# 8

# Singapore

## Connecting Asian Markets with Global Finance

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### 8.1 Introduction

Founded as a British trading colony in 1819, Singapore took its first substantive steps towards becoming an international financial centre soon after independence from Malaysia in 1965. Today it is arguably the world's fastest-growing centre for private wealth management. A WealthInsight report (2013) predicts that Singapore will overtake Switzerland to become the largest offshore wealth centre by 2020. Singapore's significance as an international financial centre (IFC) has been evident since 1968 with the formation of the Asian dollar market (ADM). Since then, the financial services industry has grown both in terms of size and scope with currently more than 700 financial institutions participating in banking, fund management, treasury operations, insurance, equity markets, debt issuance, commodities trading, and more. Over the years, the GDP contribution of financial services has risen from 4.6 per cent in 1965 to 12.25 per cent in 2016 (see Figure 8.1). In terms of employment, finance and insurance services employ 5.56 per cent of Singapore's resident population in 2016; this figure rises to 20.69 per cent if business services (which would count the finance and insurance services as major clients) are included. Singapore now ranks amongst the top IFCs in the world, behind only London and New York and generally on a par with Hong Kong (Z/Yen Group 2017).

This chapter examines the emergence and contemporary development of Singapore as an IFC by investigating the multiscalar processes of financial markets and activities. Taking a financial geography perspective, financial markets and actors are understood as being firmly rooted in IFCs as the physical locations where the production and exchange of financial services

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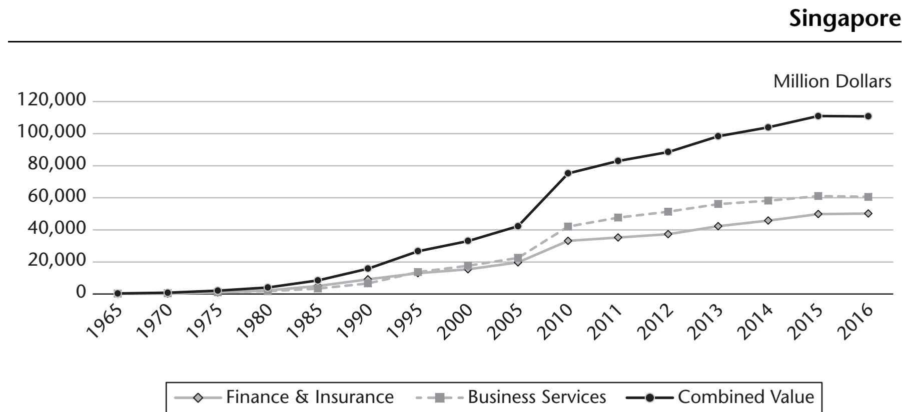


**Figure 8.1.** Contribution of financial services sector to Singapore's GDP, 1965–2016
*Source*: Author based on data from the Singapore Department of Statistics.

take place. Markets are not just abstractions that exist 'out there' and operated by 'invisible hands'; they are spatially embedded and socially constructed. While finance appears to be global in operations and impacts, the *location* of financial activities, i.e. the 'capitals of capital' (Cassis 2010), is crucial in explaining and understanding financial markets, products and services. In this vein, this chapter unravels the spatial and temporal dynamics that have influenced the development of financial markets and activities to account for the rise of Singapore as an IFC, and highlights some contemporary challenges and future growth sectors, particularly those arising in the ten years following the 2008 Global Financial Crisis. Some portions of the analysis will also reflect on the preceding 1997 Asian financial crisis, as industry changes and policy response back then set the stage for subsequent industry shifts and have shaped the responses and impacts of firms, regulators, and consumers following the 2008 Global Financial Crisis.

Singapore's significance as an IFC is often traced to the late 1960s when the government made a strategic decision to develop the ADM in 1968. Albert Winsemius, a Dutch economic adviser to the then prime minister Lee Kuan Yew, contacted an official at the Bank of America in London for advice on setting up a financial centre, specifically regarding an offshore 'Eurodollar' financial market for Asia to be based in Singapore (Woo 2016). The rapid expansion of the Eurodollar market during that time created demands for an Asian location to broaden the time zone coverage. With special regulatory and tax treatment for commercial banks to set up separate Asian Currency Units (ACUs) in their Singapore banking operations, the Asian dollar business mushroomed, focusing mainly on South Asian business and buoyed by large US dollar spending in the region during the Vietnam War. Singapore thus acquired a first-mover advantage over Hong Kong, which was also developing an ADM at the same time (Emery 1975). The establishment of the Monetary Authority of Singapore (MAS) followed shortly after, in 1971, as the country's

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central bank and finance regulator. The flotation of the Singapore dollar in 1973 fuelled the development of foreign exchange (FX) products and transactions. The 1970s and 1980s saw the establishment of new financial markets in equities, derivatives, and commodities, while fund management, corporate financing, and insurance sectors become more prominent from the 1990s onwards (Tan 2005).

The rest of this chapter will discuss the major developments in Singapore's financial sectors and markets and how they are reshaping Singapore's IFC status in terms of domestic shifts, regional role, and global networks. Section 8.2 details the changing regulatory environment in terms of banking liberalization and its impact on the growing banking sector and financial consumption in Singapore. Section 8.3 focuses on selected financial markets that have become increasingly prominent over the past decade, namely Islamic banking and finance (IBF) and the offshore renminbi (RMB). Finally, amidst new disruptive technologies and new financial actors in the global system, the emergence of fintech and its growing importance for Singapore's role as an IFC is considered in Section 8.4. The chapter concludes with some forward-looking remarks regarding Singapore's outlook as a premier financial hub in Asia and the long-standing debate regarding competition with Hong Kong for this accolade.

## 8.2 Regulatory Shifts and Liberalization

Since the 1990s, substantial regulatory attention in Singapore has been directed at liberalizing financial markets and banking sectors to attract more international financial institutions, covering market segments such as fund management, treasury operations, insurance, the equity market, debt issuance, and corporate financing. The internationalization of the finance sector in Singapore was a strategic shift that was mooted following the 1985 economic recession and more actively implemented after the 1997 Asian financial crisis. Special committee reports commissioned following those two crises were aimed at assessing the state of the economy and highlighting future growth sectors; the financial services industry featured prominently and consistently in all recommendations. The responses by the Singaporean government to the 1997 Asian financial crisis, in particular, reconfigured the structure of the Singaporean banking system in ways that shaped the impacts of and responses to the 2008 Global Financial Crisis and subsequent developments in banking and financial markets in Singapore.

In 1985 Singapore faced its first economic recession and its first government deficit since independence due to depressed demand for manufactured goods and the petro-dollar debt crisis. A review by the Sub-Committee on Banking

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and Financial Services (1985)[1] highlighted the desirability of deregulation (with particular reference to the United States, UK, Japan, and Australia) for creating greater efficiency, while the securitization of debt and the integration of loan and capital markets were regarded as favourable and necessary in order to develop deep capital markets and a fully-fledged IFC. The report also called for the MAS to 'take on a more developmental role' (Sub-Committee on Banking and Financial Services 1985, p. iv), like that of the Economic Development Board,[2] in order to boost the financial services industry and to contribute to long-term economic growth. This marked a distinctive role for the finance sector in terms of Singapore's economic development, and a departure from Singapore's export-led manufacturing strategy that had prevailed since the 1970s (see Rodan 1989). From that point onwards, the MAS also took on a distinctive promotional role for Singapore's banking and finance sector in addition to its regulatory function.

The focus on banking and finance as a key pillar of growth re-emerged in the 1998 report of the Sub-committee on Banking and Finance following the Asian financial crisis (Committee on Singapore's Competitiveness 1998). Singapore's GDP had experienced an even sharper decline than during the 1985 recession (see Figure 8.2). The 1997 Asian financial crisis shook the banking systems of Asian economies and the confidence of foreign investors and domestic enterprises in Asia (Arndt and Hill 1999). Although Singapore was among those least affected in Asia, the contagion effects from Asian neighbours meant that weak incomes, restricted bank liquidity, labour retrenchment, and reduced regional trade culminated in Singapore's second economic recession since independence. Alongside economic stimulation measures such as higher tax rebates and increased public expenditure, recommendations of strategic sectors for government-led investment included advanced engineering, chemicals, and aerospace industries but also highlighted a broad swathe of financial sectors (Committee on Singapore's Competitiveness 1998). Areas such as fund management, risk management, equity markets, debt insurance, corporate finance, insurance and reinsurance, and cross-border banking, were identified as strategic for developing the international capacities of Singapore as a financial centre.

The change in spatial framing is significant as these sectors targeted for growth would expand the economic and financial space of Singapore well beyond its national space-economy into regional and global financial networks. The regionalization policy was meant to develop an 'external wing'

[1] Part of the ad hoc Economic Committee set up for post-crisis recovery and policy recommendations.

[2] The Economic Development Board is a statutory board that coordinates the industrial policy of the Singaporean government and acts a promotional agent to facilitate foreign direct investment into Singapore.

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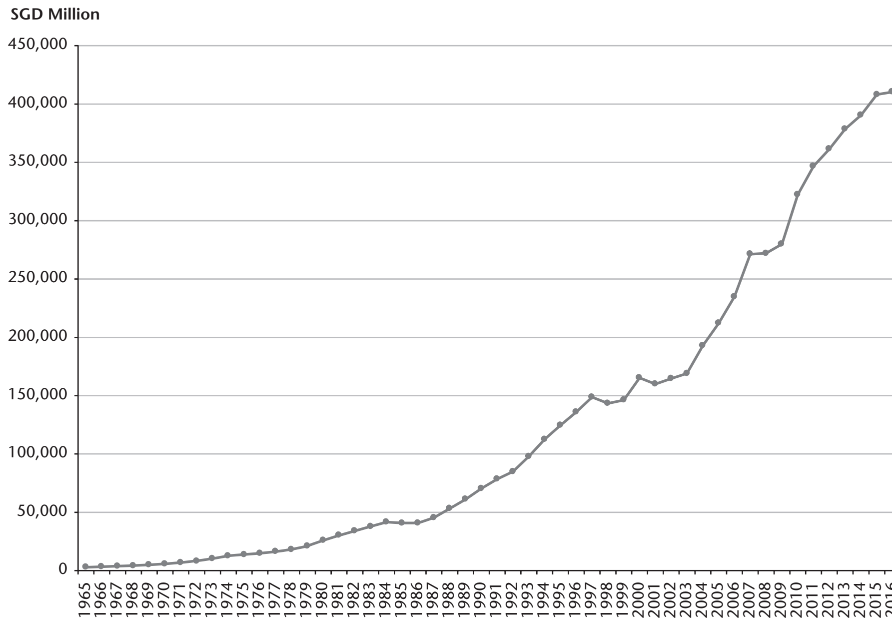


**Figure 8.2.** Singapore's annual GDP, 1965–2016
*Source*: Author, based on data from the Singapore Department of Statistics.

and overcome the limitations of Singapore's small domestic economy through the overseas expansion of domestic firms and establishment of industrial parks in other Asian countries (Yeung 1999). The regionalization of domestic firms included a plan for banks not only to facilitate the regionalization of manufacturing and other service firms but also to become wealth-creating enterprises in their own right. The rest of this section therefore focuses on the liberalization and regulatory changes specific to banking in order to examine their impacts on the changing roles of banking firms, new actors in the market, and changing consumer practices within the broader reframing of finance in Singapore's economy and society.

### 8.2.1 *Banking Liberalization*

The transformation of the local banking industry into a robust globally oriented financial services industry was a developmental goal deemed vital to Singapore's long-term competitiveness and economic success. This involved substantial reorganization of the businesses from traditional loan intermediation into financial services corporations embedded in capital markets. This move also reflects wider trends in global banking since the 1980s whereby banking activities in Europe and the United States have shifted from interest-based

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banking to fee-based banking for both retail and investment banks. Sources of funds for banks have also changed from traditional loan intermediation to more securitized modes in order to fuel business segments and geographical expansion. Official speeches during the early 2000s emphasized the growing role of non-bank capital to complement bank financing as means by which Singaporean banks could position themselves in the region. This shift from 'bank-based finance' to 'market-based banking' was seen as the way forward for Singaporean banks to grow and become substantial enough for regional leadership and global competition.

The liberalization programme started shortly after Singapore joined the Bank for International Settlements (BIS) in 1996, which was then followed by membership on the Basel Committee on Banking Supervision (BCBS) in 2009. While Singapore was reconfiguring its role on international regulatory platforms, it also had to find solutions for building more robust financial institutions in the wake of the 1997 Asian financial crisis. A key policy shift was towards a more consultative 'risk-based' model of regulation rather than the previous 'one size fits all' supervisory approach, which was in line with Basel II requirements (Ong 2004). This enabled individual firms to exercise greater freedom in expanding into new markets and sectors but also required them to put in place internal risk-control measures that comply with broader regulatory guidelines (such as minimum capital ratios, reporting requirements, etc.) (Hamilton-Hart 2002). This explains the subsequent changes in banking ownership, business strategies, and corporate governance that swept through the industry in what became known as Singapore's 'Big Bang'[3] in the late 1990s and early 2000s (Ngiam 2011).

Therefore, while debates following the 2008 financial crisis have highlighted the systemic risks to national economies and global finance presented by banks that are deemed 'too big to fail', this was not the case two decades ago in Singapore. Instead, banks were challenged to grow bigger in order to extend their extraterritorial reach and secure long-term competitiveness, not only for themselves as business entities but also to strengthen the banking sector and financial centre status of Singapore. A series of banking liberalization measures was implemented during a five-year period from 1999 to 2004, which had the dual impact of increasing the number of foreign banks in Singapore (which were permitted to engage in a wider range of financial activities) and the consolidation of local banks into just three large entities. These 'Big Bang' reforms in Singapore included issuing a new category of Qualifying Full Bank (QFB) licences to encourage foreign banking presence, increasing the number of restricted banks, giving offshore banks greater flexibility in Singapore dollar

[3] The use of the term 'Big Bang' reform by Singaporean authorities and policymakers is particularly evocative of the deregulation of financial markets that swept through the City of London in the 1980s.

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wholesale business, and lifting the 40 per cent foreign shareholding limit in local banks. All these created competitive pressures on local banks in securing domestic and regional market positions. As pointed out by then deputy prime minister Lee Hsien Loong (Lee 1998):

> Size matters in international banking . . . [The local banks] need to grow large enough to enjoy the economics of scale, and to have the reach and resilience to go regional, and eventually make a mark in global markets. This is why MAS has encouraged local banks to consider mergers.

The sale of Post Office Savings Bank (POSB) to Development Bank of Singapore (DBS) (both state-owned at that time) by the Singapore government in 1998 also made headlines as it made DBS the largest bank in Singapore and sent a clear message to the industry regarding a push towards consolidation in the local banking sector. These competitive pressures and state signals pushed the other local banks into seeking mergers and acquisitions. When the dust settled in 2002, only three large local banks were left—DBS, United Overseas Bank (UOB), and Oversea-Chinese Banking Corporation (OCBC).

Other than bank mergers, the banking liberalization policies also included divestment requirements and changes in corporate governance. The consolidation and merger of local banks significantly increased deposit bases, deemed vital by the state for promoting extra-territorial competitiveness. The enlarged banks were also supposed to expand their non-deposit-taking business, transforming themselves from traditional banks into more complex financial institutions offering an extensive and sophisticated array of products and services to an expanded regional and global customer base. In 2000, local banks were required to divest themselves of their non-financial businesses and unwind cross-shareholdings within three years. This not only complied with Basel II requirements, but also allowed local banks to rebuild their financial position following the 1997 Asian financial crisis. Rules regarding the management of financial and non-financial divisions of banking firms and limitations on cross-shareholding structures also reshaped corporate governance and management structures, especially for formerly family-owned banks (Lai and Daniels 2017).

These liberalization measures, regulatory changes, and increased competition in the banking sector prompted significant shifts in business strategies for many banks. New bank licensing schemes enabled more foreign banks to engage in a wider range of banking activities, strengthened their product offering and capabilities in Singapore, and created a stronger commercial and retail banking sector. On the other hand, after mergers and business restructuring, the three local banks shifted from traditional loan intermediation into financial services embedded in capital markets, especially in the areas of equity and debt issuance, mergers and acquisitions, asset management, and advisory

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services. The outcome has been an overall push towards securitization as well as increased emphasis on consumer markets for fee-based activities. This emphasis on consumer markets is particularly strategic given the increasing affluence of the domestic population and particularly growing wealth in the region (e.g. in Indonesia, Thailand, China, and India), both of which have significantly increased demands for financial products and services over the past two decades. This emphasis on developing Singapore as a premier wealth management centre in Asia is reflected in the launch in April 2011 of the Private Banking Code of Conduct, aimed at enhancing the competency of private banking professionals and fostering high market conduct standards (Menon 2011).

### 8.2.2 *Changing Financial Consumption*

The development of Singapore as an IFC involved not only banking firms and regulatory bodies but also everyday consumers. Banking liberalization since 1999 has led to greater participation of foreign banks and increased competition in the domestic market. In response, local banks (as well as foreign banks with QFB status) started to diversify their product offerings aimed at the growing middle class in Singapore and the region. Banks shifted their business focus towards fee-paying activities in addition to deposits and loans services, especially in the area of unit trusts and investment solutions either through the banks' own asset management divisions or joint development with other financial institutions. During this same period, the Central Provident Fund (a national compulsory savings scheme for pensions)[4] was liberalized in the 1990s, which allowed members to use portions of their pension savings to invest in commercial funds for potentially higher yields (Lai 2013). This was also part of the strategic plan following the 1985 economic recession and the 1997 Asian financial crisis to develop the wealth management sector in Singapore and boost its IFC capabilities (Tan 2011). Even as domestic banks have transformed themselves from banking firms (focusing on traditional loan intermediation) to more complex financial services corporations (with greater engagement with securities and derivatives markets, and enlargement of non-bank financial investments in insurance and asset management), households and individuals have also increasingly been exhorted to be self-reliant and 'responsible' in taking care of their financial futures and, as a result,

[4] The Central Provident Fund (CPF) is a mandatory state-run savings scheme for all working Singaporean citizens and permanent residents, with a portion of gross monthly salary being transferred to individuals' CPF accounts by both employers and employees. Withdrawal can only be made for retirement needs, public housing, medical care, tertiary education, and, since the 1990s, approved investment products.

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generate demand for insurance and investment products (Lai 2018). In this way, financial consumers not only perform the role of self-reliant and disciplined subjects responsible for their own financial future (see Langley 2006), but are also framed as citizen subjects who would build a stronger and more competitive national economy through their changing financial practices.

The changing role of consumers in Singapore's financial-centre aspirations is reflected in the organizational change and business strategies of POSB (Lai and Tan 2016). POSB had humble beginnings as a public savings bank with strong social objectives of encouraging principles of saving and thrift, and providing home loans for public housing ownership. After its acquisition by the government-backed DBS bank as part of consolidation and regional expansion plans, POSB underwent a distinctive makeover into a profit-based and fee-driven financial institution. Whereas POSB advertisements used to encouraged savings and thrift, with special tax-free incentives for savings accounts, school visits, public campaigns, and televised lottery draws to encourage high savings rates, advertisements over the past decade have turned towards a model of financial investment whereby anyone could drop into their 'neighbourhood bank' and invest in blue-chip companies. The appeal to social memories and extensive neighbourhood branch networks of POSB has been instrumental to DBS's business strategy in marketing a growing range of insurance and investment products. The enlarged DBS recorded a dramatic increase in sales of investment- and insurance-related products mainly due to referrals from the POSB customer base (Tan 2002). DBS annual reports showed that total sales of wealth management and investment-related products skyrocketed between 1998 and 2003 (see Figure 8.3). A similar trend could also be observed in the business orientation of other Singaporean banks during this period (Lai and Daniels 2017).

This emphasis on investment and fee-paying activities became problematic during the 2008 Global Financial Crisis. While the financial crisis had limited systemic impact on the banking sector in Singapore, the bankruptcy of Lehman Brothers on 15 September 2008 led to the default or early redemption of several credit-linked structured notes (collectively known as Minibonds) that had Lehman Brothers as a swap guarantor or reference entity. The affected products included Minibond Notes issued by Lehman Brothers, High Notes 5 from the DBS, Jubilee Notes from Merrill Lynch, and Pinnacle Notes from Morgan Stanley. The Minibonds were distributed by ten financial institutions in Singapore, including a number of domestic banks and their securities subsidiaries (see Table 8.1). Almost 10,000 investors were affected; a significant portion of them were either retired, elderly, or middle-aged individuals in late-working life who had invested most or all of their life savings (Lai 2013). The impact of financial losses and accusations of misconduct by distributors prompted public outrage and a level of social activism uncommon in

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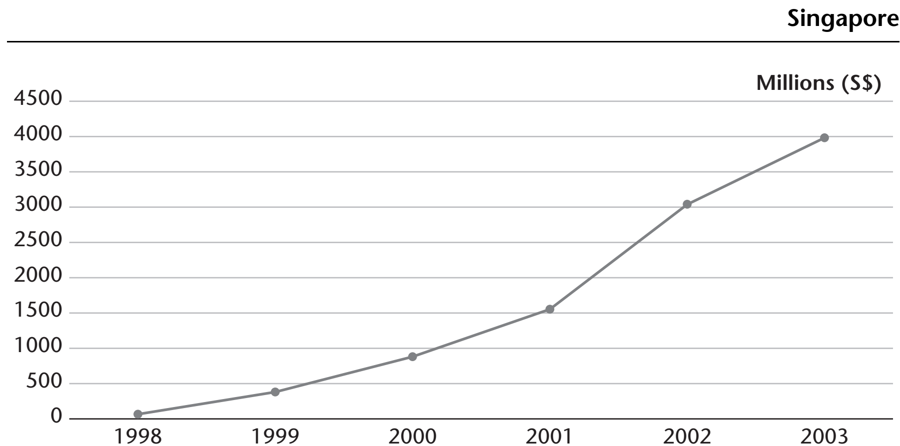


**Figure 8.3.** DBS bank's increased sales of investment products (excluding bancassurance) following the acquisition of POSB

*Source*: Author, based on data from DBS Annual Reports, 1998–2004.

**Table 8.1.** Distributors of Lehman Minibonds in Singapore

| | |
|---|---|
| 1. | ABN AMRO Bank N.V. Singapore Branch[1] |
| 2. | DBS Bank Ltd[1] |
| 3. | Malayan Banking Berhad Singapore Branch[1] |
| 4. | Hong Leong Finance |
| 5. | CIMB-GK Securities Pte Ltd |
| 6. | DMG & Partners Securities Pte Ltd |
| 7. | Kim Eng Securities Pte Ltd |
| 8. | OCBC Securities Pte Ltd[2] |
| 9. | Phillip Securities Pte Ltd |
| 10. | UOB Kay Hian Pte Ltd[2] |

1 Retail banks
2 Securities arms of Singapore retail banks
*Source*: Author, based on data from MAS (2009).

Singapore with public rallies and signed petitions to the MAS for strong action against the distributors. Accusations of banks targeting and mis-selling to retirees became a common theme of discussion, alongside poor documentation and explanation of product features and risks to investors. Findings from the MAS investigation (MAS 2009) regarding banks' due diligence on Notes, sales procedures, assessment of customers' risk profiles, and training and supervision of financial representatives supported media reports of negligence and misconduct. Distributors did not fully understand the nature of the Minibonds, bank representatives were inadequately trained on the products, there were inconsistencies in how products were matched to customers' risk profiles, and wrong information was given to investors. As a penalty, all ten distributors were banned from selling structured notes for periods ranging from six months to two years depending on the severity of offences.

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Following this event, MAS regulatory reviews and policy revisions led to changes in operational requirements of banks, including improving information disclosure through compulsory product highlight sheets, new assessment frameworks for matching customers' risk profile, and improving the training of bank representatives. Regulatory frameworks were further refined through amendments to the Securities and Futures Act, Financial Advisers Act, and a Financial Advisory Industry Review (aptly dubbed 'FAIR') aimed at improving the quality of financial advice to retail investors (Financial Advisory Industry Review 2013; MAS 2012). These regulatory changes provide more safeguards for retail investors and closer supervision of securities business in retail banks to ensure due diligence and fair disclosure in the sales and advisory process. These are seen as particularly important steps to safeguard the integrity and reputation of Singapore's financial regulation, especially given the focus on wealth management and high net worth clientele in Singapore and the wider Asia region (WealthInsight 2013).

## 8.3 New Financial Markets

Over the past decade, Singapore has also actively developed new financial markets to cater to demands from different geographical and market segments. Two of the most significant developments in terms of market participation and government involvement are Islamic banking and finance (IBF) and the offshore RMB market. Both of these have been positioned by the MAS as part of a broader government strategy to foster financial innovation for building a broad-based IFC.

### 8.3.1 *Islamic Banking and Finance*

Islamic banking and finance (IBF) had a slow start in Singapore in the 1990s and picked up momentum in the early 2000s with increasing investment flows between the Middle East and the growing economies of Asia. IBF is a form of banking and finance rooted in Sharia law. A key characteristic relates to certain prohibitions such as the injunctions against *riba* (interest), *gharar* (excessive risk, uncertainty), *maysir* (gambling), and 'making money from money' (e.g. currency speculation or financial derivatives). IBF covers a range of products and services from deposit accounts and project financing to insurance (*takaful*) and Islamic bonds (*sukuk*). The ideal forms of transactions are rooted in 'equity-financing' or 'profit-sharing' (respectively *musharaka* and *mudarabah*), but a dominant form of contract remains cost-plus financing (*murabaha*). Whether a certain product or service is deemed Islamically

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acceptable depends on the interpretation of Sharia scholars of a given Sharia Supervisory Board (Bassens 2012).[5]

A handful of *takaful* products were launched in Singapore in the 1990s, with support from government-owned banks and insurance cooperatives, as test cases to gauge the market (AMPRO Holdings 1995). The interest in IBF products proved rather limited amongst both Muslim and non-Muslim financial consumers, owing to a general lack of awareness about them, and the government took a back seat to observe how the IBF market might develop organically (Gerrard and Cunningham 1997). This started to change in the early 2000s with growing potential for increased trade and financial ties with the Middle East. With a smaller domestic market for IBF compared to neighbouring Malaysia and Indonesia, the focus has been on leveraging the infrastructure currently in place to offer wholesale market activities in the areas of capital market activities and wealth management, and persuading financial institutions to add IBF products and services to their existing suite of activities (Lai and Samers 2017).

Since the early 2000s, the MAS has become particularly active in the development of IBF in Singapore through regulatory reviews, greater participation in international bodies and, later on, tax incentives for IBF products (Vernados 2012). As a prudential regulator, the MAS does not prescribe what constitutes Sharia compliance nor endorse specific Sharia rulings; the responsibility lies with Islamic banks (or conventional banks offering IBF products) to take into account Sharia compliance and to manage this compliance risk as part of their overall risk management process, since they would be generally exposed to the same types of risk, such as credit risk, liquidity risk, and operational risks, with many similar prudential and supervisory issues as conventional banks. Folding IBF within a common regulatory framework allows for greater flexibility in financial innovation and future market development, as it keeps the doors open for potential intersections between Islamic and conventional finance in terms of financial expertise, business reorganization, and potential investors. Subsequent years saw accelerated regulatory developments in opening up greater scope for IBF activities in Singapore (Heng 2009). Other than remitting additional stamp duties and opening up *murabahah* financing, the MAS also joined the Kuala Lumpur-based Islamic Financial Services Board (IFSB) as a full member in 2005, after two years as an observer. Through active participation in the various working groups and task forces in areas such as supervisory review, Islamic money markets, capital adequacy, liquidity management, and solvency requirements for *takaful* operations, the MAS acquired technical

[5] Many of these Sharia scholars are based in the Middle East, although Malaysia is also developing significant capacities in Sharia interpretation and governance (see Lai and Samers 2017).

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knowledge and built professional networks within the international IBF community (MAS 2011). At the same time, Singapore's experience with global financial governance bodies is advantageous as developing IBF regulatory expertise could be combined with the MAS's experience in other international regulatory working committees such as the Bank for International Settlements, International Organization of Securities Commissions, and International Association of Insurance Supervisors (Ong 2005). In 2006–8, another series of tax policies was implemented to boost the IBF market, such as tax clarification on *murabaha* financing and *sukuk*, which gave participants the same regulatory protection under Singapore's Bank Act as conventional depositors. Further tax concessions were granted on qualifying Sharia-compliant financial activities (e.g. lending, fund management, insurance and reinsurance).

While the 2008 Global Financial Crisis led to a credit crunch that reverberated through global financial markets, particularly in the United States and Europe, the IBF sector remained relatively strong and has been growing at double-digit rates over the past decade (Bin Ghalaita 2015). With different business models and guiding principles for investments, IBF appears to be more resilient during financial crises compared to conventional financial institutions (Hasan and Dridi 2010). This is also reflected in the buoyant activities in Singapore's IBF sector, particularly as new regulations in 2009 permit banks to conduct an even wider range of new IBF activities (e.g. *murabaha* interbank placements, *ijara*, and spot *murabaha*), which sends clear signals to market participants concerning financial innovation. Cross-border financing has also become particularly prominent over the past decade, particularly in terms of *sukuk* (insurance) and Sharia-compliant REITs, leveraging existing financial infrastructure and expertise in Singapore. Issue managers of *sukuk* from Pakistan and the Malaysian state of Sarawak have held road shows in Singapore to reach out to the established pool of institutional investors. Building on the critical mass of reinsurers based in Singapore is also deemed beneficial for *takaful* participants seeking to collaborate with reinsurers in Singapore to provide *retakaful* capacity. In 2009, the MAS even backed a *sukuk* facility in Singapore (the first such move by a conventional central bank) by issuing *sukuk* to be priced against the liquid Singapore Government Securities market, which then provided a transparent price discovery mechanism and also improved stability and confidence in a new financial market. The encouragement of financial innovation has also led to the issue of RMB-denominated *sukuk*, such the RMB 1 billion (US$158.06 million) *sukuk Wakalah* by the Axiata Group, which was then the largest yuan-denominated *sukuk* issued. The listing in RMB denomination was also aligned with Singapore's growing status as an offshore RMB centre for trading and settlement (Islamic Finance News 2014). Singapore has an established role as the largest REITs market in Asia outside Japan and is expected to capitalize on that expertise to dominate the Islamic

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REITs market even ahead of larger IBF markets such as Malaysia (Saeed 2011, Suhana et al. 2012).

Listing these *sukuk* and Islamic REITs products in Singapore enables issuers from both within and outside of Singapore to capitalize on a wide range of existing expertise such as legal, accounting, and financial knowledge for the creation of special purpose vehicles, and to tap into potential investors who tend to cluster in an established IFC. While increasing trade with the Middle East provided initial strategic reasons for developing IBF in Singapore, the appeal of this emerging financial sector is also set against the growing interest of investors based within and outside of Singapore in various forms of ethical investment (Šoštarić 2015). The orientation for the IBF market in Singapore is distinctively outward-looking, with the objective of building up IBF activities alongside existing financial market segments and the attraction of both Muslim and non-Muslim investors.

While there has been significant development in IBF in Singapore particularly over the past decade, the Singapore market still has relatively few Islamic financial institutions (especially in comparison with neighbouring Malaysia), in terms of conventional banks offering IBF services.[6] It also suffers from the lack of a domestic market, with no Islamic pension funds and little business demand for Sharia-compliant financial vehicles. Although Singapore seems to lack a critical mass of IBF expertise, institutions, products, and investors, the MAS is banking on a wider neo-liberal strategy that has driven its international financial centre development, which is to create more diverse financial sectors and deeper capital markets within a regulatory climate that welcomes financial innovation and new financial institutions. The enmeshing of global financial networks, national economic development strategies, and Islamically-inflected modes of market making (see Lai and Samers 2017) therefore continues to unfold in the formation of a small but distinct IBF market in Singapore.

### 8.3.2 *The Offshore RMB Market*

Following from the Global Financial Crisis of 2008, the fiscal and current account woes in the United States, the Eurozone economic crisis, and the long-term stagnation of the Japanese economy have all highlighted the problems associated with the world's traditional reserve currencies: the US dollar, the euro, the British pound, and the Japanese yen. China's rising global power

[6] There was a full-fledged Islamic Bank in Singapore but the Islamic Bank of Asia announced in September 2015 that it will be closing over the next 2–3 years and transferring its business over to its majority shareholder DBS bank, which will continue to operate an IBF 'window'. HSBC has also closed its Islamic banking divisions in Singapore in 2013 as part of its global consolidation of Islamic banking business.

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since the end of the twentieth century is also hinting at an increasingly multipolar world and fuelling speculations regarding the renminbi (RMB) as a global alternative to the US dollar as the world's dominant reserve currency. However, RMB international recognition and usage has only begun to gain traction recently due to the slow and limited liberalization of the currency. China came out of the 1997 Asian financial crisis relatively unscathed, which reinforced the Chinese government's view that a liberalization of its foreign exchange regime and capital markets could introduce too much instability and uncertainty in the longer term. The internationalization of the RMB has therefore been very gradual, building on the wider economic reforms of China under the Open Door Policy of 1978 and China's membership of the World Trade Organization since 2001. This gradual and managed process of capital account liberalization, alongside the maintenance of exchange rate controls, has resulted in a distinct separation between onshore RMB markets (in which controls on interest and exchange rates remain), and the more liberalized component of offshore RMB markets (He and McCauley 2010).

An offshore RMB centre is a financial hub outside of China that conducts a variety of RMB-denominated financial transactions. Hong Kong was appointed as the first offshore RMB centre due to its special status within the Chinese polity and its historical role as a gateway between mainland China and global capital. Yuan-denominated[7] transactions started in 2003 with personal banking services, followed by bonds and equities over the past decade. Other major IFCs followed, such as London and Singapore, as well as smaller financial centres such as Taiwan, Luxembourg, and Toronto. Singapore was amongst the first to be selected for offshore RMB centre status after Hong Kong. This builds on long-standing trade, FDI, and diplomatic relationships between Singapore and China, which then turned towards financial cooperation and linkages over the past decade under the China–Singapore Free Trade Agreement (MAS 2017a). Six out of the top ten Chinese banks now operate in Singapore, with Bank of China (BOC) and Industrial and Commercial Bank of China (ICBC) having QFB status, using Singapore as a hub for southeast Asian markets. At the policy level, close discussions between the MAS and People's Bank of China (PBOC) led to the launch of RMB currency products and services in Singapore. On 8 February 2013, PBOC appointed the Singapore branch of ICBC as the RMB clearing bank in Singapore. On 27 May 2013, ICBC started RMB clearing services in Singapore, with fifty-three transactions valued at more than 1.6 billion yuan (US$240 million), and opened clearing accounts for forty-nine banks during its first clearing day (Wang 2013). This was swiftly followed by the MAS opening its representative office in Beijing (the first in

[7] China's currency is officially called the renminbi (RMB). The yuan is the unit of account.

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Asia) one day later. Within the first month of the launch of clearing services, four banks issued a total of 2.5 billion yuan of RMB-denominated bonds in Singapore (also known as 'Lion City' bonds).

In October 2013, China announced a further suite of measures to promote the internationalization of RMB through Singapore, including granting of an RMB qualified foreign institutional investor (RQFII) quota to Singapore (which allows foreign investors to invest in mainland China's bond and equity markets) and listing Singapore as an investment destination under the RMB qualified domestic institutional investor (RQDII) scheme (which permits qualified domestic Chinese investors to purchase overseas RMB-denominated products) (see Table 8.2). The strong utilization of the RQFII quota in Singapore and positive outlook led to the doubling of Singapore's quota from 50 billion to 100 billion yuan in 2016 (see Figure 8.4). Direct currency trading between the yuan and the Singapore dollar also commenced on 28 October 2014 (Today 2014), with a daily SGD–CNY benchmark published by the PBOC, which is expected to promote

**Table 8.2.** Approved RQFII quota list in Singapore, February 2017

| RQFII Name | SAFE ApprovalDate | Accumulative Quota (RMB 100 million) |
|---|---|---|
| Fullerton Fund Management Company Ltd | 30/06/2014 | 12.00 |
| NIKKO Asset Management Asia Limited | 30/06/2014 | 10.00 |
| APS Asset Management Pte Ltd | 26/08/2014 | 15.00 |
| New Silk Road Investment Pte Ltd | 26/08/2014 | 15.00 |
| Aberdeen Asset Management Asia Limited | 28/11/2016 | 73.00 |
| DBS Bank Limited | 30/10/2014 | 30.00 |
| Lion Global Investors Ltd | 27/11/2014 | 10.00 |
| The Bank of Nova Scotia Asia Limited | 30/01/2015 | 15.00 |
| Schroder Investment Management (Singapore) Ltd | 30/01/2015 | 10.00 |
| KKR Singapore Pte Ltd | 26/03/2015 | 35.00 |
| JPMorgan Asset Management (Singapore) Limited | 26/03/2015 | 20.00 |
| Neuberger Berman Singapore Pte Limited | 26/03/2015 | 8.00 |
| Aviva Investors Asia Pte Limited | 28/04/2015 | 10.00 |
| Target Asset Management Pte Ltd | 28/04/2015 | 2.00 |
| UOB Asset Management Ltd | 28/04/2015 | 12.00 |
| GIC Private Limited | 28/04/2015 | 50.00 |
| CSAM Asset Management Pte Ltd | 29/05/2015 | 7.00 |
| Allianz Global Investors Singapore Limited | 29/05/2015 | 10.00 |
| Oversea-Chinese Banking Corporation Limited | 29/06/2015 | 10.00 |
| Amundi Singapore Limited | 29/10/2015 | 28.00 |
| UBS Asset Management (Singapore) Ltd | 28/04/2016 | 25.00 |
| BlackRock (Singapore) Limited | 30/05/2016 | 200.00 |
| Avanda Investment Management Pte Ltd | 30/05/2016 | 7.00 |
| PIMCO Asia Pte Ltd | 29/06/2016 | 18.00 |
| Phillip Capital Management (S) Ltd | 27/07/2015 | 4.20 |
| ST Asset Management Ltd | 30/08/2016 | 6.50 |
| Harveston Asset Management Pte Ltd | 27/10/2016 | 6.50 |
| Soochow Securities CSSD (Singapore) Pte Ltd | 28/11/2016 | 15.00 |
| **Total approved quota under Singapore RQFII scheme** | | **664.20** |

*Source*: Author, based on data from HSBC Securities Services, 2017

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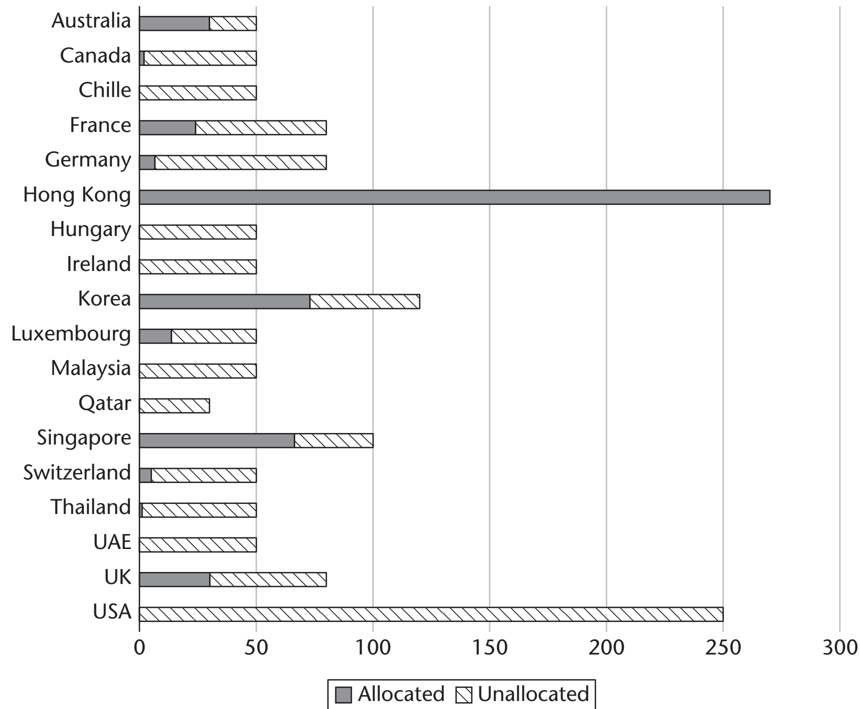


**Figure 8.4.** Allocated RQFII in approved markets, as of December 2016 (in RMB billion)
*Source*: Author, based on data from HSBC Securities Services (2017).

transparency, lower foreign exchange transaction costs and improve the currency risk environment. This development should also boost the appeal of offshore RMB in the region, given Singapore's role as a financial centre and the increased trade and investment linkages between ASEAN and China (IE Singapore 2013). Another distinctive feature of the offshore RMB market in Singapore is its connections to wider Singapore–China economic projects. The measures to allow cross-border flows between Singapore and two industrial parks in China (the Suzhou Industrial Park and Tianjin Ecocity, which are joint ventures between Singaporean and Chinese companies and governments) is unique to Singapore (IE Singapore 2013). This will allow companies operating in the two business parks to raise working capital in RMB directly from Singapore, and create a cheaper funding environment for businesses with lower interest rates.

These milestones constitute significant steps towards future RMB trading and settlement activities in Singapore, particularly given the rapid progress achieved over a short time frame, and signal Singapore's commitment to the internationalization of the RMB. The commitment towards economic and financial cooperation between Singapore and China is also evident in the MAS's continuing relationships with key banking, securities, and insurance

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regulators in China, with annual meetings to exchange views on regulatory cooperation and market development (Shanmugaratnam 2013). Thus far, Singapore consistently ranks amongst the two largest RMB transaction centres after Hong Kong, and overtook London in 2014 as the number one offshore RMB centre after Hong Kong (ASIFMA 2014).

The IMF announced in November 2015 that it would include the RMB in the Special Drawing Rights currency basket, marking a key milestone in RMB internationalization. The use of the RMB has increased significantly over the past few years, not only in cross-border transactions with mainland China but also in offshore market activities. As mainland China's economy grows and becomes even more globally integrated, the RMB will be more widely used internationally and mainland China's capital account liberalization is expected to continue. Within this context, Singapore's early move in establishing itself as an offshore RMB centre is strengthening its position as a regional financial hub. Given the close bilateral ties between the two countries and the continued growth of the Chinese economy during a time when other Asian economies are also moving up the curve of development, Singapore is well placed to leverage its financial expertise and hub status in furthering the internationalization of the RMB. This development of RMB trading and settlement in Singapore will in turn have significant impact on Singapore's future IFC development. This is particularly important as traditional financial services such as foreign exchange trading and capital market activities have declined in volume and significance in global financial markets, marking a need for new engines of growth and to develop distinctive competencies in new or emerging financial markets and services.

## 8.4 Fintech

Fintech, a shorthand for 'financial technology', has been making waves in the headlines recently, particularly in terms of its potential to severely disrupt the landscape of not just banking but also a range of financial institutions, intermediaries, and technology and e-commerce companies (Bassens et al. 2017, Economist 2015). Fintech encompasses a new wave of companies who are developing products, systems, and platforms to change the way businesses and consumers make payments, lend, borrow, and invest. The most disrupted sectors, or at least most frequently highlighted in the news, are payments and fund transfers, crowdfunding, and peer-to-peer lending. Between 2013 and 2014 alone, global investment in fintech ventures tripled from US$4.05 billion to US$12.21 billion, outstripping the growth in overall venture capital investments (Accenture 2015). While there are ongoing debates about whether the future of financial services would be characterized by ruptures

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(due to displacement or obsolescence) or redistribution (as existing players grow and enrich the market or simply acquire new fintech firms and technologies), fintech is embraced in Singapore as yet another opportunity for capturing new market trends and developing new capabilities that would bolster Singapore's IFC status.

On 27 July 2015, the MAS announced the formation of a FinTech and Innovation Group (FTIG) that would be formally responsible for regulatory policies and developmental strategies to encourage the use of innovative technology in ways that would better manage risks, enhance efficiency, and strengthen competitiveness in the financial sector. This move came together with the appointment of a Chief FinTech Officer to lead the FTIG, a high-profile position that signalled a clear commitment to developing and harnessing the potential of fintech for Singapore's financial services industry. As highlighted by the Managing Director of MAS:

> The formation of FTIG is a serious commitment by MAS towards our vision of Smart Financial Centre, where technology is applied pervasively to create new opportunities and improve people's lives. [The Chief FinTech Officer] and his team will work closely with the financial industry and technology community to promote a culture of innovation in the industry while ensuring safety and security. (MAS 2015)

In addition, a FinTech Office was established on 3 May 2016 to serve as a one-stop virtual centre for all fintech related matters and with the explicit task of promoting Singapore as a fintech hub (MAS 2017b).

While fintech is a global movement that has gained significant traction in recent years, there are different drivers in different geographical markets (Gnirck and Visser 2016). In developed markets, such as the United States and Europe, fintech comes from the basis of improving efficiency, reducing transaction costs, and adding value, while fintech in developing economies tends to be driven by other critical needs such as financial inclusion and access to business working capital (building on earlier history of micro-lending programmes). Given that there is a healthy mix of developed and developing markets in Asia, Singapore's combination of financial maturity, technological infrastructure, and sound regulatory framework makes it an ideal launch pad for fintech companies tapping into Singapore's agglomeration of funds and expertise while reaching out to larger potential markets in the region such as Indonesia, Malaysia, Thailand, and Vietnam. A key driver of fintech in Singapore is the strong support of entrepreneurship and innovation by government-linked organizations. The FinTech Office, for example, is coordinated by the MAS, EDB, SPRING Singapore,[8] and Info-communications

[8] SPRING Singapore is an agency under the Ministry of Trade and Industry responsible for grooming Singaporean enterprises.

**Table 8.3.** Grants and schemes available for setting up fintech business in Singapore

| Grant/Scheme [Administrator] | Description |
|---|---|
| Startup SG Accelerator [SPRING Singapore, Startup SG] | • Startup SG Accelerator supports partners, primarily incubators and accelerators, in strategic growth sectors that take on the role of catalysing growth opportunities for high potential start-ups through their programmes, mentorship, and provision of resources.<br>• Startup SG Accelerator will provide funding and non-financial support for these partners to further enhance their programmes and expertise in nurturing successful start-ups. |
| Startup SG Equity [SPRING Singapore, Startup SG] | • As part of the Startup SG Equity scheme, government will co-invest with independent, qualified third-party investors into a start-up. This scheme aims to stimulate private-sector investments into innovative, Singapore-based technology start-ups with intellectual property and global market potential. |
| Startup SG Founder [SPRING Singapore, Startup SG] | • Startup SG Founder provides mentorship support and a start-up capital grant to first-time entrepreneurs with innovative business concepts. The scheme provides up to $30,000 by matching $3 to every $1 raised by the entrepreneur.<br>• SPRING will fund the start-ups through Accredited Mentor Partners ('AMPs'). These appointed partners will select applicants based on the uniqueness of business concept, feasibility of business model, strength of management team, and potential market value. Upon successful application, the AMP will assist the start-ups with advice, learning programmes, and networking contacts.<br>• The AMP will decide on appropriate milestones together with the applicant. Their recommended application and milestones will be surfaced to SPRING for vetting and approval. The grant will be disbursed in two tranches based on agreed project milestones over twelve months. |
| Startup SG Talent [T-UP, STP] | • Startup SG Talent fosters a more conducive environment for promising global talent to set up innovative businesses in Singapore. Schemes under this pillar include:<br>(a) EntrePass, which allows eligible foreigners to start and operate a new business in Singapore<br>(b) T-Up, which allows businesses to access the pool of talent from A*STAR's Research Institutes and build in-house R&D capabilities in their business operations<br>(c) SME Talent Programme (STP) Internship, which will facilitate internship matching between students and technology-based local start-ups. |
| Startup SG Tech [SPRING Singapore, Startup SG] | • Startup SG Tech is a competitive grant in which proposals are evaluated based on both technical and commercial merits by a team of reviewers, and the best are funded. Applicants may apply for either the Proof Of Concept (POC) grant or the Proof Of Value (POV) grant, depending on the stage of development of the technology or solution/concept. |

(*continued*)

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**Table 8.3.** Continued

| Grant/Scheme [Administrator] | Description |
|---|---|
| Capabilities Development Grant (CDG)—Technology Innovation [Info-communications Media Development Authority] | • The Capabilities Development Grant (CDG) is a financial assistance programme designed to help SMEs build their capabilities across ten key business areas. SMEs can use the CDG to defray up to 70 per cent of qualifying project costs (e.g. consultancy, training, certification, equipment, and software costs) for upgrading initiatives in areas like increasing productivity, process improvement, product development, and market access. |
| Financial Sector Technology and Innovation (FSTI) [MAS] | • The FSTI scheme was launched to provide support for the creation of a vibrant ecosystem for innovation. MAS has committed SG$225 million over a five-year period, for the following four purposes:<br>(a) Innovation Centres: To attract financial institutions to set up their innovation labs in Singapore;<br>(b) Institution-level projects: To catalyse the development of innovation solutions that have the potential to promote growth efficiency or competitiveness;<br>(c) Industry-wide projects: To support the building of industry-wide technology infrastructure or utility that is required for the delivery of new, integrated services;<br>(d) POC scheme: The POC scheme provides support to both FIs and non-FIs for early-stage development of innovative projects in the industry. |

*Source*: Author, based on data from MAS (2017c)

Media Development Authority. Table 8.3 shows various government grants and schemes available for supporting fintech companies in Singapore. Other organizations such as International Enterprise Singapore (IE Singapore) have also been active in facilitating Singapore companies in their internationalization efforts, including fintech companies.

The proactive stance of Singapore's financial regulator is also reflected in the establishment of a special sandbox environment for fintech companies as a way to delicately manage the tension between innovation and regulatory requirements (see Figure 8.5). State support has also been directed at organizing fintech industry conventions as platforms for pitching sessions, networking events, talent recruitment, and bringing together start-ups, incubators, and investors searching for opportunities and innovation.

## 8.5 Conclusion

The development of Singapore as a financial centre has a relatively short history compared to other IFCs of similar standing. Its rapid growth, especially over the past three decades, in the increasing breadth and depth of financial

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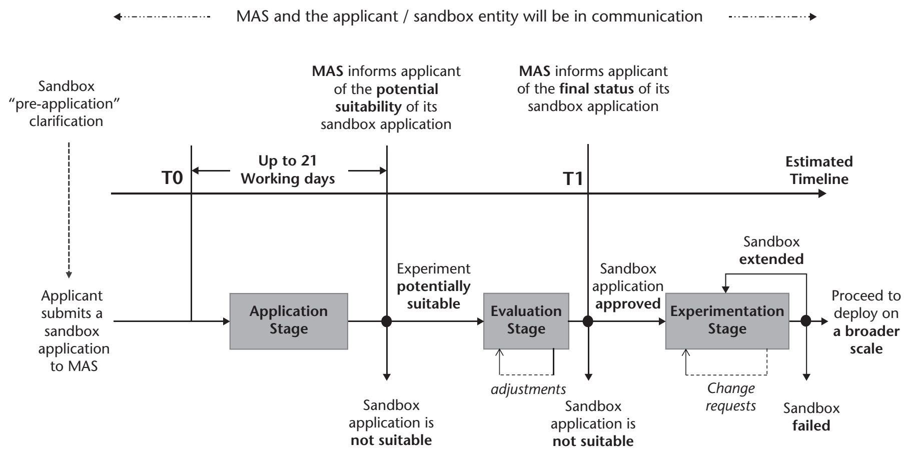


**Figure 8.5.** Examples of flexibility around regulatory requirements for the fintech sandbox

*Source*: Author, based on data from MAS (2016).

markets and institutions, and increased prominence and participation in global and regional financial governing bodies, has mirrored the intense industrialization of other sectors of its economy since independence. The 'Big Bang' reforms starting in the late 1990s and transformations in the banking landscape in the 2000s led to the proliferation of industry players and new consumer markets. Singapore has also developed a growing reputation as a wealth management centre and private banking centre. High net worth individuals choose Singapore for their private banking needs due to strong fundamentals such as economic and political stability, high regulatory standards, a robust legal framework, and a critical mass of financial players offering ready access to global and regional financial markets. Through the development of new financial markets in terms of IBF and offshore RMB products and services, Singapore is also creating market niches for itself within global financial networks. The recent but aggressive foray into fintech reflects the consistent efforts of state agencies, financial institutions, and related economic sectors towards product innovation and staying ahead of the curve in a rapidly changing global financial landscape.

Throughout the developments detailed in this chapter, the state has clearly played a vital role in Singapore's development as an IFC. The role of the developmental states in shaping East Asian economies has been well documented (Amsden 1989; Haggard 1990; Johnson 1995), referring to the core idea that the productive structure of a nation could be improved as a result of active economic policy. This includes identifying economic activities that are deemed more conducive to generating economic growth, tight relationships between the state and business sectors to facilitate policy shifts, and

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implementing policies designed to distort price structures and other market signals (e.g. through selective tariffs, subsidies, and access to finance) in order to induce changes in the pace and direction of capital accumulation. Much of the literature on developmental states in East Asia has focused on strategic investments in manufacturing and high-tech sectors, but the banking and finance sector is also clearly important in economic development strategies—as seen in the case of Singapore. This calls for a more systematic analysis of the state in terms of its functions, roles, and institutions in shaping firm behaviour and activities within the context of economic development strategies. In this case, focusing on how the development of financial markets and financial firms have become increasingly important to economic development policies brings into question the ways in which we should consider the state–firm nexus in finance and implications for capitalist dynamics (Lai and Daniels 2017). The flurry of bank bailouts and nationalization of financial institutions (in effect, if not in name) in the United States and Europe following the 2008 Global Financial Crisis has certainly demonstrated the vital role of the state in finance. More recently, the events of Brexit have also triggered heated debates, as supporters of the 'Leave' campaign proposed a vision of 'Singapore-on-Thames', with Brexit offering an opportunity to recast the City of London as an agile, low-regulation hub for global capital, defined by a unilateral free-trade approach and low-tax regime. Although this proposal has already been met with scepticism from the finance sector and downright hostility from EU leaders, it highlights the need for a rethinking of the state–finance nexus in terms of how we analyse IFC development as being market-led, state-led, or some shifting configuration that is sensitive to temporal-spatial dynamics.

In terms of future development, Singapore's long-standing rivalry with Hong Kong as IFCs, discussed also by David Meyer in Chapter 7 of this book, will probably continue to dominate business headlines and the attention of policymakers in both economies, as they are both positioned as the premier financial hubs of the fastest-growing economic region in the next few decades. In terms of practice, firms in Singapore and Hong Kong have distinctive specialization in geographical and business segments. While Hong Kong benefits from its special status and close economic ties to the enormous economy of mainland China (with some limited coverage of other East Asian economies such as South Korea and Taiwan), Singapore is much better positioned for the diverse and fast-growing economies of southeast Asia and the other Asian giant—India. In terms of business segments, Hong Kong has a much larger equity capital market while Singapore leads in terms of foreign exchange, interest rates derivatives, and insurance business. Both financial centres, therefore, are necessary for comprehensive coverage in the control and coordination of regional economic activities for both financial and non-financial firms in Asia.

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Developments in fintech, however, could introduce new opportunities and dynamics for financial centre development in Asia. Both Singapore and Hong Kong have clear ambitions to become the region's leading fintech hub. Will fintech reshape financial ecologies in ways that move Hong Kong and Singapore into different tiers or realms of products and services? On the one hand, Singapore's combination of financial maturity, technological infrastructure, and sound regulatory framework makes it an ideal launch pad for fintech companies tapping into Singapore's agglomeration of funds and expertise while reaching out to larger potential markets in the region such as Indonesia, Malaysia, Thailand, Vietnam, and India. It also has a more established knowledge economy in advanced manufacturing, systems science, IT, and media and related innovative sectors that arguably provides a more robust ecosystem to support economic innovation. On the other hand, Hong Kong has the advantage of the enormous mainland Chinese market, which already has a substantial pool of expertise and capital with rise of fintech giants such as Alibaba, Baidu, and Tencent. On a larger scale, how might the rise of Asian fintech reshape structures of power and hegemony for global finance if new forms of financial products, services, structures, and organizations emerging from Asia acquire particular forms of power over certain markets and systems? This is especially pertinent given that fintech has the potential to reshape existing divisions between production, finance, and consumption through new modes of production and service delivery in ways that might leapfrog or bypass existing firms or structures, which tends to be dominated by Anglo-American firms and institutions at present.

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