2016 SINGAPORE ASSET MANAGEMENT SURVEY

SINGAPORE - GLOBAL CITY, WORLD OF OPPORTUNITIES





Contents

Foreword	2
About the Survey	5
Survey Findings Assets Under Management Sources of Funds Investment of Funds Retail Investment Funds	6
Areas of Development Developing the Venture Capital & Private Equity Ecosystem Deepening Sustainable Investing Capabilities	14

Establishing Fund Domicilation Hub

Strengthening the Talent Pool

1

Foreword

The global asset management industry recovered in 2016, with assets under management ("AUM") growing 7% to US\$69 trillion¹ compared to 1% in 2015. A good part of this owed to valuations, as equity markets registered strong gains. Passive funds and alternative assets continued the trend of growing faster than traditional assets at 14% and 9% respectively. The pace of industry consolidation has also picked up as traditional asset managers look to scale and reap synergies.

Singapore continues to be a vibrant and leading international fund management centre. AUM in 2016 grew by 7% to S\$2.7 trillion (US\$1.9 trillion), supported by sustained net fund inflows and broad-based improvements in market valuations. In line with global trends, alternative sector AUM, comprising hedge funds, venture capital (VC), private equity (PE) and real estate grew by 17%. On the other hand, traditional AUM increased modestly by 3%.

Singapore will continue to deepen its VC and PE capabilities and establish itself as a vibrant enterprise financing hub to support the next generation of Asian growth companies. VC and PE managers play an important role in stimulating economic dynamism and innovation. MAS has been working with the industry to deepen the financing ecosystem for regional and local companies. MAS will implement the simplified regulatory framework for venture capital managers by the end of 2017. MAS will deepen the talent pool, enhance ancillary professional services and build a

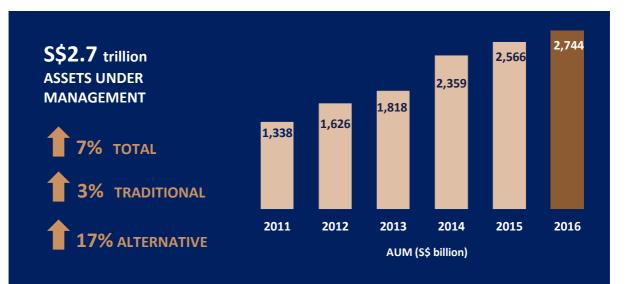
¹ Source: BCG Global Asset Management 2017 "The Innovator's Advantage"

pipeline of alternative market platforms to facilitate pre-IPO exits and capital recycling.

To further strengthen Singapore's position as a compelling hub for both fund management and domiciliation activities, MAS consulted publicly on a proposed corporate and regulatory framework, Singapore Variable Capital Companies (S-VACC), to facilitate the incorporation and domiciliation of investment funds across traditional and alternative fund vehicles for both open-ended and closeended funds. MAS will be responding to the public consultation in fourth quarter of 2017 and targets to implement the S-VACC framework by 2018.

Asset managers are also increasingly leveraging on technology and innovation across the value chain. This ranges from using artificial intelligence and data analytics to identify investment opportunities, to utilising robo-advisors and digital distribution channels to increase fund penetration and automate back-end processes. In June 2017, MAS consulted on proposed refinements to the licensing and business conduct requirements to facilitate the provision of digital advisory services in Singapore.

These trends will have implications on business models and job roles. The Institute of Banking and Finance (IBF) revised its Fund Management Standards in second quarter of 2017 to cover new sectors such as alternative investments and private equity, and incorporate skills beyond front office. The revised standards will also complement professional qualifications such as the CFA and CAIA.



2016 Key Highlights

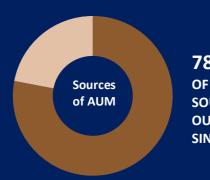
660 REGISTERED & LICENSED FUND MANAGERS



ALTERNATIVE ASSETS UNDER MANAGEMENT (\$\$ billion)







SERVING GLOBAL INVESTORS





66% OF FUNDS INVESTED IN ASIA PACIFIC

About the Survey

The Monetary Authority of Singapore conducted its annual survey of the Singapore asset management industry, for the year ending 31 December 2016.

Financial institutions surveyed include Banks, Finance and Treasury Centres, Capital Markets Services licensees (including REIT managers), Financial Advisers, Insurance Companies, Operational Headquarters and Exempt Entities, but excludes direct investments by government-related entities. 872 respondents participated in the 2016 MAS Asset Management Survey.

Survey Findings

Assets Under Management

At the end of 2016, total assets managed by Singapore-based asset managers grew by 7% year-onyear to reach S\$2.7 trillion, up from S\$2.6 trillion in 2015. Over the last five years, the industry's assets under management ("AUM") expanded at a 15% compound annual growth rate ("CAGR").

The Singapore asset management industry continued to maintain a high level of discretionary AUM, which increased from 52% to 53% of AUM in 2016. This reflected the industry's depth of expertise in higher value-added activities such as portfolio management.



▲**7%** 2016 AUM growth

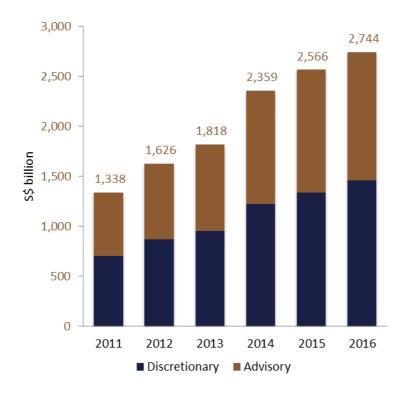
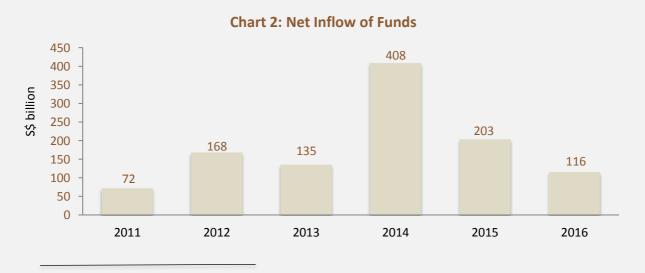


Chart 1: Assets Under Management

▲15% 5-year AUM CAGR In 2016, there was a net increase of 32 registered and licensed fund managers. This brings the total number of registered and licensed fund managers to 660.

AUM growth supported by net fund inflows

In 2016, Singapore asset managers continued to attract net inflow of funds² of S\$116 billion, albeit at a slower pace compared to previous years. Private market managers, such as real estate, PE and VC managers, contributed to the bulk of net fund inflows as they deployed capital into new investment opportunities. On the other hand, inflow of funds to traditional active managers were generally lower.



² Net inflow of funds is equal to incoming funds less outgoing funds.

Traditional AUM grew by just 3%, while Alternative AUM expanded by 17% to \$\$478 billion. Within the Alternative sector, VC³, PE³, and real estate AUM recorded robust growth rates at 32%, 14%, and 30% respectively. AUM in these sectors continued to grow robustly on the back of buoyant deal making as managers deployed funds into investment opportunities. Capital raising remained strong with VC and PE managers reporting \$2 billion and \$\$23 billion of dry powder⁴, which is equivalent to 40% and 15% of drawn-down AUM respectively.



▲17% Alternative AUM growth

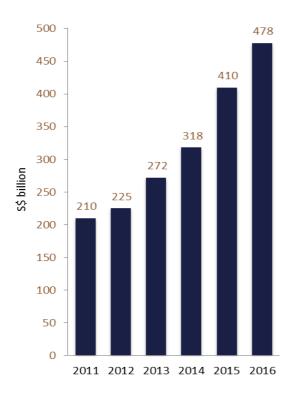


Chart 3: Alternative AUM

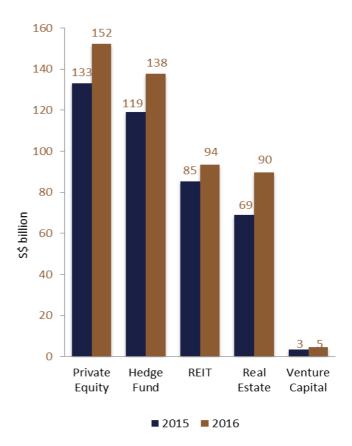


Chart 4: Alternative Sectors

³ AUM of Private Equity and Venture Capital include only drawn-down capital.

⁴ Dry powder refers to capital that is contractually committed but undrawn.

Sources of Funds

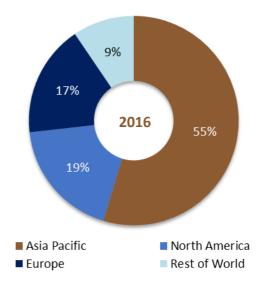
In 2016, 78% of total AUM was sourced from outside Singapore, compared to 80% in 2015. Of the total AUM, 55% was sourced from the Asia-Pacific, 19% from North America and 17% from Europe, demonstrating Singapore's role in serving regional and international investors.

Singapore also serves as the regional hub for a growing pool of institutional investors to access global markets and private market opportunities in Asia. These include Investment Company of People's Republic of China, Korea National Pension Service, La Caisse de dépôt et placement du Québec, Norges Bank Investment Management and the Swiss National Bank which maintain investment offices in Singapore. Total AUM amounted to S\$172 billion, or 6% of total AUM.

There is also a growing trend of life insurance companies setting up asset management companies. Leading regional insurers have made Singapore the headquarters of their asset management arms. Supported by a substantial and growing base of long-term life assets, these asset management companies are able to invest in longer-term strategies like private equity, real estate and infrastructure, and can build scale to manage third-party monies.

78% AUM sourced from outside Singapore

Chart 5: Breakdown of Singapore's AUM – Source of Funds



Investment of Funds

The Asia-Pacific region continued to be a key investment destination for Singapore-based asset managers, accounting for approximately 66% of total AUM in 2016 compared to 68% in 2015. Within the Asia-Pacific, 39% of AUM was invested in ASEAN.

66%

AUM Invested in the Asia-Pacific

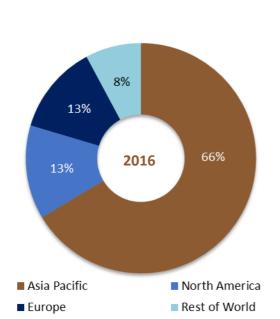


Chart 6: Breakdown of Singapore's AUM – Investment of Funds

In 2016, investors' allocation to the various asset classes were largely stable compared to the prior year. Allocation to alternatives⁵ rose slightly from 20% to 21% of AUM, reflecting investors' growing appetite for illiquidity premium in a persistent low yield environment. Allocation to bonds was unchanged at 23% as investors also sought stable returns. On the other hand, allocation to equities declined from 43% to 42% of AUM.

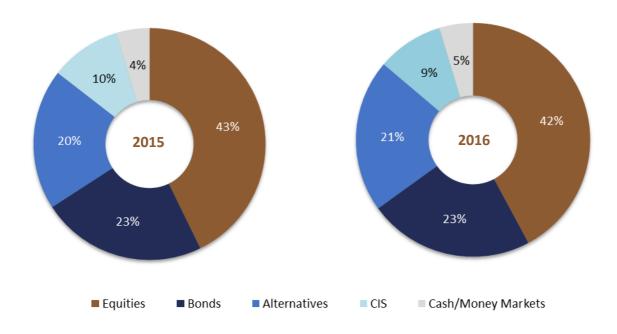


Chart 7: Investment by Asset Class

⁵ Investments in alternatives include unlisted/private equity/venture capital, real estate and other investments.

Retail Investment Funds

In 2016, the funds size of Authorised Collective Investment Schemes⁶ ("CIS") and Recognised CIS⁷ offered in Singapore grew by 6% to S\$82 billion. The increase in CIS funds size was led by Authorised CIS which rose by 13% to S\$43 billion. On the other hand, Recognised CIS declined slightly by 1% to S\$39 billion.



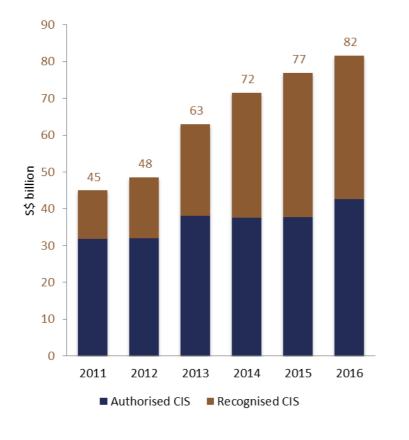


Chart 8: CIS Funds Size

⁶ Authorised CIS are schemes constituted in Singapore and offered to retail investors in Singapore.

⁷ Recognised CIS are schemes constituted outside Singapore and offered to retail investors in Singapore.

For Authorised CIS, investment to the Asia-Pacific continued to dominate at 75% of AUM, while allocation to Europe and North America increased from 10% to 11%, and from 7% to 9% respectively.

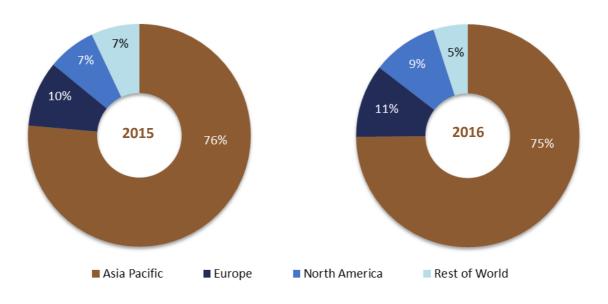


Chart 9: Investment of Authorised CIS by region

Areas of Development Developing the Venture Capital and Private Equity Ecosystem

The Asian Venture Capital (VC) and Private Equity (PE) industry is growing at a rapid pace. According to Preqin, VC and PE investments into Asia grew at 50% and 11% 5-year CAGR to reach US\$61 billion and US\$92 billion respectively in 2016. In Singapore, our VC and PE sector AUM has grown at a CAGR of 28% over the past 5 years to reach S\$157 billion. New opportunities are opening up for private markets to intermediate capital flows as companies stay private for longer. On average, a US technology company takes 11 years to list today, compared to 4 years in 1999. We are seeing a similar trend among successful Singapore-based start-ups, which tend to stay private for about 8 years before listing.

The VC and PE ecosystem plays an important role in stimulating economic dynamism and innovation. The Committee on the Future Economy (CFE) has also identified the importance of enhancing financing channels for next-generation Asian growth companies.

MAS seeks to build a vibrant VC and PE ecosystem, as part of broader efforts to develop Singapore as a financing hub for growth companies in Singapore and the region. MAS is working with the industry and government stakeholders on initiatives including:

- simplify authorisation process and regulatory • framework for VC managers;
- anchor top-tier regional and global VC and PE players in Singapore;
- deepen the talent pool; •
- enhance ancillary professional services ecosystem; and
- build a pipeline of alternative market platforms • that can facilitate private market exits for VC and PE investors.

26 VC managers

156 PE managers

▲28%

5-year PE/VC AUM CAGR

Deepening Sustainable Investing Capabilities

Sustainable finance and investing has gained momentum over the years. Growth in sustainable investing can be in part attributable to rising awareness of climate and sustainability risks among investors, as well as growing conviction that sustainable investing could potentially drive good longterm returns. Fund managers and investors have also become more sophisticated over time, moving beyond negative screening to thematic-based funds and full integration into their processes.

Global institutional investors such as government bodies, pension funds and corporates are increasingly adopting a sustainable approach in investing. In Singapore, the three main public sector investors – MAS, GIC and Temasek – have announced their plans to integrate sustainability considerations into their investment processes, in order to deliver good, longterm and stable returns. Temasek, for example, takes a strong interest in understanding sustainabilityrelated challenges, not just as a driver of business risk, but also of innovation and growth.

Sustainable investing is admittedly still a nascent activity in Singapore. On the back of rising demand, it is increasingly critical for asset managers to develop relevant skillsets and capabilities to offer sustainable products to investors. MAS, alongside association bodies, will be introducing a series of initiatives and capacity building courses to up-skill industry professionals. IBF has also recognised courses to raise awareness on the principles of sustainable financing and applications to the financial sector under the Financial Training Scheme ("FTS").

Establishing Fund Domiciliation Hub

Singapore has established itself as a leading pan-Asian asset management centre over the years. To encourage further consolidation of fund management and fund domiciliation activities in Singapore, MAS launched a public consultation in March 2017 on a proposed corporate structure for investment funds, also known as the Singapore Variable Capital Company (S-VACC).

The proposed S-VACC structure seeks to complement existing local structures – unit trusts, companies and limited partnerships – with one that is tailored for investment funds. The framework aims to provide greater flexibility and cost efficiency to asset managers who construct and manage both open-ended and close-ended funds, across all asset classes and investment strategies.

Under the new S-VACC framework, managers will also enjoy greater economies of scale from the consolidation of administrative functions at the umbrella level, while the provision for cellular company structure to segregate the assets and liabilities of sub-funds serves to mitigate cross-cell contagion risks. Further, re-domiciliation of foreign corporate funds to Singapore as S-VACC will be provided for under the S-VACC framework. The tax treatment for S-VACC is also one of the considerations for the domiciliation and management of funds. MAS is in discussions with MOF, IRAS and the industry to study the tax regime for S-VACCs.

MAS is targeting to implement the framework by end 2018.

Strengthening the Talent Pool

The future of work in the asset management industry will be redrawn, as asset managers leverage on new technologies, such as machine learning and robotics, to strengthen their investment process, seek new sources of alpha, enhance client engagement and improve efficiency.

MAS is keen to develop a strong pool of future-ready talent with the competencies to take on these new and evolving job roles. As part of the national SkillsFuture initiative, MAS has embarked on several initiatives to provide more learning pathways and training opportunities for Singaporean finance professionals to pursue mastery in their respective fields. MAS can support mid-career Singaporeans in developing specialist capabilities through post-graduate studies under the Finance Scholarship Programme (FSP). The financial sector SkillsFuture Study Award provides an additional channel of financial support to enable individuals to pursue specialist courses in risk & compliance, data analytics, cyber security and investment management.

The Institute of Banking and Finance (IBF) and industry further enhanced professional players have competency standards for the fund management industry in June 2017. The revised Standards support the development of core and elective capabilities across front, mid- and back-office functions. These include relationship management, risk and compliance, and operations, and will complement programmes such as CFA and CAIA which require a longer duration of study. The Standards will help finance professionals identify and acquire relevant skills needed for their jobs and support a growing industry.

Finance Associate Management Scheme

Who Benefits

 Fresh graduates selected for financial institutions' structured development programmes and cross functional exposure

Support

 30% funding of financial institutions' qualifying manpower costs

Finance Scholarship Programme Who Benefits

- Early to mid-career professionals looking to further their expertise through Masters/PhD programmes in specialised finance areas
- Senior finance professionals (>10 years experience) seeking to enrol in Advanced Management Programmes (AMP)

Support

- 70% funding of Masters/PhD programme fees plus allowance
- 30% funding of AMP fees plus allowance

International Posting Scheme Who Benefits

 Early to mid-career financial professionals seeking international exposure through financial institutions-supported overseas postings

Support

 50% funding of financial institutions' qualifying overseas costs



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