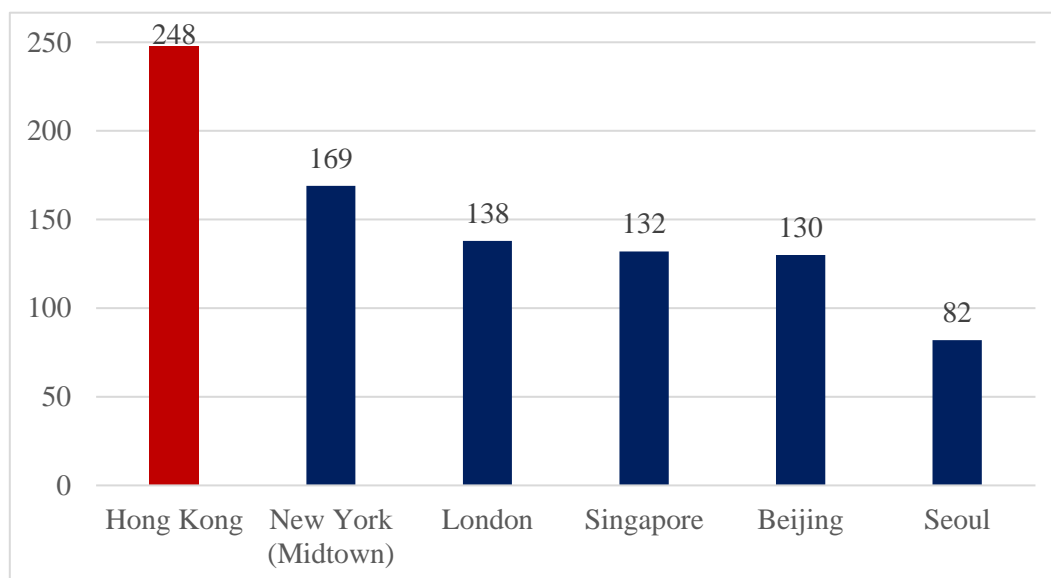
Figure 43. Hong Kong’s ranking in the IMD World Talent Ranking 2023

2023 “Appeal to talents” Ranking	Economies
1	 Switzerland
5	 Germany
9	 USA
14	 Singapore
25	 U.K.
32	 Hong Kong

Source: IMD World Talent Ranking 2023

In addition to the steep living costs, the financial burden of running a business in Hong Kong presents a difficult barrier to aspiring entrepreneurs. The high day-to-day costs incurred by rent, utilities, salaries and wages, office supplies and marketing and advertising costs, deteriorate one’s intention to start a business. While it is commonly known that Hong Kong is the most expensive city to live in with the sky-high residential rents, the rental cost of office spaces is notoriously high as well. As illustrated in **Figure 44**, Hong Kong has an annual net effect cost of USD248 per square foot for prime office space, dwarfing the costs in other global business centres such as New York’s Midtown (USD169 USD per square foot) and London (USD138 per square foot). Such unaffordable costs not only impede the launch of new ventures but also challenge the sustainability of existing businesses, potentially stifling the city’s entrepreneurial spirit and innovation potential.

Figure 44. Annual net effective cost for prime office space, 2022 (USD per square foot)



Note: Rounded up to the nearest digit, data of Q3 2022

Source: Statista (2022)

In light of these high living and business operational costs, the Government must formulate targeted policies to reduce financial burdens and enhance the overall appeal of Hong Kong to both talent and businesses. By creating a more inviting environment for top-tier professionals and pioneering companies, Hong Kong can strengthen and diversify the start-up ecosystem.

Recommendation 5.1: Offering comprehensive support to facilitate talent attraction

To fortify Hong Kong's position as a cradle for start-ups' success, strategic and all-rounded support measures to reduce their financial burden and enhance their settlement can increase global talents' interest in migrating to and developing in the region. **Hong Kong Talent Engage (HKTE) should enhance its existing infrastructure to deliver comprehensive support** that resonates with the unique needs of talents and potential entrepreneurs in the start-up ecosystem.

The Government launched the HKTE online platform in December 2022, which aims to serve as a one-stop online platform for global talents, offering information on talent admission schemes and visa application submissions. To further strengthen talent support, the Chief Executive's 2023 Policy Address announced the establishment of a physical entity of the HKTE to refine talent acquisition strategies and enhance support for skilled professionals in Hong Kong. Instead of being the service provider themselves, the HKTE reaches out to service partners to deliver targeted recruitment and marketing services. Talents with enquiries will have to contact the dedicated teams under the Government's respective Mainland and overseas offices themselves. Despite the effort to deliver online

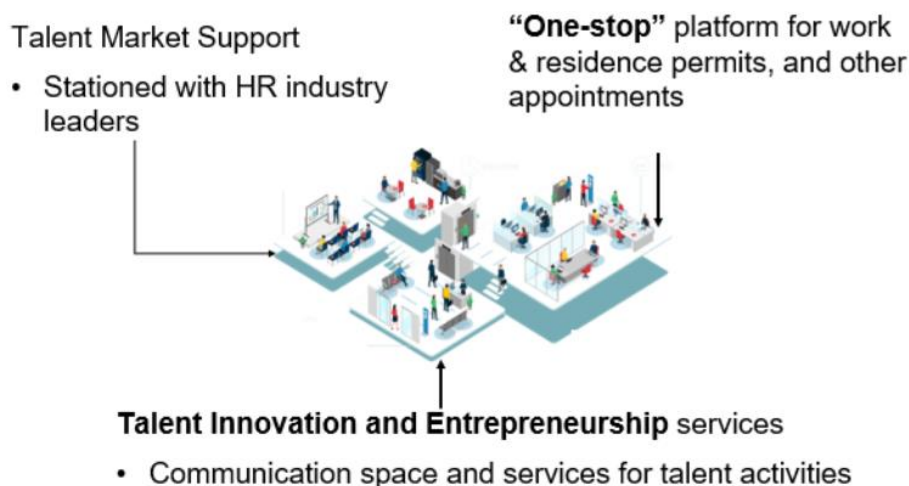
and physical support for talent acclimatisation, the scope of these platforms remains narrowly confined to providing basic information about Hong Kong and serving as a visa-matching tool.

To truly capitalise on HKTE's potential, it should transform into a comprehensive service hub, **offering a suite of services that encompass streamlined administrative procedures, a talent market, and business services**, dedicated to facilitating the relocation, integration, and professional development of international talent cohesively and efficiently. HKTE can invite partnering organisations to provide job market information on-site and organise talent exchange activities, policy seminars, and forums regularly to support the settlement of talent.

The HKTE can establish a "single window" service model akin to the Pudong International Talent Hub (**Figure 45**). Created by the Shanghai Pudong New District Government and relevant authorities' mandate to cultivate talent, the Pudong International Talent Hub provides a one-stop platform for entrepreneurial talent, offering a wide array of services including online and offline consultations, recruitment, and networking events for talent. They have simplified the process for foreign personnel services, allowing for a "one-form application" and "one-network management", enabling applicants to complete a single form for medical check-up appointments, work permits, and residence permits.

A talent market service platform is also provided, where talent can have immediate access to internationally and domestically renowned human resource service agencies, covering recruitment, headhunting, and training, stationed in the hub. A support team is available at the Pudong International Hub to assist foreign professionals and their accompanying family members, allowing them to get access to various information and benefits. Start-up-specific support has also been covered by the talent innovation and entrepreneurship service platform, spaces and accompanying services for activities such as start-up thematic forums, industry policy briefings and project roadshows. Referencing the Pudong International Talent Hub, the HKTE should also consider offering personalised assistance for talent and their families, a critical factor in nurturing a conducive environment for long-term settlement.

Figure 45. The service model of Shanghai Pudong International Talent Hub



Through the construction of comprehensive talent support facilities and services, the HKTE could effectively support incoming entrepreneurial talent, ensuring they have all the resources they need to thrive in Hong Kong's dynamic environment.

In recognition of the high costs of living and business operations in Hong Kong, it is equally vital that the Government mitigates these economic barriers to attract and retain talent. Initiatives such as the provision of talent hostels in strategic I&T hubs like the San Tin Technopole and subsidies for workspace rentals would alleviate financial burdens, making Hong Kong a magnet for international talent and entrepreneurial ventures.

- **Provide affordable talent accommodation in San Tin Technopole**

The influx of global talent to the San Tin Technopole will inevitably spark a surge in demand for affordable accommodation. The Government must anticipate and meet this demand by significantly expanding the hostel initiative beyond the current offerings of HKSTPC's InnoCell⁵⁷, which currently offers 500 units for its incubatees and non-local I&T talent at 60% of market rental rates and has reached an occupancy rate of 95%. With the InnoCell nearing full capacity, it clearly indicates the pressing need for more such facilities. Scaling up the provision of hostels, with competitive rental levels set below the market rent of similar properties nearby, would effectively erase the financial barriers and ensure high-quality living conditions for talents, facilitating their integration into the local community and support Hong Kong's ability to attract the best and brightest minds. Proximity to key I&T clusters will further enhance the attractiveness of these hostels and promote synergies among professionals who are likely to engage in synergistic partnerships, fostering an environment that is conducive to collaboration and innovation.

⁵⁷ The InnoCell at Kowloon West provides an additional of 200 units.

- **Subsidise working space rental expenses**

The escalating costs of workspace rentals in Hong Kong impede the establishment and growth of businesses, particularly for start-ups and small enterprises. The Government can provide subsidies for leasing as it is often the second-largest expense for businesses after payroll. By helping cover a part of workspace costs, the Government could not only lower the barrier to entry but also empower entrepreneurs to allocate more resources toward research and development, market expansion, and talent acquisition.

With reference to the “Social Innovation Co-working Space Subsidy Scheme” launched in 2018 by the SIE Fund and the enhanced scheme in 2020, which subsidises social entrepreneurs and ventures for co-working spaces with a cap of HKD6,000 per month, and up to HKD144,000 within the subsidy period of no longer than 36 months on a reimbursement basis.

The working space subsidy model can be accompanied by a tiered system that takes into account the maturity of the business to ensure that the most vulnerable early-stage start-ups can receive more substantial support. The amount of subsidy can decrease proportionally as businesses mature and become more financially robust. It should also be reviewed and adjusted periodically to reflect the changing rental market and economic conditions.

This strategic approach undertaken by the Government, through expanding talent support services of the HKTE, supplying affordable talent hostels in the San Tin Technopole and subsidising workspace rental costs, directly addresses one of the most significant financial challenges, i.e., the high costs of living and doing business, that deter talent from establishing roots in Hong Kong. These strategies not only remove financial barriers faced by talent and entrepreneurs in Hong Kong, and enhance its appeal as a dynamic and supportive environment for international professionals and entrepreneurs.

Recommendation 5.2: Providing tax incentives to start-ups and strategic enterprises

To cultivate a dynamic entrepreneurship ecosystem, the presence of large corporations and a variety of start-ups are instrumental. Larger firms play a pivotal role in propelling start-ups' success and innovation, not just as mentors or investors, but also as co-innovators alongside start-ups. A self-sustaining environment composed of start-ups, growth companies, experienced mentors and venture capitalists, provides a fertile innovation ground for start-ups to bloom. Countries worldwide have implemented different types of tax concessions to attract enterprises (**Appendix 5**). Since 2018, Hong Kong has implemented a two-tiered tax regime, cutting the profit tax rate from 16.5% to 8.25% for the first HKD2 million of assessable profits for corporations. This change benefits all business entities,

particularly SMEs and start-ups. However, it offers limited assistance to large corporations since profits above the threshold are still taxed at 16.5%. To further boost Hong Kong's appeal to global businesses and support the growth of its start-up economy, special tax treatment should be offered to enterprises that provide strategic value in developing a “headquarters economy”.

Therefore, we recommend the Government to **offer generous tax incentives, in particular lowering corporate tax rates, which can serve as a powerful tool to lure start-ups with the potential to become unicorns, and strategic enterprises to set up regional and international headquarters in Hong Kong**, to complete the start-up ecosystem. This approach has been successfully employed in other regions, such as Mainland China and Singapore. The Ministry of Science and Technology, Ministry of Finance and State Administration of Taxation issued the “Administrative Measures for Determination of High and New Tech Enterprises”⁵⁸ in 2008, allowing the “Recognised high-tech enterprises” with strong technical innovation and development capabilities, and meet specific criteria such as R&D expenditure and income from high-tech products, are entitle to tax breaks and preferential policies⁵⁹, including a reduced corporate income tax rate from 25% to of 15%. This policy effectively draws high-value I&T companies to the region. One of the cases is WeLab, a Hong Kong unicorn, which opted to set up its headquarters in Qianhai, Shenzhen. Benefiting from substantial R&D and patent application subsidies, incubation allowances, and enjoying the lowered corporate tax rate accorded to "Recognised High-tech Enterprises" at both national and Shenzhen provincial levels, and enable WeLab’s expansion into the Mainland and international markets.

Singapore's success in attracting global giants, such as Google, FedEx and BMW, to set up regional headquarters within its borders shows the effectiveness of targeted tax incentives. The Singaporean Government launched the Regional Headquarters Award (RHA) and International Headquarters Award (IHA) schemes to attract international firms to establish their operations in Singapore. Under the RHA, qualifying firms enjoy a reduced tax rate from the regular 17% to 15%⁶⁰ for three to five years, contingent on fulfilling criteria such as minimum paid-up capital, employment of a skilled workforce (with at least 75% being skilled workers), salary benchmarks, and incurring additional SGD 2M business expenses. Companies that exceed the RHA's baseline requirements, demonstrate extensive capital and market share, and move headquarters operations to Singapore may qualify for the IHA, which includes bespoke incentive packages featuring even lower concessionary tax rates ranging from 5 – 15%⁶¹ on eligible earnings.

⁵⁸ 《高新技術企業認定管理辦法》

⁵⁹ Preferential policies vary across provinces and cities.

⁶⁰ The RHA offers a concessionary tax rate of 15% on incremental qualifying income from abroad.

⁶¹ The tax rate of the IHA is customised on the level of commitment and as negotiated with the Singapore Economic Development Board.

Drawing from these successful international models, the Government can consider **reducing the corporate tax rate, potentially from the existing 16.5% to a more competitive range of 5-15%**⁶², to attract enterprises worldwide. This rate adjustment would be contingent upon the degree of economic contribution these enterprises offer. To qualify for the preferential tax treatment, companies would need to align with the strategic development "eight centres", ensuring they operate within sectors deemed pivotal to Hong Kong's economic development and the nurturing of a vibrant start-up ecosystem. A comprehensive set of eligibility conditions for lower tax rates can include:

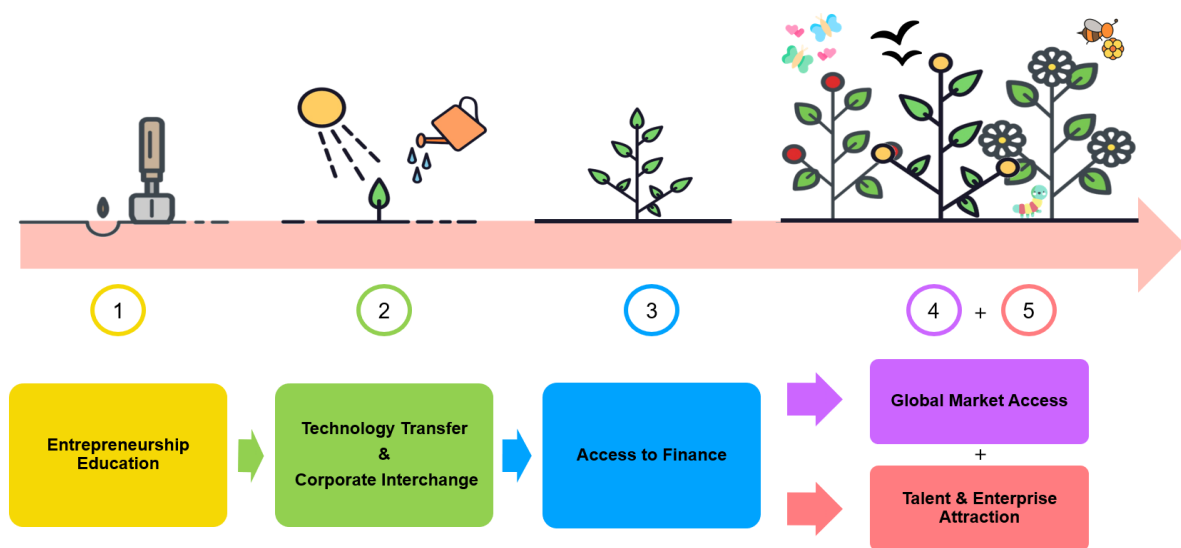
- the company is strategically valuable for the development of the "eight centres";
- employment of a certain percentage of local technical and professional staff;
- a commitment to increase business expenditure in Hong Kong;
- a required minimum of paid-up capital during the incentive period;
- provision of headquarters services to affiliated entities outside of Hong Kong.

By implementing these targeted tax incentives, Hong Kong can not only attract more foreign enterprises but also ensure that their operations contribute meaningfully to the economic landscape and support the burgeoning entrepreneurial environment. Clear parameters should be established to maximise the effectiveness of tax incentives and ensure that the benefits are extensive and impactful.

⁶² In 2021, Hong Kong is committed to implementing the OECD's Inclusive Framework on Base Erosion Profit Shifting (BEPS) 2.0, starting in 2025. BEPS 2.0 ensures that large multinational enterprise (MNE) groups with consolidated annual revenue of at least EUR750 million pay a global minimum tax of at least 15% on income derived by their constituent entities in every jurisdiction where they operate, thereby putting a floor on competition over corporate income tax. Therefore, the recommendation to reduce the corporate rate to under 15% will only apply to MNEs with annual revenue under EUR750 million.

Chapter 8: Conclusion

Hong Kong's strategic position as a free economy with robust infrastructure, research capabilities, and access to global markets makes it an ideal hub for start-ups. This report has put together 14 policy recommendations addressing five critical areas — education, technology transfer, finance, market access, and talent and enterprise attraction, all aimed at unlocking Hong Kong's potential as a cradle for successful entrepreneurship. Nurturing local entrepreneurial talent via entrepreneurship education, facilitating technology transfer and corporate exchange, as well as improving financial access for entrepreneurs, are key to increasing start-ups' success rates. Strategic measures to expand into GBA Mainland cities and ASEAN countries, and attract global and regional talents and enterprises are critical to foster a vibrant start-up ecosystem in Hong Kong. Concerted efforts from both private and public sectors are required to drive policy changes and achieve its goal. Collaboration between the public and private sectors is imperative for driving policy changes that will propel Hong Kong to become a leading hub of innovation and entrepreneurship.



Appendices

Appendix 1. List of entrepreneurship-related academic programmes offered by 8 UGC-funded universities

Universities	Common Core Courses
CityU	Foundations of Innovation and Entrepreneurship
	Social Entrepreneurship and Innovation
CUHK	Anatomy of an Entrepreneur
	Design Thinking Approach to Innovation
	Startup Exploration
HKBU	Creative Entrepreneurship
	Entrepreneurship, Creative Thinking and Innovations in New Ventures
	Entrepreneurship in the Innovation Era
	Social Innovation and Entrepreneurship
HKU	Entrepreneurship: Global and Social Development
	Innovation and Entrepreneurship: Experiential and Cultural Learning Opportunities in Israel ⁶³
	Social Entrepreneurship for Social Impact
HKUST	Entrepreneurship 1001
LU	Entrepreneurial Spirit and Opportunities
	Innovation and Entrepreneurship for Global Grand Challenges
	Bachelor's degree
CUHK	B.Sc. in Biotechnology, Entrepreneurship and Healthcare Management
EdUHK	BSocSc in Social Entrepreneurship and Development Studies
HKU	BBA in Entrepreneurship, Design and Innovation
HKBU	BBA - Entrepreneurship and Business Innovation Concentration
LU	BBA in Human Resource Management and Entrepreneurship
PolyU	BA in Social Policy and Social Entrepreneurship
	Innovation and Entrepreneurship ⁶⁴
	Minor Programmes
CityU	Engineering Entrepreneurship
	Innovation Management and Entrepreneurship
CUHK	Entrepreneurship and Innovation
EdUHK	Social Entrepreneurship and Development Studies
HKBU	Entrepreneurship
	Entrepreneurship and Business Innovation

⁶³ Common core microcredential course

⁶⁴ As a secondary major

	Business Innovation
HKU	Science Entrepreneurship
HKUST	Entrepreneurship
LU	Entrepreneurship
PolyU	Innovation and Entrepreneurship
	Social Policy and Social Entrepreneurship
	Master's Programmes⁶⁵
CityU	Msc in Venture Creation ⁶⁶
HKBU	MSc in Entrepreneurship and Global Marketing
HKU	MSc in Engineering (Innovative Design and Technology)
HKUST	MSc in Technology Leadership and Entrepreneurship
LU	MA in Social Entrepreneurship and Innovation Management
	MSc in Business Innovation and Entrepreneurship
	PhD
CityU	PhD by Innovation
HKU	HKU-BICI Entrepreneurship Joint Educational Placement Programme for PhD

Note:

1. EdUHK stands for Education University of Hong Kong and LU stands for Lingnan University.
2. BICI stands for Beijing Institute of Collaborative Innovation.

⁶⁵ Other than the Master of Business Administration programme

⁶⁶ To be launched

Appendix 2. Selected financial data of Cyberport and HKSTPC's annual reports

Selected financial data from Cyberport 2021/22 Annual Report (Consolidated Statement of Profit or Loss for the year ended 31 March 2022)

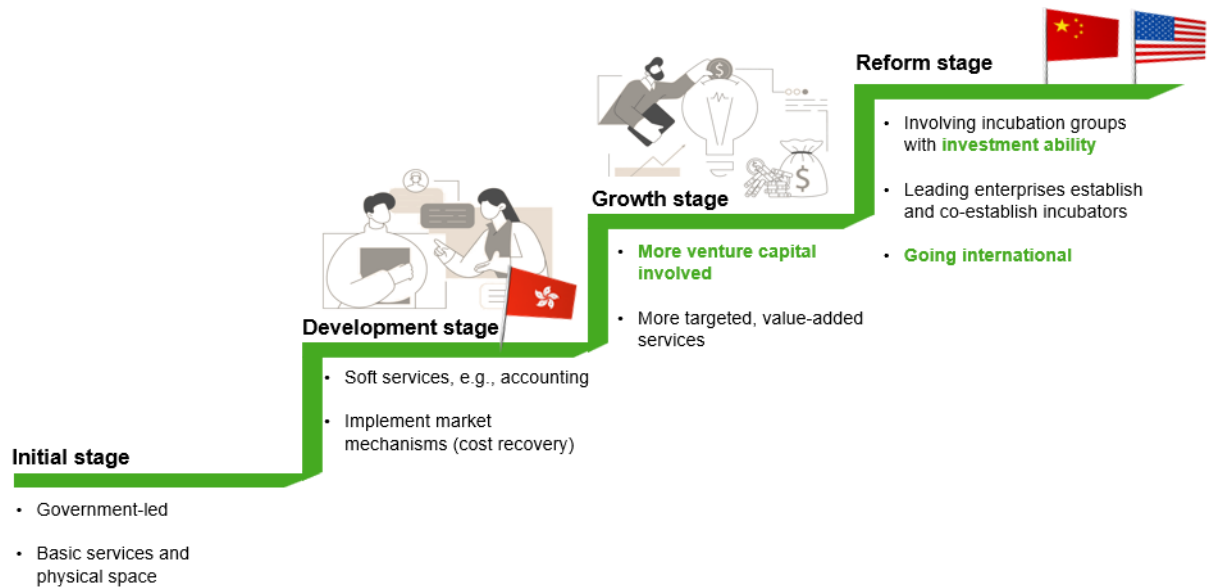
	HKD	% of total revenue
Rental income	274,900,383	66%
Revenue from contracts with customers	124,766,786	30%
Loss for the year	219,273,108	53%
Total revenue	416,817,592	

Selected financial data from HKSTPC 2022-2023 Annual Report (Consolidated income statement and other comprehensive income for the year ended 31 March 2023)

	HKD	% of income
Gross rental income	1,051,472,000	38%
Property management fee, air-conditioning and support facility income	312,201,000	11%
Surplus/(Deficit) and total comprehensive income for the year	220,080,000	8%
Income	2,758,010,000	

Appendix 3. Characteristics of each phase of development of incubation

Figure 19. The role of the incubator transformed at different stages



1. Initial Stage:

The initial stage is marked by government-led efforts. Incubators are scarce and often act as “second landlords”, providing start-ups with space and basic facilities. Incubation is considered an extension of government functions and their primary goal is to utilise idle space to alleviate the high unemployment rate. Incubators lack professional services, and their income is mainly derived from rent and property service fees.

2. Development Stage:

Incubators gradually expand their functions, moving towards the specialisation of services tailored to the needs of various start-ups. Incubators begin to provide value-added soft services, such as management consulting, accounting and business training. They operate under market mechanisms and the involvement of capital to some extent. Incubators act as “waiters”, servicing start-ups’ business development. Currently, Hong Kong’s incubation ecosystem is struggling to move beyond the development stage to the growth stage.

3. Growth Stage:

Active involvement of venture capital and diversified service forms, signalling the further evolution of the incubation ecosystem. With the increase in competition rooted in the rise in the number of incubators, incubators start to cater to a broader range of start-ups and embrace a variety of service models to support their growth. The government steps back and takes a more hands-off approach regarding incubation. In Mainland China, this stage was synonymous with the “Mass

Entrepreneurship and Innovation Initiative”⁶⁷ in 2014, incubators in Mainland China taking on the role of “mentors” to provide more targeted, value-added services and guidance with the explosive growth in the number of incubated start-ups and entrepreneurial teams.

4. Reform Stage:

The emergence of business incubation groups with investment abilities, acquiring the characteristics of venture capital and incubators, has been witnessed. For example, U.S.-founded global incubator, TechStars, receives 6% equity of a start-up in exchange for the services provided by their Techstars Accelerator Programs. The integration of private incubators with venture capital also offers a more diversified spectrum of financing options as incubators will invest directly in their resident companies. Such a model not only drives the growth of start-ups but also creates a mutually beneficial ecosystem where both incubators and start-ups can thrive.

Incubation groups provide comprehensive support in enterprise development strategy, brand management, and corporate governance structure. Leading enterprises also play a part in the ecosystem, either through self-built or co-built incubators, and actively creating start-up-related projects and campaigns. Another significant development has been the internationalisation of Chinese incubators. TusHoldings, the successor of the TusPark Development Center, expanded their full-chain technology enterprise incubation and investment system to TusPark in Cambridge UK, signalling a more global outlook in the international start-up ecosystem.

⁶⁷ 大眾創新，萬眾創業

Appendix 4. Listing standards of SSE STAR Market

	1	2	3	4	5
Financial Indicators	<ul style="list-style-type: none"> • Market value • Net profit • (Operating revenue) 	<ul style="list-style-type: none"> • Estimated market value • Operating revenue • Total share of R&D investment 	<ul style="list-style-type: none"> • Estimated market value • Operating revenue • Net cash flow from operation 	<ul style="list-style-type: none"> • Estimated market value • Operating revenue 	<ul style="list-style-type: none"> • Estimated market value • Other indicators
Estimated market value	No less than RMB1 billion	No less than RMB1.5 billion	No less than RMB2 billion	No less than RMB3 billion	No less than RMB4 billion
Net profits	Net profit for the last 2 years is positive and cumulative net profit is no less than RMB50 million	Net profit for the last year is positive	/	/	<ul style="list-style-type: none"> • The main business or products need to be approved by the relevant state departments.
Operating revenue	/	No less than RMB100 million in the last year	No less than RMB 200 million in the last year	No less than RMB300 million in the last year	<ul style="list-style-type: none"> • The market is huge, and the issuer has achieved initial progress.
R&D Investment	/	/	R&D investment accounts for no less than 15% in the accumulative operating revenue in the last 3 years	/	<ul style="list-style-type: none"> • Pharmaceutical companies need at least one core product approved for phase II clinical trials.

Net cash flow from operation	/	/	/	No less than RMB100 million in the last 3 years	<ul style="list-style-type: none"> Other companies that meet the positioning of the STAR Market should have obvious technical advantages and meet the corresponding conditions.
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Note: Where an applicant applies for listing on the SSE STAR Market, its market value and financial figures shall meet at least 1 of the 5 criteria above.

Source: Shanghai Stock Exchange

Appendix 5. Examples of tax incentives conducive to tech-enterprises attraction

Tax incentive on	Practices of other places	Hong Kong
R&D expenditure	<p>Japan:</p> <ul style="list-style-type: none"> • Tax credit: large corporation: 6%-14%; SMEs: 12%-17% <ul style="list-style-type: none"> ○ Cap: 25% (40% for eligible R&D venture corporations) of corporate tax liability ○ Collaborative or outsourced R&D with a higher tax credit rate (20%-30%), including joint research between companies and IP royalties paid to SMEs <p>US:</p> <ul style="list-style-type: none"> • Tax credit: Federal R&D tax credit (unused tax credit can be carried forward for up to 20 years) <ul style="list-style-type: none"> ○ R&D activities may be contracted to eligible small businesses <p>China:</p> <ul style="list-style-type: none"> • Pre-tax deductions: the ratio of extra deductions on R&D expenses incurred by manufacturing firms raised to 100% 	<ul style="list-style-type: none"> • Enhanced tax deduction for qualified R&D activities <ul style="list-style-type: none"> ○ Scheme covers only related payments made to designated local research institutions (only 40, most (75%) are universities and public research institutions) and those incurred in-house locally
Acquisition cost of asset	<p>Italy:</p> <ul style="list-style-type: none"> • Tax credit: for purchase of new high-tech assets and software related to Industry 4.0 (15%-40% of purchase cost) <p>Japan</p> <ul style="list-style-type: none"> • tax credit or taxable income deduction: for acquisition cost of advanced technologies assets <p>Singapore:</p> <ul style="list-style-type: none"> • Expense deducted from taxable income: depreciation allowance at 25% of qualifying capital expenditure of manufacturing and logistics sectors 	N/A

	<p>US:</p> <ul style="list-style-type: none"> • Deducted from taxable income: Election to expense certain depreciable business assets” & “Bonus” depreciation 	
Income	<p>South Korea:</p> <ul style="list-style-type: none"> • Tax credit: exemption of 50% of tax on gains from technology transfer; 25% of tax on income from patent lease (for SMEs) 	<ul style="list-style-type: none"> • “Patent box” (to be submitted to LegCo in 2024): <ul style="list-style-type: none"> ○ Provide a lower corporate tax rate for income earned from commercialisation of local IP rights
Start-ups	<p>US:</p> <ul style="list-style-type: none"> • Pre-revenue start-ups: allow start-ups with no deferral tax liability to use the R&D tax credit to offset the employer contribution of social security tax 	N/A
General	<p>China:</p> <p>Tax rate: lower tax rate (15%) than the ordinary rate of 25% for qualified "High- and New-Technology Enterprise"</p>	N/A

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Our Hong Kong Foundation (OHKF) is a non-government, non-profit organisation founded in November 2014 by Honorary Chairman Mr. Tung Chee-hwa, former Vice Chairman of the National Committee of the Chinese People’s Political Consultative Conference and former Chief Executive of Hong Kong SAR. OHKF aims to contribute to Hong Kong’s prosperity and stability as well as its sustainable development under the “One Country, Two Systems” principle. The Foundation has three operating units: the Public Policy Institute that focuses on public policy research, advocacy, and engagement as a think tank; the Academy of Chinese Studies that promotes traditional Chinese culture and tells the stories of China today, and Hong Kong Chronicles Institute that produces a book series about Hong Kong’s development over time for preserving history and educating the people. About Alibaba Hong Kong Entrepreneurs Fund



About Alibaba Hong Kong Entrepreneurs Fund

Alibaba Hong Kong Entrepreneurs Fund (“AEF”) has been launched by Alibaba Group since November 2015. To vitalize the development of innovation and technology, AEF’s mission is to support young people in Hong Kong to fulfil their start-up dreams, while contributing to the community. Exploiting a pioneering and sustainable model, AEF aspires to bolster innovation and entrepreneurship in order to help Hong Kong stay vibrant and emerge as an international innovation and technology hub. As part of its investment program, AEF invests in early-stage technology start-ups with innovative business models through AEF Hong Kong Fund and AEF Greater Bay Area Fund. AEF also provides start-ups with strategic guidance and business networks via a diversified pool of mentors and Alibaba’s ecosystem as a result of helping them expand their businesses locally and internationally. For more information, please visit the website: <http://ent-fund.org>.

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