Corporate Strategy adaptations of Singaporean firms with the increasing global financial presence

Field studies of Singaporean corporations and strategic effectiveness

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Introduction

The Asia-Pacific region is one of the world's most important and dynamic economic regions. It includes geographical boundaries from East Asia, Southeast Asia, South Asia, and Oceania. The region is home to some of the world's fastest-growing economies and has a combined GDP that accounts for a significant portion of global economic output. One of the main drivers of economic growth in the Asia-Pacific region is trading. Many countries in the region have adopted export-oriented growth strategies and have become major players in global trade. China, Japan, South Korea, and Singapore are among the world's largest exporters of goods. Under globalization, the Asia-Pacific region offers significant opportunities for international capital market transactions, driven by its strong economic growth, growing companies, and increasingly integrated capital markets.

On the downside, it is quite imaginable that the pre-pandemic and post-pandemic global environments are totally two different things. The strike and tension created by Covid were one of the unprecedented kind encountered by modern society, and significantly hindered the process of globalization and people living within such an environment. The uprising occurred in many parts of the world, which intensively shift the capital market and the political landscape residing in those countries. Taking down the scope into the Asian market, the turbulence was never easy. The China-US tension was intensified by the political movements. Hong Kong has been prone to its sinicization and regulation by China, and the turmoils that occurred in Srilanka and Thailand collectively create strong headwinds to the recovery of the Asian-pacific economy.

One of the Southern Asia countries, adversely, stands out from the others and attracts investors worldwide. Singapore, with 180,000 acres of land size, presents endless opportunities for capital growth. With the recent configuration as the incubator of Web 3.0 and the expansive progression of SGX, Singapore fostered a great ground to understand the relationship between capital market growth and the corporate strategies developed alongside such trends.

A socioeconomic view of Singapore

To better understand Singapore, it is substantial to know a few historical events in advance. Singapore has encountered a significant growth in migration over the years. Although immigration has been increasing over the years, the issue of migration did not arise until the 1980s in Singapore. Since then, the nonresident population has continued to grow, and in the last decade, large numbers of immigrants have arrived, bringing with them new cultures that challenge the country's nationalist foundations. The population of Singapore can be divided into residents and nonresidents, with citizens and permanent residents being classified as residents and temporary immigrants as nonresidents. Permanent residents, primarily immigrants, are entitled to most of the same rights and duties as citizens embodied in the eligibility for government-sponsored housing and mandatory military service for young adult males, but with some exceptions like voting rights. The nonresident population grew at a faster rate than the resident population in 2008, and growth rates for both groups have since slowed down since the 2008-09 Great Recession. Despite this, the demographic of Singapore's residents has remained relatively consistent since 1990, with some changes in ethnic composition due to differences between citizens and permanent residents. (Figure 1)

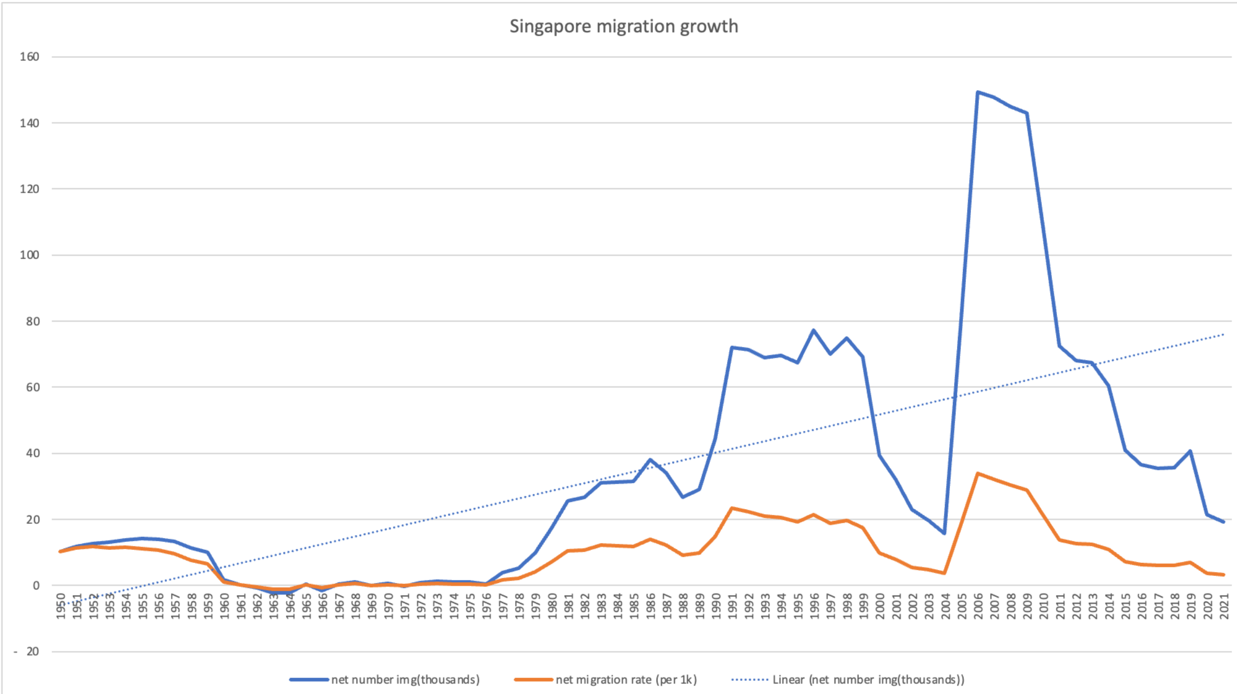


Figure 1

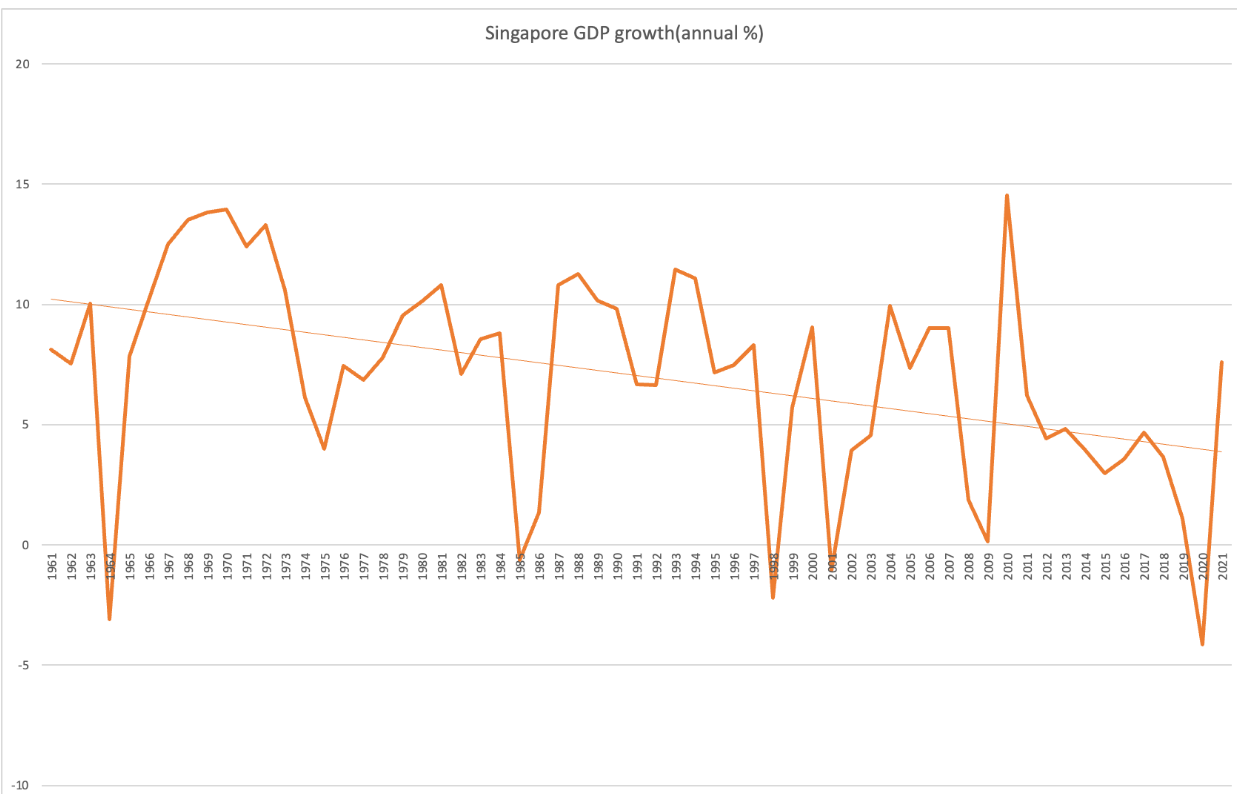


Figure 2

Immigration fosters enough talent to stimulate the economic growth of the land, making it a key factor to the overall growth. The workforce added to the labor market provides a solid cornerstone for the operation of various organizations as well as diversity for economic prosperity. There exists a strong positive correlation between the immigrant populations and the national GDP. (Figure1&2) Singapore's increasing share of the foreign-born population is a result of the country's policies to attract and depend on foreign labor across the skill spectrum to overcome local human capital limitations. In 2010, foreign-born individuals made up 34.7 percent of Singapore's labor force, which is a significant increase from 28.1 percent in 2000. The growth in the foreign-born proportion of the labor force in the 2000s was mainly due to the admission of 870,000 low-skilled workers, primarily in the construction, domestic labor, services, manufacturing, and marine industries. These workers were also allowed to work in bars, discotheques, lounges, nightclubs, hotels, and restaurants. The remaining 240,000 new arrivals were skilled and educated S-pass or employment pass holders, along with a small number of entrepreneurs. This group's size has increased rapidly due to intensive recruitment and liberalized immigration eligibility criteria. Additionally, the government has prioritized recruiting international students since 1997 as a third flow of immigration. Singapore aims to attract and maintain a highly skilled workforce to enhance its position in the globalized world. To achieve this goal, the government has invested heavily in information technology and human capital, and also focused on developing Singapore as the "talent capital" of the global economy. The government has liberalized some of its immigration policies while tightening others related to low-skilled immigration to attract skilled migrants and showcase a favorable environment for them to gain permanent residency and citizenship. Recent urban development policies aimed at branding Singapore as a culturally vibrant "Renaissance City" or "A Great Place to Live, Work, and Play!"

A political-economic view of Singapore

There has been a conventionally ongoing dispute about whether the political ideologies of the nation fit more into the form of democratism or authoritarianism. The answer to that question certainly comes from a multi-perspective point of view.

Historically, the economy of Singapore encountered its first strike when it started to crumble right after its independence from the Malay government. Singapore back then was confronted with low bottoms in both domestic market investment and human capital. The unemployment rate was at an all-time high, and the state was in urgency for a structural reformation in aspects of economic and regulatory policies.

Miracly, the country recovered swiftly in the 10 years as the employment rate reached full capacity in the late 1970s. Several factors accounted majorly for the quick rejuvenation of the national economy, including the political stability as well as the developments in both pragmatic strategies towards expansion in the financial market as well as the liberal regulatory policies carried within.

In the aspect of the political and economical regimes, the country leveraged developmental authoritarianism, in which exists strong state intervention of the market. During that time, business-state relation is key for the corporate to thrive under the authoritarian agenda. The state established Sovereign Wealth Funds, holding ownership in the Government Linked Companies (GLCs) in key sectors of manufacturing, financing, trading, transportation, shipbuilding, and services. Totally, GLCs counted for approximately 40% of the stock values from 2008-2013.

In general, a country with strong political stability, low tax and tariff burden, and liberal financial regulation is in huge favor of business throughout the globe, as the main driver of wealth inflows.

Geopolitics in Asian-Pacific and its impacts on international capital flows

It is not neglectable that the heating tension between Western and Eastern political formations creates a great and lasting influence on the financial market of the APAC region.

Historically, Hong Kong predominantly came to be the top 3 players of the financial center index with its function as the financial hub of foreign investment in mainland China. (Figure 3)

In 2022, the GFCI score of Hong Kong got exceeded by Singapore. This marks a significant change in the landscape of the capital market in APAC. Indeed, after the uprising and imposition of security laws in Hong Kong, the city has diverged from its original status as the tie between

Western and Eastern markets. Given the factors of risks, the weight of Hong Kong as a financial center is jeopardized and the blooming bubble starts to crack down, in which none could predict the underlying outcomes of the future.

Table 1 | GFCI 32 Top Ranks And Ratings

Centre	GFCI 32		GFCI 31		Change In	Change In
	Rank	Rating	Rank	Rating	Rank	Rating
New York	1	760	1	759	0	▲1
London	2	731	2	726	0	▲5
Singapore	3	726	6	712	▲3	▲14
Hong Kong	4	725	3	715	▼1	▲10
San Francisco	5	724	7	711	▲2	▲13
Shanghai	6	723	4	714	▼2	▲9
Los Angeles	7	722	5	713	▼2	▲9
Beijing	8	721	8	710	0	▲11
Shenzhen	9	720	10	707	▲1	▲13
Paris	10	719	11	706	▲1	▲13

Figure 3

The HKSAR national security law and recession of the function as the Asian financial hub

As conventionally perceived, Hong Kong was always on the utmost list of the financial center index rankings. During the Mid-1900s, Hong Kong, along with the other three east Asian countries, has been known as the Four Asian Tigers, proving its significance in the financial performance of Asia. Even though the GDP of Singapore surpassed the one of Hong Kong in late 1960, It was until 2019 that this trend has been fundamentally overturned. The Hong Kong protestant created turmoil in the stability of the economy. Geopolitics once again got brought onto the table, which showcased the opportunities for the future but also more of the unpredictable outcomes. The initiation of the national security law in 2020 marks the turning point of Hong Kong as a free land of trading. The regulations got more severe by the Chinese government, making the liberal trading of capital less easy, driving the capital to shift away due to the fear of strong regulation and political and restrictive risk. According to World Bank's data, the outflow of foreign direct investment in Hong Kong and the FDI inflow in Singapore are tightly correlated. Therefore, based on the similarities of the geographical and financial regulation advantage, it is likely to suspect that the foreign capital flowed from Hong Kong into the Singapore market during 2019-2020. It is still noticeable that the future recovery of Hong

Kong's economy under easing policies of pandemic regulation could restore its prestige as the financial hub of Asia. During the company visit to Tor Investment in the Singapore branch, Chris, as the speaker representative, expressed his bullish attitude towards Hong Kong's future as well as its political relationship with China. He thinks that the problem will be short-term and things will fall back to normal just as usual. "Never bet against the relationship between Hong Kong and China." as the SRC head of China once said at the banking summit.

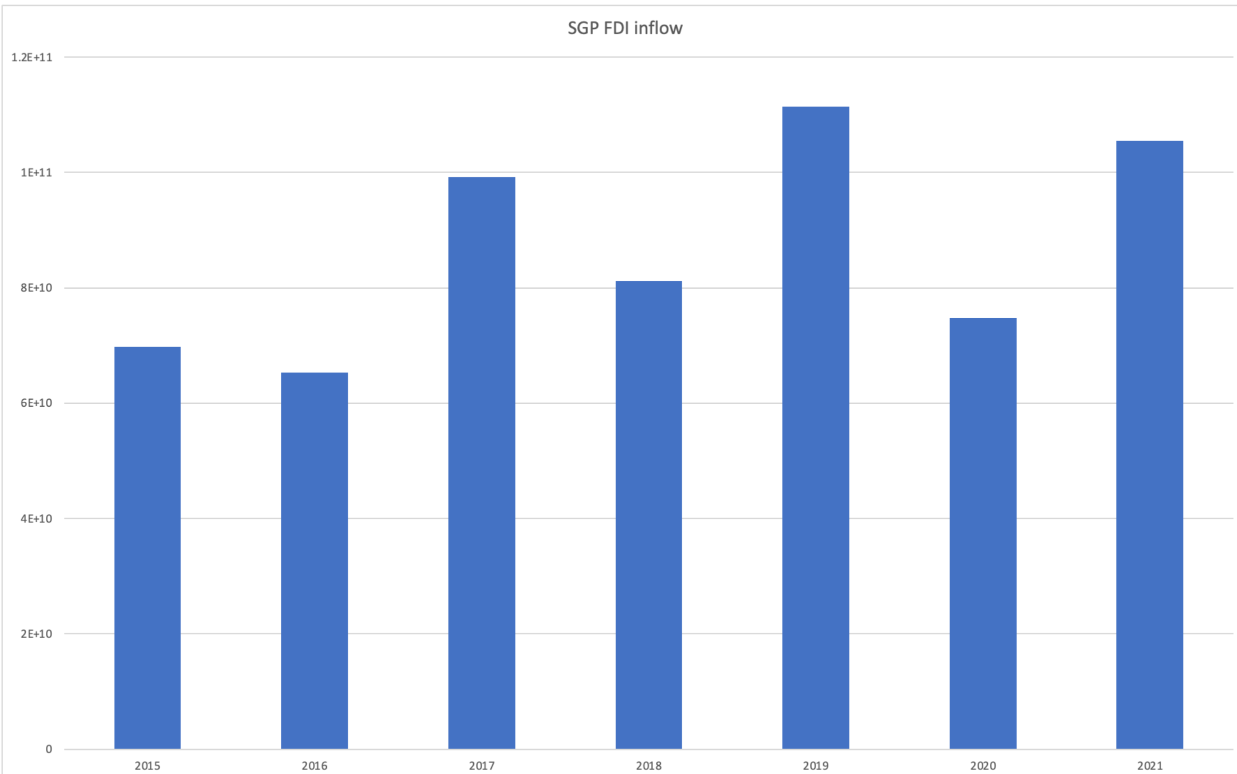


Figure 4

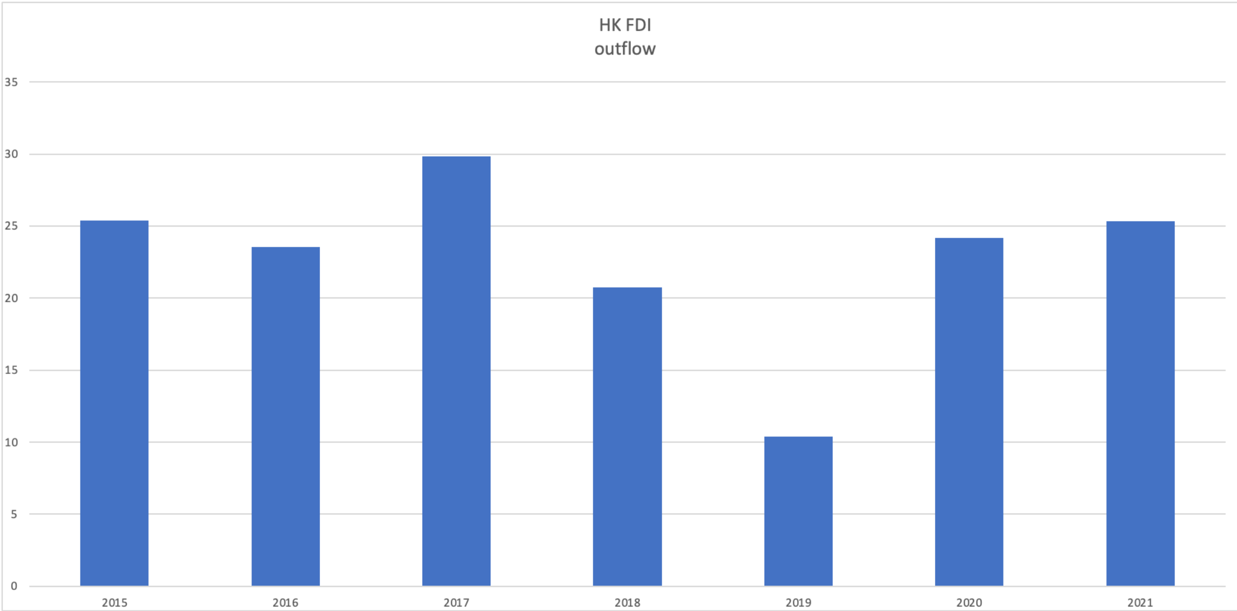


Figure 5

Another noteworthy trend is the outflow of the population in Hong Kong during recent years. In recent instances, a “brain drain” is happening in the Hong Kong human capital market, in which well-trained individuals made the decision to relocate abroad in sought of better living conditions. (Figure 6) This incident showcased a strong intention for emigration in accordance with people’s worries about the underlying recession of Hong Kong’s economy. Most of the emigrants are attracted to the ease of business, family friendliness, tax incentives, and open borders of Singapore, according to reports.

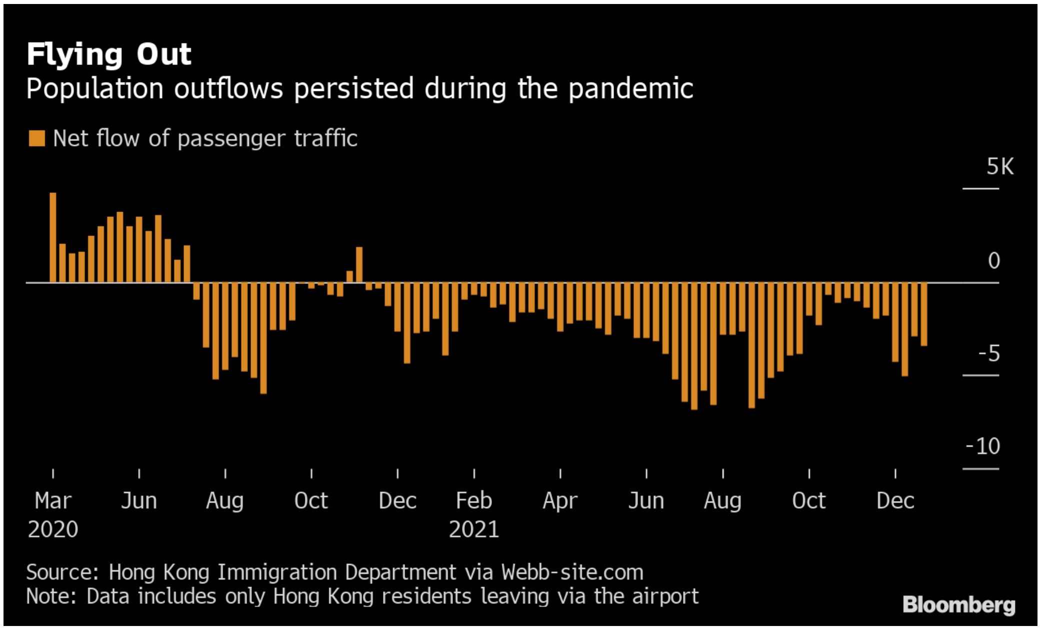


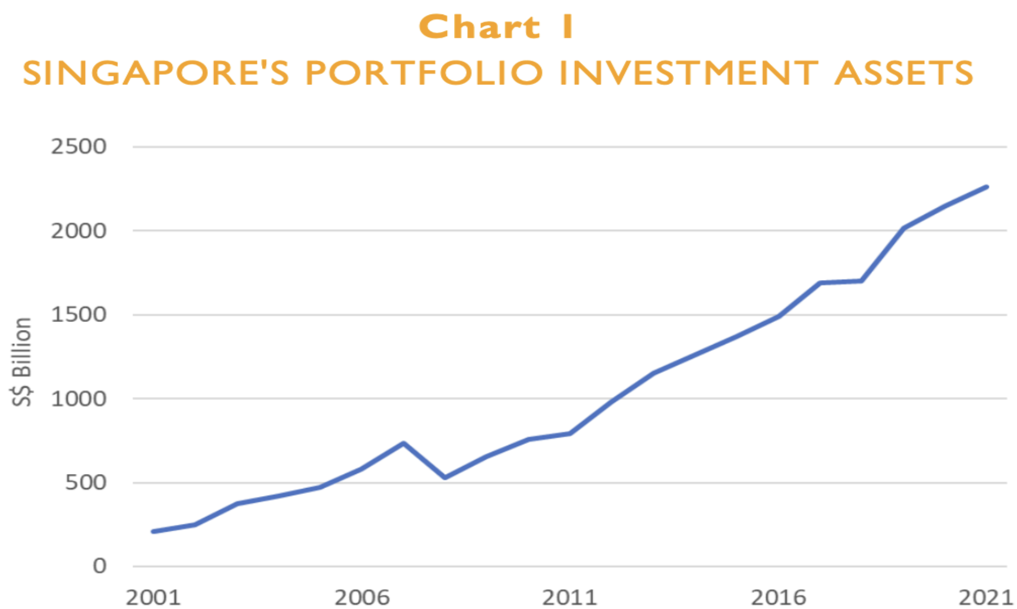
Figure 6

The structural overview of the Singapore capital market

As the emerging financial hub for Asian businesses, Singapore is one of the best cities under financial expansion, regarding the need for infrastructure development and foreign investment in other parts of Asian countries. In terms of the international investment position, Singapore has a holden an asset net surplus in the portfolio investment, making itself a creditor in the global equity market. Comparatively, the country took the role of the debtor on the sides of direct investment and financial derivative investment. It was until late 2022 that the net asset started to offset the negative position created by the liabilities within the financial derivative investment.

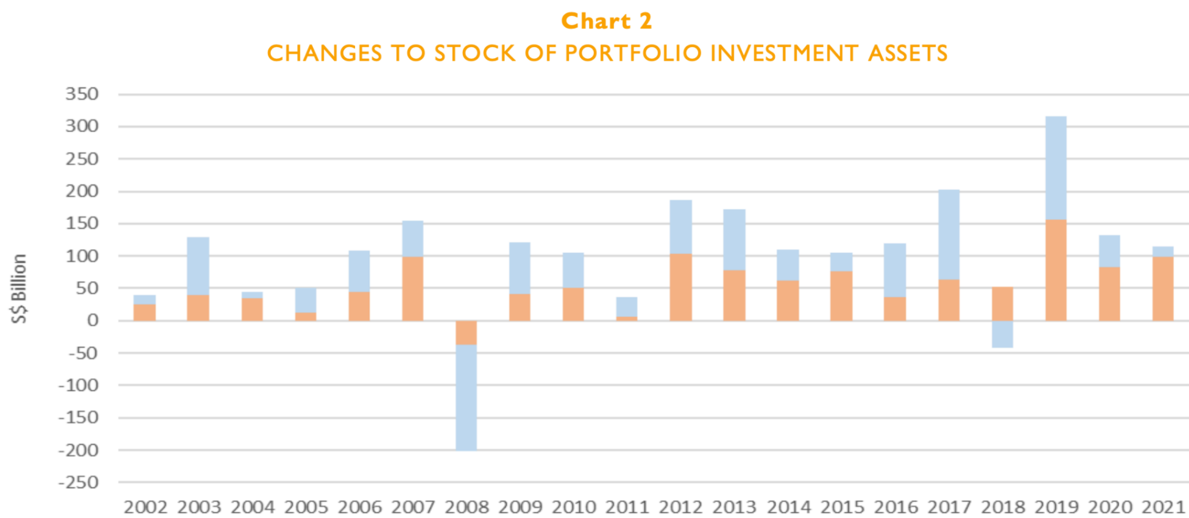
Singapore's portfolio management

Portfolio investment refers to cross-border investments by an investor into an enterprise that is a resident of another economy with a lesser degree of influence than that of a direct investment relationship. Portfolio investment takes the form of investments in either equity and investment fund shares or debt securities. It is often associated with, but not limited to, the trading of securities via organized or other financial markets. Since 2001, Singapore's stock of portfolio investment assets proliferated eleventh-fold in size over the decade, with a CAGR of 12.7% percent. Portfolio investment assets registered annual growth nearly every year throughout this twenty-year period, driven mainly by increased resident holdings of foreign equity and investment fund shares and/ or fixed-income instruments in the form of long-term and short-term debt securities, with the exception of 2008 during the Global Financial Crisis.



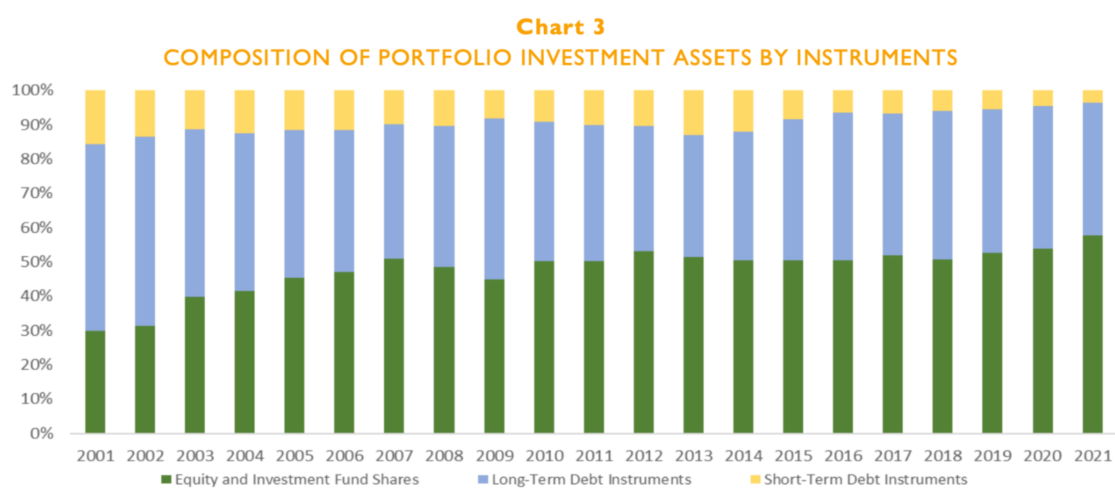
(Figure 7)

It was observed the presence of a larger proportion of stock change falls in the revaluation of the existing stocks in comparison to the external transactions, demonstrating strong positive correlations between the two sources. 2018 hits differently, during which the stock value expands despite the shrinking value incurred from the internal revaluation. The decrease in the value of Singapore's equity investments in 2018 was largely due to the country's significant holdings of such investments in the United States, which is Singapore's largest portfolio investment destination. The US equity market had a difficult year in 2018, experiencing its worst performance since the 2008 financial crisis, which was coincident with the trade war between the US and China, as well as concerns that the US Federal Reserve would raise interest rates during that period. However, despite these challenges, Singaporean investors remained confident in the US economy and continued to purchase additional US equity securities over the course of the year, which helped to maintain positive portfolio investment asset flows. Fortunately, the stock market experienced an unprecedented rebound in 2019, with gains in both revaluation and transaction contributing to the positive trend.



(Figure 8)

In terms of the composition of portfolio investment assets by instruments, the stock portfolio is approximately diversified with even distribution of equities and debt instruments, with a tendency of equity slightly taking over the shares of overall distribution.



(Figure 9)

From 2008 to 2021, the share of long-term debt securities fluctuated and peaked in 2009. Meanwhile, the share of short-term debt securities declined steadily over the decade despite a temporary recovery in 2013 and 2014. Empirically, It can be estimated that the nation's strategic preference for investment instruments came in favor of equity during the bull market, and shifted toward stabler debt instruments over the bear market. From the perspective of its foreign transaction, Singapore has a long history of tight correlation with the U.S. market. The investments in the US constituted 31 % of Singapore’s overall portfolio asset holdings, followed by Mainland China, with portfolio investment assets of 11 % of Singapore’s total portfolio assets. In contrast to the US, where equity and investment fund shares amounted to $337 billion while debt securities stood at $357 billion, portfolio investments in Mainland China largely comprised equity and investment fund shares which reached $160 billion while debt securities amounted to $98 billion. The investment patterns of Singapore residents in US debt securities as reported by DOS are consistent with the data published by the US Department of the Treasury on Singapore's purchases of US treasury bonds and bills. This suggests a tight relationship between Singapore’s investment preference in corporate bonds and that in national bonds. With the consideration of such factors, it was foreseeable to see an intimate interaction between the two markets and eased regulative governance due to the promotion of timely transactions and deposit of capital between the two markets.

Singapore has become a prominent global financial hub, as demonstrated by the consistent growth in portfolio investment assets. Over time, Singapore's portfolio investment asset composition has shifted from being largely focused on debt securities in the early 2000s to a more equitable distribution of equity and debt securities by the early 2020s. This change in composition is indicative of Singapore's development as a financial center. In recent years, Singapore's position as a financial hub in Asia has been reinforced, thanks to its liberal governance of the money market and its highly independent culture.

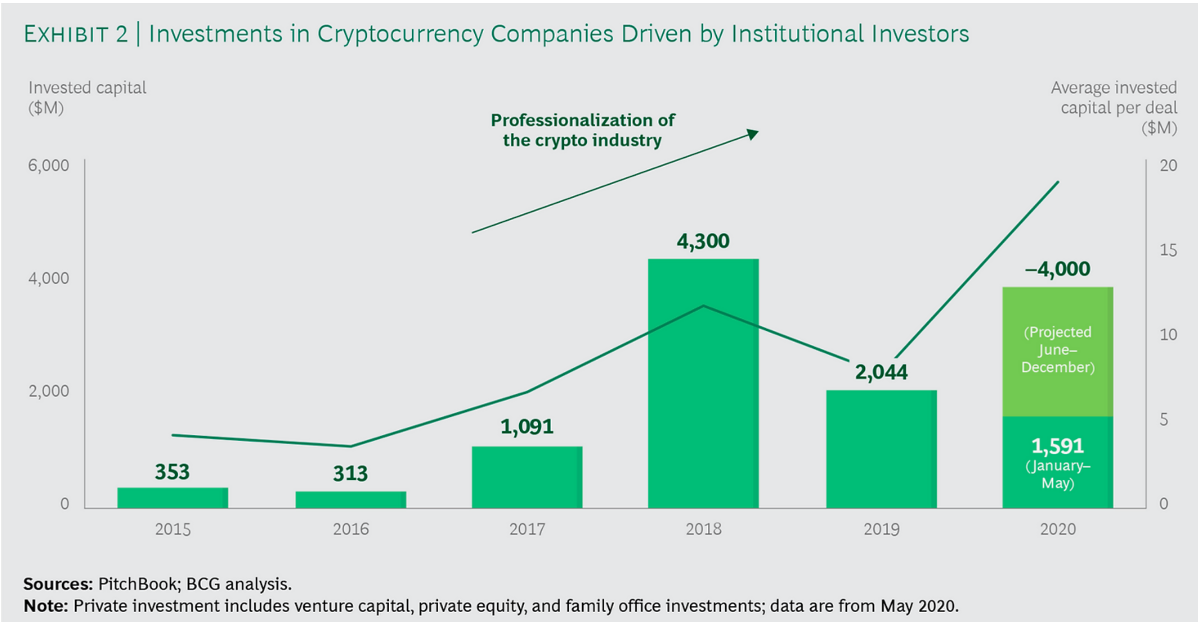
Digital asset investment boom and subsequential impact

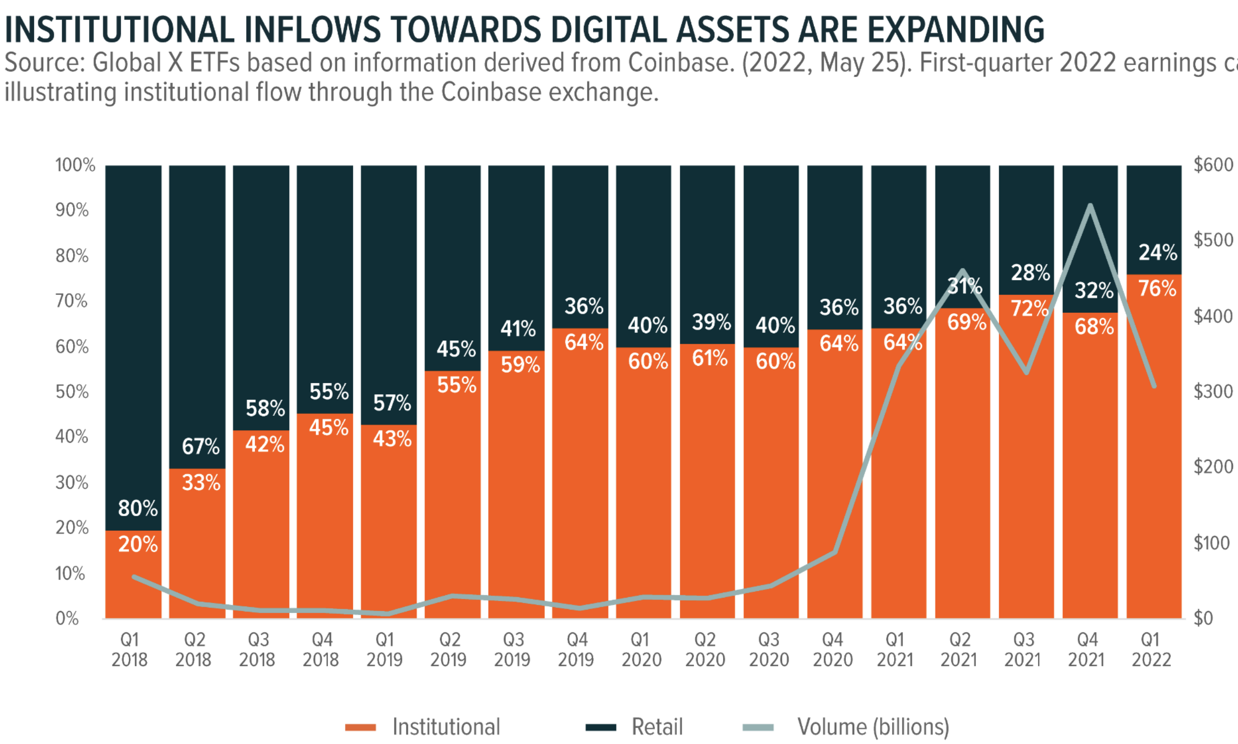
According to KPMG’s Pulse of Fintech H1’22 report, Singapore has experienced a significant increase in fintech funding, reaching a three-year high in the first half of 2022 with a combined deal value of US$2.14 billion across venture capital, private equity, and mergers & acquisitions. This surge in funding marks a 64% increase from the same period in the previous year, indicating sustained confidence in the potential of fintech developments to drive growth and innovation in the financial services industry. The sector also experienced notable growth in 2021, with investments increasing by 22% to reach $4.1 billion and 250 deals in mergers and acquisitions, private equity, and venture capital. While cryptocurrency funding in Singapore declined by over half from H2'21 to H1'22, the crypto space still saw a considerable amount of startup funding from seed and early-stage VC funding, as well as a small amount of consolidation with seven exit or merger deals. Overall, Singapore's thriving fintech industry demonstrates its status as a prominent financial center with continued potential for growth and innovation.

While the VC market experienced headwinds this year with investors pulling back in anticipation of interest rate hikes and geopolitical tensions, the VC fintech funding still remains resilient, especially with robust seed funding. Despite China's outright ban on crypto trading and India's potential plans to follow suit, regulators in other jurisdictions have taken a different approach. In particular, Singapore has emerged as a leader in the crypto market, with a significant inflow of funds in 2021. Regulators in these jurisdictions have been focused on developing frameworks for digital assets that support the growth of competitive and attractive crypto markets, while also protecting consumers and mitigating the risks of money laundering and illicit activities. This approach has led to the implementation of robust advertising and anti-money laundering (AML) regulations.

In January 2020, Singapore implemented the Payment Services Act, which established a regulatory framework for various areas of the cryptocurrency industry, including trading and using tokens for payments. The Monetary Authority of Singapore (MAS) issues digital payment token licenses to crypto companies that meet certain requirements. In April of the same year, the licensing requirement was extended to virtual asset service providers that only do business overseas. Before the crackdown on digital assets in 2022, Singapore was considered a crypto-friendly country due to transparent regulations and easy access to funding. However, following the crackdown, the MAS increased scrutiny and investigation into the market but still leveraged strong regulation and minimal intervention to maintain its advantages to investors.

In terms of investor segmentation, institutional clients have shown a growing interest in the cryptocurrency industry. The figure shows that the invested capital per deal increased from USD$5M in 2015 to USD$20M in Q1 and Q2 of 2020 (RHS axis), and the total invested capital (LHS axis) has also been trending upwards, indicating professionalization in the industry. A report from a centralized crypto exchange firm in late 2019 showcased a greater share of capital inflow from institutional investors than that from retail investors. This shift towards institutional investors marked a significant milestone, reflecting the increasing interest of large-cap investors in the cryptocurrency market during the uptrend. (Figure 10)





(Figure 10)

Such momentum can be attributed to several key factors. Firstly, the introduction of new investment options such as initial coin offerings (ICOs) has attracted the attention of regulators and large retail banks, resulting in their increased involvement in the industry. Additionally, illiquid funds, venture capital, hedge funds, and other market-based investment opportunities have become more mainstream options for investors. This growing involvement of regulators and retail banks in digital assets has led to a significant improvement in public perception of the safety of cryptocurrencies as an asset class, despite their inherent volatility.

Secondly, the wider adoption of blockchain technology, particularly in settlement processes and smart contracts, has further increased investors' confidence in cryptocurrencies. This familiarity with blockchain technology has indirectly contributed to the perceived legitimacy of cryptocurrencies as a viable investment option.

Thirdly, investors see cryptocurrencies as a useful diversification strategy to hedge against other asset classes as they are viewed as one of the least correlated assets to traditional stocks and bonds. Overall, these factors have contributed to the growing momentum of the digital assets industry, and its increasing recognition as a legitimate investment option.

Cryptocurrency: Security or commodity?

The debate is fierce in terms of whether the government should treat cryptos as the future of financial innovation or a pristine formation of new speculative opportunities.
With the recent collapse in the market, it can be observed that the attitude of the regulatory agencies would favor the former, but the perceived reality is the latter. As MAS Managing Director Ravi Menon once acclaimed in his speech, MAS wants to attract leading crypto players to Singapore, it also will maintain a stringent and lengthy licensing process for those who want to carry out crypto-related services: The lion city wants to be the hub of blockchain finance, not of the crypto speculative trading. Practically, MAS has also been issuing strong warnings against

retail investments in cryptocurrencies and has been taking increasingly stronger measures to restrict retail access to digital assets.

Regardless, after all, 2023 will remain another era of mania for digital assets in Singapore. MAS has indicated an optimistic outlook on the promising blockchain technology under development, meanwhile, in line with the reinforcement of regulatory rigor as well as the development of safety protocols for consumers and investors in the digital asset ecosystem.

Fintech Firms in the crypto markets

Amidst the frenzy of cryptocurrency expansion, numerous companies have capitalized on the opportunities by leveraging their strengths or adapting their corporate strategies to achieve long-term goals. Amidst intense competition, it is worthwhile to examine the methods and tactics that firms have employed to navigate this emerging market. Asian banks have responded to increased client demand for cryptocurrency and digital asset management services by expanding their offerings in this area. This trend became more pronounced after the cryptocurrency market reached a total value of USD $3 trillion in November 2021. DBS Bank in Singapore, for example, reported SGD $600 million ($446 million) of digital assets under management as of October 2021, and the Singapore Exchange Ltd. acquired a 10% stake in the bank's digital exchange. The DBS Digital Exchange platform allows clients to trade four crypto-assets against several currencies. Standard Chartered in Singapore has also partnered with blockchain-based asset management firms to establish a virtual asset brokerage and exchange platform, while top banks in South Korea, including Woori Bank, Shinhan Bank, NongHyup Bank, and KB Kookmin Bank, are building crypto-asset services.

AsiaNext, which is at the forefront of the crypto industry, offers a secure and decentralized platform for digital asset exchange and storage, including listing, trading, and settlement of crypto, associated derivatives, and digital securities, as well as market data and custody services. The company is a joint venture between SIX and SBI Group, two renowned digital asset exchange and financial service enterprises based in Switzerland and Japan, respectively. AsiaNext aims to provide an institutional-grade digital asset exchange with ancillary services in the global landscape, with a launch date in 2023.

In terms of competition, AsiaNext has identified the institutional investors' demand for seamless, secure, and effective institutional-grade ownership. By tailoring its services exclusively to fulfill essential parts of the institutional clients' demand, the company has differentiated itself in the market. Moreover, the firm has leveraged the comparative advantages of its joint ventures, creating synergies between the two and exploiting existing networks to find potential customers for the new services, thereby generating higher yields.

The company recognized that entering a new market can be challenging, and forming a joint venture with a partner who is more familiar and competent in the Asian digital asset market was essential. SIX groups understood this principle and formed a joint venture partnership with the Japanese conglomerate. AsiaNext's rationale was the lack of a regulated exchange in the Asian time zone through which regulated financial institutions feel safe to transact, and selecting a Japanese partner with regulatory knowledge and historical experience in the Asian market was a strategic move. Leveraging the data collection from the SIX exchange database, the Japanese holding firm could provide meaningful value through strategic advisory services in the Asian markets.

In developing its global program, AsiaNext has achieved cost savings by leveraging the advantages of both ventures, reducing transaction costs, and reducing the firm's initialization cost by offering a mature corporate ecosystem. These factors have made the company agile and risk-tolerant during its current developmental phase of market entrance.

Pros and Cons: Future opportunities and risks

Finally, it is necessary to yield some prescriptive insights for AsiaNext's future plans and strategies. The company is currently in the expansion phase and should focus on conducting more research and analysis of use cases to identify additional features that need to be addressed. Additionally, the company needs to increase investment to raise brand awareness, as its current level of credibility and exposure in the Asian market is insufficient to outtake the fierce yet upgrowing competition in the market of the institutional investor service.

In terms of corporate financial budgeting and execution, the company is in demand of greater sourcing of capital, especially of qualified human capital, in the maintenance of a rapid growth plan and sustainable prosecutions of the corporate's launch. Implementation-wise, AsiaNext needs to leverage the initial support of capital from both ventures and to keep sourcing in leveraged assets from the global financial market. Based on the nature of the service provided, it would be highly recommended for the company to keep a diversified portfolio of reserves in order to hedge the potential risk due to liquidity issues as well as the volatility of the market price of digital assets. That means any kind of short-term asset, including cash, is necessary for the company to reserve as the coverage of potential deficit positions.

In terms of risk management, AsiaNext must fulfill its obligation to educate investors about potential speculative risks that could affect their investment goals. It is crucial for Relationship Managers (RMs) and advisors to increase their knowledge and understanding of digital assets, and this understanding must be cascaded from the top of private banks and External Asset Managers (EAMs) down to the RMs and advisors. The attitude of governmental regulators remains erratic and sensitive toward cryptocurrencies, AsiaNext has to stay wary of the activities involved by the investors as being eligible by the contexts of the local jurisdictions, as a violation without careful monitors would inflict a complete restriction on the digital asset from the governmental regulation. Although digital asset regulation remains unclear, leading authorities such as Singapore's Monetary Authority of Singapore (MAS) are working to create a conducive environment that will make it easier for wealth managers to provide compliant advice on digital assets.

Outlooks and Conclusion

At the time of writing this paper, the U.S. capital market system is on the verge of sabotaging crisis. The banks and bonds markets are encountering unprecedented instabilities and liquidity risk. All the factors addressed hold accountable the preferable Pacific-Asian market with respect to the current market of the States. The market failure triggered an ever-urgent need for intertangled and lean financial systems, exemplified by the digitalization and tokenization of financial assets. With its intrinsic perks as the Asian financial center and the comparative advantages as a ground for market entrance by early startups, Singapore is estimated to play an essential part in the future global business landscape that many investors should take advanced steps on.

Bibliographies:

1. Heritage Foundation. "Singapore: Economic Freedom." Heritage Foundation, 2021. https://www.heritage.org/index/country/singapore.
2. OECD. "Revenue Statistics Asia and the Pacific: Singapore." OECD Tax Policy Studies, no. 28, OECD Publishing, 2018. https://www.oecd.org/tax/tax-policy/revenue-statistics-asia-and-pacific-singapore.pdf.
3. Bureau, HKTDC Research. "Wearable Technology Industry in China." HKTDC Research, 9 Dec. 2019, https://research.hktdc.com/en/article/MzIwNzUzMTE0.
4. "Hong Kong's Lee Pitches China Advantage to Rebuild City's Image as Financial Hub." Reuters, November 2, 2022, https://www.reuters.com/business/finance/hong-kongs-lee-pitches-china-advantage-rebuild-citys-image-financial-hub-2022-11-02/.
5. "People are Leaving Hong Kong, and Here is Where They are Going." CNBC, May 27, 2022, https://www.cnbc.com/2022/05/27/people-are-leaving-hong-kong-and-here-is-where-they-are-going.html.
6. Chew, Pei Yuen, and Yvonne Yew. "Rapid Growth in Singapore's Immigrant Population Brings Policy Challenges." Migration Policy Institute, March 28, 2013, https://www.migrationpolicy.org/article/rapid-growth-singapores-immigrant-population-brings-policy-challenges.
7. Bhattacharya, Prabir, et al. "Estimating the Economic Effects of COVID-19 in Developing Asia." ADBI Working Paper Series, no. 1134, Asian Development Bank Institute, June 2020, https://www.adb.org/sites/default/files/publication/156725/adbi-wp1134.pdf.
8. Chonabayashi, Kazunori. "Why the World Is Running out of Sand." Financial Times, 4 November 2017, https://www.ft.com/content/e7b85235-87e8-44c7-a97f-2d2ffa253465.
9. KPMG. "KPMG Pulse of Fintech Report." Press Release, 6 September 2022, https://home.kpmg/sg/en/home/media/press-releases/2022/09/kpmg-pulse-of-fintech-report.html.
10. Cointelegraph. "HK and Singapore's Mega-Rich Are Eyeing Crypto Investments: KPMG." News, 27 September 2021,

https://cointelegraph.com/news/hk-and-singapore-s-mega-rich-are-eyeing-crypto-investments-kpmg.

11. Hubbis. "ASIA:NEXT's CEO explains the mission to deliver an institutional-grade digital assets exchange." Article, 18 November 2021, https://www.hubbis.com/article/asianext-s-ceo-explains-the-mission-to-deliver-an-institutional-grade-digital-assets-exchange.
12. SDX. "Interview with Marek Socha about the Crypto Ecosystem and SDX's Development Plans." Blog post, 29 March 2022, https://www.sdx.com/insight/blog/interview-with-marek-socha-about-the-crypto-ecosystem-and-sdxs-development-plans/.
13. Global X ETFs. "The Case for Digital Assets in a Portfolio." Blog post, 14 October 2021, https://www.globalxetfs.com/the-case-for-digital-assets-in-a-portfolio/.
14. AIBC Asia. "Evolution of Digital Assets in Financial Services." Blog post, 25 March 2021, https://www.aibc.asia/post/evolution-of-digital-assets-in-financial-services.