



Access to Asia's largest financial centre: banking, financial services and cryptocurrencies in Singapore

Access to Banking and Capital Markets
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International Financial Centers Index

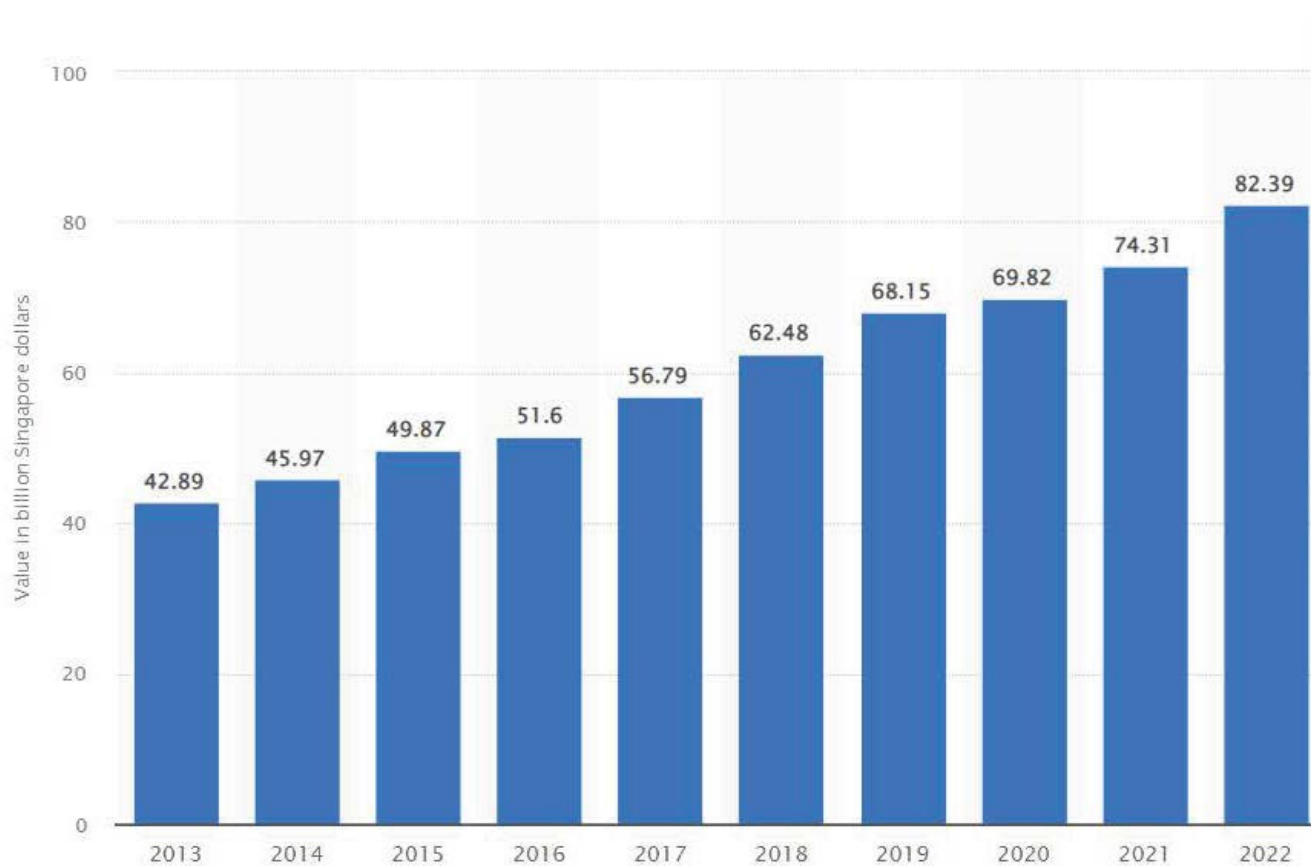
World's top 20 financial centres

Rank	Centre	Rank(+/-)
1	New York	0
2	London	0
3	Singapore	3 ▲
4	Hong Kong	-1 ▼
5	San Francisco	2 ▲
6	Shanghai	2 ▼
7	Los Angeles	2 ▼
8	Beijing	0
9	Shenzhen	1 ▲
10	Paris	1 ▲
11	Seoul	1 ▲
12	Chicago	1 ▲
13	Sydney	10 ▲
14	Boston	0
15	Washington DC	0
16	Tokyo	7 ▼
17	Dubai	0
18	Frankfurt	2 ▼
19	Amsterdam	0
20	Geneva	5 ▲

Table: STRAITS TIMES GRAPHICS • Source: GLOBAL FINANCIAL CENTRES INDEX 2022

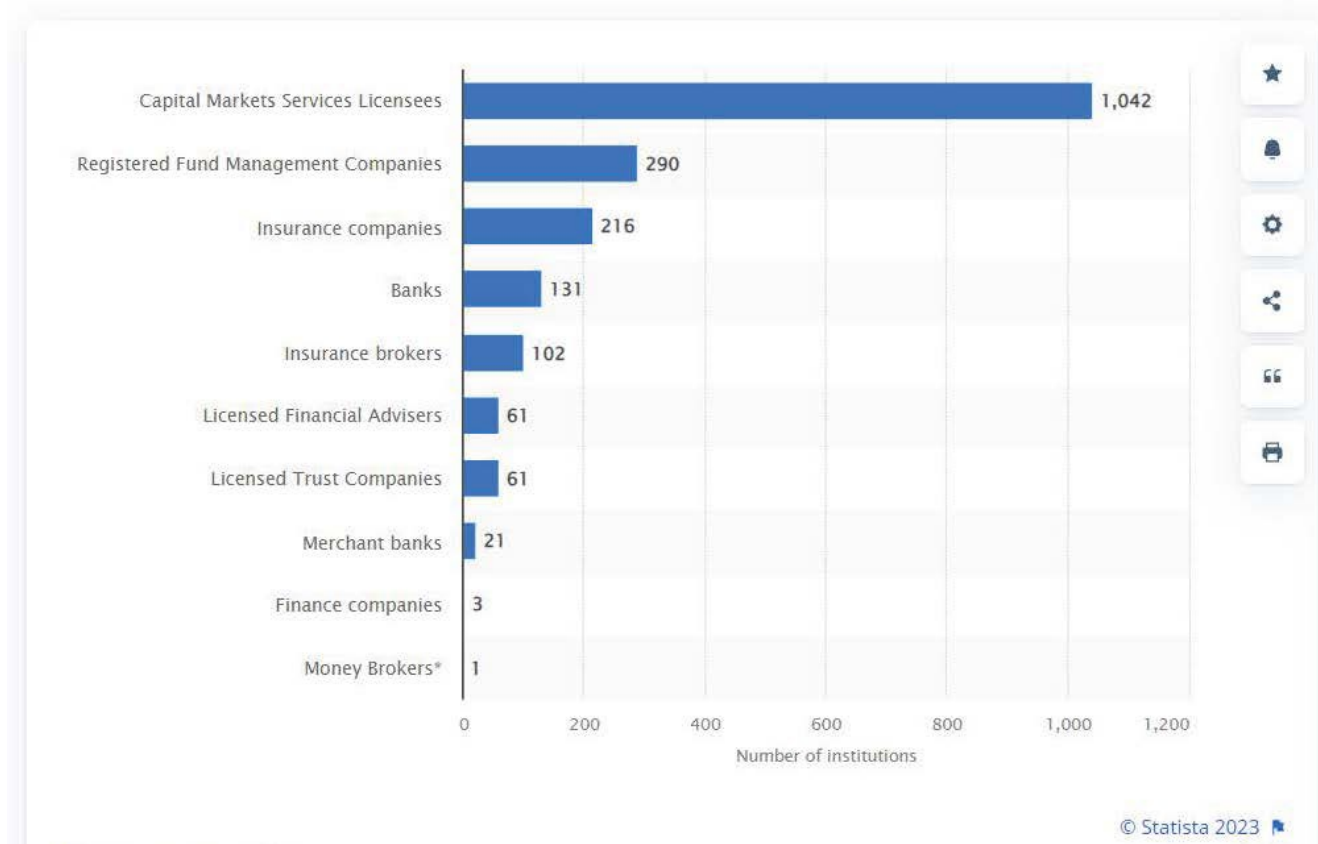
GDP of the financial and insurance industry in Singapore

(n 6 in the world by size)



Size divided by sectors

Number of financial institutions in Singapore in 2022, by type





Overview

- Access to the Singaporean market for
 - banks
 - providers of wealth management services, esp. PE/VC industry
 - providers of services in cryptoassets
- Based on
 - Singapore's regulatory framework
 - The ASEAN rulebook



The banking sector



Licensing requirements

- Running a banking business in Singapore requires a licence from the Monetary Authority of Singapore (MAS).
- There are **no exceptions** to this rule. No bank headquartered in another jurisdiction is permitted to operate in Singapore on the basis of their home state banking licence.

Licence Type/Status

Local Bank	6
Qualifying Full Bank	10
Full Bank	20
Wholesale Bank	97
Merchant Bank	22
Finance Company	3
Money Broker	1
Representative Office (Banking)	32
Financial Holding Company (Banking)	1
SGS Primary Dealer	13


Full banks

Full banks can engage in the full range of banking business under the Banking Act.

The locally headquartered banks dominate the retail banking sector.

Foreign banks with full bank licences are allowed to engage in the full range of the Singapore dollar and non-Singapore dollar denominated banking business, but can only operate a limited number of branches and automated teller machines (ATMs).

The qualifying full bank (QFB) scheme allows foreign banks to operate at more locations, share their ATM networks and relocate their branches freely. Qualifying full bank status is awarded under free trade agreement negotiations.



Wholesale banks, merchant banks and digital banks

- **Wholesale banks** are permitted to provide the same range of banking business as full banks
 - However: a wholesale bank licence is unsuitable for retail banking because
 - deposits from individuals must amount to no less than 250,000, making wholesale banks entirely unsuitable for classic checking accounts
 - Severe restrictions apply to the issuance of SGD-denominated bonds and other debt instruments
 - In essence, a wholesale bank licence is suitable for private banking
- **Merchant banks** are prohibited from
 - Accepting SGD deposits
 - Raising funding in SGD
- To date, there are two **digital full banks** (DFBs) and two **digital wholesale banks** (DWBs) in Singapore
 - DFBs are allowed to take deposits from and provide banking services to retail and non-retail customers.
 - DWBs are limited to taking deposits from and providing banking services to SMEs and non-retail customers.
 - DFB applicants must be anchored in Singapore, controlled by Singaporeans and headquartered in Singapore, and a
 - DWB applicants must be incorporated in Singapore.



Investment and private banking

The vast majority of foreign banks limit their services in Singapore to investment banking and private banking services (and stay clear of retail banking).


They are often licensed under the Banking Act (as full, wholesale or merchant banks) although the core of their activities are covered by a capital markets services licence under the Securities and Futures Act 2001.



Singapore's DSIBs

7 full banks with retail banking businesses

- DBS Bank;
- Oversea-Chinese Banking Corporation;
- United Overseas Bank;
- Malayan Banking Berhad;
- Citibank;
- Standard Chartered Bank; and
- The Hongkong and Shanghai Banking Corporation.



Licensing and prudential requirements

- Minimum paid-up capital
 - Singapore-incorporated wholesale banks SGD 100 million
 - Singapore-incorporated full banks SGD 1.5 billion.
- Capital adequacy ratio (CAR) requirements are imposed at two levels:
 - Bank standalone requirements
 - Consolidated (group) level requirements.
- CAR requirements for banks which are designated DSIBs:
 - Common equity Tier 1 capital adequacy ratio of 6.5%.
 - Tier 1 capital adequacy ratio of 8%.
 - Total capital adequacy ratio of 10%.

Licensing and prudential requirements (cont'd)

- DSIBs must comply with the Basel III liquidity coverage ratio (LCR) framework
 - Singapore-headquartered and internationally active DSIBs must maintain a Singapore-dollar LCR of at least 100%.
 - Other DSIBs of at least 50% (currently, there are no banks to which this rule would apply).
- Non-DSIBs can opt out of the LCR framework and into the minimum liquid assets (MLA) framework.
- Singapore's HQLA criteria correspond with the Basel III standards.

Licensing and prudential requirements (cont'd)

- D-SIBs which are headquartered in Singapore or internationally active are required to maintain an all-currency net stable funding ratio (NSFR) of 100% on a consolidated (group) basis
 - All assets and liabilities of all banking group entities are therefore assessed on a consolidated basis
- Other D-SIBs profit from an all-currency NSFR requirement of 50% at the entity-level (but no such banks exist currently in Singapore).

Licensing and prudential requirements (cont'd)

- Singapore-incorporated banks are required to maintain a minimum leverage ratio (LR) of 3% at the bank standalone level and at the consolidated bank-group level.
- Singapore's LR requirements follow the Basel III standards.
 - The MAS defines the LR as the resulting ratio from dividing the capital measure by the exposure measure.
 - The capital measure is the bank's overall Tier1 capital.
 - The exposure measure is the sum of the bank's assets as reflected on its balance sheet. The bank's off-balance sheet items are added.

Criteria for granting bank licenses

MAS takes into consideration, among others, the following factors:

- The strength of home country supervision, and the willingness and ability of the home supervisory authority to co-operate with MAS. The applicant must have written consent from its home country supervisory authority for the establishment of a banking operation in Singapore.
- The financial soundness, track record, international standing and reputation of the applicant and its parent institution or major shareholders
- A well-considered strategy in banking or financial services, supported by sound business plans which include a detailed assessment of the sustained economic viability, as well as the nature and criticality of the business.
- Risk management systems and processes must be robust and commensurate with the size and complexity of the proposed business.

Foreign non-SIBs

- Foreign banks that remain below the thresholds set for DSIBs may operate in Singapore through branches.
- They are not required to comply with the CAR requirements; instead, they are subject to a ring-fencing approach.
 - The MAS subjects them to a minimum asset maintenance requirement (“MAMR”).

Bank resolution

- Modern bank resolution regime in Singapore since 2018
- MAS is the designated resolution authority for all covered entities.
 - Resolution measures are prepared by the Management Bank Resolution Committee (MBRC).
 - In addition, a Crisis Management Team (CMT) is convened on an ad-hoc basis to coordinate the resolution actions.
 - For some resolution actions, official resolution orders from the Minister-in-charge-of-MAS are necessary.
- Resolution scenarios that warrant resolution actions:
 - Banks fail or are likely to fail and failure likely to result in widespread adverse effects on the financial system or the economy of Singapore.

Bail-in powers

- Legislation in Singapore embraces the global trend of far-reaching bail-in powers. The MAS Act authorises the MAS to cancel, modify, convert or change financial instruments of the institutions in resolution.
- The MAS has chosen to self-restrict its powers. It passed delegated regulations in which it reduces the scope of bail-ins to very specific types of financial instruments.
- This restriction ultimately leads to a narrow application of bail-ins to “unsecured subordinated debt and loans, contingent convertible instruments and contractual bail-in instruments” and excludes “all other unsecured and uninsured creditor claims (e.g., senior debt liabilities)”.

Bail-in powers (cont'd)

- MAS: wide discretionary bail-in powers might be conceived as a blank cheque for arbitrary and unequal treatment of different creditor groups
 - valid: it provides clarity and predictability to limit bail-ins to a clearly defined list of liabilities.
 - but: a wider list of bailin-able liabilities also creates trust and confidence for as long as the bail-in process is transparent and strictly driven by the resolution objectives.

Resolution funding

- Ad-hoc emergency fund available when resolution actions require recapitalisations or liquidity support.
- Singapore's model relies on the powers of money-creation of the MAS.
 - MAS as provider of financial help to financial institutions in resolution.
- Singapore's resolution funding model is a unique type of central bank lending of last resort that allows the central bank to go beyond the traditional limitations applied to this mechanism.
- Essentially, two potential sources of financial support are merged, and Singapore's central bank is exposed to higher financial risk.

Eased access
for banks
from
Association of
Southeast
Asian Nations
(ASEAN)
countries ?

- 2007 ASEAN Economic Community Blueprint (“AEC Blueprint”):
 - Establishment of a single market with free flow of goods, services, investments and skilled labour.
- Current core principle in financial regulation: no own standard setting, but alignment with recognized international standards.
 - However: (much) impetus from ASEAN for member states’ compliance with international standards?

ASEAN Banking Integration Framework

- ASEAN Banking Integration Framework (ABIF) established in 2011
 - Task force to formulate a timeline for financial services liberalisation within the ASEAN banking sector
 - Aims at allowing banks meeting certain criteria (“Qualified ASEAN Banks” - QABs) to gain access to other ASEAN markets under eased requirements
 - No harmonised legal framework for product and services standards and no harmonisation of regulation in the banking sector
 - Approach limited to Mutual Recognition Arrangements (MRAs)

ASEAN: developments in the banking sector to date

ABIF MRAs to date:

- Malaysian banks CIMB and Maybank received licences in Indonesia under eased requirements resulting from a bilateral arrangement between Malaysia and Indonesia
- In 2021, Malaysia and Thailand entered into an MRA for QAB
 - Open to strong and well-managed banks with interest in the host market endorsed by the home country's regulator if compliant with the host country's prudential requirements
 - “market access and operational flexibility accorded under the bilateral arrangement”
- Ultimate advantage:
 - QABs are granted treatment similar to local banks in the host country



Other financial
services, especially
capital markets
services

Singapore's success story in finance

- Reuters of 21 Oct 2022: Singapore's asset management sector surges to record as funds expand
 - “Singapore's asset management industry grew to a record size last year, outpacing global growth in the sector as the city-state benefited from more business from global and regional funds. The Monetary Authority of Singapore (MAS) said total assets under management in Singapore rose 16% in 2021 to S\$5.4 trillion (\$3.8 trillion), compared with a global increase of 12% to \$112 trillion last year. Hobbled by tough measures to combat COVID-19 in China and Hong Kong, entrepreneurs and investors are setting up or expanding their investment in Singapore.”

Asset management in Singapore

- Flow-through effect: Singapore as leading conduit of capital in Asia: bundling capital from around the globe for placements in Asia
- Large growth of number and volumes of family offices in Singapore
- Latest figures from the Monetary Authority of Singapore:
 - S\$5.4 trillion assets under management
 - 1108 registered and licensed fund managers

Capital Markets Services (CMS) Licence

- A company must hold a capital markets services (CMS) licence to conduct activities regulated under Singapore's Securities and Futures Act. Individuals representing CMS licensees need to be appointed as representatives.
- Regulated activities are:
 - Dealing in capital markets products
 - Advising on corporate finance
 - Fund management
 - Real estate investment trust management
 - Product financing
 - Providing credit rating services
 - Providing custodial services for securities

Capital Markets Services (CMS) Licence (cont'd)

- Capital markets products include (among others) securities, units in a collective investment scheme (CIS), and derivatives
- Entities required to hold a CMS licence include
 - Broker-dealers,
 - Corporate finance advisers,
 - Credit rating agencies, real estate investment trust (REIT) managers,
 - Fund managers, and
 - Securities-based crowdfunding (SCF) operators.

Prerequisites for CMS licences

- Fitness and propriety of the applicant, its shareholders and directors.
- Track record and management expertise of the applicant and its parent company or major shareholders (exceptions apply).
- Ability to meet the minimum financial requirements prescribed under the SFA (base and CAR, dependent on type of activity)
- Strength of internal risk management and compliance systems.
- Assessment of the business model and plans and projections and the associated risks.
- Appointment of
 - Minimum of 2 directors, at least one of whom must be a resident in Singapore
 - Chief Executive Officer with at least 10 years of relevant experience who resides in Singapore (exceptions apply).
 - Minimum of 2 full-time Singapore-based individuals for each regulated activity who are appointed as representatives under the SFA.

Importance of PE/VC sector

- Large amounts of funding raised in Singapore by private equity and venture capital firms
- Focus on attracting PE/VC capital for startup funding
- No specific regulation for PE/VC firms
 - General rules on fund management activities applicable
 - In principle, CMS licence required
- 2017 initiative in the VC sector: simplified authorisation process for VC fund managers
 - No prior experience needed
 - No base capital requirements
 - Simplified access requirements for recognised investment schemes

Recognised investment scheme for VC funds

- Fast-track recognition of VC funds that are investment schemes constituted and authorised outside of Singapore
 - Under the recognised scheme, no CMS licence is necessary
 - No prospectus needs to be filed
 - Instead, the recognised fund must furnish an information memorandum that summarises the terms of the investment scheme
- Eligibility criteria:
 - closed-end investment schemes
 - exclusively offered to accredited and institutional investors
- Highly popular:
 - Master-feeder structure with Cayman-incorporated limited partnership acting as pooling master fund that deploys the financial means
 - Singapore-incorporated feeder sells membership rights to investors and buys interests in the master fund
 - New corporate structure 'Variable Capital Companies (VCC)' introduced in 2020 is meant to rival the success of partnerships from the Cayman Islands
 - 400 VCCs incorporated in 2021 and more than 660 in 2022

ASEAN Capital Markets Forum (ACMF)

- The ASEAN Capital Markets Forum (ACMF) was established in 2004 to develop a “deep, liquid and integrated regional capital market”.
- ASEAN member states participate in ACMF initiatives “based on their readiness and ability to meet the requirements of the respective framework”.
- The ACMF supports
 - Streamlined authorisation processes that allow fund managers to offer Collective Investment Schemes (CIS) to retail investors on a cross-border basis;
 - Review process co-ordination that allows for a single prospectus for offering or listing applications of equity and plain debt securities.



Cryptoassets

Categorisations of cryptoassets in Singapore

- Legislation relies on the term (digital) token.
 - Digital securities tokens,
 - Digital payment tokens,
 - Utility tokens, and
 - Non-fungible tokens (NFTs).
- Depending on their functions, different acts apply, mostly the
 - Securities and Futures Act;
 - Payment Services Act (PS Act).

Digital securities tokens

- The SFA applies when a digital token serves the same functions as a conventional capital markets product such as a security or unit in a collective investment scheme.
- Consequentially, the focus in on
 - CMS licence requirements,
 - Retail investor protection measures, including the
 - Prospectus requirement (with the usual exceptions thereto).

Digital payment tokens

- The Payment Services Act (PS Act) applies when a cryptoasset entails the characteristics of a digital payment token.
- Digital payment tokens are defined by the PS Act as any digital representation of value (...) that
 - is expressed in a unit,
 - is not denominated in any currency and not pegged by its issuer to any currency,
 - is, or is intended to be, a medium of exchange accepted by the public or a section of the public, as payment for goods or services or for the discharge of a debt, and
 - can be transferred, stored or traded electronically (...)."
- Any service provided in relation with digital payment tokens requires a licence under the PS Act.

Licensed payment services providers

Licensing of payment service providers in Singapore

- Every payment service provider must hold either a Standard Payment Institution (SPI) licence or a Major Payment Institution (MPI) licence.
- A look at the landscape of digital asset providers in Singapore indicates that only a small number of entities have received MAS approval.
- There are 13 entities that run exchanges for digital payment tokens. 2 entities hold an SPI licence and 11 an MPI licence.

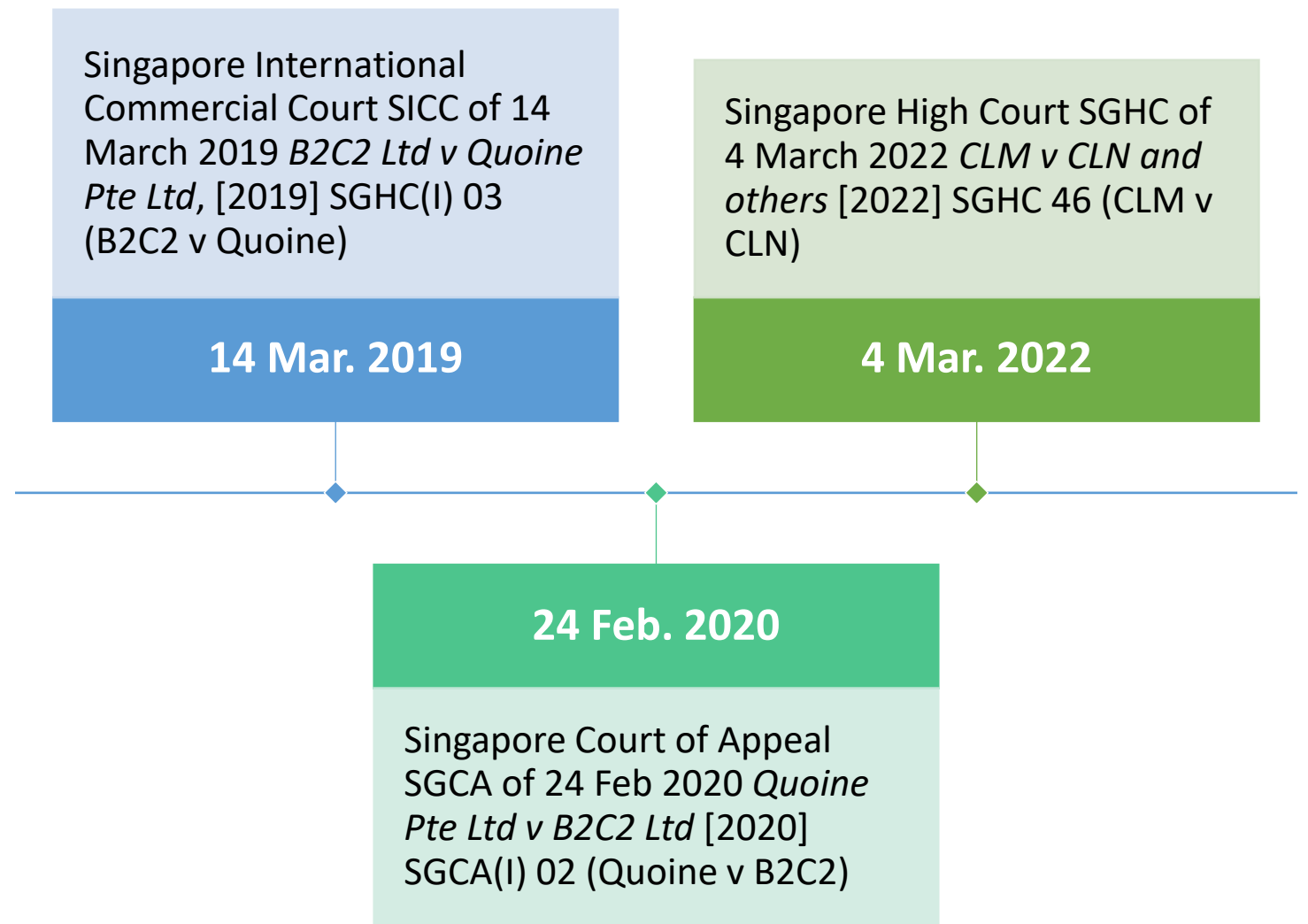
2 SPI

1. Bhop Consulting Pte. Ltd
2. Triple A Technologies Pte. Ltd

11 MPI

1. Circle Internet Singapore Pte. Ltd.
2. DBS Vickers Securities (Singapore) Pte. Ltd.
3. Digital Treasures Center Pte. Ltd.
4. FOMO Pay Pte. Ltd.
5. Foris DAX Asia Pte. Ltd.
6. Independent Reserve SG Pte. Ltd.
7. MetaComp Pte. Ltd.
8. Paxos Global Pte. Ltd.
9. Revolut Technologies Singapore Pte. Ltd.
10. Sparrow Tech Private Limited
11. HAKO Technology Pte. Ltd.

Cryptowinter, fraud and loss



Cryptowinter, fraud and loss (cont'd)

- Planend reforms of digital payment token regulation:
- Multiple new prohibitions and requirements, e.g.,
 - Duties of payment token services providers to
 - disclose risks;
 - rely on custodians for the separation of assets held on behalf of customers from providers' own assets;
 - protect customers' private access keys from external and internal attacks;
 - rely on procedures that can detect manipulative activities and require compliance with fair, orderly and transparent practices from their partners (e.g., token issuers).
 - Prohibitions for payment token services providers to
 - Facilitate debt-financed token purchases by retail investors;
 - Offer incentives to influence retail investors in their decision of whether to invest in digital payment tokens;
 - Use 'staking and lending' and other problematic practices vis-à-vis retail customers.

Cryptowinter, fraud and loss (cont'd)

- Plans for a twofold regime applicable to stablecoin issuers and providers of stablecoin-related services:
 - Specific regime for single-currency pegged stablecoins (SCS);
 - General rules on digital payment tokens applicable to all other stablecoins.
- Choice between
 - “high-quality licence” for single-currency, especially SGD-pegged stablecoin arrangements, and
 - less strictly regulated stablecoin schemes for (highly) speculative investments (e.g., algorithmic stablecoins).



Conclusions

