Demographic Changes and Long-term Asset Markets

Opportunities and Developments in Hong Kong

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Contents

Foreword

People in Hong Kong are living longer and healthier lives. Therefore, their plans must include longer lives. Because financial assets are the major source of income during retirement, current demographic trends will exert a gradual but significant impact on the long-term asset markets in Hong Kong.

Hong Kong's financial markets provide a broad range of long-term investment options for retirement planning. Apart from the vibrant equity and bond markets, Hong Kong is actively promoting alternative investments such as private equity and infrastructure financing. To better adapt to demographic trends, Hong Kong also launched the Mandatory Provident Fund System and the 'HKMC Retire 3' (the Reverse Mortgage Programme, the HKMC Annuity Plan, and the Policy Reverse Mortgage Programme), which have significantly expanded the menu of retirement solutions available to retail investors.

This report offers a comprehensive overview of current and future demographic trends in Hong Kong, shedding light on their implications for the demand for long-term assets. To provide quantitative insights, the Hong Kong Institute for Monetary and Financial Research (HKIMR) commissioned a study to project the growth in potential demand for long-term assets in Hong Kong due to demographic trends over the next 30 years. The report then explores the supply of long-term assets offered by Hong Kong's financial markets. To this end, the report discusses the results of a survey commissioned by the HKIMR, which highlights the business opportunities and challenges in the long-term asset markets that will be brought about by the demographic changes. It also explores how market participants have responded to recent trends, including the rising popularity of environmental, social, and governance (ESG) assets, the Guangdong–Hong Kong–Macao Greater Bay Area initiative, and the digitalisation of financial services, so as to meet customers' changing investment needs. It concludes by suggesting ways to facilitate further development of Hong Kong's long-term asset markets amidst demographic transition.

Because of its robust infrastructure and world-class pool of professional talent, Hong Kong is well positioned to capture the opportunities created by its shifting population dynamics. We are optimistic that the future development of the long-term asset markets in Hong Kong will further facilitate residents' retirement planning.

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Executive Summary

Population ageing has been a major global trend in the past few decades and is expected to continue. Hong Kong is undergoing such a transition: the median age of its population is expected to reach 55 in 2049, rising from 45.5 in 2019. This trend is increasing demand for long-term assets, which are defined in this report as investments with the objective of meeting future expenditures after retirement and an investment horizon tied to the long-term nature of the liabilities. The financial markets in Hong Kong offer a wide variety of financial products to long-term investors.

This report provides an overview of current and future demographic trends in Hong Kong and the Asia-Pacific region and projects the growth in demand for long-term assets arising from population ageing. It reviews the various long-term assets provided by the local markets and gathers the insights of market participants in Hong Kong through a survey and interviews commissioned by the HKIMR. The report also highlights key opportunities for market participants, such as the increasing popularity of environmental, social, and governance (ESG) assets, the development of the Guangdong–Hong Kong–Macao Greater Bay Area (GBA), and the digitalisation of financial services. The report concludes by suggesting ways to promote the healthy development of the long-term asset markets in Hong Kong.

The population of Hong Kong is undergoing a sustained increase in life expectancy and decline in fertility rate, in line with other major jurisdictions around the world. Economic theory suggests that individuals tend to accumulate wealth in their working age and then deplete their assets after retirement, which creates the need to make long-term investments at different stages of life. In view of this, the HKIMR commissioned a study to explore how population ageing will affect the demand for long-term assets in Hong Kong. The study reveals two opposite drivers of this demand. First, as an increasing fraction of the population approaches the retirement age, their stock of wealth and demand for long-term assets increase. Second, Hong Kong's population growth is projected to slow down and turn negative within two decades, which will dampen the demand for long-term assets. **This study finds that demographic trends alone will result in an overall 15% increase in the demand for long-term assets from 2020 to 2049. The growth in demand will be even larger, up to nearly 32%, due to policies aimed at attracting young talent from outside Hong Kong.** Moreover, whereas currently around 70% of the demand for long-term assets is from people before retirement, in 30 years, around 45% of the demand will come from people after retirement.

The financial markets in Hong Kong offer a broad range of assets with attractive features as long-term investments, such as equities, bonds, residential property and reverse mortgages, annuities, and policy reverse mortgages. Retail government bonds, such as iBonds and Silver Bonds, offer stable and guaranteed returns; they have been well-received by the public, with significant oversubscriptions. 'HKMC Retire 3', which comprises the Reverse Mortgage Programme, the HKMC Annuity Plan, and the Policy Reverse Mortgage Programme (a loan arrangement that uses life insurance policy as collateral), together with the Qualifying Deferred Annuity Policy, offer alternative solutions for Hong Kong residents to generate lifelong streams of income after retirement. This report identifies several factors that will influence the future development of the long-term asset markets in Hong Kong, including the development of the local bond market, opportunities for cross-boundary investments with Mainland China, the investment preferences of local retail investors, and the protracted low interest rate environment.

The report highlights that major pension funds and insurers worldwide are increasingly making

allocations to green and sustainable assets, and high-net-worth individuals are also expressing interest in ESG products. This is consistent with the accumulating evidence that ESG assets, compared with conventional assets, provided similar or superior long-term performance and offered better resilience during market downturns. Moreover, ESG investing is believed to be a key future secular growth theme and can provide protection against certain ESG risks.

Market participants expect significant growth in business related to retirement needs in the next five years, due to shifting demographic trends in Hong Kong. According to a survey commissioned by the HKIMR and conducted by PwC, over 85% of the respondents expected their business serving the needs of customers in the pre-retirement stage to grow significantly in the next five years, and more than 55% of the respondents expected their business serving the needs of customers in the post-retirement stage to expand as well. Moreover, **the survey respondents foresaw five major drivers of rising demand for long-term assets: products with long investment horizons and guaranteed returns, products providing stable post-retirement income, voluntary contributions to MPF accounts, products related to health and long-term care, and exchange-traded funds.** Market participants also anticipated evolving asset allocations across asset classes in the next five years to search for higher yields. The survey findings show that more than half of the respondents planned to allocate a higher percentage of portfolios to alternatives, equities, and residential/commercial real estate, and around 40% planned to reduce allocations to cash and money market funds.

Despite the business opportunities arising from population ageing, challenges remain. **Key challenges highlighted by survey respondents include protracted low interest rates, mismatches between assets and liabilities, the evolving regulatory landscape, high operating costs, the difficulty of distributing products with complex features, and low public awareness.**

Several key trends may help institutional and retail investors to capitalise on the opportunities brought about by demographic transition, namely ESG investing, the GBA initiative, and digitalisation of financial services. The GBA initiative provides financial institutions in Hong Kong with the opportunity to access more diverse assets, some of which may match the changing long-term investment needs of the ageing population. The digitalisation of financial services may help financial institutions to distribute their long-term financial products to targeted customers in specific age groups and attract more interest in their products and services. **Our survey revealed that 83% of the respondents moved towards ESG adoption in their investment strategies, and 89% reported that they considered or planned to consider the GBA initiative in their strategic plans.** Furthermore, some respondents saw positive impacts from digitalisation of their financial services.

Based on the findings from the survey, this report proposes a wide range of suggestions for promoting the healthy development of the long-term asset markets in Hong Kong, aiming to encourage broad participation of institutional and retail investors and capture opportunities arising from key trends. Suggestions for promoting broad participation of institutional and retail investors include providing incentives for long-term investing, promoting public awareness of retirement planning, and creating diversified products for long-term investors. Suggestions for capturing opportunities arising from key trends include perfecting local ESG ecosystem, supporting cross-boundary transactions, and facilitating digital transformation of financial services.

Chapter 1
The Shifting Demographic Structure of Hong Kong

Ageing population will create strong demand for long-term assets going forward

HIGHLIGHTS:

- The population of Hong Kong is undergoing a sustained increase in life expectancy and decline in fertility rates, in line with other major jurisdictions around the world.
- Economic theory suggests that individuals tend to accumulate wealth in their working age and deplete their assets after retirement. This pattern creates the need for long-term investment at different stages of life.
- Hong Kong provides a broad range of retirement solutions, including universal welfare subsidies to the elderly, the Mandatory Provident Fund (MPF) system, voluntary contributions to MPF accounts, other personal retirement savings solutions, and family support.
- The results of an HKIMR commissioned study suggest that demographic factors alone will lead to an overall 15% increase in the demand for long-term assets from 2020 to 2049. The projected growth will be higher, up to 31.7%, if one takes into account policies intended to attract young talent from outside Hong Kong.
- Currently around 70% of the demand for long-term assets is associated with people before retirement; our projection suggests that in 2049 around 45% of the demand will come from people after retirement.

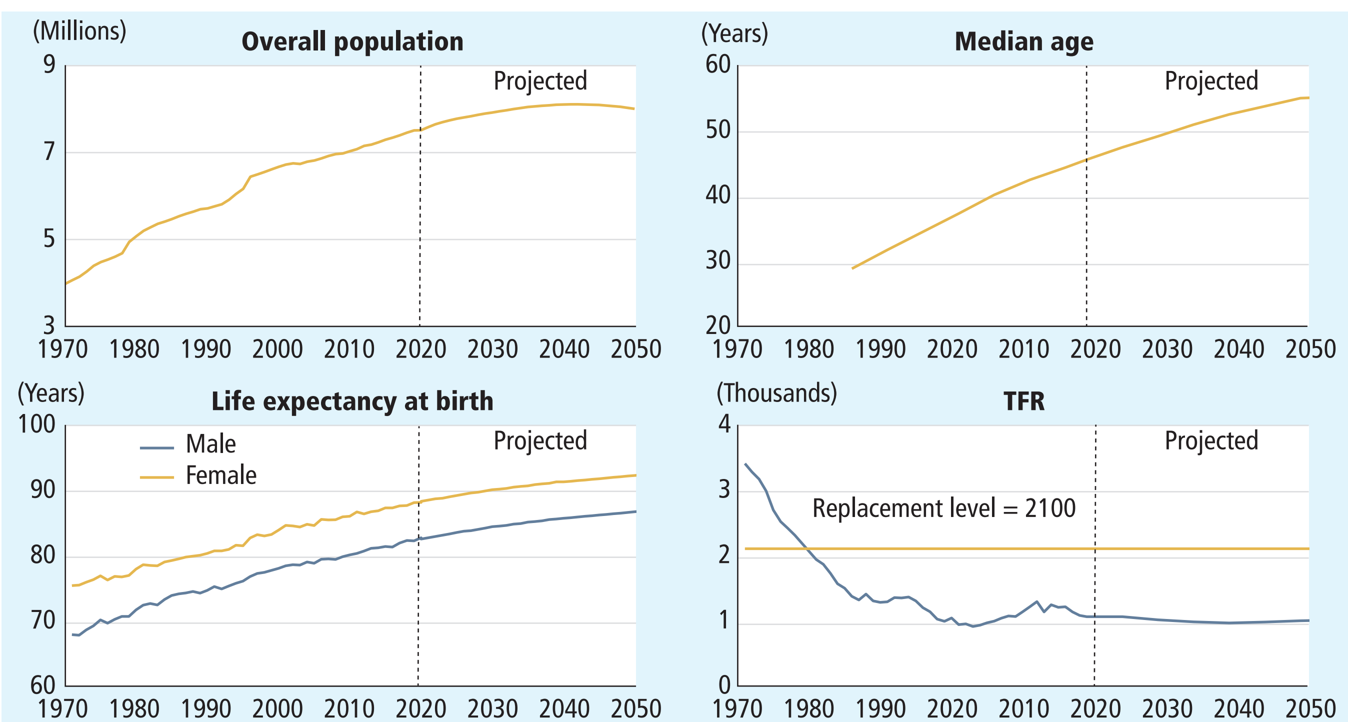
1.1. DEMOGRAPHIC TRENDS IN HONG KONG AND OTHER JURISDICTIONS

The twentieth century witnessed an unprecedented increase in human longevity in many countries, which has had major implications for society, the financial markets, and pension systems. Along with other major jurisdictions, Hong Kong is undergoing a transition in demographic structure. According to the projections by the Census and Statistics Department of Hong Kong, the overall population of Hong Kong is expected to grow slowly over the next two decades and then decline, reaching a peak in 2041 with a total population of more than 8 million. The median age is projected to reach 55 in 2049, rising significantly from 45.5 in 2019 (Chart 1.1).

Two key factors have contributed to population ageing in Hong Kong. The first is an increase in life expectancy. Chart 1.1 shows that life expectancy at birth for men (women) in Hong Kong was around 70 (77) years in 1975, climbed to 80 (86) in 2010 and is expected to surpass 86 (92) after 2050. These figures represent an average improvement of 3–4% per decade to date and a projected improvement of more than 1% per decade in the future.

Second, Hong Kong has experienced a continued decline in the total fertility rate (TFR).[1] If replacement-level fertility (around 2,100 children per 1,000 women) is sustained over a sufficiently long period, populations with low mortality rates and no migration will achieve a growth rate of zero (i.e., neither growing nor shrinking in size). The TFR in Hong Kong stood at 3,400 in 1971 but has dropped below the replacement threshold since 1980. It is projected to reach a stable value of around 1,000 over the next 30 years. As a result, the elderly dependency ratio, defined as the number of persons aged 65 and above per 1,000 persons aged between 15 and 64, increased dramatically from 112 in 1980 to 265 in 2019 and is projected to rise to 653 in 2049.

Chart 1.1: Demographic trends in Hong Kong



Source: Census and Statistics Department.

[1] *Total fertility rate (TFR) is the number of live births per 1,000 women (excluding female foreign domestic helpers).*

Table 1.1: Life expectancy at birth and total fertility rate in selected jurisdictions

Jurisdictions	Life expectancy at birth						TFR		
	Male			Female					
	1999	2019	2049	1999	2019	2049	1999	2019	2049
Hong Kong	77.7	82.2	86.6	83.2	88.1	92.2	981	1051	990
Mainland China	69.2	74.8	80.2	73.1	79.2	83.9	1595	1696	NA
Japan	77.1	81.4	84.0	84.0	87.5	90.3	1340	1429	1440
South Korea	71.8	80.0	86.1	79.2	85.9	90.0	1425	920	1270
UK	74.7	79.9	83.2	79.7	83.6	86.1	1680	1653	1785
US	73.9	77.7	82.5	79.4	82.3	86.1	2008	1840	1840

Note: The numbers above for 1999 and 2019 are actual; the numbers for 2049 are projected. The projected total fertility rate for Mainland China is not available.
Source: Census and Statistics Department.

Population ageing is not a phenomenon unique to Hong Kong. We can compare the trend of population ageing in Hong Kong with those in several major jurisdictions around the world, namely Mainland China, Japan, South Korea, the UK, and the US.

Table 1.1 shows the life expectancy at birth (males and females respectively) for these six jurisdictions. The life expectancy at birth for both males and females in all six jurisdictions, has risen over time, indicating a general improvement in public health. The rates at which longevity improves are projected to drop slightly in the future. The table also displays the corresponding TFRs. The fertility rates in all of these jurisdictions have been lower than the replacement level (2,100 births per 1,000 females) since 1999 and are projected to remain low in the future.

Beginning in 1985, Japan led the world in life expectancy for both males and females, but Hong Kong took the lead position after 1999 for men and 2011 for women. As for TFR, Hong Kong is expected to drop below South Korea after 2027, after which it will have the lowest fertility rate among the six jurisdictions. These figures suggest that the pace of population ageing in Hong Kong may be more pronounced in the coming years than in other major jurisdictions around the world.

1.2. IMPLICATIONS OF POPULATION AGEING FOR PRIVATE SAVINGS FOR RETIREMENT

1.2.1. Individual saving decisions

Ageing has a significant effect on savings. As people age and retire, they withdraw or spend their savings to pay for their retirement needs. This is referred to as the decumulation phase. In anticipation of wealth decumulation, an individual is likely to save in his or her working age to prepare for retirement. This is known as the accumulation phase. The accumulation and decumulation pattern, known as the life-cycle theory in the macroeconomic literature, is reviewed in Box 1.1.[2, 3]

[2] *For more information on the life-cycle theory, please refer to https://www.encyclopedia.com/social-sciences/applied-and-social-sciences-magazines/life-cycle-hypothesis.*

[3] *This discussion and the subsequent projection in Section 1.3 emphasise the role played by labour income. A more elaborate framework can take into account other effects such as capital income and wealth distribution within cohorts, but the accumulation and decumulation pattern over the life cycle remains robust. See Imrohoroglu et al. (1998) for details.*

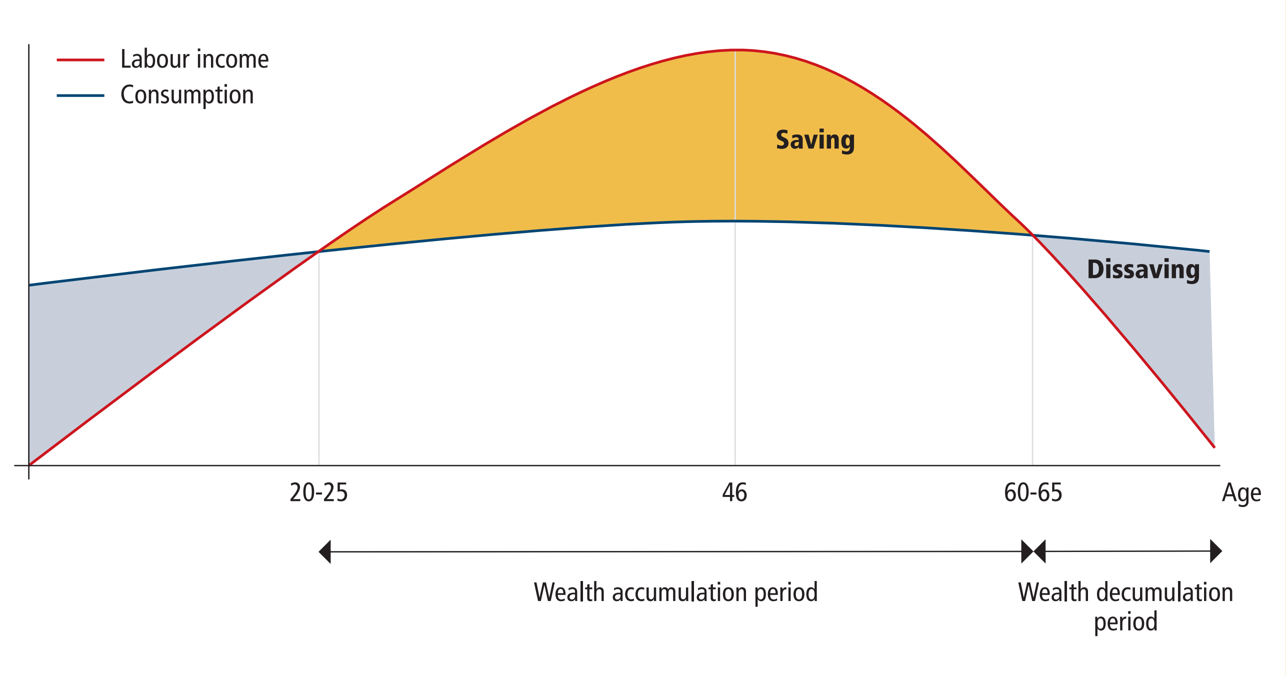
Individuals tend to accumulate wealth in their working age and decumulate after retirement. These life-cycle decisions create a need for long-term investment.

Accordingly, the accumulation and decumulation pattern of individuals is reflected in the economy as a whole. It is expected that savings in the economy will grow as the proportion of the working population in an economy goes up. In contrast, when the proportion of the retired population increases, the cumulative savings in the economy are expected to decrease.

Box 1.1: Life-cycle theory

The life-cycle theory attempts to characterise the saving and spending pattern of a typical individual over the course of his or her lifetime. It assumes that people seek to smooth out their consumption over time by borrowing when they are young (when income is low), saving when they are in their working age, and depleting their savings after retirement. Chart 1.2 explains the basic life-cycle theory. During their youth, people may take on debts (e.g., student loans). The development of a career and increased experience allow the income of an individual to overtake consumption at around age 20–25 years, and they enter the wealth accumulation stage. Empirical evidence in Mason and Lee (2011) shows that an individual achieves his or her peak income level at around age 46 (average of 23 jurisdictions in 2000). Subsequently, the income level drops off and ultimately falls below the consumption level after retirement at around age 60–65 years. The wealth decumulation (i.e., dissaving) stage after retirement continues until the end of life.

Chart 1.2: Income and consumption in the life-cycle theory



Source: HKIMR staff compilation.

Table 1.2: Comparison of retirement income security systems in the region

Pillar	Characteristics	Hong Kong	Mainland China	Singapore	South Korea	Japan
0	Universal or means-tested, social assistance/basic pension	✓	–	✓	✓	–
1	Mandated public pension plan, publicly managed	–	✓	–	✓	✓
2	Mandated occupational or personal pension plans, fully funded	✓	–	✓	–	–
3	Voluntary occupational or personal pension plans, partially or fully funded	✓	✓	✓	✓	✓
4	Access to informal and other formal social programmes and other individual assets	✓	✓	✓	✓	✓

Note: ✓ implies that the pillar has been implemented, and – means that the pillar is non-existent or extremely under-developed.
Source: Chow et al. (2014).

1.2.2. Retirement security system: Hong Kong and the Asia-Pacific region

Another important determinant of individual savings is the income available from a society's pension system. Apart from drawing upon their own savings, the elderly rely on the pension system to maintain a decent life after retirement. The World Bank (2005) proposed a 'five pillar' framework to describe the old age security systems adopted by different jurisdictions. The five pillars consist of both formal and informal, public and private sources of retirement income. Using this five pillar framework, the following discussion summarises the retirement pension system in Hong Kong and compares it with others in the region (Table 1.2).

'Pillar 0' is universal social assistance. Hong Kong provides welfare subsidies to elderly adults through Social Security Allowance (SSA, which includes Old Age Allowance, Normal Old Age Living Allowance and Higher Old Age Living Allowance) and Comprehensive Social Security Allowance (CSSA) payments. All Hong Kong residents aged 70 and above are eligible for the Old Age Allowance. Universal social assistance is available in other regional jurisdictions. For example, the Silver Support Scheme in Singapore is meant to support the bottom one-third of Singaporeans aged 65 and above, who had low incomes during their working years and now have less in their retirement.

'Pillar 1' is a mandated public pension plan. Currently, Hong Kong does not have a 'Pillar 1' scheme. For a number of jurisdictions in the Asia-Pacific region (APAC), the public pension plan is the most developed pillar for retirement protection. The state pension system of Mainland China, which consists of the National Council for the Social Security Fund and various provincial pension plans, accounts for the majority of total pension assets.[4] Japan has a well-developed mandatory public pension scheme comprising the universal National Pension Scheme and earnings-related schemes.[5]

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[4] *Chen, T., & Turner, J. A. (2021). 'China's development of a multi-tier pension system,' International Social Security Review, 74(1), 35-58.*

[5] *Ministry of Health, Labour and Welfare of Japan (2015). 'Overview of Japanese public pension system.'*

'Pillar 2' of retirement income protection is mandated occupational or personal pension plans. In Hong Kong, this pillar includes mandatory contributions to the Mandatory Provident Fund (MPF) system and other occupation-based retirement schemes.[6] The MPF System in Hong Kong is a defined contribution system that covers all employees and self-employed persons aged 18 to 64, unless specifically exempt under the law. The employee is required to contribute 5% of his or her monthly income (subject to a maximum level) and the employer has to match this amount. An employee who earns less than the minimum level of income is not required to contribute. Singapore's Central Provident Fund (CPF) scheme is a mandatory public-sector occupational pension plan, which requires all eligible employees and employers to make monthly contributions to personal CPF accounts for retirement. In general, an employee aged 55 or below is required to contribute 20% of his or her monthly income, and the employer needs to contribute 17%. For employees older than 55 years old, the required contribution rates for the employee and the employer decrease gradually.[7]

'Pillar 3' is voluntary occupational or personal pension plans. The government has been actively promoting personal retirement savings in recent years. In addition to the statutory amount of contributions, employees can make voluntary contributions to their MPF accounts. A deferred annuity plan is another retirement savings tool that allows individuals to turn their accumulated savings into a stable stream of income after retirement. To encourage these two forms of personal retirement savings, starting in April 2019, MPF contributions paid into a tax deductible voluntary contributions (TVC) account and premiums paid for the Qualifying Deferred Annuity Policy (QDAP) became tax deductible, subject to a combined cap.[8] In addition, employers may also make MPF voluntary contributions on top of the mandatory contributions for their employees so as to enhance the retirement benefits of employees. All of the retirement income security systems of the major jurisdictions in the APAC region offer 'Pillar 3' protection.

'Pillar 4' relates to access to informal, other formal social programmes, and other individual assets. Due to changing social values, the family support component in this pillar is fading away in Hong Kong. As a result, the government and regulators have attempted to strengthen this pillar; for instance, the Hong Kong Mortgage Corporation (HKMC) Limited has launched the Reverse Mortgage Programme, the Policy Reverse Mortgage Programme, and the HKMC Annuity Plan. 'Pillar 4' is present in all retirement income security systems in the APAC region.

The retirement security systems vary remarkably among jurisdictions in the APAC region, and they perform differently in terms of their adequacy, coverage, and fiscal sustainability.[9] It is worth emphasising that each pension system is designed to address the specific conditions of its population. The merits and drawbacks of a pension system should be evaluated in the context of a wide array of socio-economic factors, such as the demographic structure, financial literacy and social norms of the population, economic and financial development, as well as its public healthcare system and social safety net. There is not necessarily a 'one size fits all' solution.

6 *All retirement schemes set up voluntarily in Hong Kong by employers to provide benefits to their employees are regulated under the Occupational Retirement Schemes Ordinance (ORSO) and are often called ORSO schemes. An ORSO scheme is generally registered with and regulated by the Mandatory Provident Fund Schemes Authority (MPFA).*

7 *For more details, please refer to the website of Central Provident Fund Board of Singapore: https://www.cpf.gov.sg/employer/employer-obligations/how-much-cpf-contributions-to-pay.*

8 *The current deduction cap is HK$60,000 per year, which is an aggregate limit for both qualifying deferred annuity premiums and tax deductible voluntary contributions (TVC) to MPF.*

9 *More detail can be found here: Social Security Administration of US (2019). 'Social security programs throughout the world: Asia and the Pacific, 2018.'*

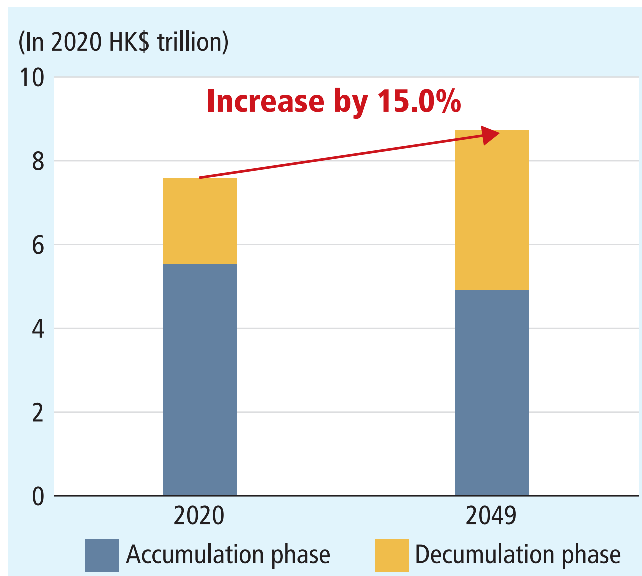
1.3. IMPLICATIONS OF POPULATION AGEING FOR THE LONG-TERM ASSET MARKETS

In response to the current trend of population ageing in Hong Kong, the HKIMR commissioned a study to project the potential growth in demand for long-term assets in Hong Kong due to demographic changes.[10,11] The study constructs the lifetime labour income and savings profile of a representative Hong Kong resident by age and gender. Consistent with the life-cycle theory, the representative resident's savings rise throughout his or her working ages, peak at retirement age (assumed to be 65) and decrease afterwards. The total savings and demand for long-term assets of the whole economy in each future year are then computed by aggregating individual savings according to the projected population distribution in that year. In other words, the model captures in a simple manner how shifting demographic trends will contribute to the growth in demand for long-term assets.

Chart 1.3 shows that, due to population ageing, the projected demand for long-term assets will grow by 15% between 2020 and 2049.[12] This increase will be driven by two forces, both originating in demographic trends. First, the median age will increase from the current level of around 45.5 to 55 years over the next three decades, as demonstrated in Chart 1.1. As individuals approach the retirement age, they accumulate more savings and thus drive up the demand for long-term assets in the near future. Second, the projected slowdown in population growth, which is expected to turn negative in 2041, will put downward pressure on savings and demand for assets. The projection suggests that the first effect dominates the second, leading to an overall increase in demand for long-term assets.[13]

The projection suggests that demographic changes in Hong Kong are likely to generate higher demand for long-term assets in the next 30 years.

Chart 1.3: Projected growth in demand for long-term assets due to population ageing



Source: Chan (2021).

Chart 1.3 also decomposes the demand for long-term assets into that contributed by people in their accumulation (below 65) and decumulation (65 and above) phases. Such a distinction is important, as

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10 *In this report, we define long-term assets as investments with the objective of meeting future expenditures after retirement, and thus the investment horizon is tied to the long-term nature of their liabilities. For more details, please refer to Chapter 2.*

11 *The projection of demography-driven demand for long-term assets in Hong Kong was conducted in a study for the HKIMR by Chan (2021). For further details, please refer to Appendix A.*

12 *The model considers the growth in long-term asset demand solely due to demographic factors. Actual growth is very likely to be higher than 15%, as a result of productivity and real wage increase over time, improving financial literacy in Hong Kong, and the integration of Hong Kong into the Guangdong–Hong Kong–Macao Greater Bay Area (GBA), among other factors.*

13 *To assess the robustness of the projection, the study also indicates that the growth in long-term asset demand during 2020–2049 will be between 7.9% and 23.1%, with 95% confidence.*

the types of long-term assets in demand across the two stages in life can be different. For example, individuals in the accumulation phase may favour investment portfolios weighted towards equities and voluntary MPF contributions, whereas those in the decumulation phase may find annuities and reverse mortgages more attractive. Given the demographic structure of Hong Kong, in 2020 the majority of demand (73%) came from individuals in their accumulation phase. As population ageing continues, the demand for decumulation products will grow steadily. By 2049, around 45% of the demand for long-term assets is projected to come from individuals after retirement.

The analysis above assumes no public or private responses to population ageing. International experience suggests, however, that population ageing induces policy initiatives aimed at attracting highly-skilled and talented persons to immigrate and contribute to society. Hong Kong is no exception. Currently, through the Quality Migrant Admission Scheme, a maximum of 4,000 talented individuals are admitted to settle in Hong Kong. The study assumes a scenario in which the young talent (aged 20–40) immigration rate doubles the current level.[14] After 2031, the projection assumes that the population grows at the same rate but in a way that keeps the demographic structure by age unchanged. Under this scenario, the growth of the working-age population increases the aggregate wealth and demand for long-term assets, resulting in a 31.7% growth in demand for long-term assets from 2020 to 2049 (Table 1.3).

Table 1.3: Projected growth in demand for long-term assets from 2020 to 2049

Baseline scenario	15.0%
With policy to attract young talent from outside Hong Kong	31.7%

Source: Chan (2021).

Attracting young talent from outside Hong Kong may further increase the demand for long-term assets.

The analysis above suggests that the demand for long-term assets in Hong Kong may increase in the medium term for reasons related to demographic changes. In the next chapter, we explore this issue from the perspective of the supply of long-term assets.

[14] *The current projected net immigration rate by the Census and Statistics Department is around 0.6% per year based on historical observations.*

Chapter 2
The Long-Term Asset Markets in Hong Kong: An Overview

Hong Kong offers a wide range of long-term assets for institutional and retail investors

HIGHLIGHTS:

- The financial markets in Hong Kong offer a broad range of assets with attractive features as long-term investments, such as equities, bonds, residential property and reverse mortgages, annuities, and policy reverse mortgages.

- Retail government bonds, such as iBonds and Silver Bonds, offer stable and guaranteed returns and are popular with the public, with significant oversubscriptions.

- 'HKMC Retire 3', which comprises the Reverse Mortgage Programme, the HKMC Annuity Plan, and the Policy Reverse Mortgage Programme, provides options for residents in Hong Kong to create lifelong streams of income for their retirement.

- Several factors may influence the future development of the long-term asset markets in Hong Kong, including the development of the local bond market, opportunities for cross-boundary investments with Mainland China, the investment preferences of local retail investors, and the protracted low interest rate environment.

2.1. DEFINITION OF LONG-TERM ASSETS

There is no universal definition of long-term assets. In this report, we define them as investments with the objective of meeting future expenditures after retirement; thus, the investment horizon is tied to the long-term nature of their liabilities. Some examples of long-term assets include cash and bank deposits, real estate, equities (both active and indexed), fixed income securities, and other instruments.[15]

Three points are worth noting. First, the definition of long-term assets in this report emphasises the objective of meeting retirement expenditures through long-term investments. An equity invested with the aim of managing retirement savings is considered a long-term asset, but an equity invested with the purpose of short-term profits is not. Second, some assets, such as annuities, are held directly by retail investors, whereas other assets, such as corporate bonds, are more commonly invested indirectly by institutional investors on behalf of retail investors. Third, the asset classes listed above have different risk and return characteristics, with some providing higher average returns and others offering more stable income flows. An appropriate portfolio is essential to retirement planning.

The previous chapter demonstrated that population ageing is a major issue in Hong Kong, and the need to understand the evolution and the current status of the long-term asset markets in Hong Kong. This chapter first discusses several asset classes that have attractive features as long-term investments (such as providing relatively stable income flows), and/or are increasingly adopted as long-term assets in Hong Kong. In particular, we focus on equities, bonds, residential property and reverse mortgages, annuities, policy reverse mortgages, infrastructure investment, and private equities. The chapter ends with a discussion of the key factors in the development of Hong Kong's long-term asset markets.

2.2. THE LONG-TERM ASSET MARKETS IN HONG KONG

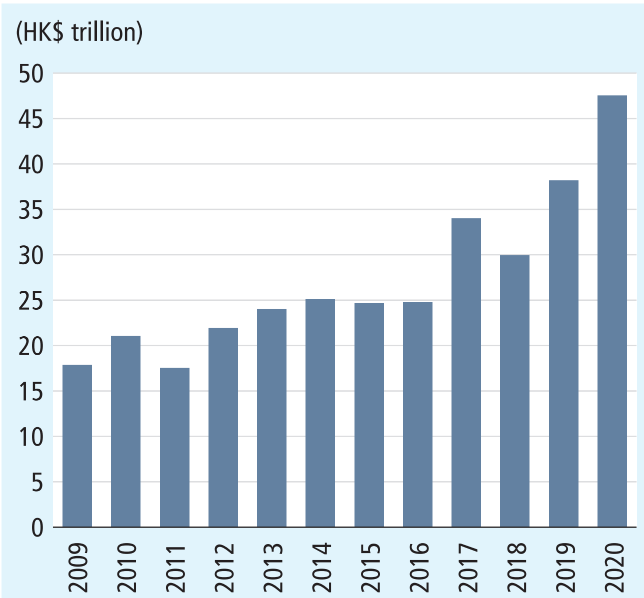
2.2.1. The equity market

As one of the most important asset classes in the long-term asset markets, equities are popular among both institutional and individual investors. The equity market offers a wide range of stocks with different risk and return characteristics to cater to investors with different needs and preferences. Some investors prefer stable income from dividend stocks, while others favour capital appreciation from growth stocks. Whether through direct investments in equities or indirect investments in equity funds, investors use equities as an instrument to meet their long-term goals.

As a world-class international financial centre, Hong Kong has one of the most established stock markets in the world. The total market capitalisation has grown from around HK$18 trillion in 2009 to around HK$48 trillion in 2020, an increase of more than 160%. By the end of March 2021, the Hong Kong Stock Exchange was the fifth largest stock exchange globally according to the market capitalisation provided by the World Federation of Exchanges. The high stock market capitalisation may partly reflect the growing appetite for equity financing in Hong Kong (Chart 2.1).

[15] *Some examples of other instruments are private equities, infrastructure, investment fund shares/units, mutual funds and unit trusts, hedge funds, commodities, securitised assets, and private debt.*

Chart 2.1: Market capitalisation of companies listed in the Hong Kong Stock Exchange



Source: World Federation of Exchanges.

It is also worth noting that in recent years, there has been a significant increase in the capital raised through initial public offerings (IPOs) in the Hong Kong Stock Exchange. The capital raised increased from US$430 million in 1990 to US$52 billion in 2020. Hong Kong has become one of the top destinations for IPO listings in the world, thanks partly to its mature market infrastructure.

In November 2014, the Stock Connect scheme was launched as a joint initiative of the Hong Kong Stock Exchange and Shanghai Stock Exchange, with the Shenzhen Stock Exchange joining in late 2016. It allows investors from Mainland China to purchase selected companies listed in Hong Kong, and relaxes restrictions on non-residents' purchase of China A-shares listed in the Shanghai and Shenzhen Stock Exchanges. Hong Kong, as the gateway between Mainland China and the rest of the world, has attracted an increasing number of participants and injected more impetus into the equity market.

Private equity is increasingly popular among institutional investors. Box 2.1 discusses its main characteristics and development in Hong Kong.

2.2.2. The bond market

Fixed income assets are another major component of long-term institutional investors' portfolios. From the perspective of asset allocation, bonds offer a relatively more stable return, which helps balance the risks of the more volatile equity prices. Government bonds are often considered safe assets due to their low default risk. Corporate bonds are another common asset in institutional investors' long-term investment portfolios. The expected return of corporate bonds is usually higher than that of government bonds but lower than that of equities.

Box 2.1: Private equity

Private equity is an alternative asset class that is receiving increasing attention from long-term investors. In addition to its benefits for portfolio diversification, some argue that private equity can afford to take a long-term view (in contrast to public equity, which usually pursues short-term profit at the expense of long-term growth), which is a good fit for the long investment horizon of insurance companies and pension funds. Although there is some evidence that private equities outperforms public markets in the US, private equities may be associated with higher financial risks as they are unlisted and disclose limited public information.

Hong Kong is the largest private equity hub in Asia after Mainland China, with more than US$160 billion in capital and over 560 private equities and venture capital firms as of the end of 2019. The growth has been enhanced by Hong Kong's position in the Greater Bay Area, where there is now rising investment demand from high-net-worth individuals and diverse investment opportunities. Hong Kong's robust financial infrastructure also makes it a popular destination for private equities.

However, corporate bonds are generally associated with higher credit risk, liquidity risk, and volatility than government bonds. Below, we provide overviews of the government and corporate bond markets in Hong Kong.

The government bond market in Hong Kong

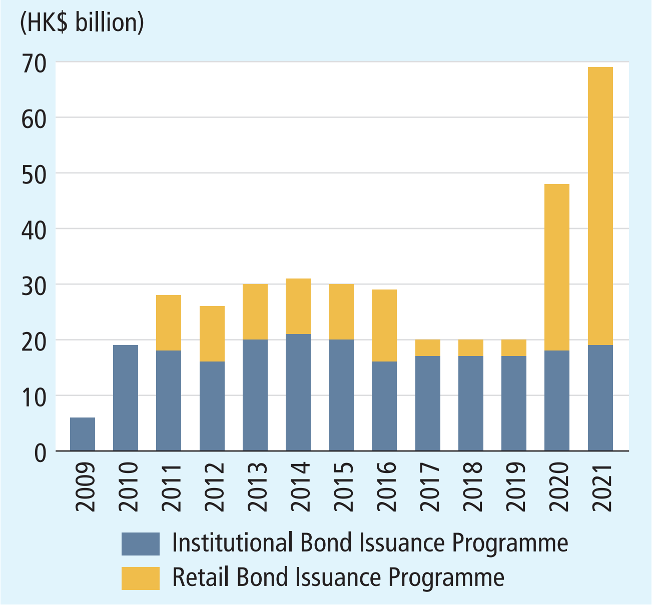
To promote the sustainable development of the local bond market, Hong Kong introduced the Government Bond Programme in 2009, consisting of the Institutional Bond Issuance Programme and the Retail Bond Issuance Programme.[16,17] Through the Institutional Bond Issuance Programme, the government issues HKD-denominated bonds on a regular basis according to a pre-announced schedule. Bonds issued under this programme have tenors ranging from 1 to 15 years, with the total issuance amount exceeding HK$220 billion by the end of 2021. This programme aims to satisfy the demand of institutional investors, such as pension funds and insurers, for investments to match their long-term HKD liabilities.

The Retail Bond Issuance Programme consists of the iBond Series and the Silver Bond Series. iBonds or Silver Bonds are HKD-denominated 3-year bonds whose semi-annual interest payments are linked to average annual inflation, subject to a minimum interest rate. All Hong Kong residents aged 18 or above are eligible to buy iBonds, but only Hong Kong residents aged 60 or above can buy Silver Bonds. Due to their stable and guaranteed returns, both retail bonds have been well-received by the public, resulting in oversubscriptions. In the 2021–22 Budget, the government announced that the issuance of iBonds and Silver Bonds would continue to promote further development of the local retail bond market.

iBonds and Silver Bonds offer stable and guaranteed returns. They have been well-received by the public, with significant oversubscriptions.

The amount of government bonds issued under the Institutional Bond Issuance Programme has remained stable at around HK$20 billion each year since 2010. The amount of government bonds issued under the Retail Bond Issuance Programme was around HK$10 billion each year in 2011-2019, and increased significantly to HK$30 billion and HK$50 billion respectively in 2020 and 2021. The growth came from the increased issuance amount of both iBonds and Silver Bonds, which received significant oversubscriptions by the public (Chart 2.2).

Chart 2.2: Government bonds issued under the Government Bond Programme



Source: Hong Kong Monetary Authority.

16 *Exchange Fund Bills and Notes (EFBNs) are also important fixed income instruments issued by the public sector in Hong Kong. However, we do not discuss EFBNs in our report for two reasons. First, the EFBN Programme operates with the overriding objective of exchange-rate stability, and its growth is governed by the inflow of US dollars under the Currency Board system. It is primarily a tool to help banks manage liquidity. Second, the HKMA has stopped new issuance of Exchange Fund Notes with tenors of 3 years or longer since 2015, whereas the Government Bond Programme focuses on issuance with tenors of 3 years or longer. Therefore, the latter is more relevant for long-term asset markets.*

17 *Three USD-denominated sukuk have also been issued under the Government Bond Programme.*

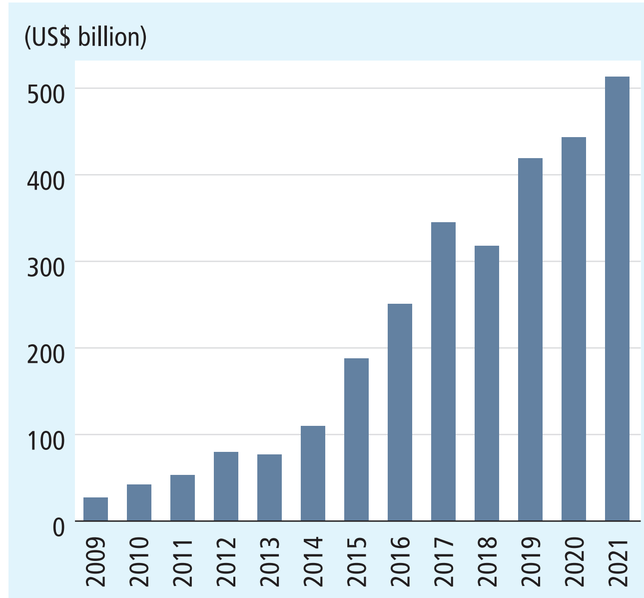
In the 2018–19 Budget, the Financial Secretary announced the launch of the Government Green Bond Programme, under which the government is authorised to borrow up to a maximum principal amount outstanding at any time of HK$100 billion or equivalent. The borrowing ceiling was then doubled to HK$200 billion pursuant to the passage of a Resolution (i.e. Cap 61H) under section 3 of the Loans Ordinance by the Legislative Council on 21 July 2021. Proceeds raised under the programme are used for financing public work projects with environmental benefits. The government successfully offered green bonds in 2018 and 2021, with a total issuance amount of close to US$7 billion by the end of November 2021. The tranches of 5-year, 10-year and 30-year green bonds will build a comprehensive benchmark curve for potential issuers in Hong Kong and the region. The deals have attracted strong interest from a diverse group of conventional and green investors.

The corporate bond market in Hong Kong

The corporate bond market in Hong Kong has grown considerably over the past decade. According to Bloomberg, the issuance amount of corporate bonds by market of syndication has grown from US$27 billion in 2009 to over US$510 billion in 2021. The uptake of corporate bonds suggests that corporations increasingly regard market-based financing as a workable alternative to bank-based funding (Chart 2.3).

According to Leung et al. (2014), two sets of structural factors have been crucial for the growth of the corporate bond market. First, the initiation of the Government Bond Programme boosted the supply of government bonds and established a representative yield curve, which enabled appropriate pricing of corporate bonds. Second, because of the tightening of bank credit following the global financial crisis, corporations started to tap the bond market for long-term funding given the rising costs of long-term bank lending.

Chart 2.3: Issuance amount of corporate bonds in Hong Kong by market of syndication



Note: Market of syndication specifies the country identified as the primary market of syndication of an equity or fixed income transaction. Syndication is the process of involving multiple underwriters in arranging a debt or equity issuance.

Source: Bloomberg.

The government has also provided incentives to facilitate the growth of the corporate bond market. The launch of the Qualifying Debt Instrument (QDI) scheme and Pilot Bond Grant Scheme (PBGS) has also benefitted the bond market. The QDI scheme was introduced in 1996 and refined in 2011, with the goal of further developing the local debt market and putting Hong Kong on a more equal footing with other financial centres in the region. The scheme gives concessionary tax treatment to interest income and trading profits derived from QDIs. The PBGS is a three-year pilot programme announced in the 2018–19 Budget; it aims to attract enterprises around the world to issue bonds in Hong Kong. The scheme offers grants to eligible bond issuers to cover part of their issuance expenses.

Infrastructure investment is another type of long-term asset that is seeing growing demand from institutional investors in recent years (Box 2.2).

Box 2.2: Infrastructure investment

Infrastructure is attractive as an alternative long-term instrument because it generates relatively stable cash flows, and its returns are less likely to be affected by economic cycles and have weaker correlations with the returns of traditional assets. Moreover, the returns of infrastructure investment are generally inflation-linked due to franchise arrangement or contract protection, which helps reduce inflation risk. However, given its unlisted, infrequently traded nature and long investment horizon, the pricing, performance measurement, and risk management of infrastructure investment may require specialised knowledge.

The major investors in infrastructure investment include pension funds and superannuation funds, especially in developed markets. Governments are creating long-term investment opportunities by using privatisation and/or public–private partnership for long-term infrastructure assets.

Though infrastructure investment and financing are not yet popular in Hong Kong, the recent focus on long-term investment in infrastructure by the G20 and the Belt and Road Initiative will increase the funding needs of infrastructure projects globally. Hong Kong can serve as an ideal venue for infrastructure investment.

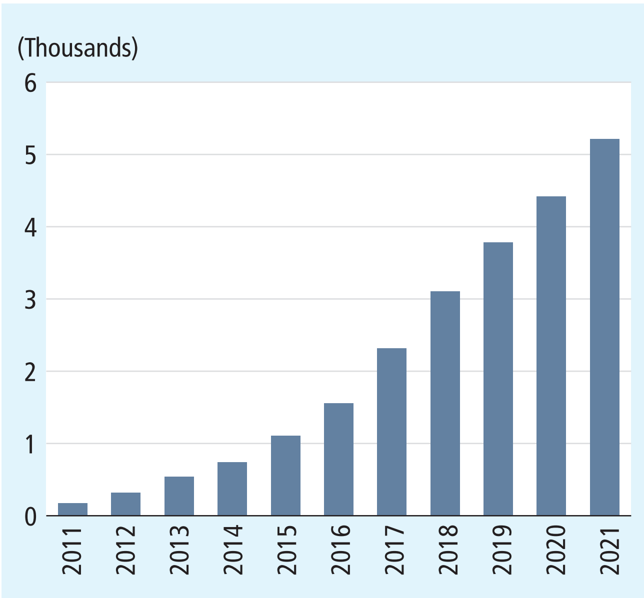
2.2.3. Residential property and Reverse Mortgage Programme

The net housing wealth in Hong Kong's private residential sector is estimated to have been around HK$14.4 trillion by the end of April 2021, which is around five times the GDP of Hong Kong in 2020. For many retirees in Hong Kong, residential property accounts for a significant part of their assets, whereas liquid assets are relatively limited. However, replacing the residential property with a smaller one to liquidate part of the wealth involves significant transaction costs. Apart from renting out the property to receive rental income, a homeowner can also use reverse mortgage to obtain stable cash flows. Another advantage of reverse mortgage is that it enables the homeowner to keep the property as the primary residence.

HKMC Insurance Limited (HKMCI), a wholly-owned subsidiary of the Hong Kong Mortgage Corporation Limited, has operated the Reverse Mortgage Programme in Hong Kong since July 2011. The Programme enables people aged 55 or above to use their residential properties in Hong Kong as security to obtain reverse mortgage loans. The borrower can opt to receive monthly payouts either over a fixed period of 10, 15, or 20 years or throughout his or her entire life. The borrower may also borrow lump-sum payouts for specific purposes. In general, the borrower does not need to repay the reverse mortgage loan during his or her lifetime unless it is terminated under specific circumstances.

The number of applications for the Reverse Mortgage Programme has steadily increased since its inception in 2011 and exceeded 5,000 by the end of 2021 (Chart 2.4). Almost all applications are associated with one or two borrowers, and nearly half of the borrowers choose payouts throughout their entire lives. As of 31 December 2021, the average age of borrowers was 68 years old, with a monthly payment of HK$16,800.

Chart 2.4: Cumulative number of applications for the Reverse Mortgage Programme



Source: HKMC Insurance Limited.

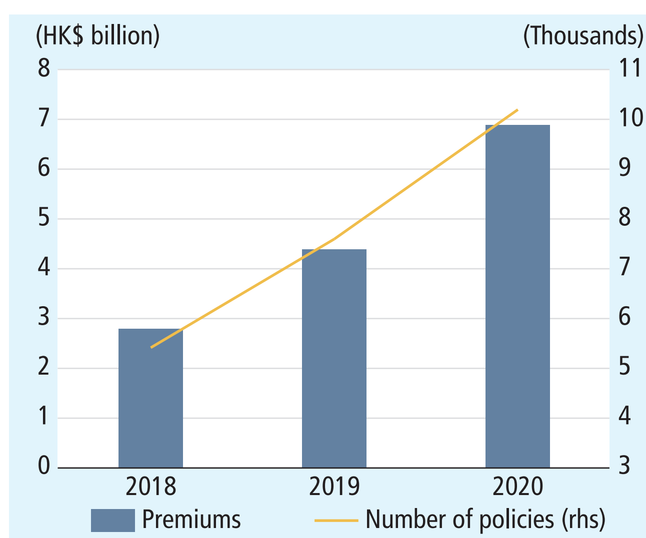
Numerous studies have shown that reverse mortgages can considerably improve retired households' welfare.[18] Despite the theoretical appeal of reverse mortgages, they are underutilised worldwide. Bequest motives, high up-front costs, lack of trust, use of residential property as insurance against negative health shocks and the costs of long-term care, and a lack of understanding are among the key reasons cited for the low uptake rate. Although some of these issues have been moderated by the design of the Reverse Mortgage Programme in Hong Kong (for example, mandatory counselling ensures that the borrower is informed about the programme), more publicity and public education could increase utilisation of the programme.

2.2.4. Annuity

An annuity is a long-term insurance product often used in the decumulation phase of retail investors. It converts savings into a steady stream of income over the long term. Acting like a pension, a life annuity guarantees sustained monthly income for life, which allows those with shorter lives to subsidise those who live longer, hedging against longevity risk. There are other types of annuity products. For example, a guaranteed annuity expires upon the death of a retiree or the expiration of a fixed period of time – whichever occurs later. A deferred annuity begins only after a specific period of time when the annuity purchase premium has been paid.

Both public and private annuity schemes are available in Hong Kong. The HKMC launched the first public annuity plan under its wholly-owned subsidiary HKMC Annuity Limited in July 2018. Under the HKMC Annuity Plan, Hong Kong permanent residents aged 60 years or above are entitled to pay a single premium (with minimum and maximum amount of HK$50,000 and HK$3 million respectively) in exchange for lifelong monthly streams of guaranteed and stable income during retirement, without the need to disclose medical information. The Plan guarantees each annuitant instalments of monthly annuity payments equivalent to 105% of the premium paid and allows for special withdrawals for medical and dental expenses. By the end of 2020, over 10,000 policies were sold with a total premium of HK$6.9 billion (Chart 2.5).

Chart 2.5: Cumulative statistics of the HKMC Annuity Plan



Source: Insurance Authority.

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[18] *See Baily, M. N., Harris, B. H., & Wang, T. (2019). 'The unfulfilled promise of reverse mortgages: Can a better market improve retirement security?' Economic Studies at Brookings. October.*

Apart from the HKMC Annuity Plan, insurers in Hong Kong offer various types of annuity products. Annuity plans from the private sector provide more choices regarding the contribution and payout periods, guaranteed and non-guaranteed income, and death benefit arrangements. For example, many insurers offer deferred annuities that have an accumulation phase for the insured to accumulate the cash value via investment. To encourage Hong Kong residents to save for their retirement, since April 2019 taxpayers have been allowed to claim a tax deduction for their qualifying deferred annuity premiums up to a maximum limit of HK$60,000 per assessment year.

The mix of public and private annuity products serves the demand in different market segments. The simplicity of the HKMC Annuity with a flat monthly payment is helpful for citizens who lack financial literacy. The guaranteed payment of 105% of the premium addresses the psychological effects of loss aversion among potential investors. There are, however, needs that may not be sufficiently addressed by the public annuity. For instance, it does not shield the buyer from rising inflation in future, which erodes purchasing power. The private sector can design more diverse products to fulfil the needs of the rest of the market.

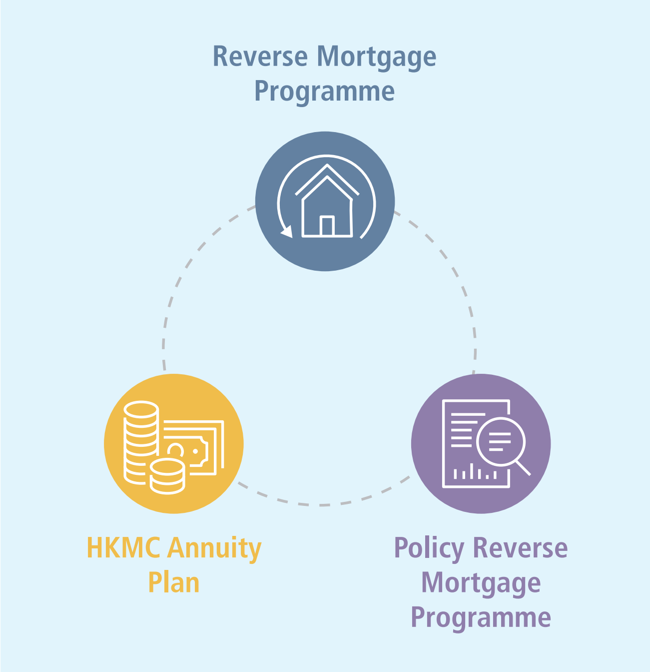
2.2.5. Policy Reverse Mortgage Programme

Individual life insurance has remained the dominant line of the long-term insurance business in Hong Kong, with office premiums reaching HK$459 billion in 2020 and the number of policies exceeding 13 million. Although life insurance pays lump-sum death benefits to beneficiaries upon the death of the insured, policyholders cannot obtain a stable income stream to meet their living needs after retirement by simply holding an insurance policy.

The Policy Reverse Mortgage Programme (PRMP), operated by HKMCI since 2019, provides a way to liquidise the death benefits or benefits triggered by specified events of life insurance. This loan arrangement allows people who are aged 60 or older in Hong Kong to use a life insurance policy as collateral to borrow from a lender. The borrower then receives monthly payouts either over a fixed period of 10, 15 or 20 years or throughout his or her life (until the maturity of the borrower's life insurance policy), and the borrower may also borrow lump-sum payouts for specific purposes when needed.

The HKMC launched the 'HKMC Retire 3' initiative in 2021, which covers its retirement planning products, namely the Reverse Mortgage Programme, the HKMC Annuity Plan, and the Policy Reverse Mortgage Programme. The new initiative highlights the three products as a solution for retirees to create lifelong streams of income for their retirement (Chart 2.6).

Chart 2.6: HKMC Retire 3



Source: HKIMR compilation.

'HKMC Retire 3', which comprises the Reverse Mortgage Programme, the HKMC Annuity Plan, and the Policy Reverse Mortgage Programme, offers alternative solutions for residents in Hong Kong to create lifetime cash flows for their retirement.

2.3. FACTORS AFFECTING THE FUTURE DEVELOPMENT OF THE LONG-TERM ASSET MARKETS IN HONG KONG

2.3.1. Local bond market

Government bonds account for a small fraction of the total bond market in Hong Kong. A key reason for this modest size is that the Hong Kong Government maintains a strong fiscal position and does not need to finance its expenditures through bond issuance. The fiscal reserve of the Hong Kong Government has been increasing steadily from 2009 to 2019, with a total value of more than HK$1 trillion in 2019. The decline in 2020 and 2021 was related to the large amount of government expenditure to counter the effects of the Covid-19 pandemic.

However, the government sees the need to develop the local bond market and has introduced the Government Bond Programme and Government Green Bond Programme based on market development instead of fiscal needs. Recent years have witnessed the proactive increment in the size of government bonds, with oversubscriptions from both institutional and retail investors. The government is moving towards further development of the local bond market.

2.3.2. Mainland opportunities

The recent opening of financial markets in Mainland China has given new momentum to the long-term asset markets in Hong Kong. In November 2014, Stock Connect was launched between the Hong Kong Stock Exchange and the Shanghai Stock Exchange, with the Shenzhen Stock Exchange joining in late 2016. The scheme now covers more than 2,000 qualified stocks. In July 2017, the People's Bank of China (PBoC) and the HKMA jointly launched Bond Connect to enable mutual bond market access between the Mainland and Hong Kong. The implemented northbound trading has attracted international investors and facilitated the inclusion of Chinese sovereign bonds in several major global bond indices. In September 2021, the HKMA and the PBoC announced the launch of southbound trading under Bond Connect, which provides another diversified and convenient channel for Mainland financial institutions' allocation to offshore bond assets through Hong Kong. Once again, this signifies that Hong Kong's financial markets serve as a secure and reliable channel and gateway for the Mainland's opening up.

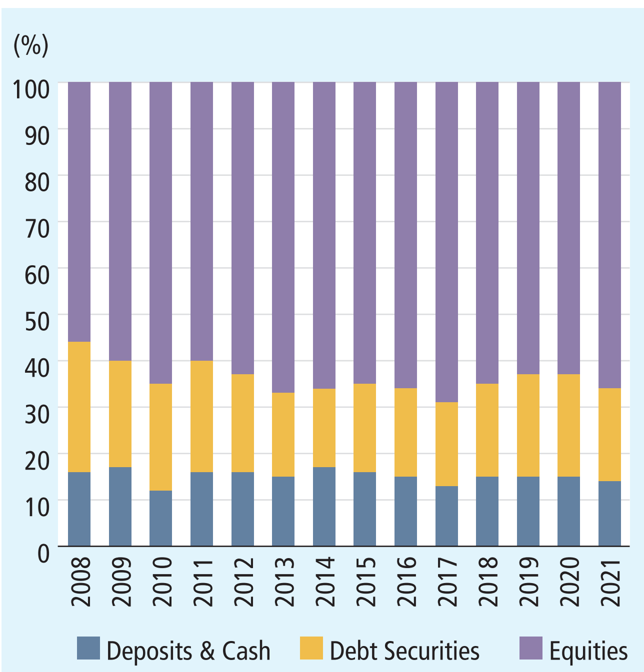
The Cross-boundary Wealth Management Connect Scheme was launched in September 2021, allowing eligible Mainland, Hong Kong and Macao residents in the GBA to invest in wealth management products distributed by banks in each other's markets through a closed-loop funds flow channel established between their respective banking systems. A considerable degree of flexibility is given to individual retail investors to open and operate cross-boundary investment accounts directly through a convenient formal channel and to choose their preferred products. Against this background, the presence of wealth management professionals in Hong Kong can better serve the growing demand for cross-boundary wealth management and investment services by Mainland residents, especially given the trend of population ageing in Mainland China.

By means of two-way traffic, long-term investors in Hong Kong can diversify their portfolios by investing in the Mainland, and capital flows from the Mainland will boost the size of the long-term asset markets in Hong Kong. Foreign investors will also be attracted to participate in the Hong Kong market as it provides a channel for access to the Mainland market, which will increase the liquidity of the long-term asset markets.

2.3.3. Investment preferences of local retail investors

Another important factor affecting the development of long-term asset markets in Hong Kong is retail investors' preferences for long-term investments. To get a glimpse of their preferences, one may look at the asset allocations of the aggregate MPF portfolio, which reflects the voluntary portfolio choices of scheme members. According to the statistics from the Mandatory Provident Fund Schemes Authority, equity funds and mixed asset funds accounted for 44% and 36% of the total net asset value (NAV) of MPF constituent funds (CFs) at the end of September 2021. In terms of asset allocation, debt securities accounted for 20% of the total NAV of CFs, of which slightly less than half were Hong Kong debt securities, whereas equities accounted for 66% of the total NAV of CFs (Chart 2.7). According to the OECD, the allocation to equities by the Hong Kong MPF is amongst the highest in the pension funds of non-OECD economies.[19]

Chart 2.7: Asset allocation of approved constituent funds across asset classes



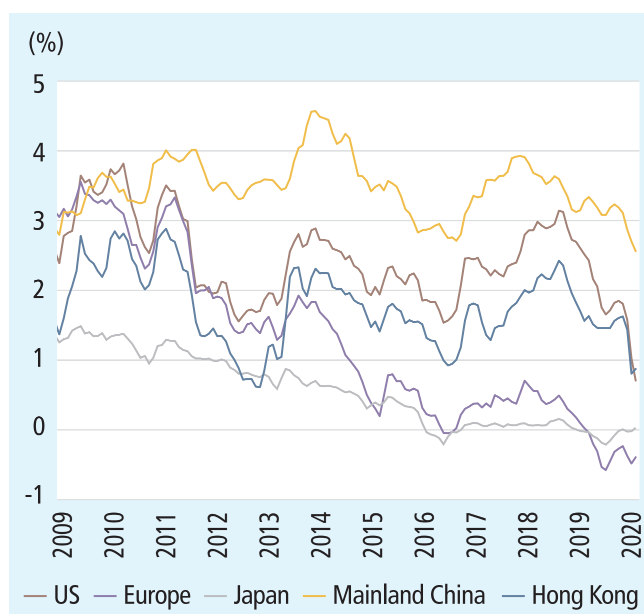
Note: The data above are based on the 3rd quarter of each year.
Source: Mandatory Provident Fund Schemes Authority.

Although the findings above suggest that investors in Hong Kong have a relatively high tolerance for fluctuations in investment returns, the evidence is far from conclusive. Interestingly, anecdotal evidence suggests that long-term products with investment guarantees are popular among investors in Hong Kong. For example, a recent survey finds that an annuity with a period-certain guarantee of 30 years was more likely to be chosen than one without a guarantee.[20] One possible reason for the seemingly contradicting preference might be that the MPF assets are locked in until the age of 65 and thus perceived to be capable of riding through cyclical market gyrations. Future studies may focus on understanding the risk preferences and other investment characteristics of retail investors in the long-term asset markets in Hong Kong.

2.3.4. Protracted low interest rate environment

The monetary environment has been loose since the Global Financial Crisis in 2008, and the recent Covid-19 pandemic has kept interest rates from rising. Chart 2.8 shows that the 10-year nominal government bond yields of major jurisdictions (except for Mainland China) fell in the early 2000s and stayed at very low levels for an extended period of time.

Chart 2.8: 10-year nominal government bond yields of major jurisdictions



Note: Interest rates are the 3-month moving averages of daily data.
Source: Bloomberg.

[19] OECD (2020). *'Annual survey of large pension funds and public pension reserve funds.'*

[20] Chow, K-L. et al. (2016). *'How to increase the demand for annuities in Hong Kong: A study of middle-aged adults,' Legislative Council Paper No. CB(2) 1301/15-16(02).*

The low interest rate environment impacts pension funds and insurers on both the asset and the liability sides of their balance sheets. On the one hand, low interest rates generate capital gains in existing bond holdings and increase asset values. On the other hand, the low discount rate increases the net present value of future benefit payments. As the liability side of pension plans generally has a longer average duration than the asset side, a drop in interest rate worsens the funding ratio of pension plans.

This has several implications for long-term investors such as insurers and pension funds. First, to offset the negative impact of low interest rates on the funding ratio, investors may need to increase their holdings of assets with longer durations, such as long-term government bonds.[21] Second, for defined-benefit pension plans and investment plans with guaranteed returns, declining interest rates mean that it is more difficult for investors to meet their investment targets. To address worsened funding ratios, long-term institutional investors may be tempted to 'search for yield' by investing in alternative assets, such as private equity and real estate. These shifts in asset allocation may increase expected returns at the cost of greater exposure to credit risk, liquidity risk, and asset price fluctuations.

[21] *For more details, see Domanski. D., Shin. H. S., & Sushko, V. (2015), 'The hunt for duration: Not waving but drowning?' IMF Economic Review 65(1): 113-153.*

Chapter 3
Doing Well by Doing Good with ESG Investing

Global investors are increasingly embracing ESG investing in their long-term portfolios

HIGHLIGHTS:

- Demand for ESG assets and inflows into ESG funds have risen in recent years amidst growing public awareness and interest.
- Increasing research evidence suggests that the long-term performance of ESG assets was similar to, if not better than, conventional assets. Moreover, ESG assets offered better resilience during market downturns.
- ESG investing is believed to be a key secular growth theme of the future and able to provide protection against certain ESG risks.
- Major pension funds and insurers worldwide are making increasing allocations to green and sustainable assets. High-net-worth individuals are also expressing interest in ESG products.
- A broad range of initiatives have been introduced in Hong Kong and other jurisdictions to facilitate ESG investments, such as encouraging the convergence of ESG practices, enhancing transparency and disclosure, constructing ESG indices, providing incentives, and example setting.

Environmental, social, and governance (ESG) investing has become a popular investment theme among investors, including long-term investors. This chapter discusses the definition of ESG investing, its recent development trend, and initiatives adopted in Hong Kong and other jurisdictions. It explores key characteristics of ESG assets that make them desirable instruments for long-term investments and discusses the current and potential status of ESG integration by long-term investors.

3.1. OVERVIEW OF ESG INVESTING

ESG investing takes account of both ESG and financial factors in the investment decision-making process. The environmental factor is the impact of the underlying firm's activities and policies on the environment. The social factor is the firm's relationship with society, including its employees, customers, and community. The governance factor is the firm's governance, leadership, and internal controls.

Investors follow various strategies to take ESG factors into account in their investments. Some exclude assets in specific sectors (such as tobacco and fossil fuels); others invest in assets specifically related to sustainability. Some investors take the further step of using shareholder power to influence corporations' ESG commitments (Table 3.1).

Public awareness and interest in ESG factors have grown in recent years. At the same time, investors are becoming more aware of the impact of their investments. Demand for ESG assets and inflows into ESG funds are rising. Assets under management (AUM) in ESG funds ballooned almost 400% in the past decade.[22]

Table 3.1: ESG investment strategies

Negative/exclusionary screening	The exclusion from a portfolio of certain sectors or companies based on specific ESG criteria
Positive/best-in-class screening	Investment in sectors, companies, or projects with positive ESG performance
Norms-based screening	Screening of investments against minimum standards of business practice based on international norms
ESG integration	The systematic inclusion of ESG factors in financial analysis
Sustainability themed investing	Investment in themes or assets specifically related to sustainability
Impact/community investing	Targeted investments or financing businesses with a social or environmental purpose, including community investing
Corporate engagement and shareholder action	Using shareholder power to influence corporate behaviour

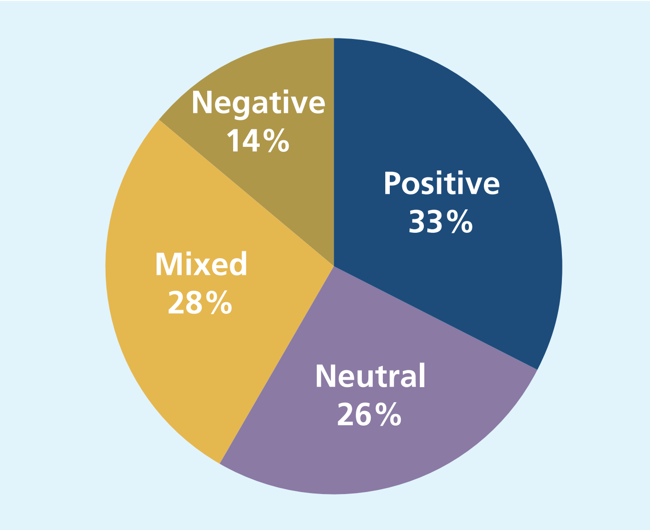
Source: Global Sustainable Investment Alliance (2019). '2018 Global sustainable review.'

[22] *Financial Times (2021). 'ESG funds defy havoc to ratchet huge inflows.'*

3.2. POTENTIAL OF ESG ASSETS FOR LONG-TERM INVESTMENTS

A large body of research has focused on firms' ESG attributes and their financial performance. Whelan et al. (2020) reviewed over 1,000 studies on the relationship between ESG and financial performance published in the last five years. Among investment studies focusing on risk-adjusted returns, 59% found that ESG assets had similar or better performance relative to conventional ones, whereas only 14% found negative results (Chart 3.1). Furthermore, they found that improved financial performance due to ESG becomes more significant over a longer time horizon.[23]

Chart 3.1: Results of studies on performance of ESG assets compared with conventional assets



Source: Whelan et al. (2020).

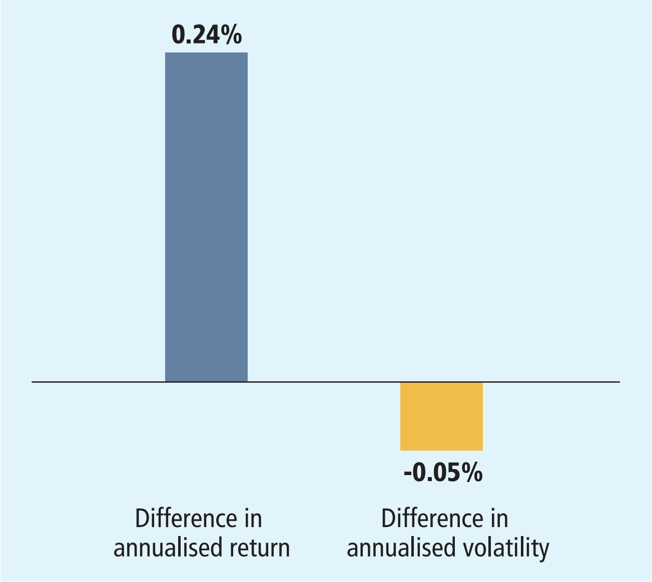
In the following, we summarise three findings on the financial performance of ESG as long-term investments based on both academic and industry studies of ESG investments.[24]

3.2.1. Similar or superior long-term performance of ESG assets

A common perception holds that investing in ESG assets is equivalent to sacrificing returns compared with conventional assets over a long horizon. However, this view is not supported by evidence. A large body of studies have found that the long-term performance of ESG assets was similar to, if not better than, that of conventional assets.

Using 10 pairs of ESG equity indices and their parent indices covering global, regional and several key local markets, we find that ESG indices demonstrated similar, if not superior, performance compared with their parent indices over the past decade. In particular, the average annualised return of ESG equity indices was 0.24% higher and the average annualised volatility was 0.05% lower. There appears to be no contradiction in 'doing well by doing good' (Chart 3.2).

Chart 3.2: Differences in return and volatility between ESG indices and their parent indices over the past decade



Source: Bloomberg and HKIMR compilation.

[23] *An earlier meta-analysis also yielded similar findings. Friede et al. (2015) studied around 2,200 individual studies up to 2015. They showed that roughly 90% of these studies found a nonnegative relation between ESG and corporate financial performance, with the large majority reporting positive findings.*

[24] *The discussion here aims to provide a balanced view based on the state of the art literature. The evidence presented here is not exhaustive.*

The finding appears to hold not only for equities but also for a wider class of assets. Research conducted by Morningstar and Barclays respectively suggests that sustainable funds and ESG bonds performed similarly to, if not better than, their conventional counterparts over a long horizon.[25, 26]

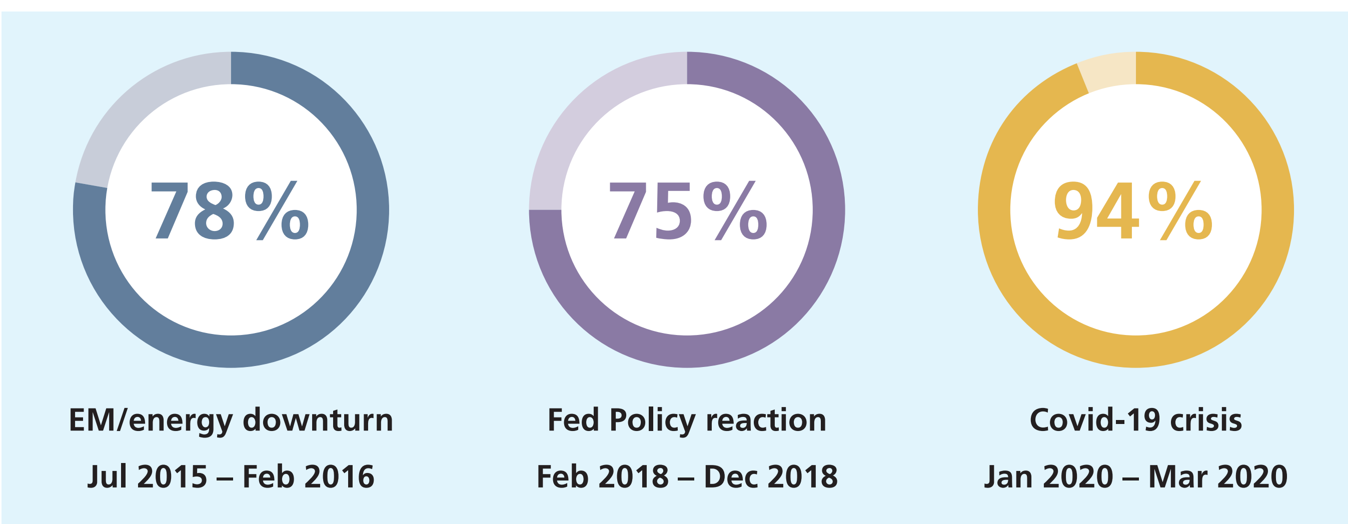
Moreover, this finding of comparable returns is robust even after controlling for other factors that may affect an asset's financial performance. For instance, a study commissioned by the HKIMR showed that US publicly traded equities with high scores in environmental and social factors do not perform significantly differently from other firms based on standard, unconditional market risk, or average returns, after controlling for factors such as firm size, book-to-market ratio, and firm industry.[27]

3.2.2. Better resilience of ESG assets during market downturns

Another characteristic of ESG assets is their better resilience during market downturns. This is an attractive attribute for long-term investors because they can enjoy more stable returns over their investment horizon. As people age, they rely more on passive income instead of active income from labour supply. Thus, the consistency and stability of cash flows is a key factor to be taken into account by long-term investors.

Using a globally representative, widely analysed set of 32 sustainable indices, BlackRock found that during several notable market downturns, sustainable indices demonstrated a smaller drawdown than their non-sustainable counterparts. In particular, 94% of sustainable bond indices outperformed their parent benchmarks during the first quarter of 2020, when the Covid-19 pandemic broke out (Chart 3.3).[28]

Chart 3.3: Percentage of sustainable indices that outperformed during downturns



Source: BlackRock (2020b).

[25] *Bioy, H., & Boyadzhiev, D. (2020). 'How does European Sustainable Funds' performance measure up?' Morningstar Manager Research. June.*

[26] *Barclays (2016). 'Sustainable investing and bond returns.'*

[27] *Chava et al. (2021). 'Doing well by doing good? Risk, return, and environmental and social ratings,' HKIMR Applied Research Paper No. 03/2021. January.*

[28] *BlackRock (2020b). 'Sustainable investing: Resilience amid uncertainty.'*

Recently, many studies have zoomed in on the Covid-19 pandemic to study the performance of ESG assets in a downturn and found strong support for ESG resilience. For example, one influential academic study found robust evidence that stocks with higher environmental and social ratings had significantly higher returns, lower volatility, and higher operating profit margins during the Covid-19 pandemic.[29] It also identified two channels through which ESG activities add value for shareholders and investors. First, firms that engage in ESG activities have a good reputation, inducing higher customer and employee loyalty, which translates into higher resilience in market downturns. Second, ESG assets are demanded by investors who are less sensitive to short-term fluctuations in asset prices (say, due to an ESG investment mandate), so panic selling is less likely to occur for ESG stocks during market turbulence.

ESG assets demonstrated similar or superior long-term performance and offered better resilience during market downturns than traditional assets.

3.2.3. ESG assets possess desirable characteristics for long-term investments

Going forward, long-term investors may find it rewarding to consider ESG integration in their strategic asset allocation for two reasons. First, it is believed that ESG investing will be one of the key secular growth themes of the future.[30] For example, the Paris Agreement, signed in 2015, aimed to control the rise in average global temperatures to well below 2°C, and preferably to 1.5°C. More recently, jurisdictions accounting for over 70% of world GDP and greenhouse gas emissions have announced targets for net-zero emissions. More capital input from the private sector is needed to achieve these goals. Increased green investing may improve productivity and unlock commercial opportunities, but it requires a longer investment period to realise gains. For example, it takes some time for green technologies to mature and become mainstream.

Moreover, due to growing public awareness of ESG factors, employees and consumers are gradually shifting their attitudes and preferences towards sustainability. The long-term impact of this shift can be material. For instance, when the majority of job seekers care about workforce diversity in a company, socially conscious firms that care about diversity will attract and retain talent, which will be beneficial to the firms' long-term development. With increased disclosures, consumers are able to make informed choices based on the ESG practices of a firm. Firms that have poor governance or unfair labour conditions or that fail to embrace sustainable practices risk losing customer support, which can hurt profitability and competitiveness in the long run.

Second, ESG assets can provide protection against certain ESG risks. One example is the risk arising from policies aimed at greenhouse gas reduction, such as carbon taxation or changing farming practices. Such transition risk may be minor for a short-term investor, as it is unlikely to materialise within a short investment horizon. Over a longer horizon, however, the risk becomes unignorable. Indeed, Schroders (2020) showed that once physical and transition costs and other climate impacts are accounted for, there is a big reshuffling for relative returns of different assets over a 30-year horizon.[31] ESG assets are natural instruments to hedge against ESG-related risks, which is important for long-term investors.

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[29] *Albuquerque, R., Koskinen, Y., Yang, S., & Zhang, C. (2020). 'Resiliency of environmental and social stocks: An analysis of the exogenous Covid-19 market crash,' Review of Corporate Finance Studies, 9, 593-621.*

[30] *J.P. Morgan (2021). 'Sustainable investing: How to identify ESG leaders poised for long-term growth.'*

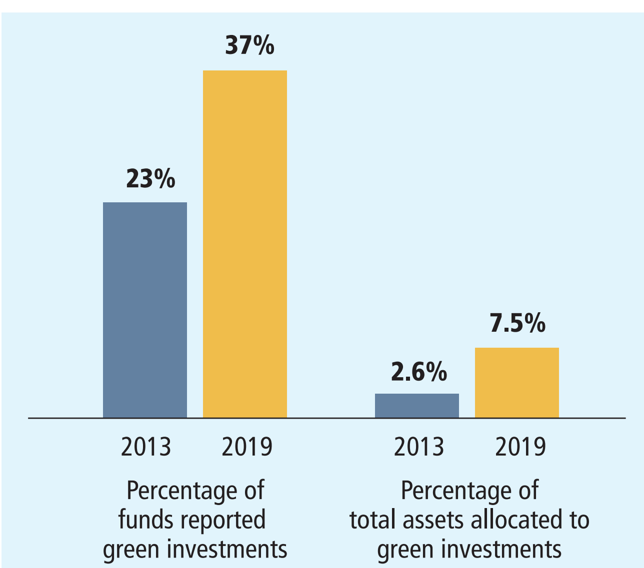
[31] *Schroders (2020). 'Incorporating ESG into long term investment return forecasts.'*

3.3. ARE LONG-TERM INVESTORS ADOPTING ESG ASSETS?

Given the benefits of long-term investments in ESG assets, this section explores the current and potential status of ESG integration by long-term investors.

According to an annual survey conducted by the OECD that covers more than 100 public and private pension funds from 46 countries, sustainability is a major theme amongst pension funds. Specifically, 37% of the funds reported allocations to green investments in 2019, up from 23% in 2013.[32] These pension funds on average allocated 7.5% of total assets to green investments, which was almost three times the figure in 2013 (Chart 3.4). Moreover, 15 funds reported investing in social investments. These findings suggest that pension funds are showing growing interest in ESG investing and have considerably increased their fund allocations to ESG assets in recent years.

Chart 3.4: Allocations to green investments by pension funds



Source: OECD annual survey of large pension funds and public pension reserve funds (2014, 2020).

Insurers are another key group of long-term investors. Available data suggest that insurers are also demonstrating a growing appetite for ESG assets. BlackRock global insurance report 2020 shows that, 54% of the 360 surveyed senior executives in the insurance and reinsurance sectors across roughly 20 countries indicated that they had invested in specific ESG strategies in the last 12 months.[33]

Both institutional investors and high-net-worth individuals show a growing appetite for ESG investing. Moreover, younger investors are more willing to invest in ESG assets.

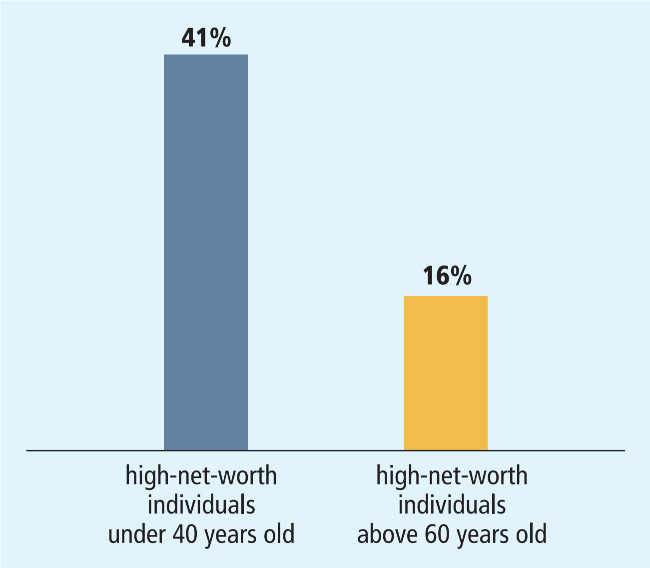
Apart from institutional investors, high-net-worth individuals are increasingly involved in ESG investing. According to the World Wealth Report by Capgemini, 27% of overall high-net-worth individuals expressed interest in ESG products. In particular, 41% of high-net-worth individuals under the age of 40 (versus 16% of high-net-worth individuals aged 60 or older) were willing to make ESG investments, implying that younger high-net-worth individuals are more concerned about sustainable development.[34] The enthusiasm expressed by younger high-net-worth individuals suggests that demand for ESG assets is likely to grow in the future (Chart 3.5).

[32] OECD (2014, 2020). 'Annual survey of large pension funds and public pension reserve funds.'

[33] BlackRock (2020a). 'Global insurance report 2020 – Insurers see the future.'

[34] Capgemini (2020). 'World wealth report 2020.'

Chart 3.5: Percentage of high-net-worth individuals expressing interest in ESG products across age groups



Source: Capegemini World Wealth Report (2020).

3.4. ESG-RELATED INITIATIVES IN HONG KONG AND OTHER JURISDICTIONS

A broad range of initiatives have been introduced in Hong Kong and other jurisdictions to promote ESG investments. The initiatives fall into five major categories: encouraging convergence of international ESG practices, enhancing transparency and disclosure, constructing ESG indices, providing incentives, and example setting (Table 3.2).

Hong Kong has been actively facilitating ESG development. It has established the Green and Sustainable Finance Cross-Agency Steering Group to co-ordinate the management of climate and environmental risks with the financial sector, accelerate the growth of green and sustainable finance in Hong Kong, and support the government's climate strategies. The Steering Group launched its strategic plan to strengthen Hong Kong's financial ecosystem in 2020, and established the Centre for Green and Sustainable Finance in 2021 to coordinate the efforts of financial regulators, government agencies, industry stakeholders and the academia in capacity building and policy development. In addition, a series of proactive measures have been rolled out to strengthen ESG infrastructure, including but not limited to the Green and Sustainable Finance Certification Scheme, the Green and Sustainable Finance Grant Scheme, the Sustainable & Green Exchange (STAGE) launched by the Hong Kong Exchanges and Clearing Limited (HKEX), and the Exchange Fund's commitment to ESG investments. In November 2021, the MPFA issued a set of guiding principles to MPF trustees which lay down a high-level framework that serves to assist MPF trustees in integrating ESG factors into the investment and risk management processes of MPF funds and making relevant disclosure to MPF scheme members. The principles were developed by making reference to relevant local and global requirements on ESG integration and disclosure approach.

Table 3.2: Examples of global initiatives to facilitate ESG development

Encouraging convergence of international ESG practices	EU's Sustainable Finance Taxonomy China's Green Industry Guideline Catalogue Regulators in Hong Kong will explore developing a green classification framework for adoption in the local market, with the aim of aligning with the Common Ground Taxonomy reported by the International Platform on Sustainable Finance
Enhancing transparency and disclosure	Certification schemes (Hong Kong Quality Assurance Agency's Green and Sustainable Finance Certification Scheme) Guidelines (US SEC Climate Guidance, HKEX's ESG Reporting Guide) Platforms for ESG disclosure (The Sustainable & Green Exchange (STAGE) established by the HKEX)
Constructing ESG indices	iBoxx Global Green, Social & Sustainability Bonds Index Bloomberg Barclays MSCI Green Bond Index
Providing incentives	Hong Kong's Green and Sustainable Finance Grant Scheme US's Clean Renewable Energy Bonds and Qualified Energy Conservation Bonds programmes The Netherlands' Green Fund Scheme
Example setting	Carbon neutrality goal (Mainland China before 2060, Hong Kong before 2050) Government-affiliated asset managers prioritising green assets (Hong Kong's Exchange Fund, Singapore's Temasek, and Japan's Government Pension Investment Fund)

Source: HKIMR compilation.

Chapter 4
Insights from Market Participants

Our survey finds both opportunities and challenges arising from demographic changes

HIGHLIGHTS:

- According to the survey commissioned by the HKIMR, over 85% of the respondents expected significant growth in their business serving accumulation needs in the next five years, and more than 55% also expected growth in their decumulation business.
- The survey respondents foresaw five drivers of rising demand for long-term assets: products with long investment horizons and guaranteed returns, products providing stable post-retirement income, voluntary contributions to MPF accounts, products related to health and long-term care, and exchange-traded funds.
- Financial institutions reported several challenges in providing long-term products for customers, including the protracted low interest rate environment, asset–liability mismatch, the evolving regulatory landscape, high operating costs, the difficulty of distributing products with complex features, and low public awareness.
- Several key trends and initiatives offer opportunities for the long-term asset markets in Hong Kong, including ESG investing, the Greater Bay Area initiative, and digitalisation of financial services. Survey findings show that 83% of the respondents took some action to adopt ESG investment strategies, and 89% of the respondents considered or planned to take into account the GBA in their strategic plans.

In the previous chapters, we discussed various aspects of the long-term asset markets in Hong Kong. It is useful to gather insights from key players in the long-term asset markets concerning the opportunities and challenges of the demographic changes in Hong Kong and the opportunities brought about by key trends and initiatives, such as ESG investment, the GBA initiative, and digitalisation of financial services. Three types of market participants are of particular interest, namely insurers, pension fund providers, and asset managers. Pension fund providers manage funds under MPF and ORSO schemes. Life insurers provide participating and investment-linked insurance products, which give customers access to investment returns bundled with some protection against life contingencies, and annuities. Asset managers offer flexible access to various asset classes. Some manage target-date funds, which adjust the asset allocation mix based on life-cycle considerations and may be desirable for long-term investors. Whereas MPF forms the basis of Pillar 2 of the World Bank's five pillar framework for Hong Kong, life insurers and asset managers support Pillar 3 by providing discretionary and flexible savings towards retirement.

Against this background, the HKIMR commissioned a survey entitled *Demographic changes and their implications for the long-term asset markets in Hong Kong* (hereinafter the Long-Term Asset Markets Survey) from July to September 2021. Survey questionnaires were sent to insurers, pension fund providers, and asset managers. In addition, institutional investors and some high-net-worth individuals in Hong Kong were also invited to give interviews to share their in-depth insights on this topic. This chapter presents the key findings of the survey and interviews.

4.1. THE DEMAND SIDE: DEMOGRAPHIC CHANGES CREATE DEMAND FOR LONG-TERM ASSETS

The survey asked local market participants to identify the age and income profiles of the target customers of their long-term saving products. The results show that all three sectors mainly serve people aged 30–60. Whereas insurers and asset managers focus more on the mass-affluent market, pension fund providers mainly cover the lower-income market due to the mandatory nature of the MPF.

Driven by factors from both the demand side and supply side, some customer segments may currently be underserved in the long-term asset markets. Whereas the low income group has limited financial wealth available for investment, high-net-worth individuals may receive more tailored services if necessary.[35] Whereas young investors may not see an urgent need for retirement planning, there may be limited assets suitable for the elderly, as the market has so far focused on serving the accumulation needs of the working age population.

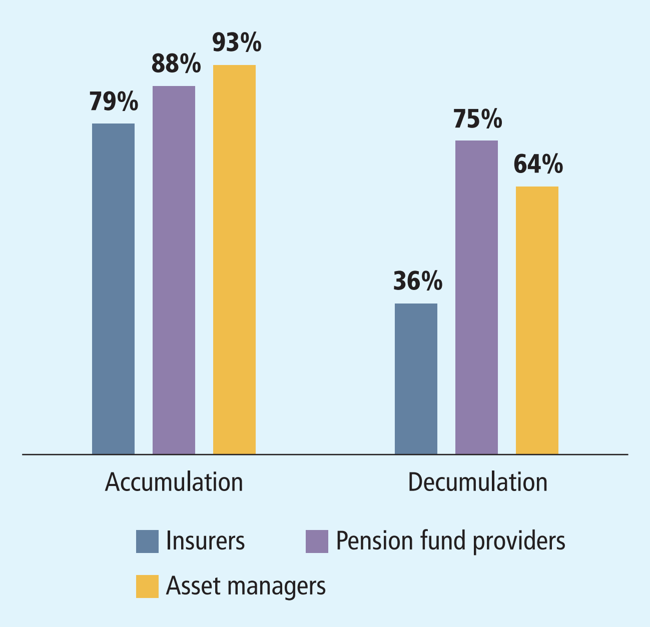
Institutional investors offering long-term assets in Hong Kong mainly serve middle-income or mass-affluent customers aged 30–60 years.

When asked about their strategic focus in the next five years in light of the demographic trends in Hong Kong, over 85% of the financial institutions in the

[35] *Box 4.1 summarises interview findings from high-net-worth individuals.*

survey stated that they expected their accumulation business to grow significantly, and more than 55% of the respondents expected their decumulation business to expand (Chart 4.1). This finding is in line with the shares of accumulation and decumulation demand projected in Chart 1.3 of Chapter 1, which shows that the survey participants were well aware of the demographic trends in Hong Kong.

Chart 4.1: Percentage of survey respondents expecting significant growth in long-term business



Source: HKIMR staff calculations based on the Long-Term Asset Markets Survey.

Survey participants expected a significant increase in demand for both accumulation and decumulation products in the next five years. Over 85% of the respondents expected their accumulation business to grow significantly, and more than 55% expected their decumulation business to expand.

When asked about how demographic changes might affect the demand for their long-term business, institutional investors mentioned five potential drivers of rising demand, as shown in Chart 4.2:

- Products with long investment horizons and guaranteed returns. Due to longer life expectancy, investors have a preference for products with longer investment horizons to better prepare for retirement. A number of interview respondents also suggested that investors are attracted by products providing guaranteed returns, such as those providing lifelong income or minimum investment returns, iBonds, and target-date funds.

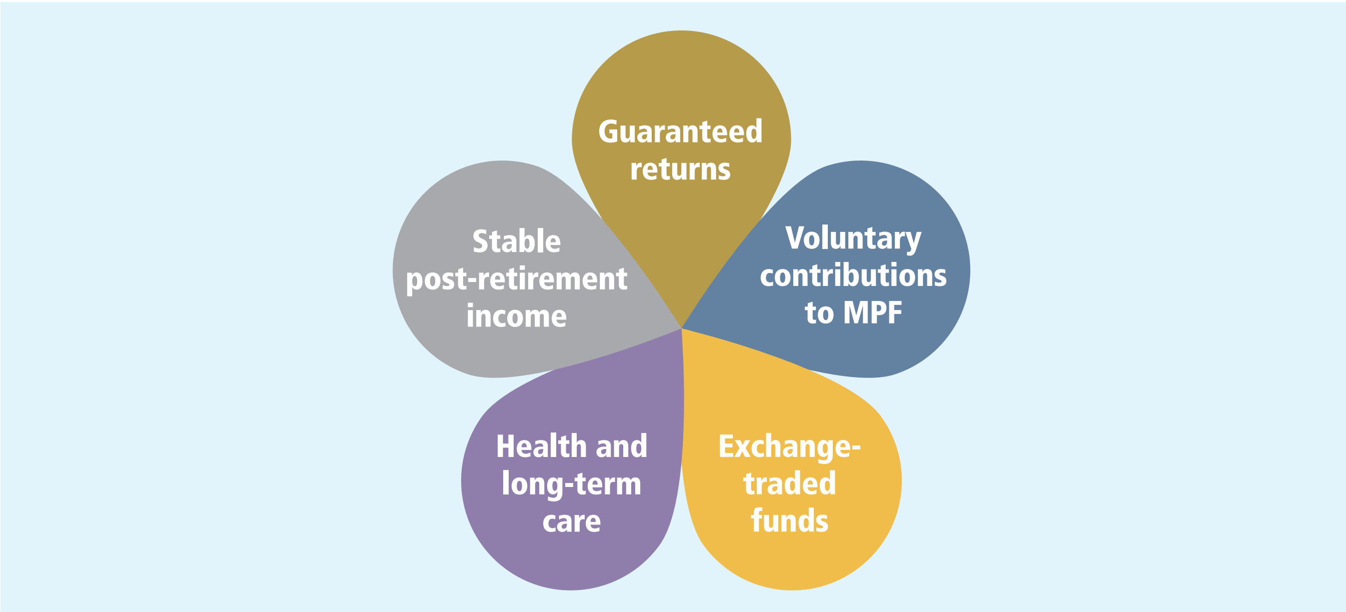
- Products providing stable post-retirement income. Demand for products such as annuities and reverse mortgages may be on the rise. Moreover, survey respondents expected that MPF scheme members would prefer withdrawal options for MPF that provide steady post-retirement income, in addition to the current method of withdrawals in a lump sum or by instalments.

- Voluntary contributions to MPF accounts. Due to rising awareness of retirement planning, survey respondents expected an increasing amount of voluntary contributions. Moreover, tax deductions for voluntary contributions further incentivise saving behaviour.

- Products related to health and long-term care. Some respondents expected rising demand for health insurance and long-term care insurance with cross-boundary coverage, which would provide coverage in potential retirement destinations such as Mainland China.

- Exchange-traded funds (ETFs). ETFs track the performance of preferred assets, which are particularly suitable for investors with limited financial literacy and investment experience.

Chart 4.2: Five potential drivers of rising demand for long-term assets

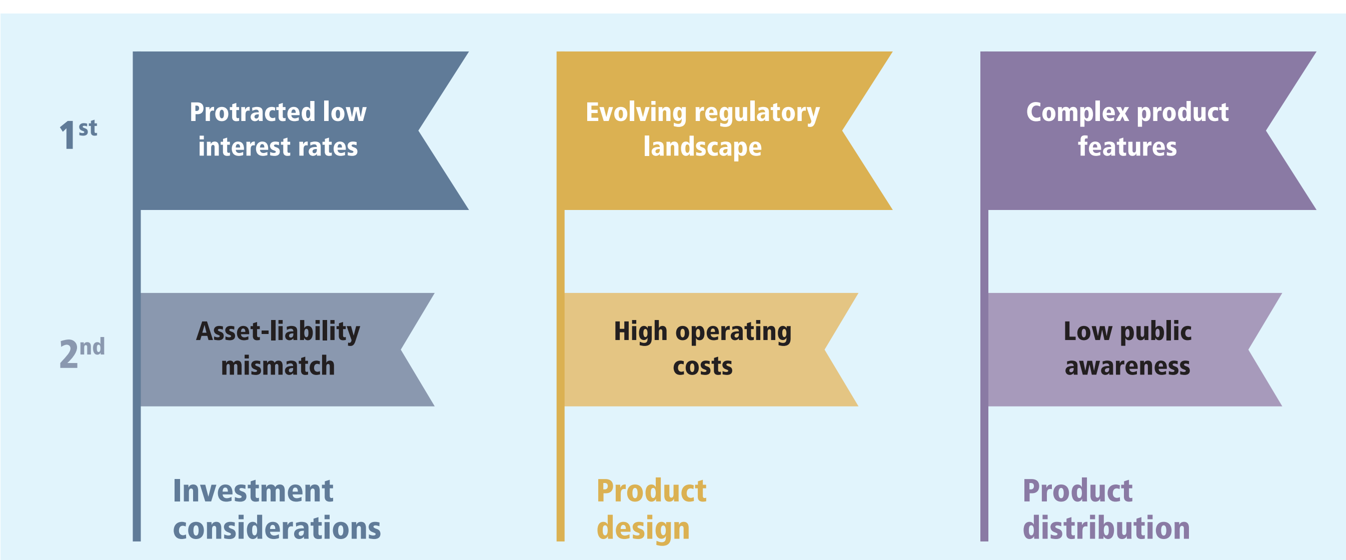


Source: HKIMR staff calculations based on the Long-Term Asset Markets Survey.

4.2. THE SUPPLY SIDE: CHALLENGES IN MEETING THE RISING DEMAND FOR LONG-TERM ASSETS

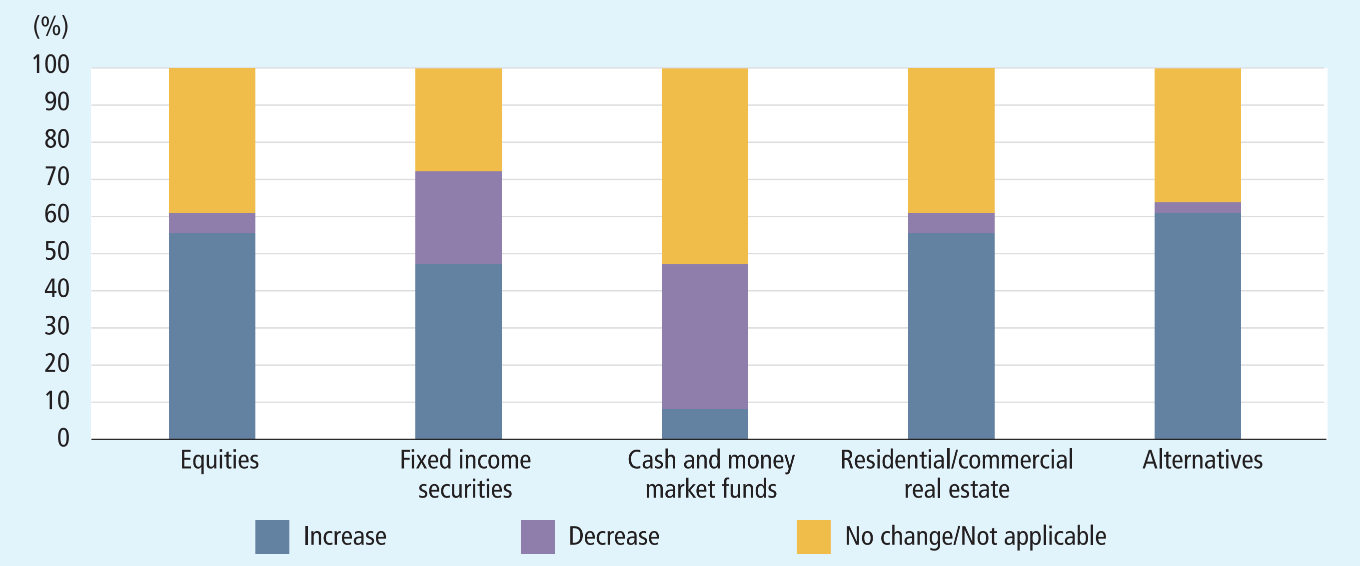
Against the backdrop of rising demand for long-term assets, financial institutions were asked about the challenges they encountered in supplying long-term assets in different areas. Chart 4.3 shows the top two challenges with respect to investment considerations, product design, and product distribution.

Chart 4.3: Top two challenges in different areas of long-term business



Source: HKIMR staff compilation based on the Long-Term Asset Markets Survey.

Chart 4.4: Expected asset allocation across asset classes in the next five years



Source: HKIMR staff calculations based on the Long-Term Asset Markets Survey.

4.2.1. Investment considerations

From the perspective of investing in suitable assets for long-term business, the protracted low interest rate environment was rated as a key challenge by all three types of institutional investors. These rates reduce investment return, posing a challenge for long-term investors, especially those offering guaranteed returns such as life insurers. Survey results show that more than half of the respondents intended to increase asset allocations to equities, residential/commercial real estate, and alternatives in the next five years, searching for higher yields within the current low interest rate environment. At the same time, around 40% of respondents planned to reduce investments in cash and money market funds (Chart 4.4).

The majority of the survey respondents expected to increase asset allocations to equities, residential/commercial real estate, and alternative investments in the next five years. Around 40% of the respondents planned to reduce investments in cash and money market funds.

Asset–liability mismatch is another challenge. In anticipation of a future pay-out, an ideal asset should have a long duration and be denominated in local currency. The institutional investors surveyed had mixed views regarding the extent to which the limited supply of HKD-denominated long-term assets constrained their investment options. Insurers and pension fund providers generally felt that currency mismatch was manageable through hedging with derivative instruments, but currency hedging tends to be imperfect and involves additional costs.[36] Moreover,

[36] *Survey results show that currency mismatch is less of a concern for asset managers.*

some stated that retail investors may find it desirable to eliminate exchange rate risks by directly investing in HKD assets. Because of these considerations, the respondents agreed that further developing the HKD-denominated asset markets would be desirable.

4.2.2. Product design

From the perspective of product design, one challenge cited by the market participants relates to the evolving regulatory landscape. Market participants understand the evolution of the global regulatory landscape and that local regulations have to align with international standards; however, they show different degrees of readiness to fully adapt to the new regulatory regimes. Some hold that the underlying challenge goes back to the combination of a low interest rate environment and increasing longevity, which limits the space of profitable retirement solutions.

Respondents also cited high operating costs as a challenge. Globally, asset managers face intensifying fee pressure, which reduces their incentives to design long-term products with more complex features that involve higher operating costs (such as target-date funds). MPF funds had an average Fund Expense Ratio of 1.43% as at November 2021, which is partly driven by continued reliance on manual, paper-based administration involving different stakeholders and a large number of contributions made per month.

4.2.3. Product distribution

In the distribution of long-term investment products, the top challenge cited by institutional investors was misaligned incentives in the distribution channels. Investment managers may be incentivised to sell products that are easy to market or carry high commissions, which are typically products with simple features and short investment horizons. Moreover, retail customers may sometimes fail to understand certain features of retirement planning products, such as guaranteed versus non-guaranteed returns, bonus declaration mechanisms, and surrender penalties.

A related challenge is the lack of awareness of retirement planning. The majority of Hong Kong residents save for their retirement through the MPF system. But contribution caps mean that MPF savings alone may not be adequate for some members to cover their post-retirement living expenses.[37] Survey respondents believed that some residents are unaware of the need to save on top of their MPF contributions. They also expressed concern that some customers may not have enough disposable income to have meaningful voluntary savings. Others felt that their customers might not have the necessary financial knowledge to make sound investment decisions. These findings are consistent with the research results reported by the Investor and Financial Education Council in 2019: among retirees, just about one third felt confident that they had financially prepared well for retirement and the majority (68%) still relied on their children to provide financial support apart from drawing on their own savings. Besides, less than half of the working population read their MPF/ORSO statements regularly.[38]

4.3. OPPORTUNITIES IN KEY TRENDS AND INITIATIVES

In light of the challenges encountered in managing demographic changes and investing in long-term asset markets, market participants were asked what strategies and actions would help to improve the situation. This section focuses on their views concerning several key market trends, including ESG investing, the GBA initiative, and digitalisation of financial services, that could provide opportunities for long-term investing. In the next chapter, we discuss policy initiatives to support demographic changes and long-term investment.

4.3.1. ESG

ESG investing is now one of the key investing themes in the financial services industry. Survey results show that 83% of the respondents made some efforts to adopt ESG investment strategies, believing that ESG

[37] *The estimated average accrued benefit of MPF scheme members exceeded HK$250,000 as of 30 June 2021 (MPFA, 2021).*

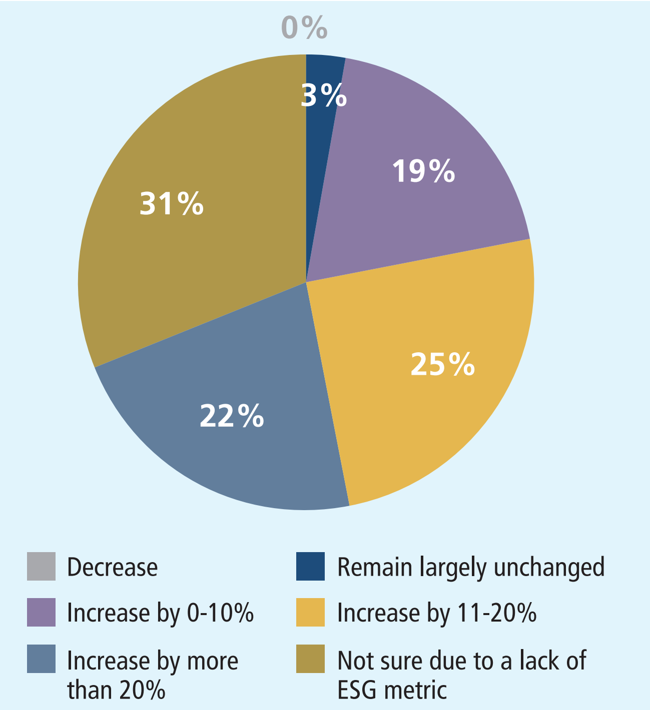
[38] *IFEC (2019). 'Financial literacy monitor 2019.'*

will create value for their long-term portfolios. The most common ESG-related actions, adopted by around half of the respondents, were investing in ESG or green funds and screening investment portfolios. Some respondents adopted a comprehensive ESG framework that takes into account the commitment of the board, clear actions, and proper disclosures.

83% of our survey respondents made some efforts to adopt ESG investment strategies.

In addition, the survey respondents overwhelmingly expected the allocation of ESG assets to increase in the next five years. Nearly 70% of the respondents expected their ESG assets to increase in the next five years, and less than 5% believed that their ESG assets would remain largely unchanged. Nevertheless, around 30% of respondents were still unsure about their ESG allocation in the future, due to the lack of a clear ESG metric (Chart 4.5).

Chart 4.5: Expected change in ESG allocation in the next five years



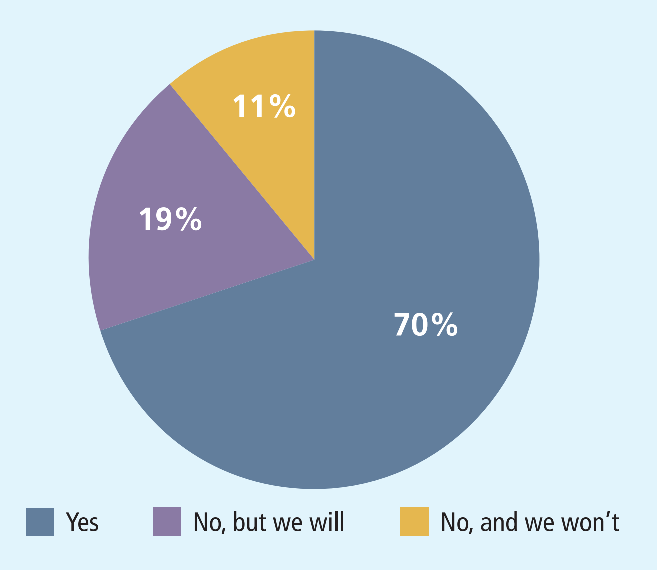
Source: HKIMR staff calculations based on the Long-Term Asset Markets Survey.

Although the importance of ESG investing is increasingly recognised, there are barriers to its adoption. Survey respondents cited unclear rules, a lack of quality data, and inconsistent definitions as challenges to ESG investing. Moreover, although evidence suggests that ESG investments provide satisfactory returns in the long term, the survey respondents reported that some retail customers are sceptical about ESG investing.

4.3.2. Guangdong–Hong Kong–Macao Greater Bay Area

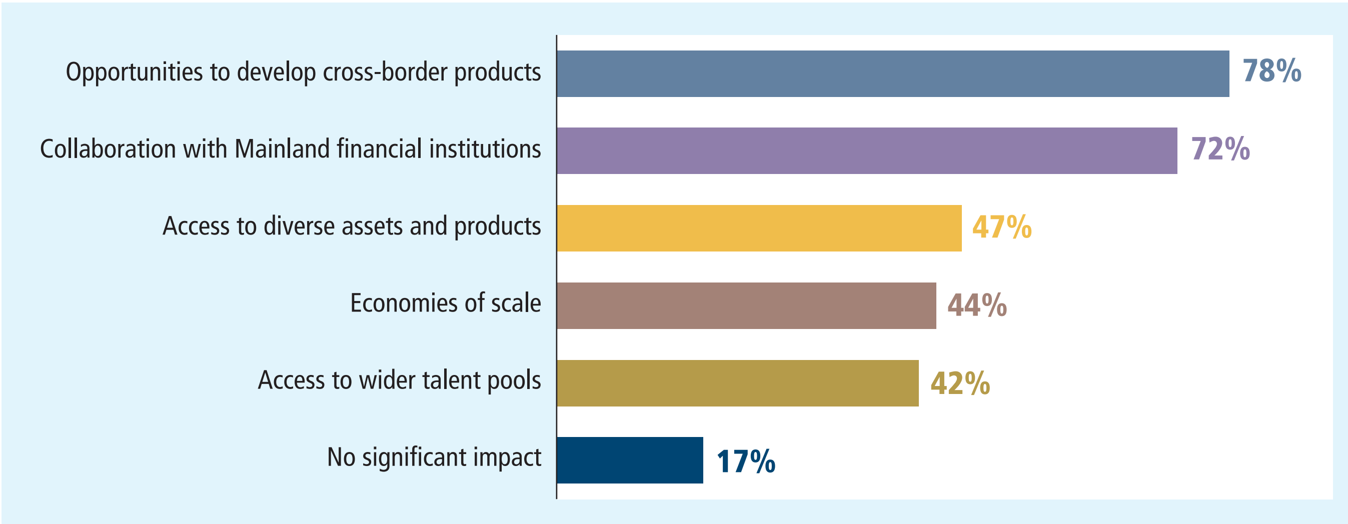
The Guangdong–Hong Kong–Macao Greater Bay Area (GBA) initiative has opened up many potential opportunities to financial institutions in Hong Kong, from the perspectives of both the demand and supply of long-term assets. The survey participants showed strong interest in the potential of the GBA, with 70% of the respondents having included the GBA in their strategic plans, and another 19% indicating they planned to do so in the next one to two years (Chart 4.6).

Chart 4.6: Percentage of respondents who considered the GBA in their strategic plans



Source: HKIMR staff calculations based on the Long-Term Asset Markets Survey.

Chart 4.7: Ways in which the GBA has enhanced financial institutions' ability to meet customers' retirement needs



Source: HKIMR staff calculations based on the Long-Term Asset Markets Survey.

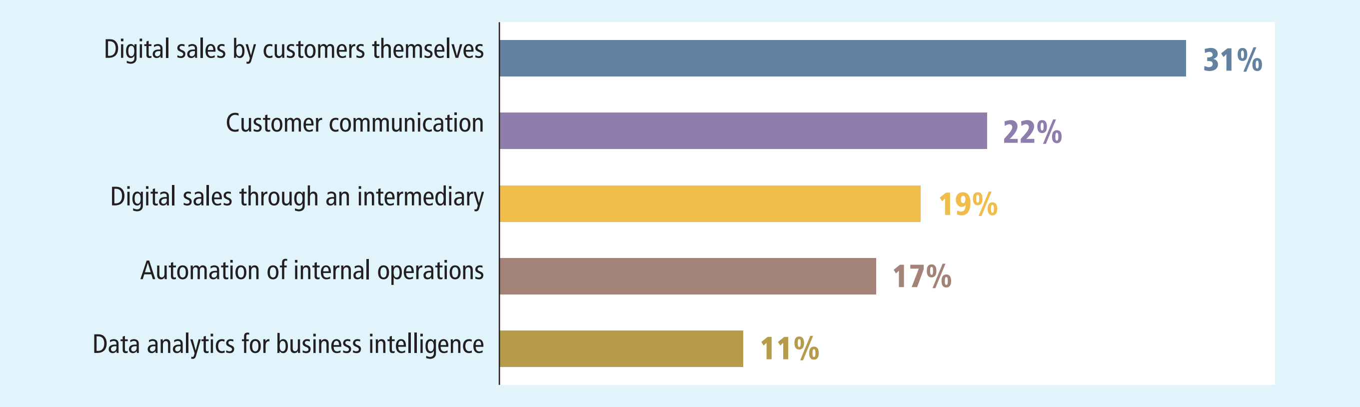
Regarding the ways in which the GBA initiative facilitates the development of the long-term asset markets, 78% of the survey respondents found the opportunities to develop cross-boundary products appealing. Given the GBA's much larger population base (86 million) and the tendency of retired Hong Kong citizens to reside in the GBA, market participants expected a strong demand for cross-boundary long-term investment solutions. Specifically, 72% of the respondents wished to collaborate with Mainland financial institutions and leverage their Fintech experience to develop products and services. Around half of the respondents recognised the opportunity to access more diverse asset classes. For example, the strong need to fund infrastructure development within the GBA has created investment opportunities with stable returns suitable for long-term investors in Hong Kong (Chart 4.7).

4.3.3. Digitalisation of financial services

Digitalisation of financial services can address some of the challenges in meeting retirement needs discussed earlier. Through interactive interfaces, the features of long-term investment products such as annuities and reverse mortgages can be better explained to customers. Fintech platforms can be made less rigid and more engaging, improving customers' experience and promoting public awareness. Data analytics can enable institutions to better understand their customers' preferences and behaviours, leading to better engagement and product design. Digitalisation can reduce operating costs through automation.

When asked which part of their operation financial institutions the respondents would wish to digitalise, 'sales by customers themselves' was the top choice, selected by more than 30% of the respondents. The other responses were relatively evenly spread across all of the options offered, from customer-facing (digital sales through intermediaries and customer communication) to back-end operations (automation of internal procedures and data analytics for business intelligence). This indicates that the industry recognises that digitalisation would benefit their business in multiple aspects instead of a particular area (Chart 4.8). At the same time, respondents cited high costs and a lack of suitable expertise and resources as the major barriers to digitalisation.

Chart 4.8: Part of business operations on which digitalisation will have the most positive impact



Source: HKIMR staff calculations based on the Long-Term Asset Markets Survey.

Box 4.1: Interviews with high-net-worth individuals

In addition to institutional investors, high-net-worth individuals (henceforth HNWIs) were interviewed. They were invited to share their insights on how demographic changes might affect their investments and their perspectives on Hong Kong's investment markets. The results revealed that HNWIs' investment decisions were shaped by major trends, similar to institutional investors, but given that there were fewer constraints associated with their investments, HNWIs could make different investment decisions in response to the trends. We discuss these findings in greater detail below.

HNWIs predominantly viewed demographic changes as a structural phenomenon that might create investment opportunities in certain sectors, such as healthcare and senior living. For HNWIs, funding for their own retirement was not a major concern, and a number of HNWIs cited taking care of family or legacy planning as key investment objectives.

Most HNWIs agreed that, currently, the key challenge was the very low interest rate environment, echoing the views of institutional investors. Given this reality and the fact that they faced fewer constraints on their investments, HNWIs did not view long-term fixed-income assets as an attractive option for investment. Instead, they invested in a wide range of assets, including local and foreign equities (with a focus on high-growth tech sectors), properties (to secure rental income and gains from rising property prices), private equities, infrastructure-related bonds, and venture capital. When asked about their experience in investing in Hong Kong and other international financial centres around the world, some HNWIs commented that regulation of the financial services industry in Hong Kong was sufficient, and that they would benefit from enhanced transparency of the financial products provided in Hong Kong, which would help them make informed decisions.

HNWIs generally viewed the GBA as a good investment opportunity. At the same time, some highlighted that given existing constraints, these opportunities may be difficult for investors to access. They indicated interest in structured projects (such as ETFs), or debt solutions (such as infrastructure bonds) managed in Hong Kong to provide 'bite-sized' exposure to the GBA theme.

Most HNWIs were aware of the increasing global popularity of ESG investing and recognised its benefits to society. Some planned to gain exposure to ESG assets in the future, consistent with the findings in Capegemini's (2020) survey; others were not actively seeking to invest in ESG assets, citing the need to ensure that their returns would be in line with their investment objectives.

Chapter 5
Developing Healthy Long-Term Asset Markets amid Changing Demographics

Promoting broad participation of institutional and retail investors and capturing opportunities arising from key trends are crucial

HIGHLIGHTS:

- Based on the findings from the survey and interviews, this report makes a wide range of suggestions to facilitate the healthy development of the long-term asset markets in Hong Kong, which include promoting broad participation of institutional and retail investors and capturing opportunities arising from key trends.

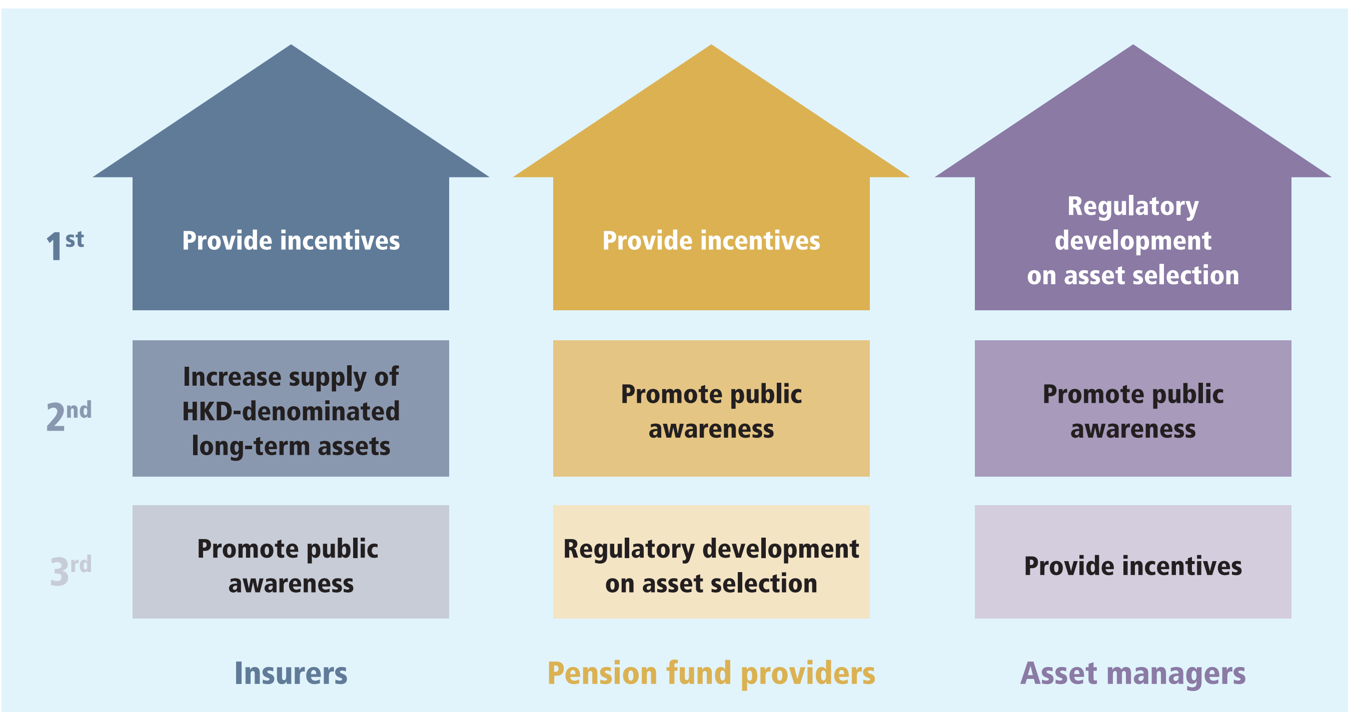
- Suggestions for promoting broad participation of institutional and retail investors include providing incentives for long-term investing, promoting public awareness of the need for retirement planning, and creating diversified products for long-term investors.

- Suggestions for capturing opportunities arising from key trends include perfecting local ESG ecosystem, supporting cross-boundary transactions, and facilitating digital transformation.

5.1. MARKET VIEWS ON HOW TO ADDRESS THE CHALLENGES

Given the many challenges financial institutions face in Hong Kong's long-term asset markets, the survey respondents were asked to rate the top three initiatives that they would find useful. Two key measures were cited by insurers, pension fund providers, and asset managers alike, namely providing incentives for long-term investing and promoting public awareness. Insurers also suggested increasing the supply of HKD-denominated long-term assets to meet long-term liabilities; pension fund providers and asset managers considered regulatory development on asset selection to be important (Chart 5.1).

Chart 5.1: Top three initiatives cited by market participants for addressing the challenges of Hong Kong's long-term asset markets



Source: HKIMR staff compilation based on the Long-Term Asset Markets Survey.

Insurers, pension fund providers, and asset managers regard providing incentives for long-term investing and promoting public awareness as key to addressing the challenges of Hong Kong's long-term asset markets.

5.2. WAY FORWARD TO DEVELOP THE LONG-TERM ASSET MARKETS

The long-term asset markets in Hong Kong are crucial for addressing the evolving needs of the ageing population. To mitigate the challenges that institutional and retail investors face in the long-term asset markets, we make the following suggestions (Chart 5.2).

5.2.1. Provide incentives for long-term investing

One way to promote long-term investing by the public is to provide incentives, which the survey respondents also considered an effective way to increase public awareness and uptake rates. Following the introduction of tax deductions for qualifying deferred annuity premiums and tax-deductible voluntary contributions (TVC) in April 2019, the number of TVC accounts increased significantly. Some refinements to the Qualifying Deferred Annuity Policy (QDAP) may better align the incentive schemes of the policy holders with the goal of increasing long-term investing. One possibility is to spread the premium payments out over a longer period of time so that policy holders can enjoy reduced cash outflow each year, while naturally prolonging the time invested in the instrument.

Moreover, it is worth exploring the potential to broaden incentives to more long-term investment products. The HKMC announced a promotional offer for the 'HKMC Retire 3' this year, including a premium discount for the HKMC Annuity Plan, an enhanced fixed-rate mortgage plan under the Reverse Mortgage Programme, and product enhancements to the Reverse Mortgage Programme and the Policy Reverse Mortgage Programme, which could encourage the public to invest for the long term.

As for institutional investors and high-net-worth individuals, well-designed investment mandates could encourage investment over a longer horizon. According to FCLT Global (2020), shaping mandates with provisions specifically oriented towards long-term goals can help to build stable investment partnerships between institutional investors and asset managers and improve long-term performance. Some examples of these provisions include reducing fees with the longevity of the partnership rather than with the assets under management, emphasising long-term returns in performance reports instead of quarterly returns, and developing a rebalancing policy to counteract overreaction to short-term events.

5.2.2. Promote public awareness of retirement planning

Low public awareness and a lack of investment knowledge are regarded as a major challenge to individuals' retirement planning: 70% of survey respondents cited this among the top three policy issues to address. Two initiatives may be helpful for increasing public awareness. First, education is essential. Numerous international surveys of retail investors have identified a general lack of knowledge about certain long-term assets, such as annuities.[39] A financial curriculum could be introduced to help the public better understand the nature of longevity risk and the need to protect against it. Public and media promotion campaigns can also raise public awareness. Second, access to high-quality financial advice can help retail investors to select appropriate long-term assets to meet their retirement needs. Well-trained financial advisors can better deliver information about long-term products to potential customers. This is especially important for products with insurance or annuity elements or with relatively complex payoff structures. A fee-based model could be promoted to encourage more independent advice rather than a commission-based model, in which the adviser's income depends on the sales amount.

5.2.3. Create diversified products for long-term investors

The survey revealed the need for more diversified investment products among both institutional investors and retail investors. Institutional investors would like low-risk fixed-income instruments to meet the needs of asset–liability management. Though the Hong Kong government has a strong fiscal position, initiatives such as North New Territories and Lantau Development may provide opportunities to issue infrastructure-linked long-term government bonds denominated in HKD. A second need expressed by institutional investors is alternative assets that offer higher investment returns, such as private equities and infrastructure-linked assets. The

[39] *See for example LIMRA (2020) '2020 Insurance Barometer Study'.*

HKMA has attempted to build a competitive private equity platform in Hong Kong, fitting into the broader policy goal of maintaining Hong Kong's status as a leading asset and wealth management centre.

For retail investors, a wider variety of long-term products would be helpful in preparing for retirement. First, as the population ages, the demand for decumulation products will increase. More differentiated products with decumulation characteristics can cater to the diverse needs of the retired population. Both the public and the private sector can play a constructive role in supplying these assets. Second, the demand for health and long-term care-related products is also on the rise, given current demographic trends. Access to holistic retirement solutions, which comprise housing, medical, and other services, also appeals to retirees. Third, expanding the supply of products with stable returns and low operating costs would be helpful. For example, iBonds and Silver Bonds have received strong interest and significant oversubscription from retail investors. Another example is index ETFs, which are transparent in nature and easy to manage.

5.2.4. Perfect local ESG ecosystem

Notwithstanding the potential benefits of ESG assets as long-term investments, some market participants reported hesitation about the idea of ESG investing. Further capacity-building efforts would be useful. First, public education about the advantages of ESG investments is needed. The survey respondents reported that some investors have limited interest in ESG assets and incorrectly associate ESG assets with lower yields. The government could provide subsidies for ESG training and courses to professionals and offer public education campaigns for retail investors to raise awareness, creating a favourable policy environment for ESG investments. Second, given the growth potential of ESG assets, there is a window of opportunity to increase the supply of long-term ESG assets to retail investors. To this end, the HKMA is looking into piloting the issuance of green bonds to retail investors under the Government Green Bond Programme. Third, constructing ESG indices will increase the accessibility of ESG-related ETFs in the financial markets. This will appeal to investors who have an interest in ESG investments but limited investment knowledge, or who prefer not to spend too much effort on active management.

5.2.5. Support cross-boundary transactions

Support for cross-boundary transactions would benefit the further development of the long-term asset markets in Hong Kong. First, a number of market participants in the interviews expressed interest in cross-boundary business after the announcement of related initiatives and development strategies by the government. By establishing a clear roadmap for cross-boundary development, the government would strengthen investors' confidence in long-term investments. The second action is to provide unitised products to create 'bite-sized' exposure to projects in the GBA, which in practice are difficult for investors to access and often require certain minimum investments. This view was echoed by high-net worth individuals, who expressed similar wishes to invest in the GBA. The third action is to enhance the cross-boundary payment system to simplify the processing procedures. Policy makers have been studying the possibility of allowing Mainland investors to use CNY to participate in the Hong Kong stock market. In the future, the use of Central Bank Digital Currency in HKD or CNY and of eWallet can further support cross-boundary transactions.

5.2.6. Facilitate digital transformation

Facilitating the digital transformation of financial institutions can reduce operating costs and improve customers' experiences. Pilot schemes can incentivise financial institutions to engage in the digital area. One example is the Fintech Supervisory Sandbox, which allows banks and their partnering Fintech firms to conduct pilot trials of Fintech initiatives involving a limited number of participating customers without the need to achieve full compliance with HKMA's supervisory requirements. Providing support for institutions' digital transformation would ensure that customers engage with more user-friendly interactive platforms that provide them with enough information on the implications of different scenarios.

A promising example of digitalisation is the eMPF platform, which is a common, integrated electronic platform used to standardise, streamline and automate MPF scheme administration processes. Due to its centralised nature and economies of scale, the eMPF platform not only significantly changes the administration of the MPF system but also leads to greater operating efficiencies and lower administrative costs. This platform will make it easier and more convenient for employers and plan members to manage their MPF and pave the way for future MPF reforms. The eMPF Platform will come into full operation in early 2025 at the earliest.

Chart 5.2: Suggestions to promote the healthy development of the long-term asset markets in Hong Kong

Promote broad participation of institutional and retail investors

Provide incentives for long-term investing

- Encourage lower premium payments spread out over a longer period of time
- Reorient investment mandates towards long-term goals

Promote public awareness of retirement planning

- Strengthen financial education, such as financial curriculum and media promotion campaigns
- Provide access to high-quality financial advice for retail investors

Create diversified products for long-term investors

- Create diversified products for institutional investors, such as long-term government bonds
- Create diversified products for retail investors, such as decumulation products
- Further expand the iBond and Silver Bond programmes and encourage ETFs

Capture opportunities arising from key trends

Perfect local ESG ecosystem

- Enhance public education on ESG investments
- Increase supply of long-term ESG assets to retail investors
- Construct ESG indices

Support cross-boundary transactions

- Establish a clear roadmap for cross-boundary development
- Provide unitised products to create 'bite-sized' exposure to the projects in the GBA
- Enhance the cross-boundary payment system

Facilitate digital transformation

- Offer pilot schemes for digitalisation
- Provide support to facilitate institutions' digital transformation

Source: HKIMR staff compilation.

Conclusions

The demographic trends in Hong Kong are a major force behind the demand for long-term assets. A sustained increase in life expectancy and decline in fertility rates drive up investment demand to support retirement. The accumulation and decumulation pattern of an individual over the life cycle is reflected in the whole economy. Our projection suggests that demographic trends alone will increase the demand for long-term products by 15% overall in the next 30 years, and the increase in demand will be even larger (up to 32%) when taking into account policies aimed at attracting young talent from outside Hong Kong. Our projection also suggests that whereas the demand from people before retirement currently accounts for around 70% of the total, the demand from people after retirement will account for around 45% as the population structure changes.

The financial markets in Hong Kong are evolving to meet this changing pattern of demand. Apart from the wide range of equity and bond instruments provided by the financial markets in Hong Kong, 'HKMC Retire 3' and Qualifying Deferred Annuity Policy also offer solutions for residents in Hong Kong to generate lifelong streams of income for their retirement. iBonds and Silver Bonds have been well received by the public owing to their stable and guaranteed returns. Moreover, there is increasing demand for alternative assets under the current low interest rate environment. The HKMA has already attempted to facilitate alternative investments in Hong Kong. According to our survey results, market participants expected their business serving people before or after retirement to grow significantly in the next five years. Moreover, they foresaw five major drivers of rising demand for long-term assets: products with long investment horizons and guaranteed returns, products providing stable post-retirement income, voluntary contributions to MPF accounts, products related to health and long-term care, and exchange-traded funds.

Key opportunities for meeting the changing demand arising from demographic trends are identified, namely ESG investing, the GBA initiative, and digitalisation of financial services. First, ESG investing will be a key secular growth theme in the future and is increasingly embraced by institutional and retail investors in long-term investments. Second, the GBA initiative offers Mainland investors access to diverse assets and products, and provides financial institutions in Hong Kong access to a larger customer base and economies of scale. The mobility of capital, labour, and information within the area will further promote the development of the long-term asset markets in Hong Kong. Third, the digitalisation of financial services will address the challenges of rising retirement demand. It will reduce operating costs through automation and improve the customer experience through interactive interfaces and Fintech platforms. Market participants are increasingly incorporating these trends into their strategic plans.

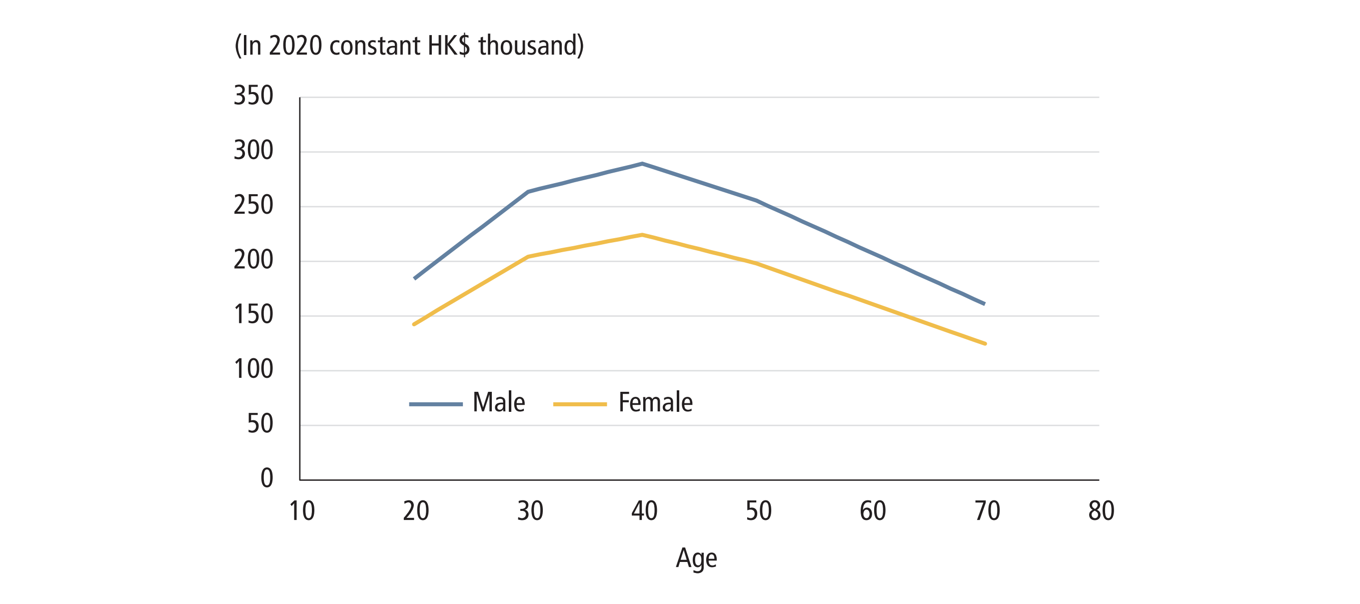
Several factors are important for the development of the long-term asset markets in Hong Kong. Key local factors include the development of the local bond market and the investment and risk preferences of local investors. Globally, the protracted low interest rate environment poses challenges for long-term institutional investors and has incentivised a 'search for yield' in investing.

A wide range of suggestions are made for promoting the healthy development of the long-term asset markets in Hong Kong. These include actions to promote investors' participation and ways to capture opportunities arising from key trends. Recent initiatives such as the promotion of the 'HKMC Retire 3' and the development of the eMPF platform are positive moves in these directions.

Appendix A:
Future Demand for Long-Term Assets due to Demographic Trends

The model by Chan (2021) projects the demand by Hong Kong residents for long-term assets out of their career income. The basic building block is the career income of a typical individual in Hong Kong, based on the Annual Earnings and Hours Survey data from the Census and Statistics Department (Chart A.1).

Chart A.1: Median individual annual income at various ages in 2020



Source: Census and Statistics Department.

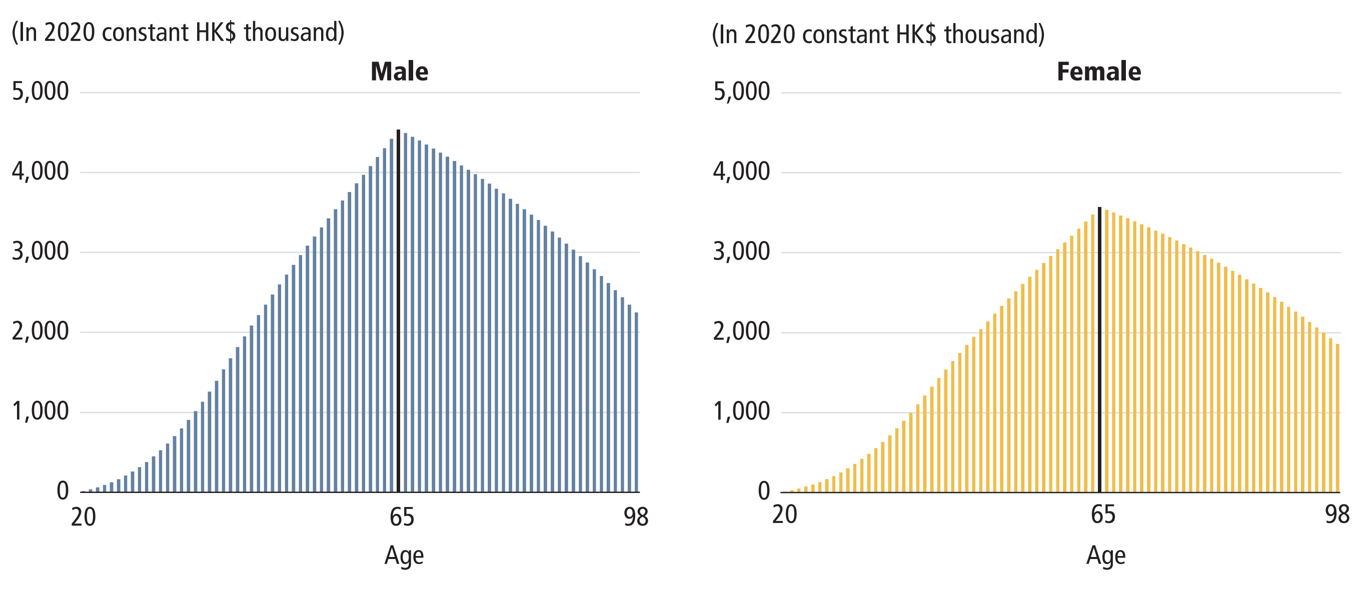
The accumulation of life-cycle wealth of a typical individual in Hong Kong is then computed. The study calibrates the savings ratios (between 10% and 40%) by age and gender and unemployment probabilities based on Hong Kong data. Savings are accumulated during the working period, i.e., from age 20 to 65, assuming a real annual rate of return of 2.25%.[40] After retirement at age 65, the individual is assumed to decumulate wealth at the rate of 80% of the pre-retirement wage level.[41] Chart A.2 presents the Hong Kong individual life-cycle wealth in 2020 constant Hong Kong dollars. The high savings rates in Hong Kong lead to a relatively large stock of wealth among older individuals.

Appendix

[40] *As at the end of December 2020, the annualised return was 4.8% since the inception of the MPF System, outperforming the inflation rate of 1.8% over the same period (MPFA, 2020). However, due to the recent low interest rate environment, we make a conservative assumption of a 2.25% real rate of return in our model.*

[41] *We assume that the retiree needs more than the usual 50–60% income replacement ratio to support his/her spouse and other household members.*

Chart A.2: Life-cycle wealth



Source: Chan (2021).

In the final step, the individual savings are aggregated using the population projection, and the total demand for long-term assets is computed for each year from 2020 to 2049. The projection takes into account mortality and labour force participation by age and gender. Individual wealth is assumed to consist of 95% long-term assets at ages 20–40, 85% at 41–60 and 75% for 60+ years old.

Population projection data, mortality data, and labour market data (age- and gender-specific median wage, unemployment rate, and labour force participation rate) are obtained from the Census and Statistics Department. Savings ratios are calibrated based on the estimates by Wong and Yeung (2019).

The resulting demand for long-term assets from Hong Kong residents is projected to grow continuously for the next 25 years and then to start slowing down after 2045 due to asset decumulation by retired people and overall population decline. In 2049, the projected demand will be HK$8.73 trillion, an overall 15% increase from the demand in 2020. The total demand is further split into that from individuals in their accumulation phase (before 65) and decumulation phase (after 65) (Chart 1.3).

To assess the robustness of the projection, a sensitivity analysis is conducted by assuming a stochastic process for the real rate of return, with a mean of 2.25% and a standard deviation increasing linearly with the projection period, reflecting the increase in uncertainty in real investment return over time. One thousand simulated time paths of the real rate of return are generated, and their corresponding long-term asset demands are computed. The 5th and 95th percentiles of the projected long-term asset demand growth for the period 2020–2049 are 7.9% and 23.1%, respectively.[42]

[42] *Using a similar methodology, Chan (2021) showed that the 5% and 95% bands of growth in demand for long-term assets in 2020–2049 are given by [3%, 69%] with policy to attract young talent from outside Hong Kong. The projection results suggest a growing demand for long-term assets by Hong Kong residents in the medium term.*

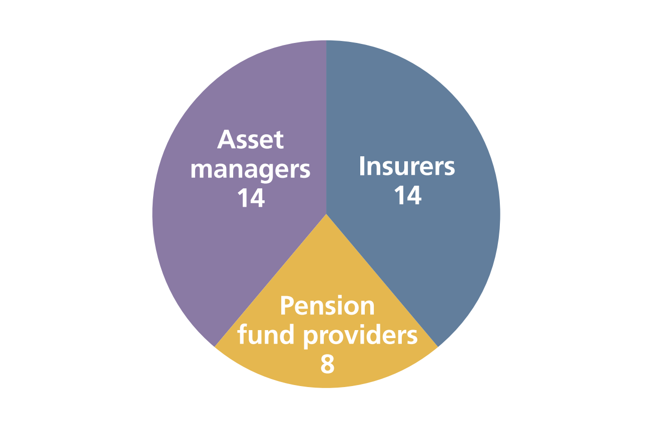
Appendix B: Survey Background

The results presented in this report are based on a survey entitled 'Demographic changes and their implications for the long-term asset markets in Hong Kong', conducted from July to September 2021 in collaboration with PwC, with the objective of obtaining qualitative and quantitative information from market participants to gather insights into the development of the long-term asset markets in Hong Kong.

In total, 36 institutions participated in the survey: 14 insurers, 8 pension fund providers, and 14 asset managers. The sample of market participants in this survey was constructed to cover a broad representation of the market landscape. The assets backing liabilities for the insurers surveyed account for 73% of the total assets backing liabilities for individual long-term businesses. These respondents are also sponsors of 18 out of 27 MPF schemes in Hong Kong, or over 80% of the total assets under management (AUM) for all MPF schemes. The AUM of the asset managers surveyed accounts for 31% of the AUM of unit trusts and mutual funds authorised by the Securities and Futures Commission (Chart B.1).

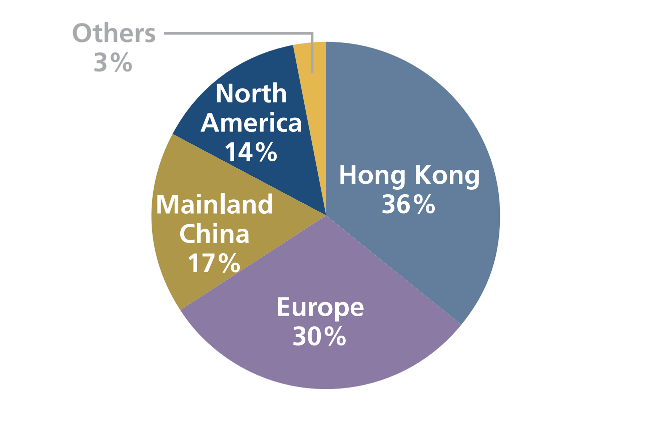
The respondents are diverse in the locations of their global headquarters, with 36% located in Hong Kong, 30% in Europe, 17% in Mainland China, and 14% in North America (Chart B.2).

Chart B.1: Number of participants in the survey



Source: HKIMR staff calculations based on the Long-Term Asset Markets Survey.

Chart B.2: Distribution of the global headquarters of survey participants



Source: HKIMR staff calculations based on the Long-Term Asset Markets Survey.

Apart from the survey, 19 interviews were also conducted to gain insights from market participants in more detail. The sample included 6 insurers, 3 pension fund providers, 5 asset managers, and 5 high-net-worth individuals. Although such high-net-worth individuals are not directly affected by demographic trends, they shared unique perspectives on the long-term asset markets in Hong Kong and the various themes explored in this study.

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