

### DBS Vickers Pulse of Asia Conference 2021 Singapore Exchange Limited

January 2021

Singapore Exchange

WWW. and a second

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### Who we are

SGX 📰

# Award-winning diversified exchange group

A diversified exchange group that runs key market infrastructure including the Singapore securities market and a pan-Asian derivatives exchange covering all major asset classes.

**Exchange of the Year** FOW Asia Capital Markets Awards 2020

Asia-Pacific Derivatives Exchange of the Year GlobalCapital Global Derivatives Awards 2020

> Best FX Exchange in Asia FX Markets Asia Awards 2020

> **Best Exchange for FX** *FX Markets e-FX Awards 2020*

**Exchange of the Year** Regulation Asia Awards for Excellence 2020

Financial Metals Service Provider of the Year Standard & Poor Global Platts Awards 2019

> Derivatives Exchange of the Year Asia Risk Awards 2019

• High operating margin of 54% in FY2020

- High ROE of 40% and Operating cash flow of 58 cents per share
- Dividend of 30.5 cents per share in FY2020, going forward, annualised quarterly dividend will be 32 cents per share
- Most liquid international market for pan-Asian listed derivatives
- Most international exchange in Asia with 46% cross-border listings



Anchored in Singapore, Asia's only AAA-rated economy

Reputation for good corporate governance, infrastructure, regulation and strength of the broader advisory ecosystem



## **Our international footprint**

Anchored in Singapore with global reach, serving a diverse set of international clients seeking Asian opportunities.



Our offices:

Beijing	Chicago	Hong Kong	London	Mumbai
New York	San Francisco	Shanghai	Singapore	Tokyo

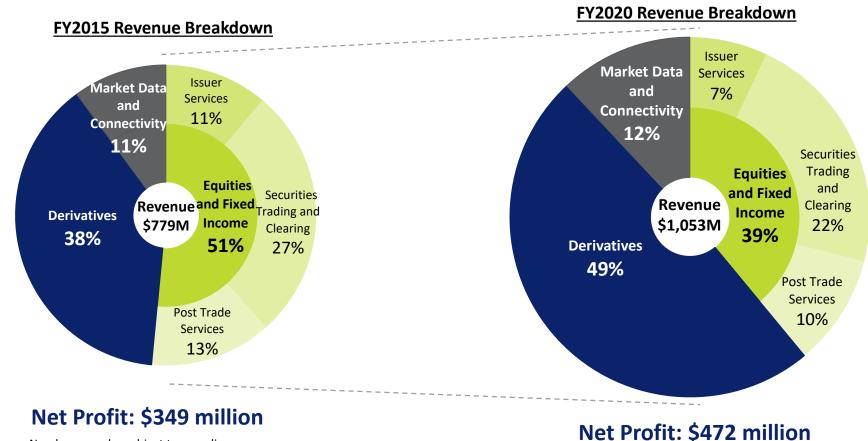
#### Key roles of our International offices

- Our key clients include: Sell-side participants, Interdealer brokers, Corporate trade clients, Institutional investors, Asset managers and Proprietary Trading Groups. T+1 volumes increased 28% y-o-y in FY2020.
- Engage existing clients and acquire new clients to improve liquidity (Fixed Income, Currencies, Commodities, Equities and Data, Connectivity and Indices).
- Increase memberships and listing of equity and debt instruments.



### Successfully achieved growth in revenues

Revenue contribution from Derivatives grew from 38% in FY2015 to 49% in FY2020. Total revenue grew 35% during the same period.



Note: Numbers may be subject to rounding Source: SGX



#### Macro and investor trends shaping markets today





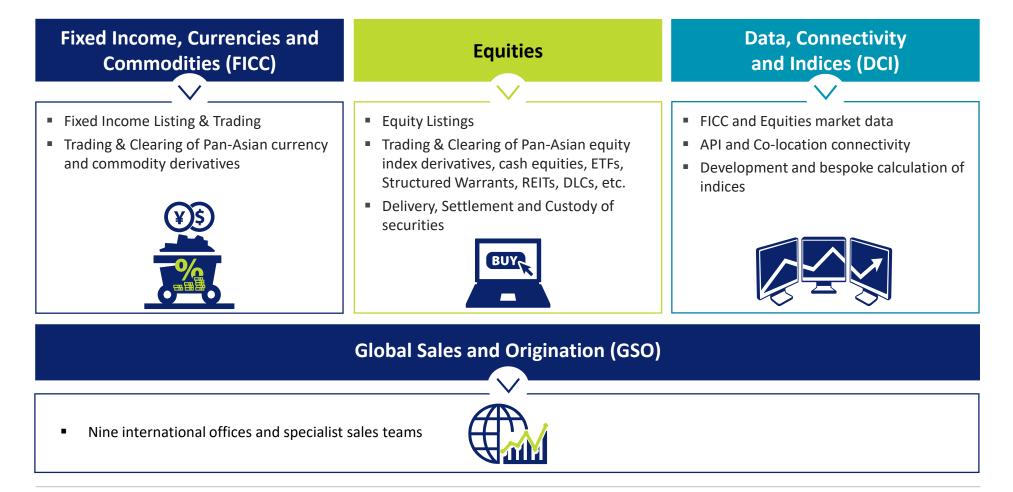
### **Executing our strategic priorities**





# Four business and client units (from 1 July 2019)

Four business and client units covering the entire exchange value chain, resulting in diversified and resilient revenue streams.





#### **Our strengths as a multi-asset marketplace**

# Wide range of Asian portfolio risk management and access solutions

Liquid futures & options products in key asset classes such as equities, currencies and commodities Capital Efficiency through Margin-Offsets, creating customer stickiness

Cross-asset margin offsets resulting in savings of 30% to 90%

Round-the-clock trading covering Asian & Western time zones

Ability for global participants to manage their portfolio risk 22.5 hours a day

# Trusted clearing house and high skin in the game

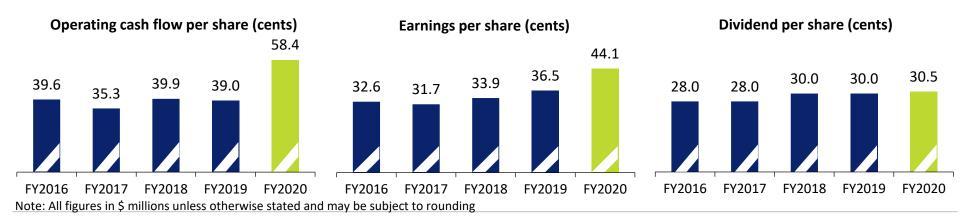
Committed to the safety of the market by contributing 25% to the clearing fund



# **Robust financials**

- High EBITDA margin, operating profit margin and ROE of 62%, 54% and 40% respectively
- Dividend of 30.5 cents per share

	FY2016	FY2017	FY2018	FY2019	FY2020
Revenue (\$ million)	818	801	845	910	1,053
EBITDA (\$ million)	469	460	486	524	656 <sup>1</sup>
EBITDA margin	57%	57%	58%	58%	62%
Operating profit (\$ million)	409	402	425	461	566
Operating profit margin	50%	50%	50%	51%	54%
Net profit (\$ million) attributable to SGX	349	340	363	391	472
Return on equity	36%	34%	34%	36%	40%

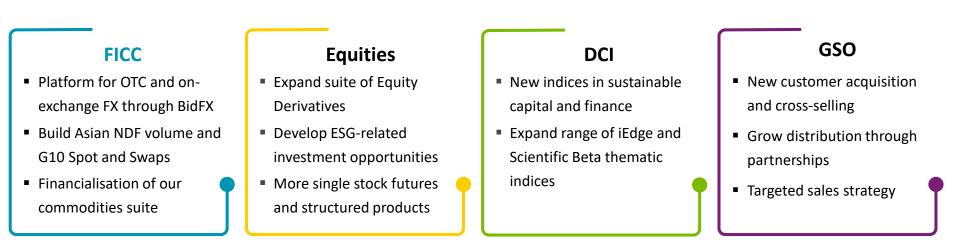




<sup>1</sup> Adoption of SFRS(I) 16 Leases: Rental expenses relating operating leases for data centers and office premises are now recorded as depreciation expense and finance charges.

# FY2021 : Advancing to the next phase of our multi-asset strategy with our customers

- Continued underlying growth from developing investment and risk management solutions for our customers
- FICC Integrated FX platform; Equities New and expanded suite; DCI New SB and iEdge index development; GSO – Cross-selling and growth through partnerships
- Investment and risk management activities likely to continue. Driven by prolonged low interest rates, escalating geopolitical tensions between US and China, and economies' differing pace of recovery from COVID-19, whilst market activity could ease from the high of 2H FY2020.



#### SGX **S**

### Fixed Income, Currencies and Commodities (FICC)



### A leading Fixed Income listing venue

Size of Market

- Asia (ex-Japan) bond market of US\$14 trillion
- Shift towards electronic trading
- Fixed Regulatory trends favour Income shift to on-exchange clearing

Singapore

 Strong distribution network to global investor base with US\$3.4 trillion of AUM in Singapore SGX

ARG

- >US\$2.2T amount issued, with more than 6,600 listed bonds from over 66 countries in 26 currencies
- Launched SGX Bond Pro, an electronic platform for Bond Trading

**Key SGX Highlights** 

### >6,600 bonds

listed by 1,600 issuers from over 66 countries in 26 currencies

#### ~40%

market share for listed G3 APAC bonds

Leading Bond listing exchange in Asia Pacific ~200

Number of customer sign-ups SGX Bond Pro gaining traction

#### TRUMID:

Expanding network



#### Largest and fastest growing currency futures exchange in Asia

Size of Market

- Largest financial market globally with US\$6.6 trillion traded OTC daily
- Asian NDFs is a US\$153 billion market that has potential to be futurised
- Regulatory trends favour shift to on-exchange clearing

#### Singapore

- Largest FX center in Asia Pacific, third largest globally
- US\$640 billion traded OTC daily
- Leading global trading venue for key Asian currencies

SGX



- Diverse Asian currency suite of 23 currency futures and options contracts
- >80% market share in USD/CNH and > 60% market share in INR/USD
- Notional on-exchange FX ADV of US\$5.9B in FY20
- Innovative FlexC FX futures feature

**Key SGX Highlights** 

23 Futures O

**Diverse Asian** 

FX suite

Options

Currencies

133%

# % US\$10.36Bn ~US\$1.3T

Total Volume – CAGR Nov 13 – Nov 20 Open Interest value (Nov 2020) Notional value traded in 2019 up 44% y-o-y



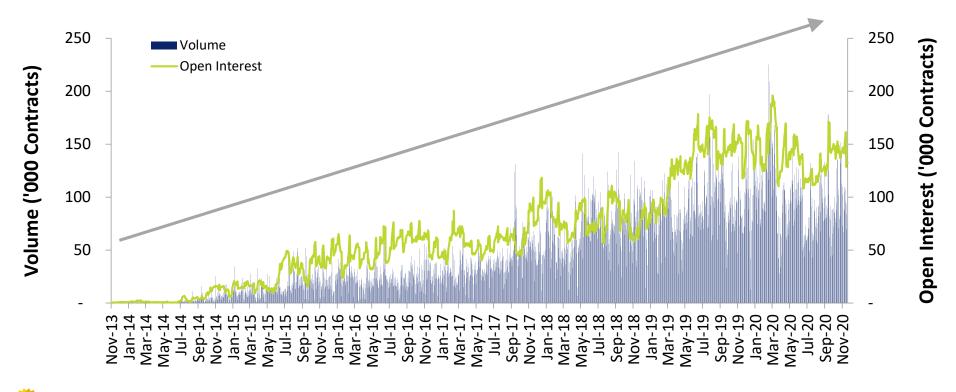
#### **Expanding Network**

SGX 🛤

### **Currency Futures as a growth driver**

133% volume CAGR since November 2013

#### SGX Currency Futures – Total Daily Volume & Open Interest



Asia's Best FX Exchange & Clearing House – by FX Week (2018 and 2019)

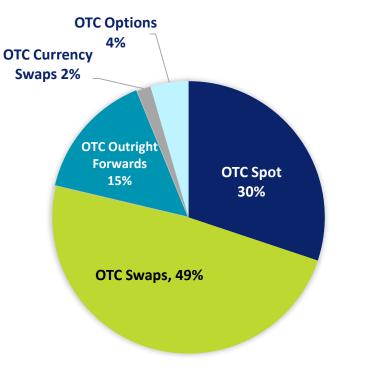
Note: Data as at 30 November 2020



### **BidFX provides SGX opportunity to target a larger OTC FX** market

**OTC FX Trading in 2019:** US\$6.6 trillion traded daily **Exchange-traded FX derivatives 2019:** US\$0.16 trillion traded

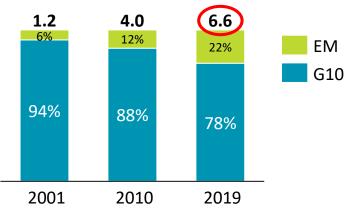
#### <u>Global OTC FX Trading in 2019 – by instrument type</u>



#### Synergistic opportunities from BidFx's strengths:

- Asian NDF
- G10 Spot & Swaps
- International footprint

#### OTC FX: Increasing growth of EM currencies<sup>1</sup> US\$ Trillion ADV, 2001-2019



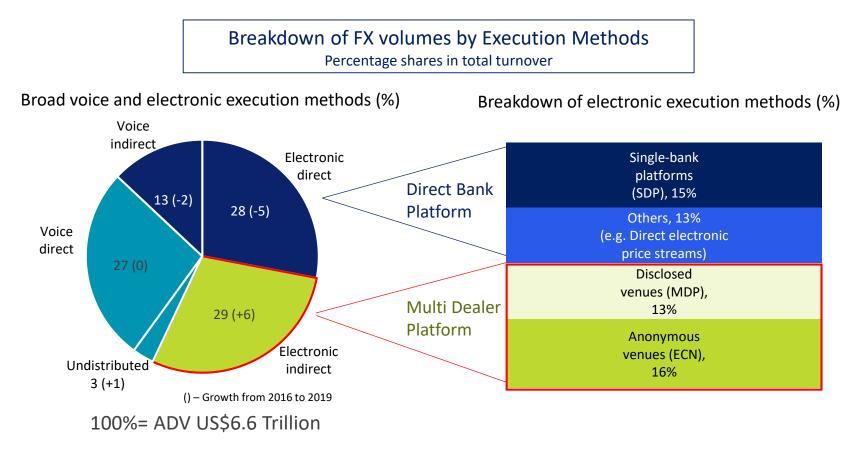
Source: BIS Triennial Central Bank Survey 2019 and SGX estimates



1. EM currencies are defined by BIS as EME currencies, which include non-EM currencies such as SGD and HKD even though these are not classified as "emerging" economies Adjusted for local and cross-border inter-dealer double counting (i.e. net-net basis). Excludes exchange-traded derivatives.

### Potential to capture greater electronification of FX market

BidFX is positioned as a buyside Multi-Dealer Platform (MDP), which has gained 6% share since 2016



SDP: Single Dealer Platform, individual bank proprietary trading which only allows clients to trade with the bank

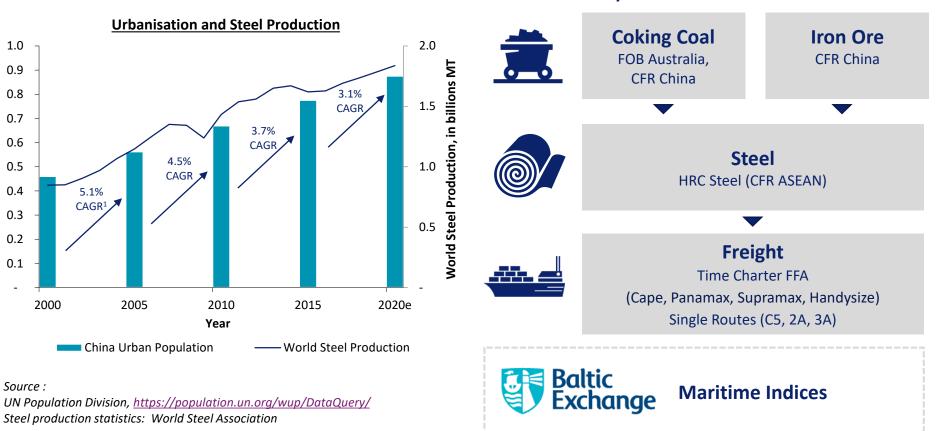
MDP: Multi-Dealer Platform, electronic venue (usually 3rd party) for clients to access liquidity from many banks

**ECN:** "Electronic Communication Network" that automatically matches buy and sell orders on a anonymous basis and provides direct access to market participants. It resembles the 'exchange' trading model



# **Extensive Suite Of Commodities Products**

- Complements Singapore's commodities hub status
- Demand for industrial commodities set to continue amid sustained urbanisation



#### **Price-Discovery Centre For The Steel Value Chain**

<sup>1</sup> CAGR in chart relates to growth of China's Urban Population



2000

1.0

0.9

0.8

0.7

0.6

0.5

0.4

0.3

0.2

0.1

Source :

5.1% CAGR<sup>1</sup>

**Urban Population, in Billions** 

### The leading offshore Iron Ore risk management hub

#### Size of Market

- Largest in the metal market by tonnage
- Notional value of >US\$115B traded annually in the
- Iron physical market
   Ore Asia's first truly global commodity, with China a major consumer
  - Increasing financialisation of Iron Ore

#### Singapore

- Leading merchant hub for commodities houses with ~140 metals and mineral companies
- Include top iron producers e.g. Vale, Rio Tinto, BHP Billiton

SGX

- ARE
- Global pricing and risk management centre
- Cleared 1.5 billion MT of iron ore in 2019
- Offers a complete iron ore suite: 58% Fe, 62% Fe, 65% Fe
- Steel value chain incorporating coking coal and freight

**Key SGX Highlights** 

### **1.5 billion MT**

cleared in CY2019

#### > 95%

market share of international iron ore volumes cleared

### Fe 65%

New high-grade Fe futures contract

**1.5x** 

of paper to physical ratio

**Potential to grow** 

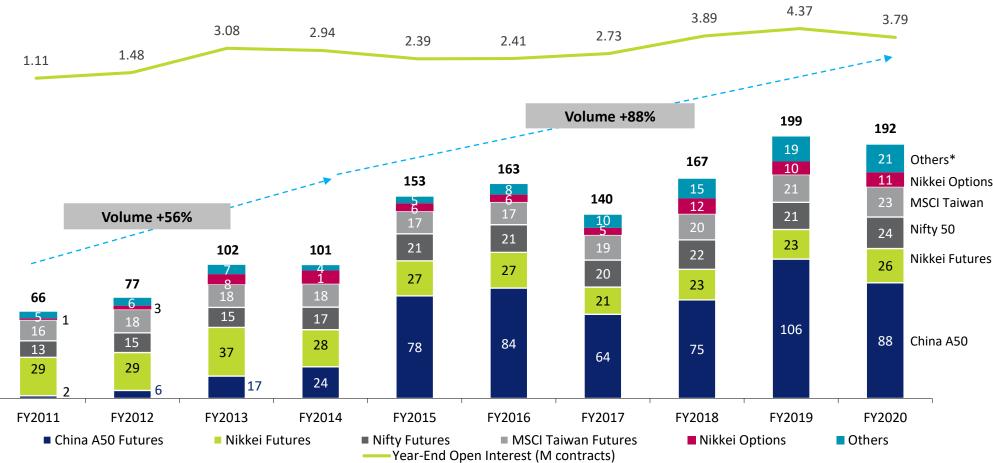


### **Equities (Derivatives and Cash)**



### **Rapidly growing offshore market for Asian Equity Derivatives**

Multi-asset exchange, offering a broad range of Asian access and risk management solutions

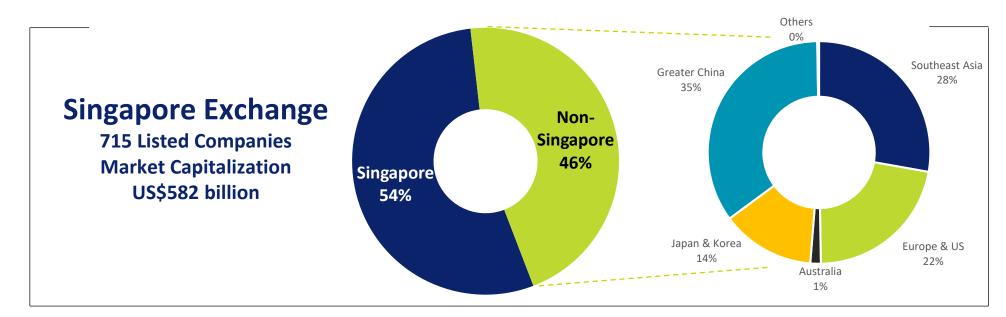






# SGX is the Most International Exchange

More than 40% of total market cap of companies listed on SGX are overseas companies



**Australia Securities** Hong Kong Stock Exchange London Stock Exchange NASDAQ New York Stock Exchange Tokyo Stock Exchange Exchange Non-Non-Non-UK Non-US Non-AU Japan US Non-16% 15% 6.7% 0.1% 15% China 7.2% AU China\* US UK US Japan 93.3% 92.8% 85% 84% 85% 99.9%

\*Note: Greater China includes Hong Kong, Taiwan and Mainland China companies



### **Top Sectors on SGX**

#### Consumer

PF: 16x



- Includes food & beverage, retail and others
- 138 companies with market cap of US\$49 billion

#### Maritime, Offshore Services & Energy

PF: 15x

- Asia's largest cluster of listed companies
- 62 companies and 2 business trusts with market cap of US\$15 billion



- Includes technology hardware & equipment, digital, semiconductor and telecommunications services companies. Other businesses include media, clean tech and engineering.
- 82 companies with market cap of US\$50 billion

Includes Agri-commodities, Mineral &

34 companies with market cap of

**Commodities** 

**Oil & Gas Companies** 

US\$28 billion

PE: 15x

$\mathbb{D}$

#### Healthcare

PF: 22x\*



- Full range of companies from pharmaceuticals, healthcare services to medical devices technology
- 35 companies with market cap of US\$55 billion

#### **Real Estate**



PB: 1.0x

- Asia's broadest range of real estate companies and property trusts covering global real estate assets
- 109 real estate companies and property trusts with market cap of US\$119 billion

Bloomberg & Singapore Exchange (June 2020) Source:

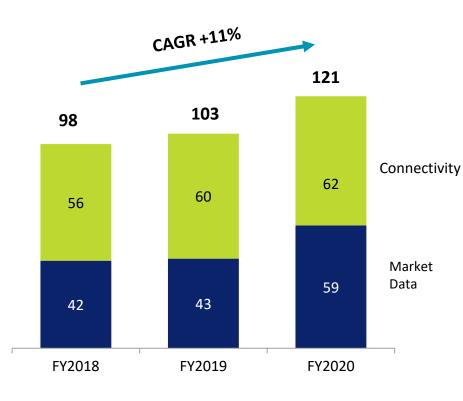
^ Excludes the PE of telecommunication services companies by GICS sub-industry classification \*Excludes P/E of Thomson Medical with P/E of 2,231x Companies with PE >100 excluded from the PE calculations for all sectors.

## Data, Connectivity and Indices (DCI)



# **Overview**

#### Data, Connectivity and Indices



- Market infrastructure business driven by increased use of technology in trading
- Supports Securities and Derivatives Trading:

Data:	Price data, Company Announcements, Financial Indices
Connectivity:	Trading system connections, Network linkages and Data center co-location



### **Index Business**

- Global Exchange Traded Products (index-based) have AUM of > US\$4tn
- Index funds (unlisted) has grown >230% to > US\$ 6tn since 2007
- Acquisition of Scientific Beta (SB) in February 2020

#### **Index Calculation Service**

- Calculating for leading investment banks and asset managers
- Flexible index engine for calculating and disseminating wide variety of indices
- Strong governance framework to meet regulatory requirements
- Established capabilities in Europe

#### **Proprietary Indices**

- SGX iEdge Domestic Indices
  - SGX Thematic indices e.g. S-REIT 20
  - SGX Sustainability index
- SGX iEdge Regional Indices
  - SGX Developed Asia Quality Dividend Index
  - SGX APAC Dividend REIT
- Smart Beta Indices
  - Developed by Scientific Beta



# Index investing and the 'Smart Beta' market

Factor investing has seen significant growth in recent years, with assets using smart beta and factor-based strategies forecast to reach US\$2.7 trillion by 2020<sup>1</sup>, and there is further room for growth.



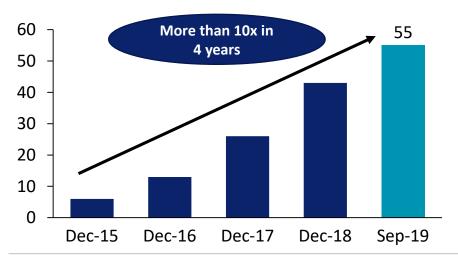


# Scientific Beta broadens SGX's index offering through the fast-growing 'Smart Beta' index space



- Established in 2012 by EDHEC-Risk Institute Asia
- Award winning 'Smart Beta' index firm which develops, produces and promotes multi- and single-factor indices
- HQ in Singapore; offices in France, UK and US
- Asset owner-focused client base







### **Strategically elevates SGX's Index business**

Broad index offering, with (a) strong research-based index construction capabilities, (b) index calculation services, and (c) expansion into smart ESG and green investing



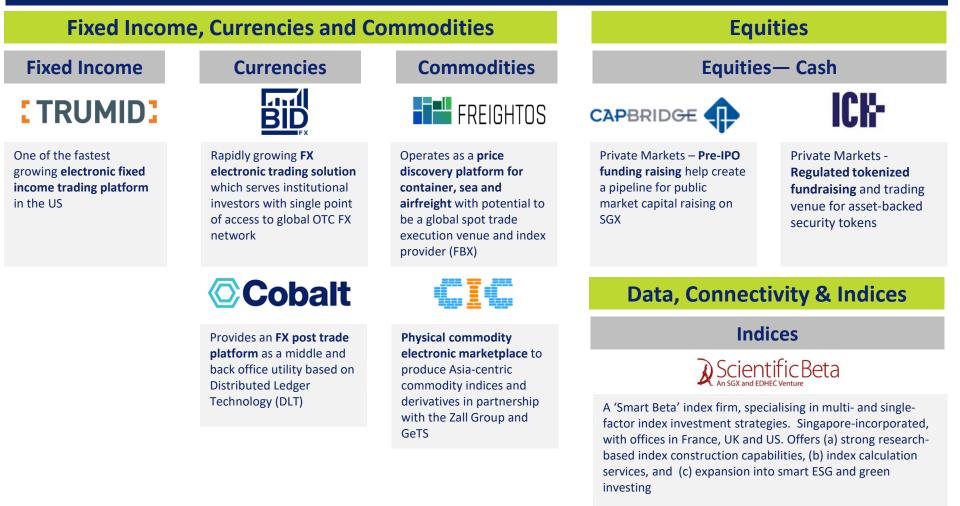


### **Other Information**



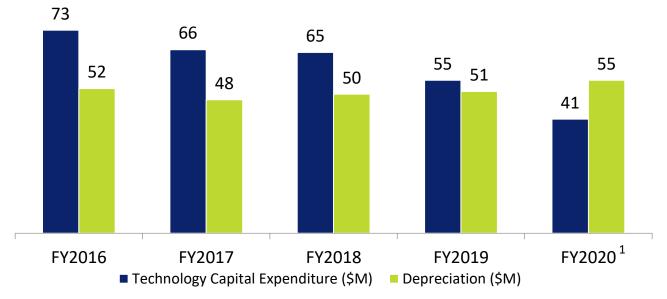
### **Delivering growth with bolt-on investments**

#### Supporting SGX's multi-asset strategy



#### Technology investments have enabled higher capacity for growth

- Past investments advanced SGX's technology capabilities and enables higher capacity for growth
- FY2020 CAPEX of \$41M below guidance of \$45M to \$50M. Enhanced key technology infrastructure, digitalised retail investor services, and upgraded Titan OTC commodities trade reporting system.
- FY2021 CAPEX Guidance: \$55M to \$60M



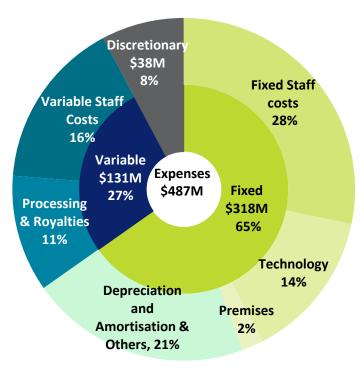
#### Technology – CAPEX and Depreciation (S\$ Million)

Note: All figures in \$ millions unless otherwise stated and may be subject to rounding <sup>1</sup>FY2020 Technology Depreciation excludes the impact of adoption of SFRS (I)16 Leases of \$7.7M.



## **Disciplined in our expenditure**

- Investments in building capabilities to support multi-asset strategy
- FY2020 expense of \$487M, up 8% from a year ago, CAGR of 4% from FY2016-FY2020
- FY2021 Operating Expense Guidance: \$535M to \$545M



#### FY2020 Expense Breakdown

- Fixed costs 65%
- Variable costs 27%
  - Variable staff cost increase in line with profitability
  - Processing & Royalties expenses are volume-related
  - Royalties are recovered as revenues under licence fees
- Discretionary costs 8%

Note: Numbers may be subject to rounding.



# Appendix

- Sustainability
- Cross margining example
- Shareholder profile
- Dividend history
- FY2020 Performance



## Sustainability at SGX

#### Ensuring long-term value for our stakeholders and creating a positive, lasting impact on society

**Our Focus** 

Sustainability factors that are important to SGX:

- 1. Economic Performance : Our financial performance, economic value creation, distribution, and retention for shareholders
- 2. Socioeconomic Impacts : Our external impacts through our role as a market operator and regulator
- 3. Governance : Our governance structure, ethics and integrity, anti-corruption and compliance policies
- 4. People : Our talent management and responsible employment practices
- 5. Environment : Our role in mitigating climate change



#### Equities

Develop ESG-related risk management and trading solutions; publish ESG ratings for SGX-listed companies



#### Commodities

Develop more ESG-related derivatives to support the production of essential materials such as higher grade iron ore, low sulphur FFA and sustainable rubber



#### Regulation

Partner ESG experts and consultants to provide resources and training to help listed companies produce sustainability reports that are in line with globally-recognised frameworks. SGX has also been leading in the advocacy for Women on Boards in Singapore since 2012.



#### **Fixed Income**

Aim to be the preeminent Asian platform for green, social and sustainability fixed income securities.



#### Indices

Develop more sustainability benchmarks, ratings and products to facilitate shift towards sustainable investing. These include custom ESG thematic indices such as low carbon and climate change risk.

#### Corporate



Identify and assess ESG risks and opportunities through robust enterprise risk management system. SGX is a component of FTSE4Good Index, Bloomberg ESG Data Index and MSCI World ESG Leaders Index.

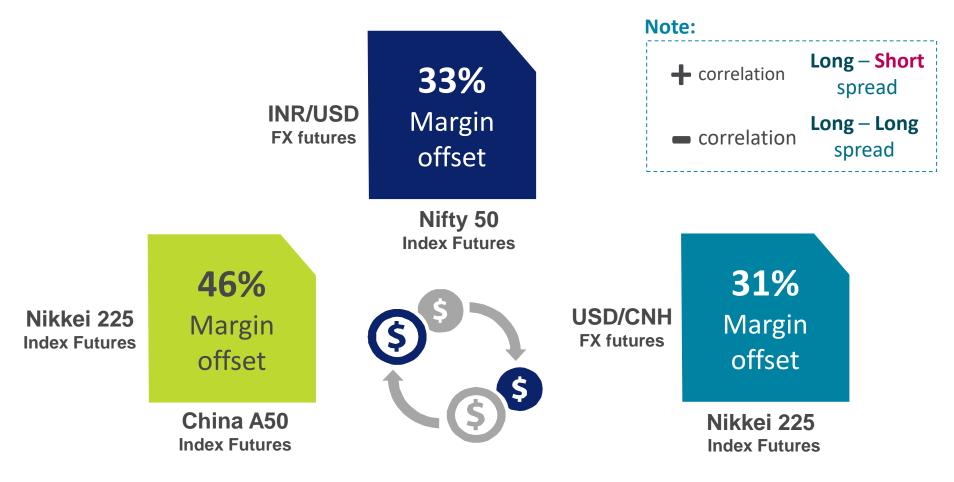


Awarded Asia's Best Sustainability Report (within Annual Report) in 2020 Ranked within the top 5 among listed companies in the NUS Governance and Transparency Index\* in the last 5 years.



# **Cross margining efficiencies**

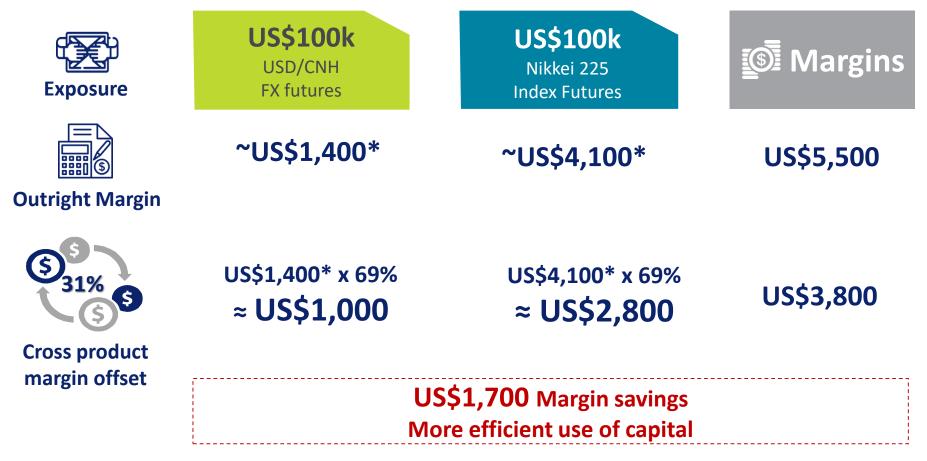
Correlated products, margin netting efficiencies





# **Cross margining example**

More exposure with the same amount of margins

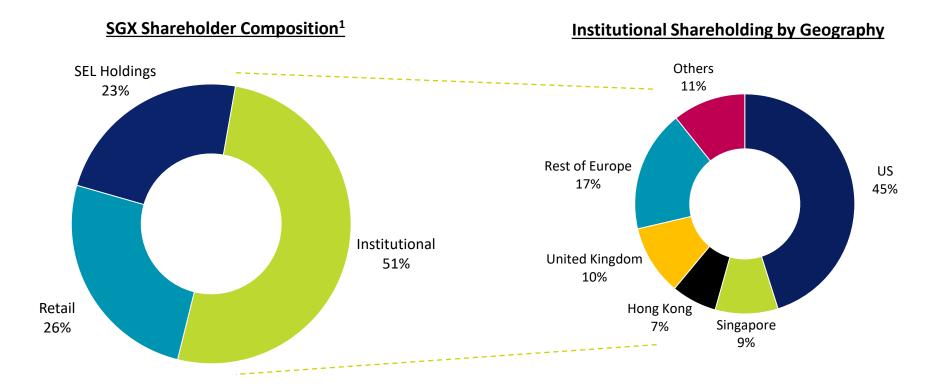


Note: Based on exchange rate as of 3 February 2020 Based on Margin Schedule as of 3 February 2020, full schedule available on SGX website

SGX =

# SGX shareholders' profile

Broad shareholding base with domestic retail shareholders, as well as domestic and international institutions

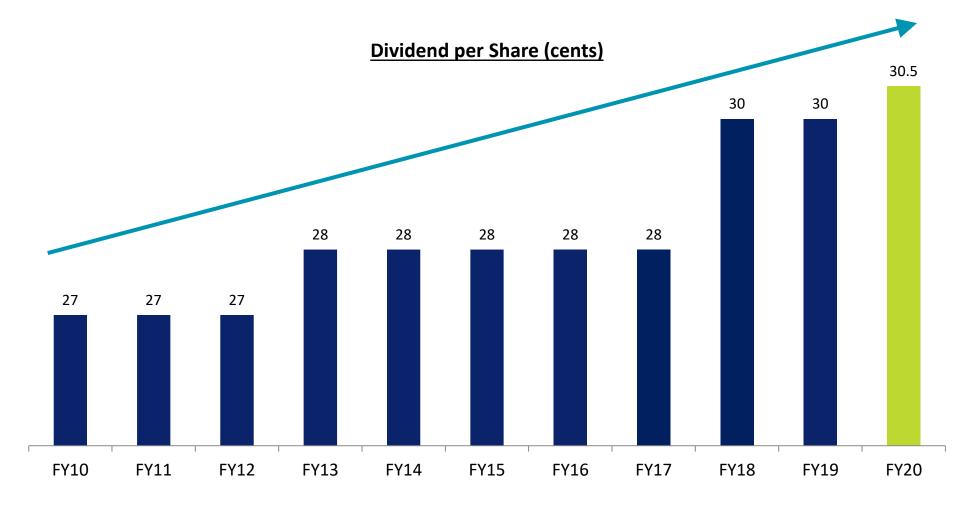


Note: Numbers may be subject to rounding. <sup>1</sup>As at 30 June 2020



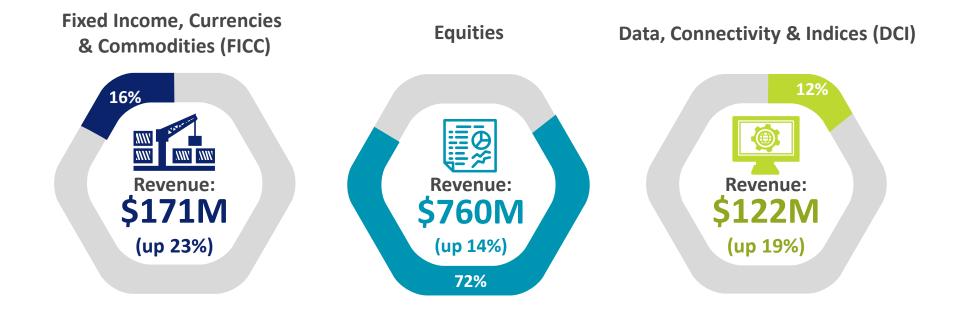
# **Dividend history**

Committed to returning value to our shareholders





### **FY2020** Performance

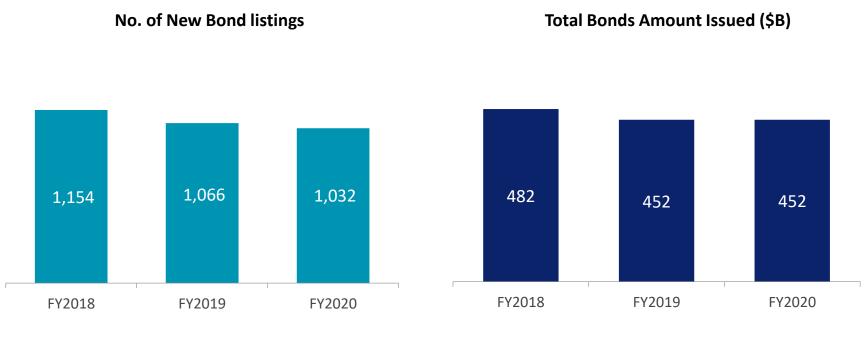


- Total revenue of >\$1.0 billion, highest since listing
- Achieved double-digit growth in all business segments under a new organisational structure
- Leveraged on our global network and partnerships to engage and acquire new customers



#### **FICC – Fixed Income**

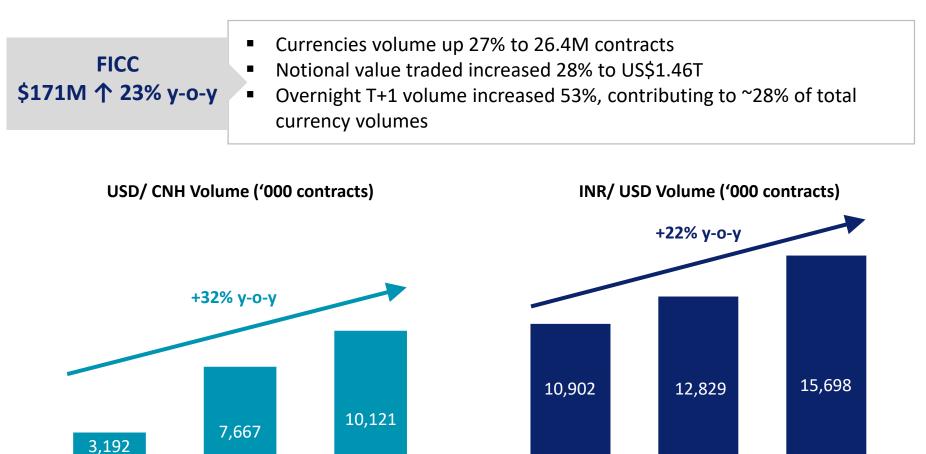
FICC \$171M 个 23% y-o-y	<ul> <li>Number of new bond listings at 1,032, down 3%</li> <li>Total bond amounts issued at \$452B, comparable</li> <li>Attracted more bond issuers from North America, Latam, and India</li> </ul>
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Note: All figures in \$ millions unless otherwise stated and may be subject to rounding



#### **FICC – Currencies**



FY2018

FY2019

FY2020

SGX =

FY2018

FY2019

Note: All figures in \$ millions unless otherwise stated and may be subject to rounding

FY2020

### **FICC – Commodities**

	FICC ► 23% y-o-	- <b>y</b> = E = F p	<ul> <li>Iron ore volumes up 25% y-o-y to 21.0M contracts</li> <li>Established global benchmark with over 98% market share</li> <li>Financialisation: &gt;35% of commodities volumes from financial market participants</li> <li>Screen trading grew 12% to contribute 19% of total Iron Ore volumes</li> </ul>						
Iron Ore Derivatives Volume ('000 contracts)			Freight Derivatives Volume ('000 contracts)			Rubber Futures Volume ('000 contracts)			
	+25% y-o-y								
14,088	16,773	20,968	645	<b>+7% y-o-y</b> 969	1,033	1,689	1,923	1,819	
FY2018	FY2019	FY2020	FY2018	FY2019	FY2020	FY2018	FY2019	FY2020	

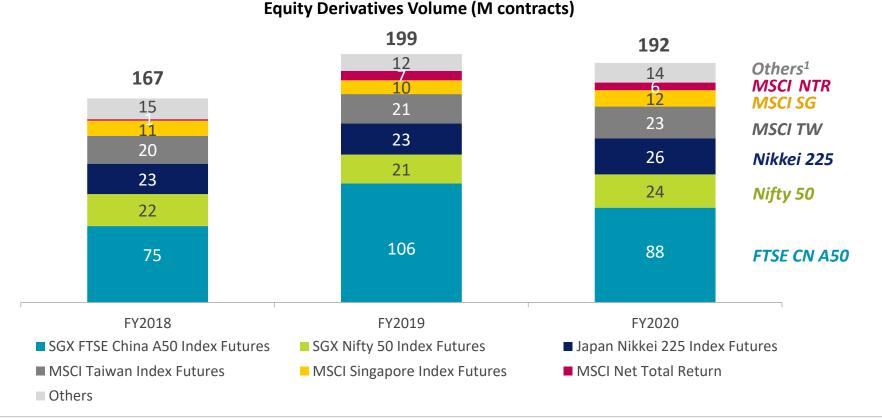
Note: All figures in \$ millions unless otherwise stated and may be subject to rounding



### **Equities – Equity Derivatives**

Equities \$760M up 14% y-o-y

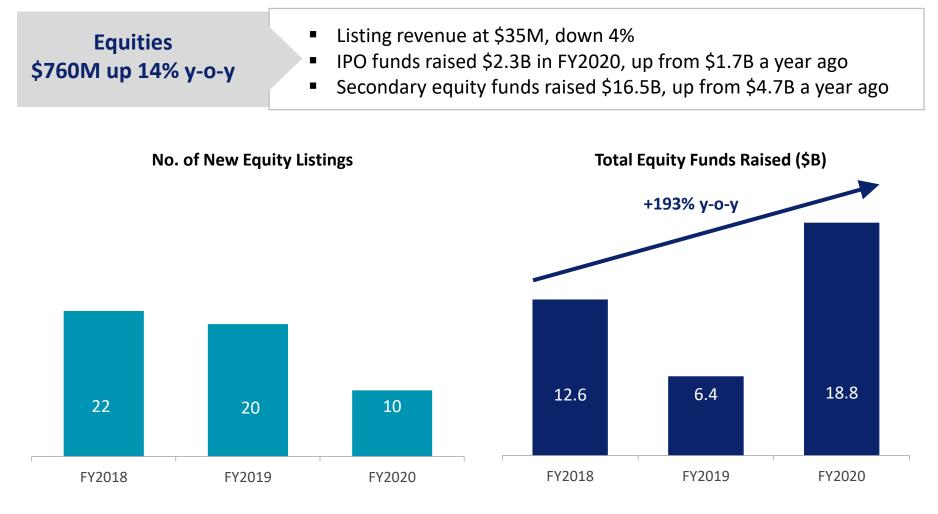
- Equity derivatives down 3% y-o-y. Higher volumes in MSCI SG, NK 225, Nifty 50, and MSCI Taiwan futures, offset by lower volumes in our FTSE China A50 futures.
- Overnight T+1 volumes increased >25%, contributing to ~17% of total equity derivatives volumes





Note: All figures in \$ millions unless otherwise stated and may be subject to rounding <sup>1</sup>Others comprise mainly Nikkei 225 Index Options and Single Stock Futures

### **Equities – Cash Equities Listings**



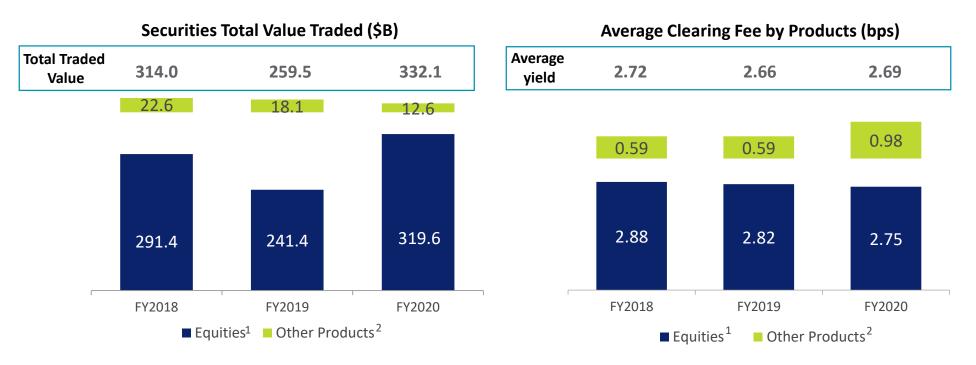
Note: All figures in \$ millions unless otherwise stated and may be subject to rounding



# **Equities – Cash Equities Trading & Clearing**

Equities \$760M up 14% y-o-y

- Higher activity from all customer segments
- Total traded value increased by 28% to \$332.1B
- Average Clearing Fee for Securities up from 2.66bps to 2.69bps



Note: All figures in \$ millions unless otherwise stated and may be subject to rounding

<sup>1</sup> Equities include ordinary shares, real-estate investment trusts and business trusts

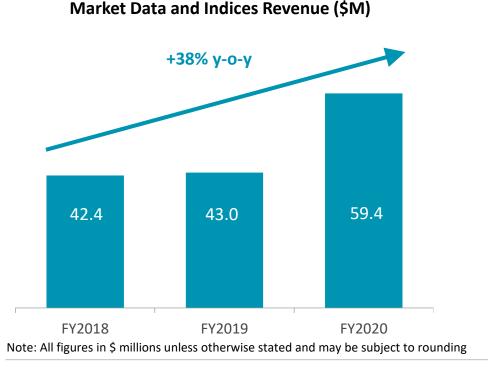
<sup>2</sup>Other products include structured warrants, exchange-traded funds, daily leverage certificates, debt securities, and American depository receipts

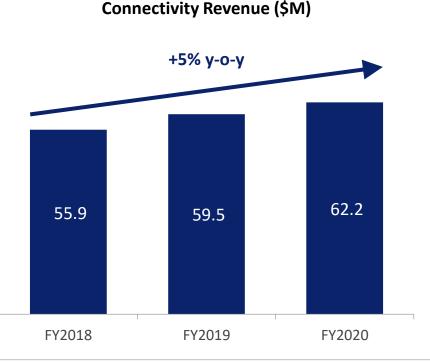


#### **Data, Connectivity & Indices**

Data, Connectivity & Indices \$122M 个 19% y-o-y

- Market data and Indices revenue up 38% to \$59M
- Revenues from Scientific Beta (SB) since February of \$14M
- Connectivity revenue up 5% to \$62M from continued growth in colocation services business and increase in derivatives connectivity subscriptions
- Scientific Beta to develop smart green solutions for climate risk management









#### **Thank You**

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