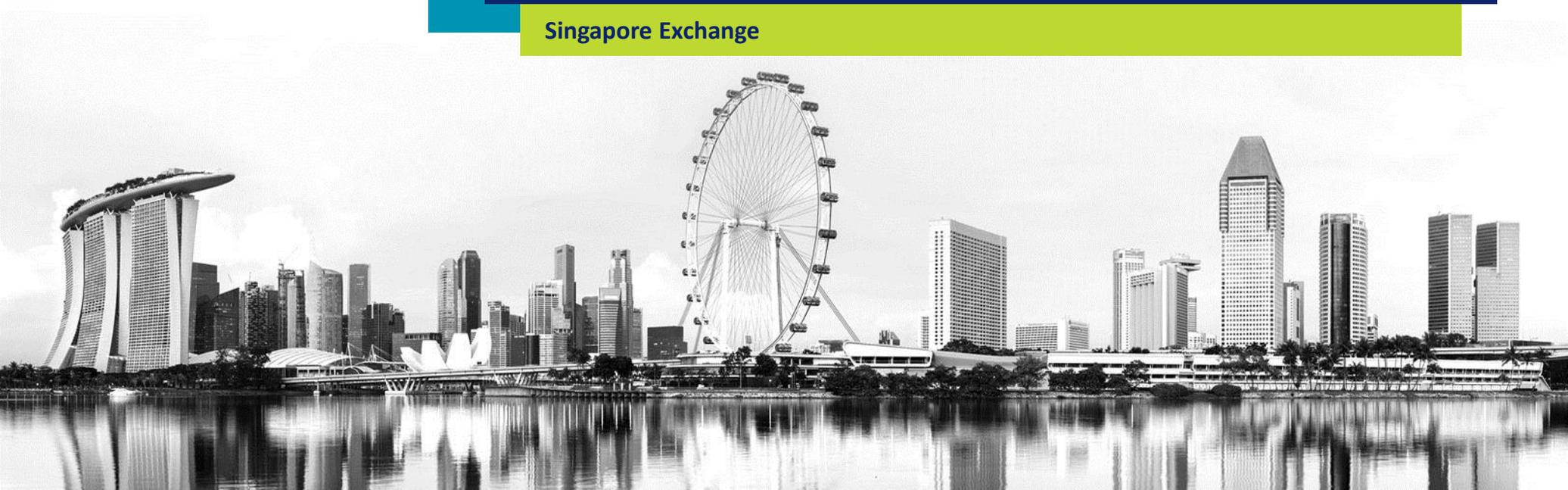


# SGX-Maybank-Mizuho Corporate Day (Tokyo)

**Chng Lay Chew, Chief Financial Officer**

21-22 November 2017

Singapore Exchange



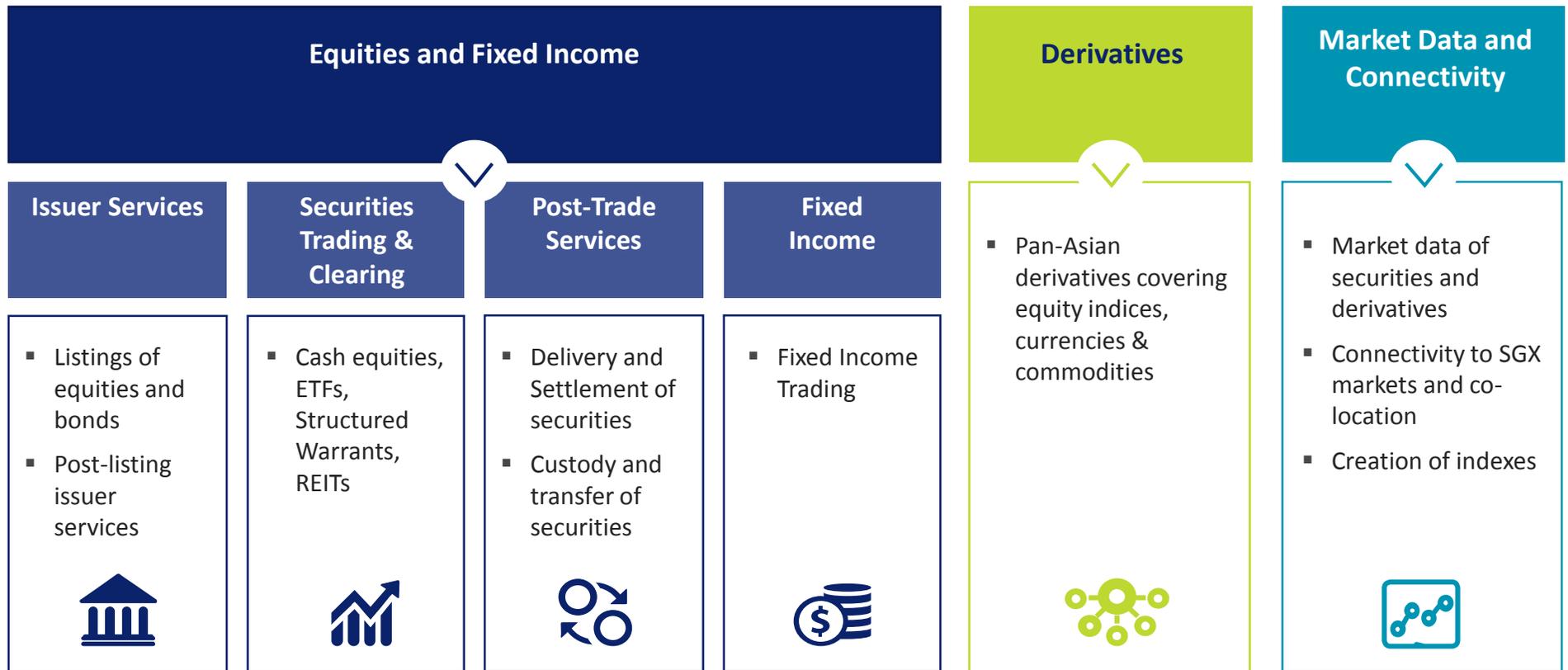
# Who We Are

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



# Our Business Lines

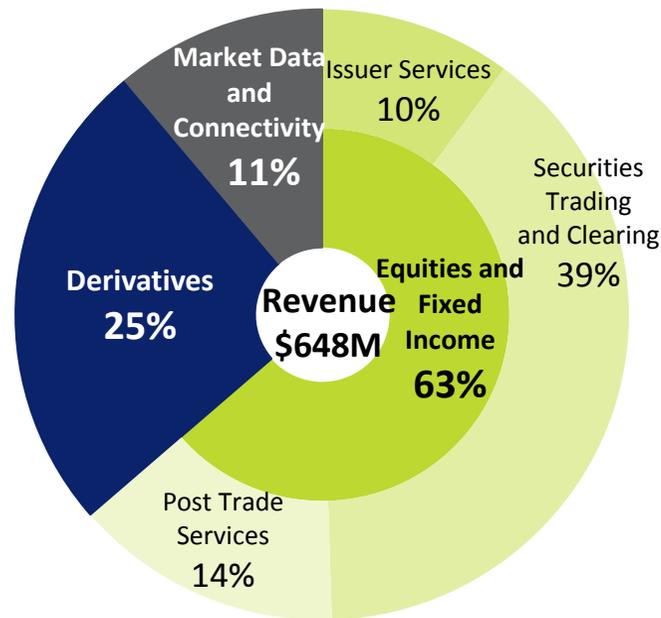
Three business units covering the entire exchange value chain, resulting in diversified and resilient revenue streams.



# Revenue Breakdown by Business Lines

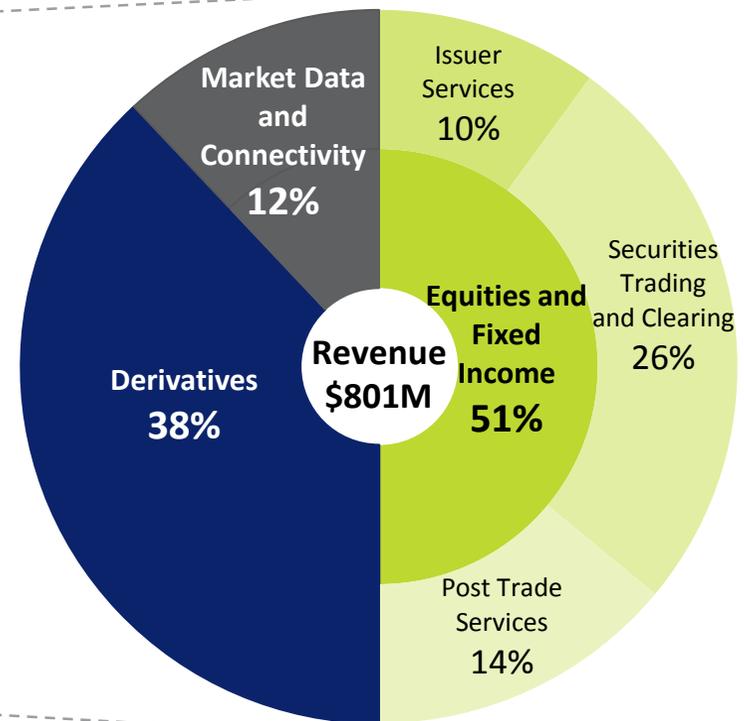
Successfully achieved diversification of revenues. Revenue contribution from Derivatives grew from 25% in FY2012 to 38% in FY2017.

**FY2012 Revenue Breakdown**



**Net Profit: \$292 million**

**FY2017 Revenue Breakdown**



**Net Profit: \$340 million**

Note: Numbers may be subject to rounding  
 Source: SGX. Data as of FY2017

# International Footprint

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



## Key Clients

- **Sell-side participants** - Clearing & Trading Members and partner brokers who act as agents to clients.
- **Interdealer brokers** - Facilitate execution of business between clients of our Members
- **Corporate trade clients** - Use our derivative products for hedging their risks e.g. Steel Mills; Insurance firms; Oil companies ...
- **Institutional investors** – Including funds that invest in our market for various investment needs e.g. hedging, income, growth ...
- **Proprietary Trading Groups** – Companies that trade on markets using their own capital. Examples include market-makers and liquidity- providers.

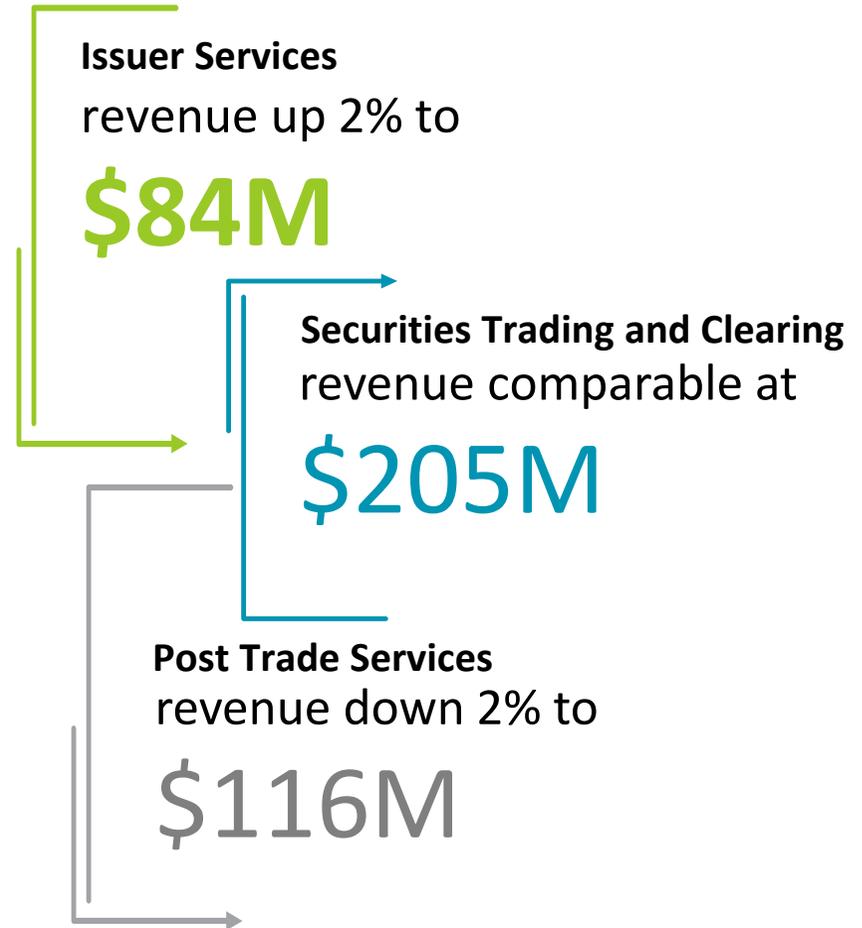
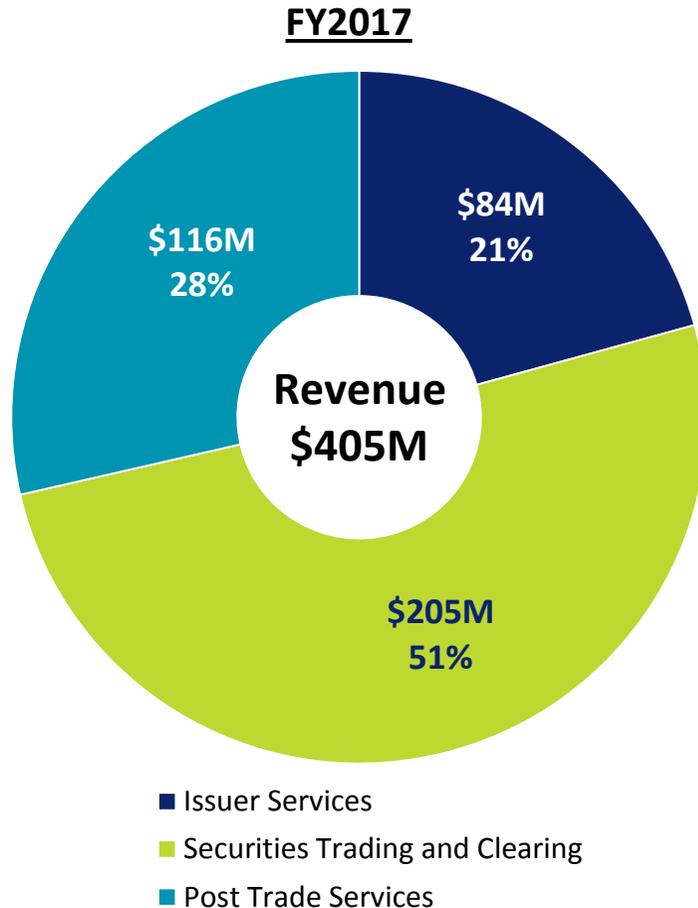
Attained the required regulatory standards to service US and European customers

- Derivatives Clearing Organization (DCO) and Foreign Board of Trade (FBOT) from the US Commodity Futures Trading Commission (CFTC).
- Recognized by the European Securities and Markets Authority (ESMA) as a third-country central counterparty.

# Equities & Fixed Income

# Overview

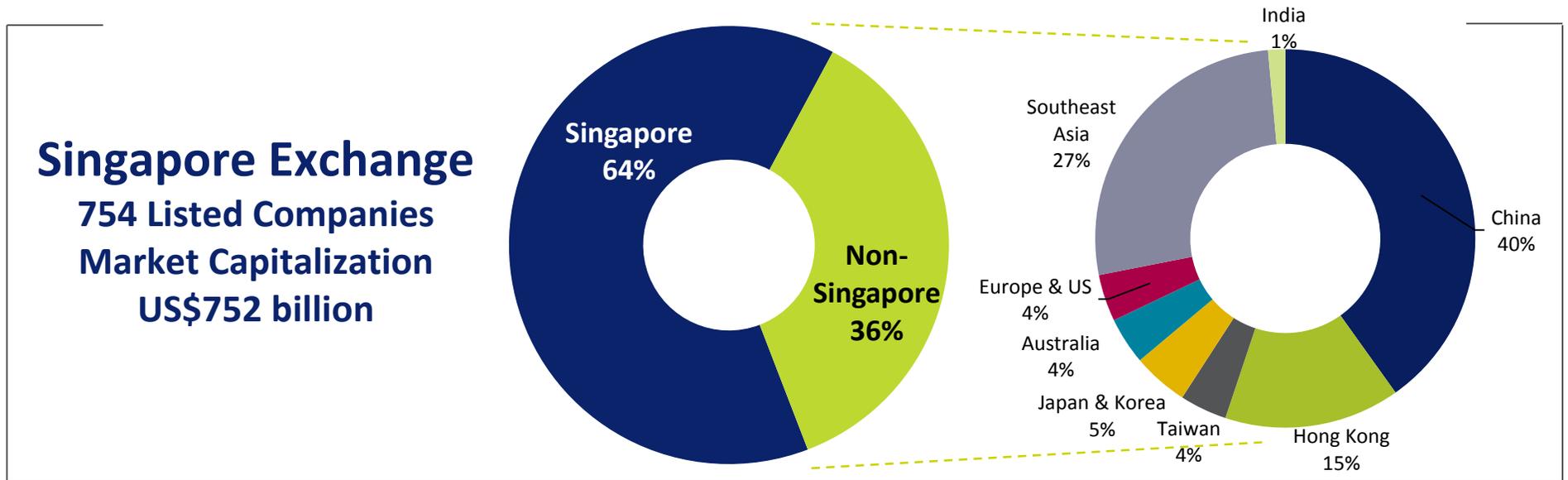
## Equities and Fixed Income



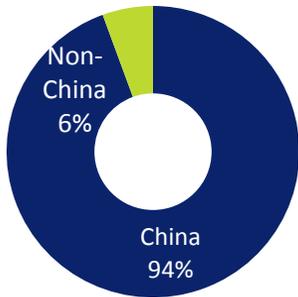
Note: Numbers may be subject to rounding. Comparatives are based on figures for a year earlier in FY2016  
Source: SGX. Data as of FY2017

# SGX is the Most International Exchange

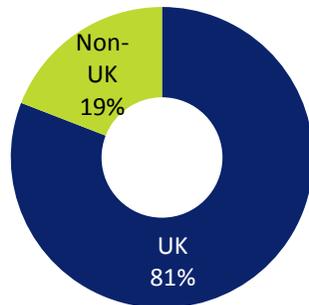
Nearly 40% of all companies listed on SGX are overseas companies.



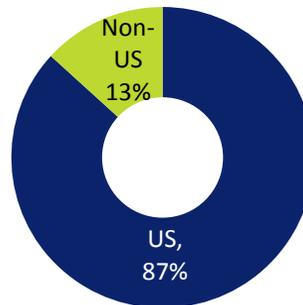
Hong Kong Stock Exchange



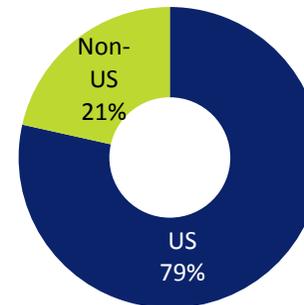
London Stock Exchange



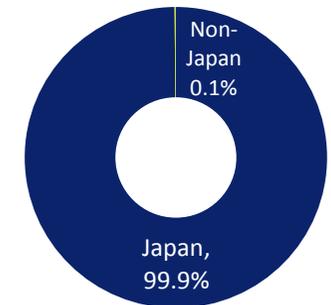
NASDAQ



New York Stock Exchange



Tokyo Stock Exchange



Source: World Federation of Exchanges (Aug 2017), Companies' Website and Singapore Exchange (Sep 2017)

# Top Sectors on SGX

## Consumer

PE: 17x



- Includes agri-commodities, food & beverage and retail
- 150 companies with market cap of US\$107 billion

## Technology

PE: 16x



- Includes information & communications technology, medical technology and financial technology
- 78 companies with market cap of US\$62 billion

## Healthcare

PE: 43x



- Full range of companies from pharmaceuticals, healthcare services to medical devices technology
- 31 companies, 2 REITs and 1 Trust with market cap of US\$43 billion

## Maritime & Offshore Services

PE: 22x



- Asia's largest cluster of listed companies
- 55 companies and 2 business trusts with market cap of US\$23 billion

## Mineral, Oil and Gas

PB: 3.0x



- Companies in exploration, development and production of mineral or oil & gas
- 29 companies with market cap of US\$2.2 billion

## Real Estate

PB: 0.95x



- Asia's broadest range of real estate companies and property trusts covering global real estate assets
- 107 real estate companies and property trusts with market cap of US\$144 billion

Source: Bloomberg & Singapore Exchange (Sep 2017)

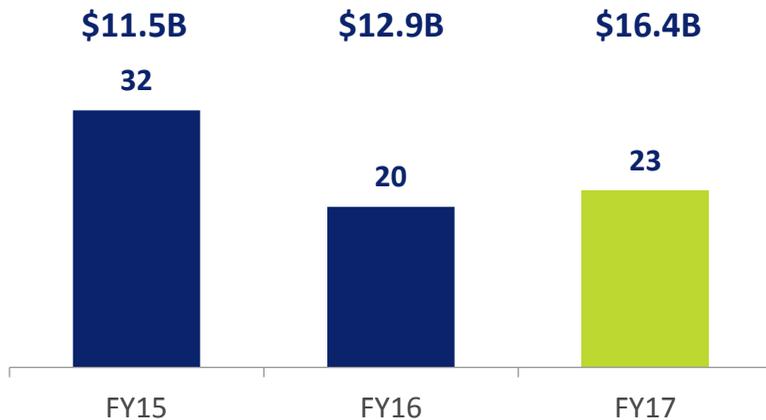
# Growing Listings And Trading Activities

Higher funds raised, healthy IPO Pipeline, and Increasing Daily Trading Activity

## Equity Listings

- 23 listings in FY2017, 10% higher YoY
- S\$16.4B funds raised, 27% higher YoY

### Equity Listings<sup>1</sup> and funds raised<sup>2</sup>



## Trading Activities

- FY2017 SDAV 2% higher YoY
- STI Index up 14% YoY
- Total Market Capitalization up 13% YoY to exceed \$1 Trillion

### Securities Daily Average Traded Value (SDAV)



Source: SGX <sup>1</sup> Equity listings include Initial Public Offerings (IPOs) and Reverse Takeovers (RTOs) | <sup>2</sup>Includes Placement, Rights and Warrants

# Resilient Trading in Equities

Growth in trading of securitized products

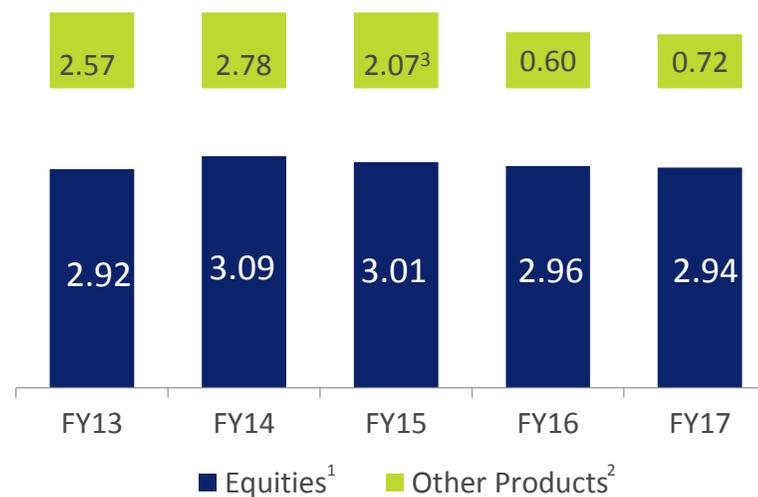
Securities Total Value Traded (\$B)

Total Traded Value	FY13	FY14	FY15	FY16	FY17
	368.8	286.3	274.3	274.1	280.7



Average Clearing Fee (bps)

Average fee	FY13	FY14	FY15	FY16	FY17
	2.91	3.09	2.98	2.90	2.82



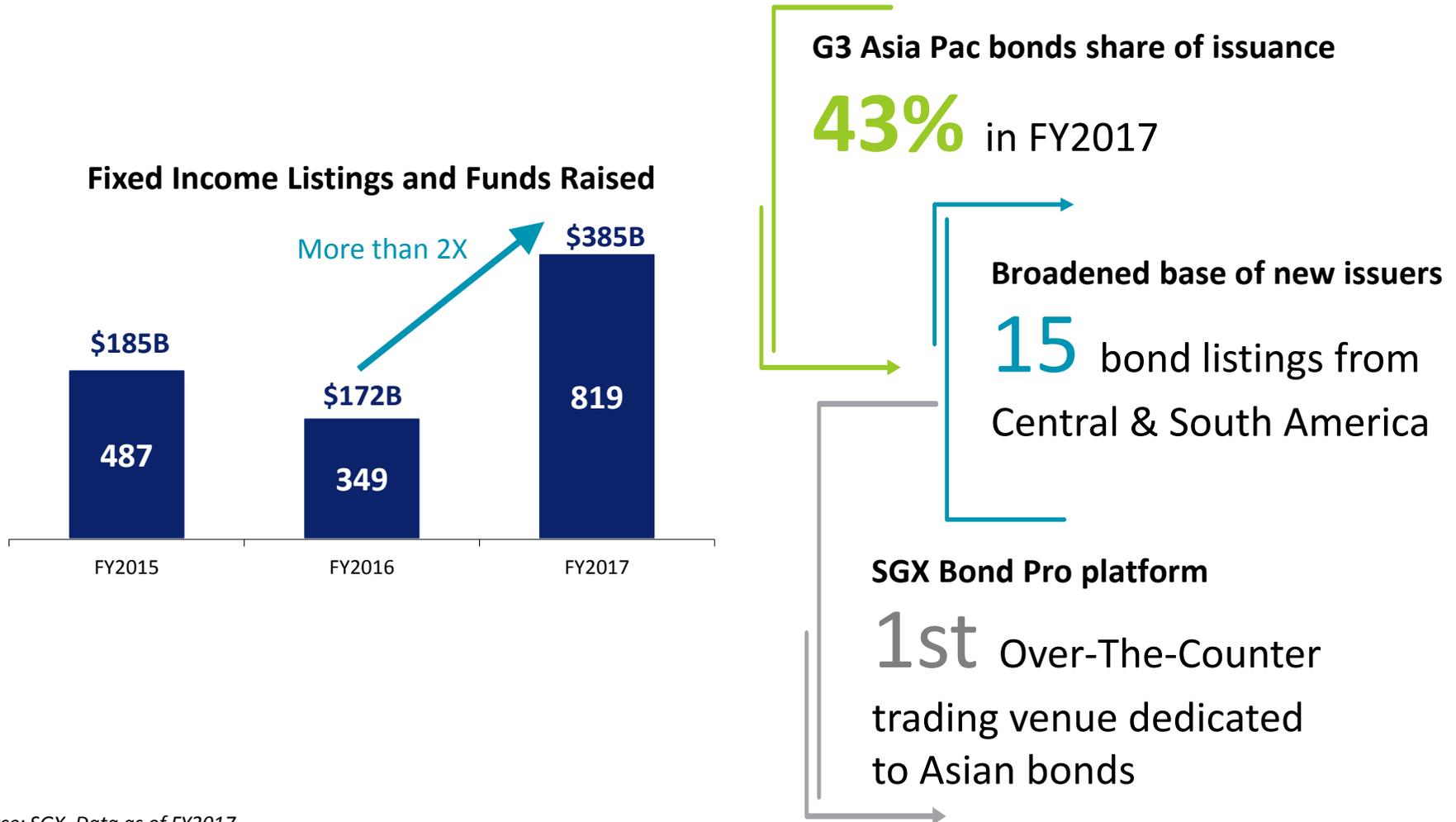
Note: Figures may be subject to rounding

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

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

<sup>3</sup>In January 2015, the clearing fees for Structured Warrants was revised from 3.25bp to 0.4bp

# Increase In Fixed Income Listings And Market Share



Source: SGX. Data as of FY2017

# Build Liquidity & Profile Companies

Continuing our efforts in increasing trading activity



Enhance market quality and lower transaction cost



Reaching out to 140,000 retail investors each quarter



Over 260,000 subscribers today



2 million online views per quarter



Connecting ~40 listed companies with ~200 investors every quarter



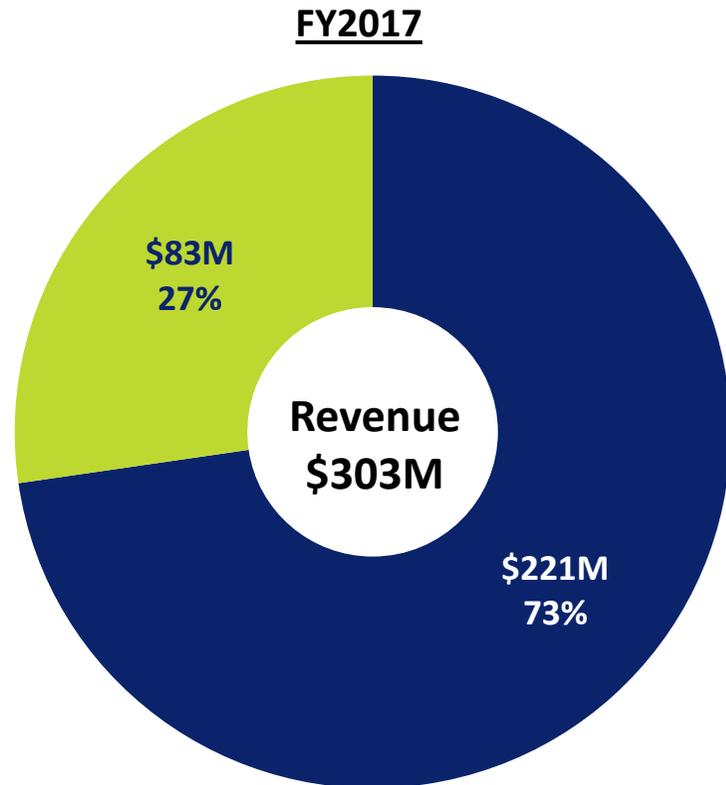
More than 30 articles published per quarter



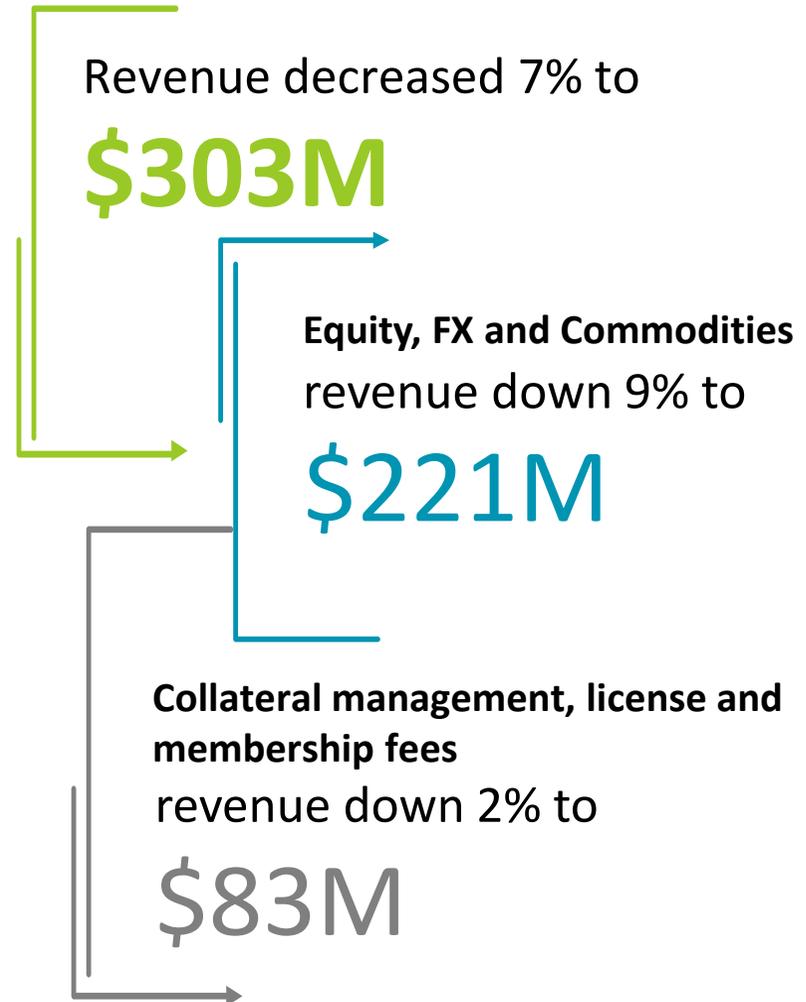
# Derivatives

# Overview

## Derivatives



- Equity, FX and Commodities
- Collateral management, license, membership and others

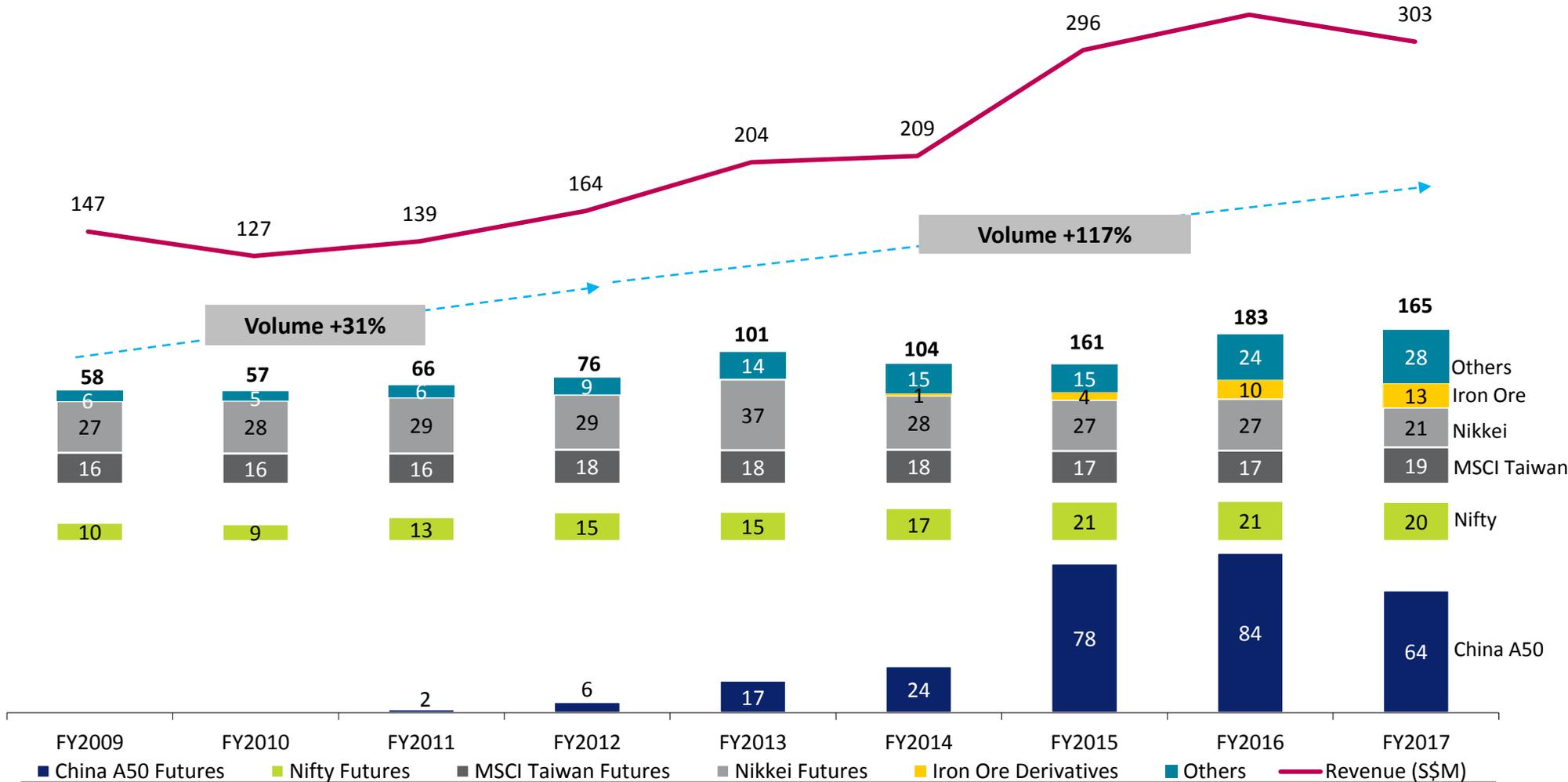


Note: Numbers may be subject to rounding. Comparatives are based on figures for a year earlier in FY2016

Source: SGX. Data as of FY2017

# World's most liquid offshore market for Asian Derivatives

Growth of Derivatives (volumes and revenue in millions)



# The only liquid offshore access to China and India

Complementary products, margin netting efficiencies

China	
Equity Index Futures	SGX FTSE China A50
Equity Index Futures and Options	MSCI China
FX futures	USD/CNH, CNY/USD, CNY/SGD, EUR/CNH, SGD/CNH
Commodities, Futures, Swaps, Options	Iron Ore

India	
Equity Index Futures & Options	SGX Nifty 50 SGX Nifty IT SGX Nifty CPSE SGX Nifty Bank SGX Nifty Midcap 50
Equity Index Futures	SGX MSCI India
FX futures, options, forwards	INR/USD

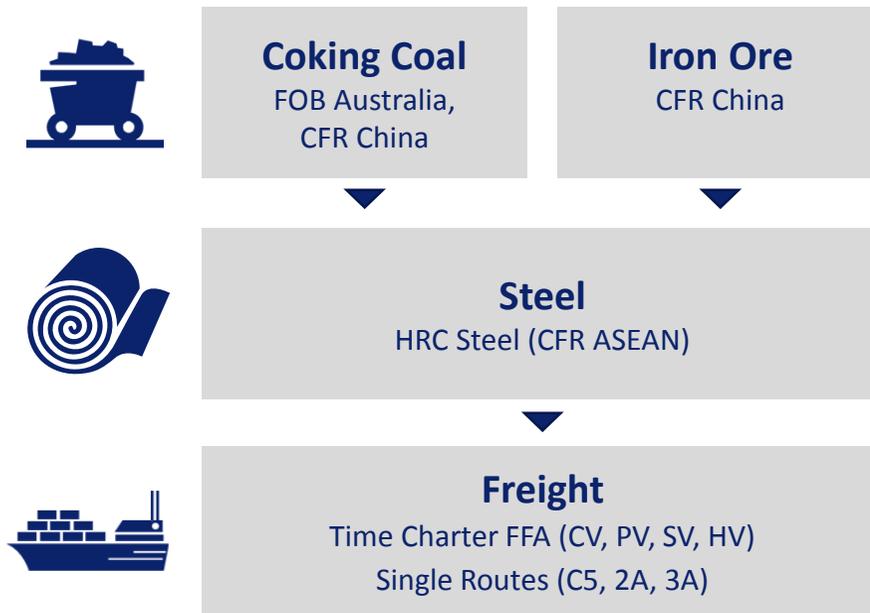
## Our Platform

- An integrated Trading and Clearing System offering low-latency high-throughput and enhanced risk controls and system safeguards
- Round-the-clock trading
- Delivering Asia's broadest range of listed derivatives across China, Japan, India, Taiwan and ASEAN
- Efficient client connectivity by putting together an ecosystem of users trading and clearing on-exchange or OTC
- Capital efficiency through the netting of margins

# Extensive Suite Of Commodities Products

Complements Singapore's commodities hub status

## Price-Discovery Centre For The Steel Value Chain



**The Baltic Exchange**  
Maritime Indices

## Other Products In Commodity Franchise



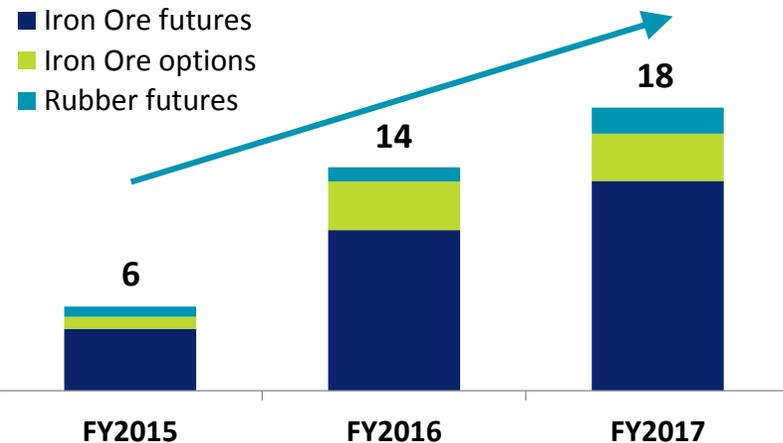
Electricity

Energy

Gold

Rubber

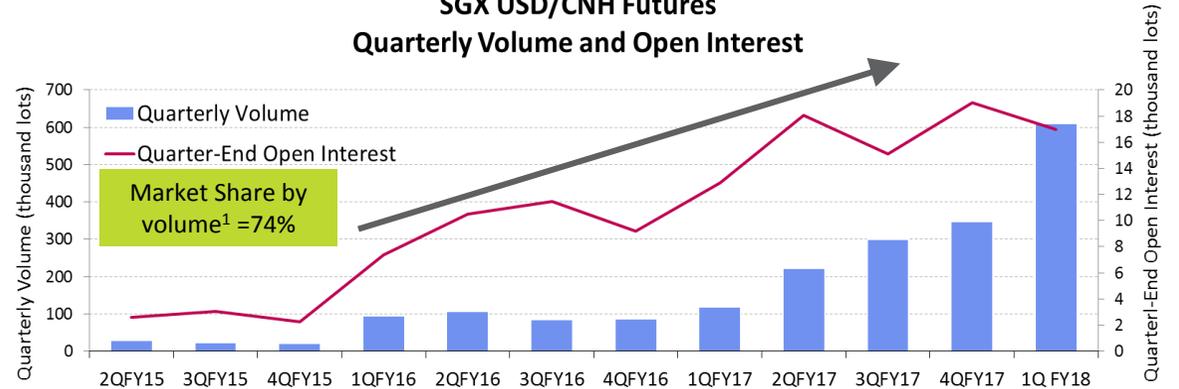
## Total Volume of Contracts Traded (M)



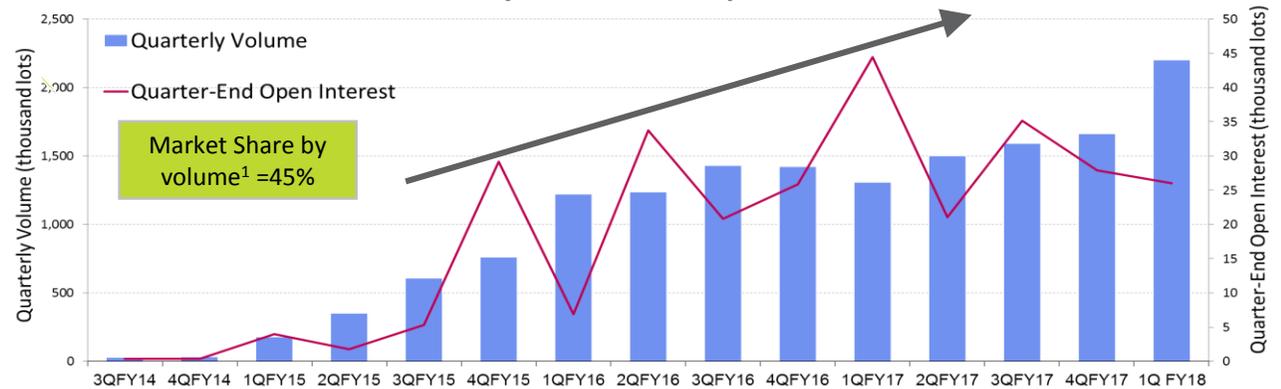
# Liquid Currency Futures



**SGX USD/CNH Futures**  
Quarterly Volume and Open Interest



**SGX INR/USD Futures**  
Quarterly Volume and Open Interest

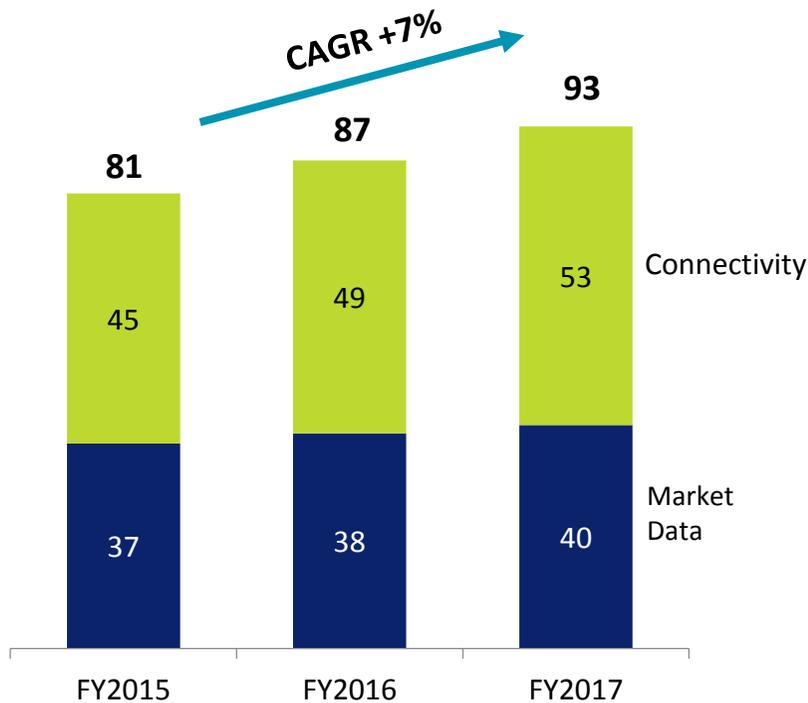


Note: Data as at 30 September 2017

# Market Data & Connectivity

# Overview

## Market Data And Connectivity



- 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

Note: Numbers may be subject to rounding.

Source: SGX. Data as of FY2017

# SGX Index Edge

## Serving The Growing Needs Of Index Investing

- Index business established to take advantage of global shift to index-based investing
- Global Exchange Traded Products (index-based) have AUM of > US\$4tn
- Index funds (unlisted) has grown >230% to > US\$ 6tn since 2007



### 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



### SGX Proprietary Indices

- **Domestic Indices**
  - SGX Thematic indices e.g. S-REIT 20
  - SGX Sustainability index
- **Regional Indices**
  - SGX Developed Asia Quality Dividend Index
  - SGX APAC Dividend REIT

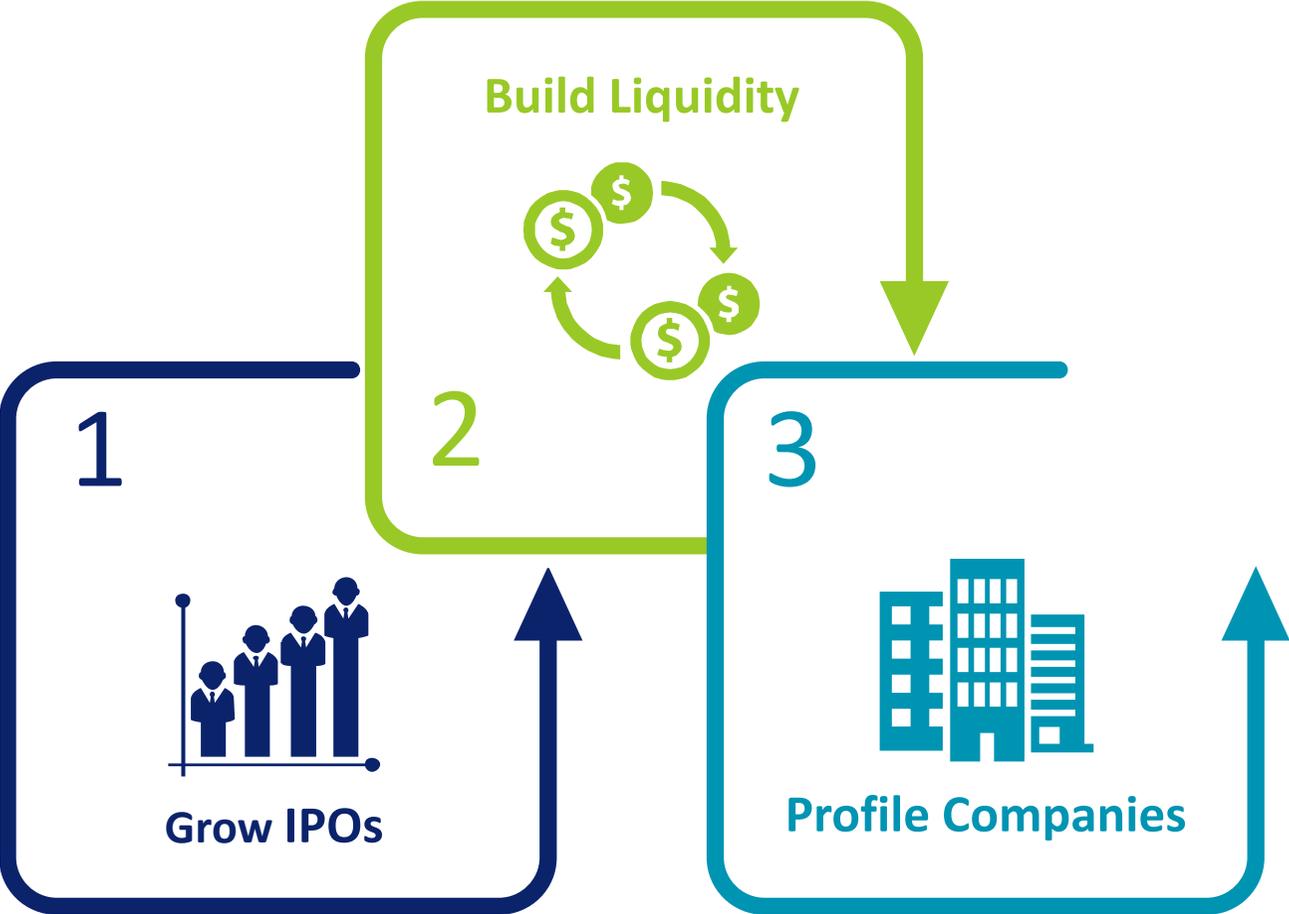
# FY18 Strategic Priorities



# Grow Asset Classes – Diversification

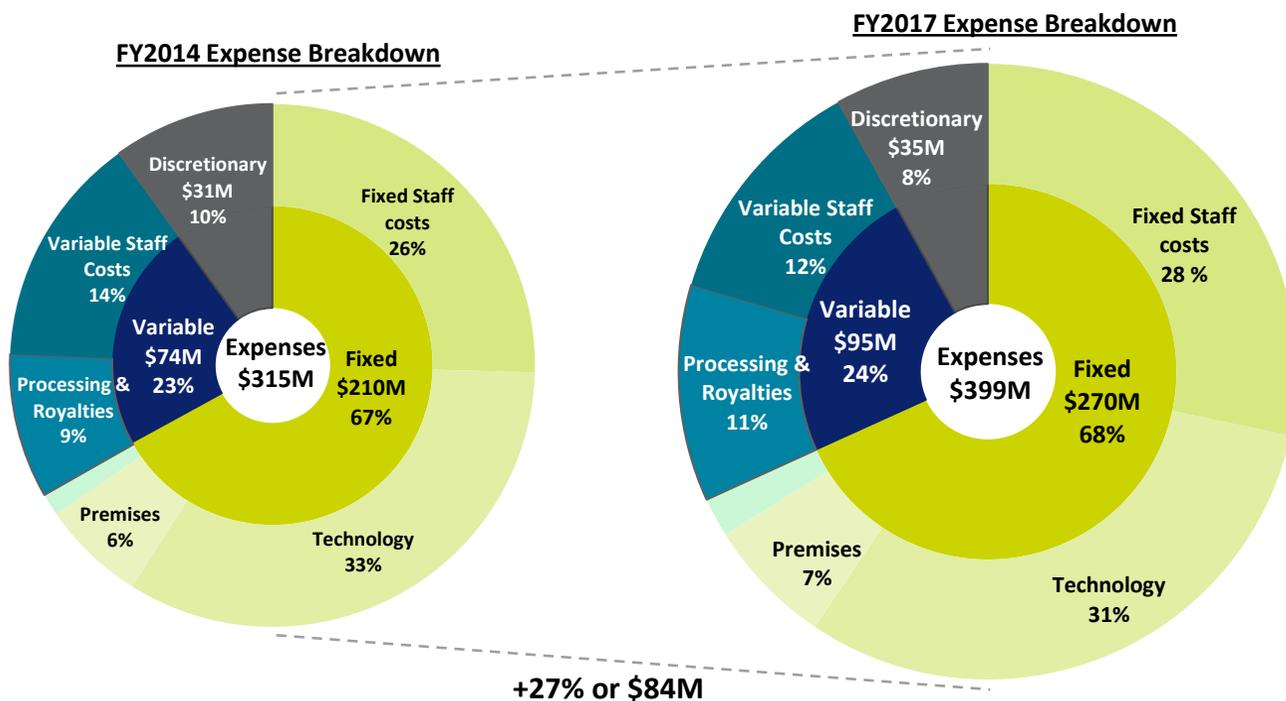
	Size of Market 	Singapore 	SGX 
<b>FX</b>	<ul style="list-style-type: none"><li>▪ US\$5.1 trillion traded daily</li><li>▪ Largest off-exchange (OTC) market globally</li><li>▪ Regulatory trends favour shift to on-exchange trading</li></ul>	<ul style="list-style-type: none"><li>▪ US\$500 billion traded daily</li><li>▪ Largest FX center in Asia Pacific, third largest globally</li><li>▪ Leading global trading venue for key Asian currencies</li></ul>	<ul style="list-style-type: none"><li>▪ 21 currency futures contracts</li><li>▪ &gt;70% market share in CNH and &gt; 40% market share in INR</li></ul>
<b>Fixed Income</b>	<ul style="list-style-type: none"><li>▪ Asia (ex-Japan) bond market of US\$14 trillion</li><li>▪ Shift towards electronic trading</li></ul>	<ul style="list-style-type: none"><li>▪ Strong distribution network to institutional investors</li></ul>	<ul style="list-style-type: none"><li>▪ Leading listing venue with a 40% share of new G3 issuance</li><li>▪ Launch of SGX Bond Pro</li></ul>

# Advance our Securities Market



# Expense breakdown by nature

- Investments in building capabilities, acquisitions and business growth
- Cost discipline exercised – Achieved flat JAW in FY2017 compared to negative JAW of -4% in FY2016. In 1Q FY2018, positive JAW of +2%
- FY2018 expense guidance of \$425M to \$435M



- Fixed costs – 68%  
Variable costs – 24%  
Discretionary costs – 8%
- Variable costs – Processing & Royalties expenses are volume-related
- Discretionary costs – Focused on distribution capabilities and client-related activities.

Note: Numbers may be subject to rounding

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# Looking Ahead...

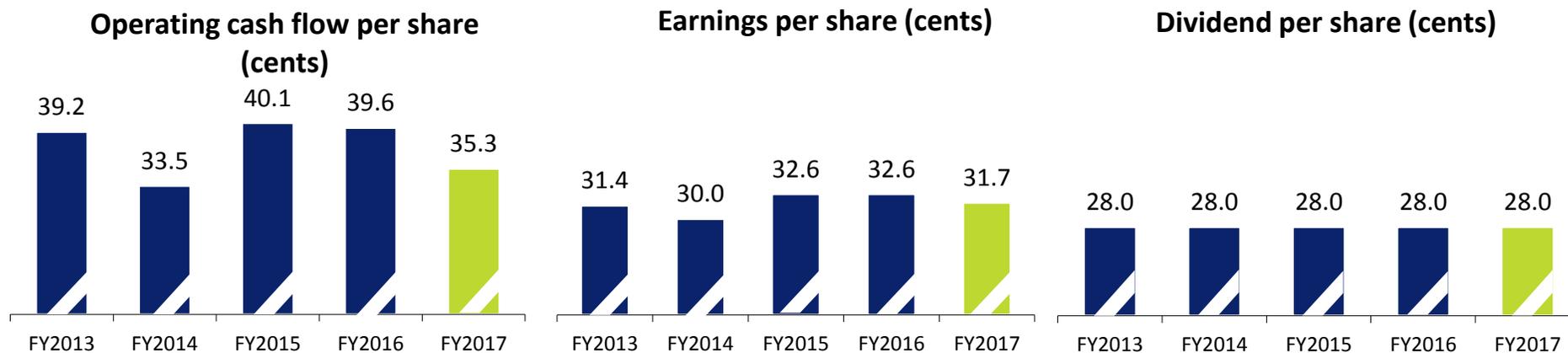
- Momentum in market activity to continue
- Focus on growing new asset classes
  - Record trading volumes in FX Derivatives and strong trading activity in securitized products
  - Fixed Income business gaining traction
- Enhance our global distribution network by growing geographically
- Seek opportunities to collaborate with other exchanges
- Evaluate investments and partnerships to grow our FX, Fixed Income and Commodities businesses
- Guidance for FY2018
  - Operating expenses expected to be between \$425M and \$435M
  - Technology-related capital expenditure between \$60M and \$65M



# Financials

# Financial Performance: Key Indicators (Recent years)

	FY2013	FY2014	FY2015	FY2016	FY2017
Revenue (\$ million)	714	686	779	818	801
Operating profit (\$ million)	413	371	402	409	402
Operating profit margin	58%	54%	52%	50%	50%
Net profit (\$ million)	336	320	349	349	340
Return on equity	39%	35%	37%	36%	34%
Earnings per share (cents)	31.4	30.0	32.6	32.6	31.7
Dividend per share (cents)	28	28	28	28	28



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

# Disciplined Expense Management

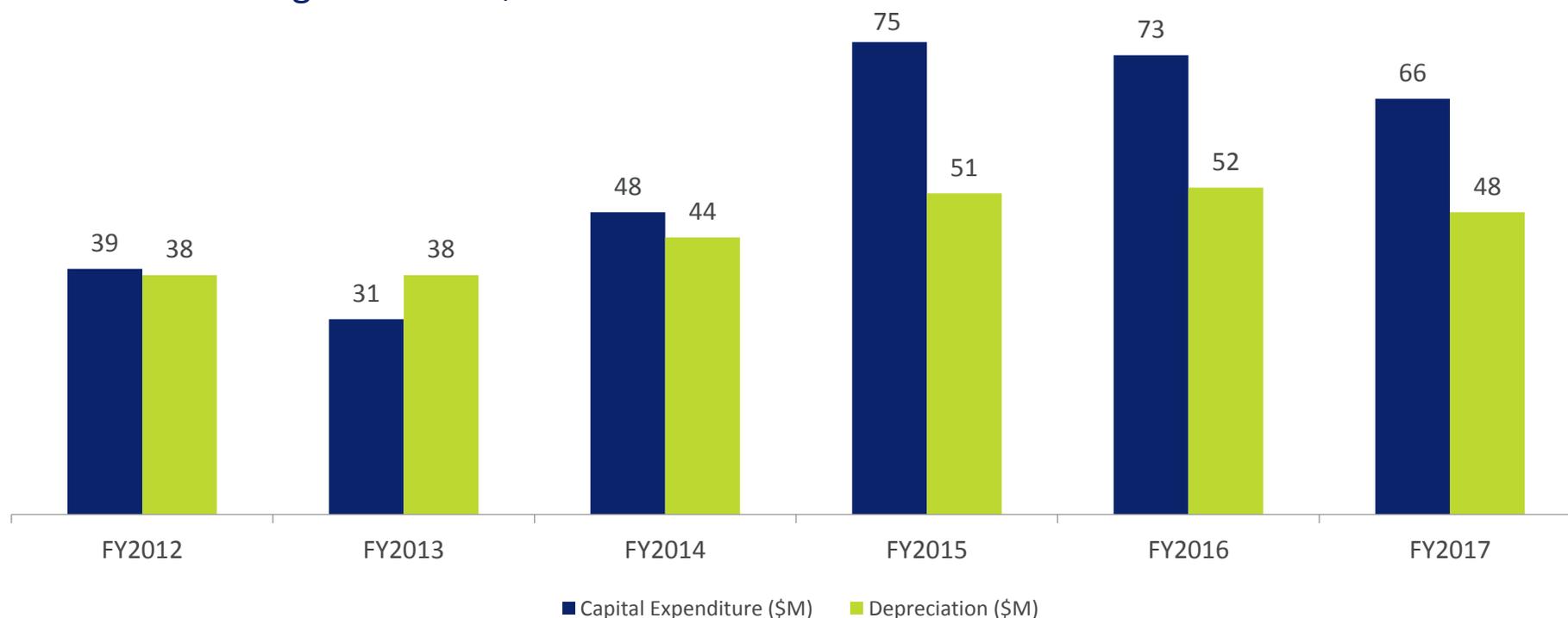
Organic Y-o-Y Expense Trends	
FY2015 Organic Expense Growth	19.7%
FY2016 Organic Expense Growth	8.5%
FY2017 Organic Expense Growth	(5.5%) <sup>1</sup>

Operating Income Margin Trends			
Segment	FY2015	FY2016	FY2017
Equities and Fixed Income	57.9%	55.6%	56.0%
Derivatives	44.5%	42.5%	39.7%
Market Data and Connectivity	46.3%	52.0%	58.9%

<sup>1</sup> Excluding operating expenses relating to Baltic Exchange, which was acquired in November 2016

# Technology CAPEX and Depreciation: Annual Trend

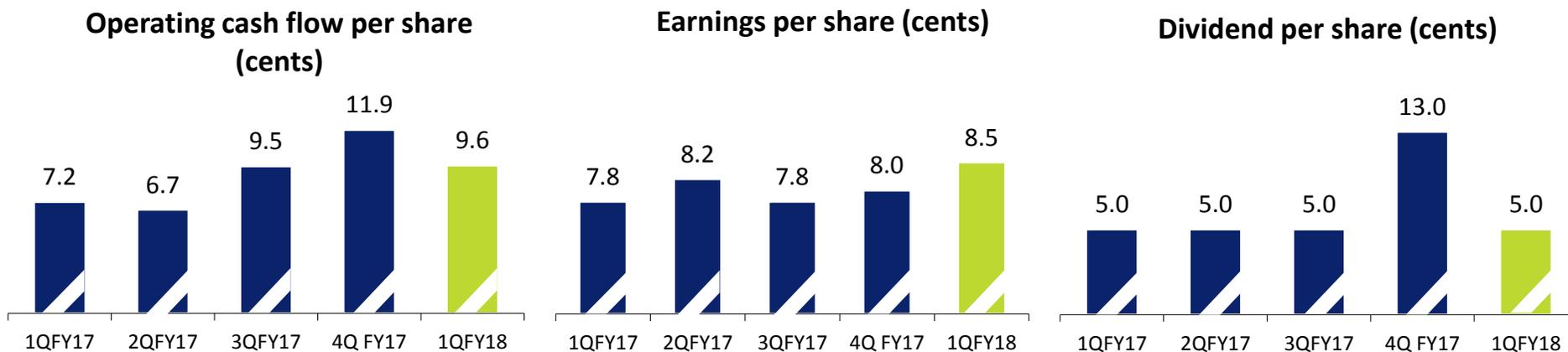
- FY2017 investments were mainly for the migration to a new secondary data centre, enhancements to our securities post-trade system, and improvements in operational resiliency.
- FY2018 CAPEX guidance of \$60-65M.



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

# Financial Performance: Key Indicators (Recent quarters)

	1Q FY2017	2Q FY2017	3Q FY2017	4Q FY2017	1Q FY2018
Revenue (\$ million)	191	200	203	208	204
Operating profit (\$ million)	97	102	103	99	106
Operating profit margin	51%	51%	51%	48%	52%
Net profit (\$ million)	83	88	83	85	91
Return on equity	38%	38%	36%	34%	38%
Earnings per share (cents)	7.8	8.2	7.8	8.0	8.5
Dividend per share (cents)	5	5	5	13	5



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

# First Quarter FY2018 Highlights

## Revenue

- \$204M
- Up 7%

## Expenses

- \$98M
- Up 5%

## Operating Profit

- \$106M
- Up 9%

## Net Profit

- \$91M
- Up 9%

## Earnings Per Share

- 8.5 cents
- Up 9%

## Operating Profit Margin

- 52%
- Up 1% pt

## Return On Equity

- 38%
- Maintained

## Dividend Per Share

- Interim dividend  
5 cents per share
- Maintained

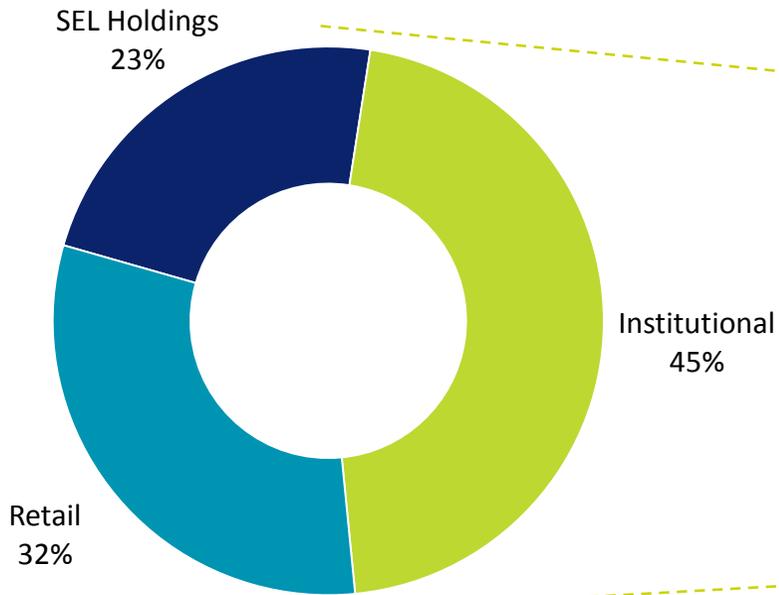
- Net profit of \$91M, up 9% from a year ago, up 6% quarter-on-quarter
- Positive JAW of 2% → Revenue up 7%, Operating expenses up 5%.
- Operating profit margin → 52%, Earnings per Share – 8.5 cents, Dividend per share – 5 cents

# Appendix

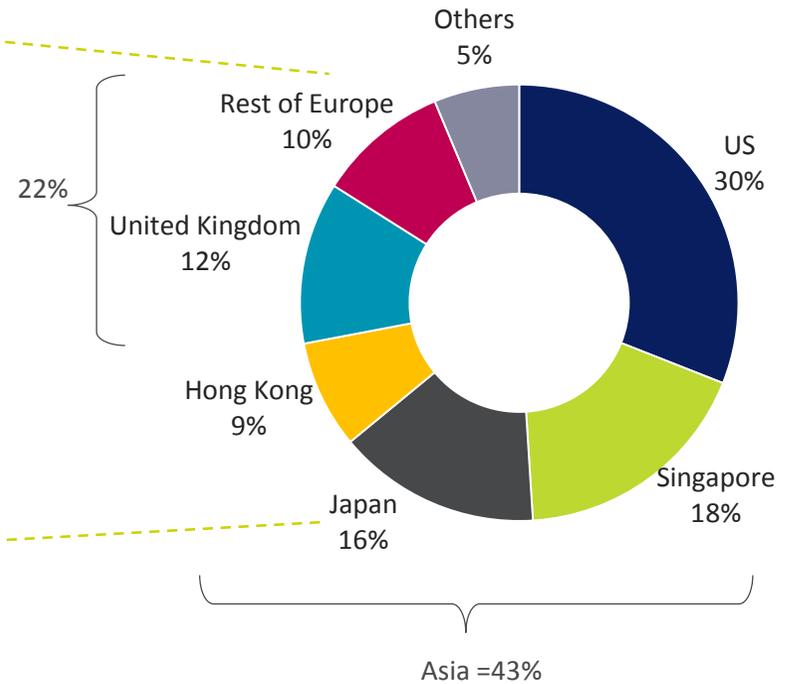
# SGX Shareholders' Profile

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

**SGX Shareholder Composition<sup>1</sup>**



**Institutional Shareholding by Geography**



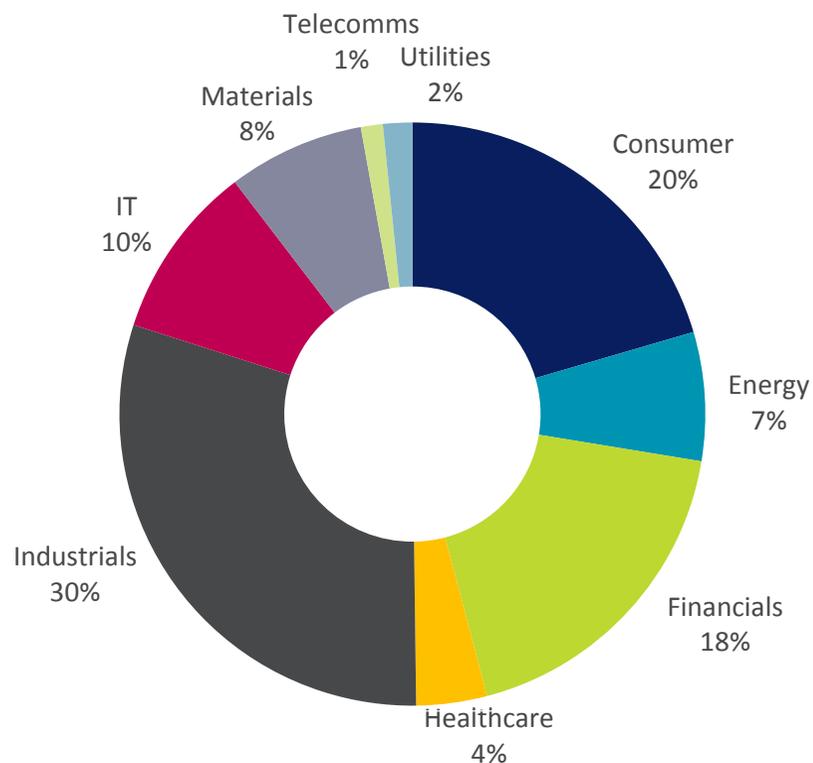
<sup>1</sup> As of September 2017

# Diversity of Industries on SGX

SGX is the listing venue of choice for companies from varying sectors

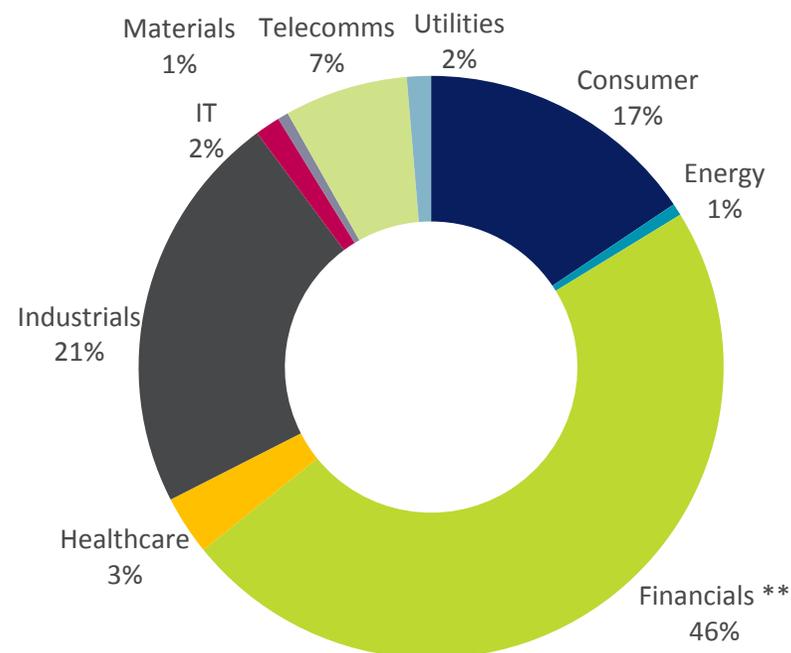
## Breakdown by Number of Companies

754 companies in total



## Breakdown by Market Capitalisation

US\$752 billion in total

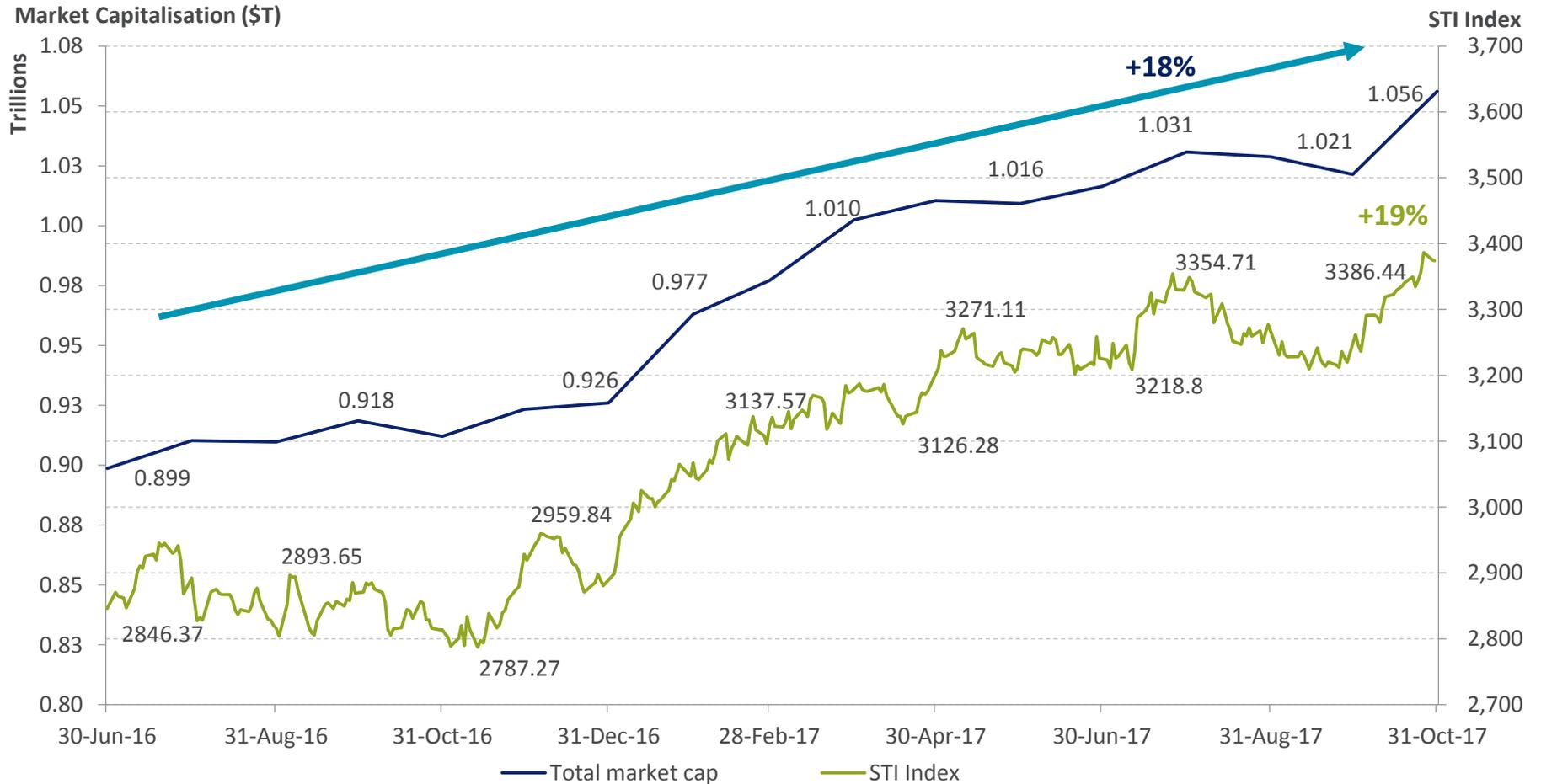


Note: \* Real Estate accounts for 14% of the 754 companies  
 \*\* Real Estate accounts for 19% of the total market capitalisation of US\$752B

Source: Singapore Exchange & Bloomberg (Sep 2017)

# Growth of Market Capitalization & STI Index

Overall market capitalization grew 18% since 30 June 2016. STI Index rose 19% over the same period.

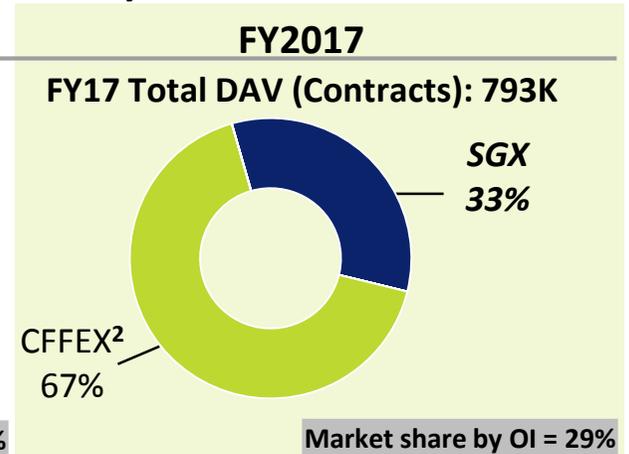
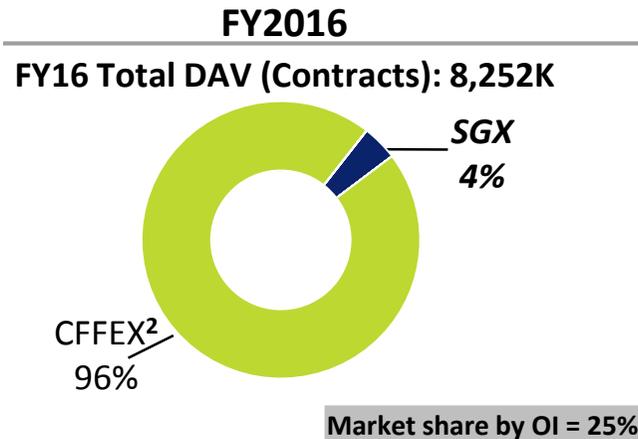


# Derivatives – Equities Volume Market Share

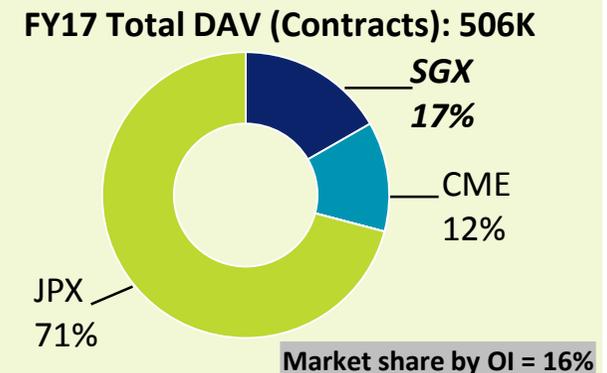
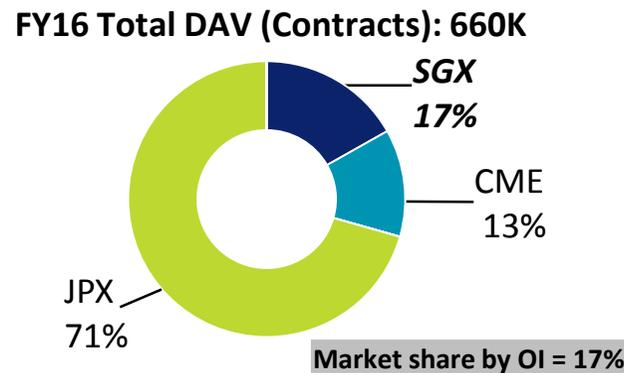
- Volume market share in key contracts growing or maintained
- Market share by Open Interest(OI) comparable or higher year-on-year

## Volume Market Share of Key Contracts<sup>1</sup>

SGX FTSE China A50 Index futures



Japan Nikkei 225 Index futures



# Derivatives – Equities Volume Market Share

- Volume market share in key contracts growing or maintained
- Market share by Open Interest(OI) comparable or higher year-on-year

## Volume Market Share of Key Contracts<sup>1</sup>

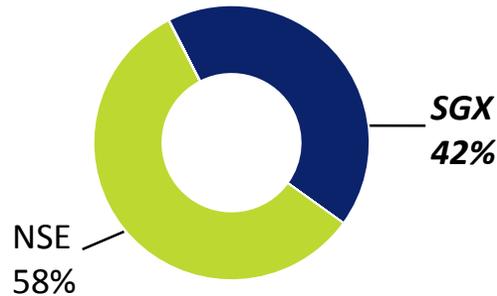
FY2016

FY2017

SGX Nifty 50 Index  
futures

FY16 Total DAV (Contracts): 201K

FY17 Total DAV (Contracts): 173K



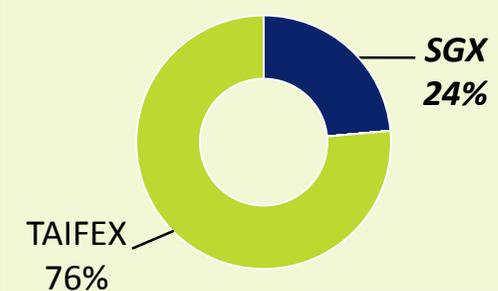
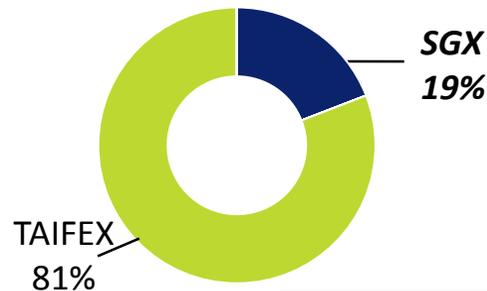
Market share by OI = 66%

Market share by OI = 67%

MSCI Taiwan Index  
futures

FY16 Total DAV (Contracts): 370K

FY17 Total DAV (Contracts): 336K



Market share by OI = 53%

Market share by OI = 52%

# Thank You

## Singapore Exchange

Beijing ▪ Hong Kong ▪ London ▪ Mumbai ▪ Shanghai ▪ Singapore ▪ Tokyo

[sgx.com](http://sgx.com)

### Forward Looking Statements

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