

Make it
Work for
Everyone



Annual Report 2020



Vision

To Make the Capital Market “Work” for Everyone

The capital Market is an integral tool for economic growth,
and should not be privileged to only some.

Hence we work hard to ensure the capital market benefits all stakeholders
both directly and indirectly.

We believe that good business growth will lead to national strength
and this in turn leads to the betterment of society.

This is what we envision and are committed to.



Mission



To “plant” state-of-the-art financial **Platform Development** that is both innovative and accessible to our customers locally, regionally, and globally



To innovatively “grow” **Product Development** that not only caters to market needs but also resonates the sustainable growth



To “foster” **People Development** to ensure that our people will embrace proactive working spirit with synergy, while adhering to professional integrity



To “implant” an **Inclusive Growth Approach** that will enable us to perform as the best business partners and social supporters



To continuously “cultivate” ourselves and our stakeholders by investing in **Knowledge Management** creating, sharing and generating knowledge as part of an intangible asset



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Chaiyawat Wibulswasdi

Dr. Chaiyawat Wibulswasdi
Chairman

Message from the Chairman

“

Business is an integral part of the society whereby any organization cannot survive and thrive on its own if its stakeholders and society at large aren't viable.

”

The Stock Exchange of Thailand (SET) has navigated through a sea of change over time – from technological evolution to local industrial structural change and Thailand's connectivity with the global economy. The year 2020 marked another watershed moment in its history with the pandemic of a new coronavirus (COVID-19) dealing a major blow to society, economy and people from all corners of the world including Thailand.

SET managed to deal with the unprecedented circumstance and steered through the year of challenges with a focus **on building confidence**. SET proved its resilience by continuously carrying out its operations with stable trading system and market liquidity, and being the liquid source for investors when they want. SET also is the long-term source of investment and funding for businesses in both normal and difficult times.

Stakeholder engagement has also been SET's top priority. Business is an integral part of the society whereby any organization cannot survive and thrive on its own if its stakeholders and society at large aren't viable. Throughout the year, SET enhanced stability, strengthened capital market sector, played a role as

a knowledge-sharing source on how business can survive amid the change and a slew of restrictions, and equipped stakeholders with necessary tools including virtual communication channel, basic infrastructure to improve work efficiency. Significantly, a number of listed companies remain resilient and, in turn, take part in helping stakeholders.

In addition, SET has extended its reach to the public in a wide scale, especially leveraging SET's expertise to immunize Thai people through effective financial literacy program to get them through the difficult period. It has also liaised with the SET Foundation to offer relief assistance to those affected by COVID-19.

SET would like to thank public and private agencies, listed companies, SET members, asset management companies, institutional investors, market participants, social sector, investors, general public as well as SET executives and employees for their support in making Thai capital market a main pillar that contributes to the country and Thai society going forward.



Dr. Pakorn Peetathawatchai
President

Message from the President



SET stands by all sectors in tackling, adapting and getting through challenging situations and coming out stronger together



In 2020, the world has been affected by the COVID-19 outbreak, resulting in many challenges clouding the Thai stock market sentiment and **compelling all sectors to transform towards “Next Normal”**. A number of companies were capable of adapting to change to stay relevance. SET is committed to advancing the Thai capital market and developing new products and services as well as information access channels. It has also adapted work process and business models to brace for any situations and meet customer demand while always placing importance on sustainable development covering environment, society and corporate governance.

Over the past year, **the Thai capital market has been able to deliver an outstanding performance in terms of both quantity and quality**. SET managed to top trading liquidity in ASEAN for another year with the average daily turnover of THB 67.33 billion (approx. USD 2.21 billion), while newly listed companies had market capitalization at IPO amounted to THB 555 billion. The Thai capital market was the world’s eighth biggest IPO market, and the highest among ASEAN by fund raising amount. Thai listed companies also made another mark on quality, earning international recognition with 21 of them being constituents of Dow Jones Sustainability Indices (DJSI), seven of which scored the highest as leaders in their industries.

SET continuously **expanded investor base** with a record high of 747,063 new accounts in 2020, thanks to SET’s concerted efforts with market participants on proactive marketing campaigns

and digital onboarding that provides more convenience to open accounts. The success was also attributed to additional products particularly those with global market exposure to widen investment alternatives and facilitate investment management.

It has been apparent that **the importance of technology adoption for business connectivity has been unprecedented in scale** and SET has leveraged new technologies to enhance service quality across all platforms from e-learning to new investment channels jointly developed by alliances and one-stop-services for listed companies. SET has also continued to balance ecosystem, act as a bridge between social and private sector and develop the end-to-end digital platforms to embrace future social and business opportunities.

As a result, the year 2020 was the latest test of SET’s strength to overcome challenges and the success stemmed from supports from market participants and SET which has firmly adhered to vision **“To Make the Capital Market ‘Work’ for Everyone”** to develop the capital market to benefit all sectors including capital market itself, society and the nation. Moving into 2021, SET will foster all stakeholders to pass through all situations together under the 4 pillars of sustainable development framework consisting of 1) Market Growth, 2) Infrastructure Expansion, 3) Environment Solution and Social Development, and 4) Continuous Personnel Improvement **with the purpose of creating balanced growth for everyone.**



Board of Governors



1 Professor Kitipong Uraepatanapong
Governor

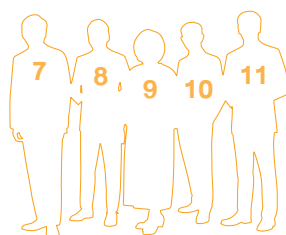
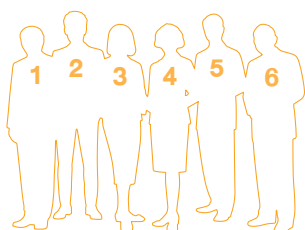
2 Paiboon Nalinthangkurn
Governor

3 Sopawadee Lertmanaschai
Governor

4 Pattera Dilokrunthirapop
Vice Chairperson

5 Charamporn Jotikasthira
Governor

6 Dr. Chaiyawat Wibulswasdi
Chairman





As of December 31, 2020

7 Dr. Pakorn Peetathawatchai
President

8 Thiti Tantikulan
Governor

9 Voravan Tarapoom
Governor

10 Norachet Sangruji
Governor

11 Dr. Seree Nonthasoot
Governor



Board of Governors

Dr. Chaiyawat Wibulswasdi

Chairman

Education

- Ph.D., Massachusetts Institute of Technology, USA
- B.A., Williams College, USA

Executive Education

- National Defence Course for the Joint State Private Sector, The National Defence College of Thailand
- Certificates, Director Certification Program, Thai Institute of Directors Association
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

Other current positions

Since 2019	Chairman, Capital Market Development Fund Committee
Since 2019	Advisor, Charoen Pokphand Foods Public Company Limited
Since 2015	Chairman, The SET Foundation
Since 2015	Chairman, Thailand Futures Exchange Public Company Limited

Past experience

2016 – 2019	Independent Director and Chairman of The Audit Committee, Charoen Pokphand Foods Public Company Limited
2013 – 2015	Chairman, Executive Board, Corporate Social Responsibility Institute (CSRI)
2007 – 2008	Vice Chairman, The Securities and Exchange Commission, Thailand
2004 – 2010	Chairman of the Board of Executive Directors, Krungthai Bank Public Company Limited
2001 – 2006	Advisor to Deputy Prime Minister and Minister of Finance
1997 – 1998	Governor, Bank of Thailand (Worked at Bank of Thailand for 25 years.)
1996	Deputy Finance Minister and Acting Finance Minister

Pattera Dilokrunthirapop

Vice Chairperson

Education

- Master Degree of Engineering Science, University of Queensland, Brisbane, Australia
- Bachelor Degree of Engineering, Monash University, Melbourne, Australia

Executive Education

- Certificates: 1. Director Certification Program; 2. Director Accreditation Program; 3. Role of The Chairman Program; 4. Role of the Compensation Committee, and 5. Corporate Governance for Capital Market Intermediaries, Thai Institute of Directors Association
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

Other current positions

Since 2019	Chairperson, Risk Management Committee, The Stock Exchange of Thailand
Since 2019	Chairperson of Advisory Committee, Association of Thai Securities Companies (ASCO)
Since 2018	Subcommittee of Digital Strategy for Capital Market of The Securities and Exchange Commission
Since 2017	Vice Chairperson, The SET Foundation
Since 2017	Director, The Thai Bond Market Association
Since 2015	Director, TSFC Securities Public Company Limited
Since 2001	Chief Executive Officer, DBS Vickers Securities (Thailand) Co., Ltd.

Past experience

2010 – 2019	Director, Thailand Futures Exchange Public Company Limited
2010 – 2019	Chairperson, Association of Thai Securities Companies (ASCO)
2010 – 2019	Vice Chairperson, Federation of Thai Capital Market Organizations
2013 – 2015	Director, TRIS Rating Co., Ltd. and TRIS Corporation Limited
2014 – 2015	Chairperson, Corporate Governance and Sustainability Committee, The Stock Exchange of Thailand
2014 – 2015	Chairperson, Nomination and Remuneration Committee, The Stock Exchange of Thailand
2011 – 2015	Vice Chairperson, The Stock Exchange of Thailand

Charamporn Jotikasthira

Governor

Education

- MBA, Harvard University, USA
- BS (Electrical Engineering and Computer Science), Massachusetts

Institute of Technology, USA

- National Defence Course for the Joint State Private Sector, The National Defence College of Thailand
- Certificate, The Executive Program of Energy Literacy for a Sustainable Future, Thailand Energy Academy
- Certificate, Director Certification Program, The Thai Institute of Directors Association
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

Other current positions

Since Oct 2020	Director, Mitta Social Enterprise Company Limited
Since Jul 2020	Chairman, Clinixir Company Limited
Since 2019	Member, The SET Foundation
Since 2019	Chairman, Information Technology Management Committee, The Stock Exchange of Thailand
Since 2019	Advisor, Thai Group Holdings Public Company Limited
Since 2017	Executive Director, Bangkok Bank Public Company Limited
Since 2017	Independent Director and Chairman of the Risk Management Oversight Committee and Member of the Audit Committee, Minor International Public Company Limited
Since 2017	Independent Director, Singha Estate Public Company Limited
Since 2017	Member, The Chulabhorn Royal Academy Council
Since 2017	Director, The Thai Silk Company (Jim Thompson)
Since 2017	Director, Thai Institute of Directors Association

Past experience

2014 – 2017	President, Thai Airways International Public Company Limited
2011 – 2014	Chairman, Electronic Transactions Development Agency (Public Organization)
2011 – 2014	Member, The Financial Institutions Policy Committee (FIPC), Bank of Thailand
2010 – 2014	President, The Stock Exchange of Thailand
2008 – 2010	Chief Information Officer, Siam Commercial Bank Public Company Limited

Professor Kitipong Uraepatanapong

Governor

Education

- Honorary Doctorate Degree from the Faculty of Law, Hatyai University
- LLM, University of British Columbia, Canada
- LLM, Chulalongkorn University
- LLB, Chulalongkorn University
- Barrister-At-Law, The Thai Bar Under the Royal Patronage

Executive Education

- Certificate Executive Program, Kellogg, Northwestern University
- Certificate, Completion on Company Directors, Australian Institute of Company Directors
- Diploma for Executives Program, King Prajadhipok's Institute
- Certificate, Completion on Corporate Governance, Director Executive Program) School of Management, Yale University
- Certificate, Notary Public, Lawyers Council Under the Royal Patronage
- Certificate for Senior Executives, The Judicial Training Institute
- National Defence Course for the Joint State Private Sector, The National Defence College of Thailand
- Certificate, The Role of The Chairman Program, Thai Institute of Directors Association
- Certificate, Top Executive Program in Commerce and Trade (TEPCoT), University of the Thai Chamber of Commerce
- Certificate, The Executive Program of Energy Literacy for a Sustainable Future, Thailand Energy Academy
- Certificate, Course in Good Governance for Medical Executives, King Prajadhipok's Institute
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

Other current positions

- | | |
|----------------|------------------------------------------------------------------------------------------------------------------------|
| Since Nov 2020 | Chairman, Chotiwat Manufacturing Co., Ltd. |
| Since Nov 2020 | Subcommittee, The Office of Social Enterprise Promotion |
| Since Oct 2020 | Legal Subcommittee, The Office of the Board of Investment |
| Since Oct 2020 | Advisor to Board of Investment, The Office of the Board of Investment |
| Since Oct 2020 | Member, Thai Law Reform Commission |
| Since Sep 2020 | Member, Corporate Governance Committee, The Thai Institute of Directors Association |
| Since Sep 2020 | Member, The Economics Situation Administration Committee Center for COVID-19 Situation Administration (CCSA) |
| Since Dec 2019 | Member, Executive Board, The Office of National Higher Education Science Research and Innovation Policy Council (NXP0) |
| Since Aug 2019 | Independent Director and Member of the Governance and Nomination Committee, SCG Packaging Public Company Limited |
| Since Apr 2019 | Director and Member of Risk Management Committee, Pruksa Holding Public Company Limited |
| Since 2019 | Member, The SET Foundation |
| Since 2019 | Steering Committee, Office of the National Higher Education, Science, Research and Innovation Policy Council |
| Since Sep 2018 | Director, Board of Directors, Rachakarn Asset Management Co., Ltd |
| Since Jun 2018 | Member of the Professional Expert Committee, Thailand Institute of Justice (Public Organization) |
| Since 2018 | Member, The National Commission for Justice Administration (NCJAD) |
| Since 2011 | Chairman, Tax and Regulation Committee and Director, The Thai Chamber of Commerce |
| Since 2011 | Professor, The Faculty of Law, Chulalongkorn University |
| Since 2008 | Chairman, Baker & McKenzie Ltd. |
| Since 1999 | Executive Director, Siam Piwat Co., Ltd. |

Past experience

- | | |
|-------------|-----------------------------------------------|
| 2014 – 2015 | Executive Member, The National Reform Council |
| 1990 – 2008 | Director and Partner, Baker & McKenzie Ltd. |

Norachet Sangruji

Governor

Education

- MBA in Finance & Marketing, Syracuse University, USA
- MS in Electrical Engineering (Telecommunication), Syracuse University, USA
- BSc in Electrical Engineering, Chulalongkorn University

Executive Education

- Certificates: 1. Directors Accreditation Program; and 2. Corporate Governance for Capital Market Intermediaries, Thai Institute of Directors Association
- Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives, King Prajadhipok's Institute
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

Other current positions

- | | |
|------------|-----------------------------------------------------------------------------------------------|
| Since 2019 | Member, Audit Committee, The Stock Exchange of Thailand |
| Since 2019 | Member, Risk Management Committee, The Stock Exchange of Thailand |
| Since 2019 | Member, Nomination and Remuneration Committee, The Stock Exchange of Thailand |
| Since 2019 | Member, The SET Foundation |
| Since 2018 | Chairman of the Advisory Board, Association of Securities Companies / Investment Banking Club |
| Since 2018 | Director, ASCO Business Promotion Company Limited |
| Since 2017 | Audit Committee, Kiatnakin Phatra Securities Public Company Limited |
| Since 2017 | Director, Association of Thai Securities Companies |
| Since 2017 | Director, Noppakit Company Limited |
| Since 2013 | Director, KKP Capital Public Company Limited |
| Since 2005 | Advisor to Management Committee, Mitr Technical Consultant Company Limited |
| Since 2004 | Director, Kiatnakin Phatra Securities Public Company Limited |
| Since 2000 | Director, Pantavanij Company Limited |
| Since 1990 | Director, Kasetin Company Limited |

Past experience

- | | |
|-------------|------------------------------------------------------------------------------------------------------------------------------|
| 2018 – 2019 | Member, Corporate Governance and Social Responsibilities Committee, The Stock Exchange of Thailand |
| 2015 – 2018 | First Executive Vice President and Head of Corporate Banking Group, Kiatnakin Bank Public Company Limited |
| 2009 – 2018 | Chairman of Investment Banking Club, Association of Securities Companies / Investment Banking Club |
| 2007 – 2012 | Executive Director, Phatra Securities Public Company Limited (renamed to Kiatnakin Phatra Securities Public Company Limited) |
| 2005 – 2007 | Managing Director / Head of Investment Banking, Phatra Securities Public Company Limited |
| 2004 – 2005 | Managing Director, Phatra Securities Public Company Limited |

Paiboon Nalinthrangkurn

Governor

Education

- MBA (Finance), Indiana University at Bloomington, USA
- BA (Computer and Information Sciences), University of California at Santa Cruz, USA

Executive Education

- Certificate, Chartered Financial Analyst, CFA Institute, USA
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

Other current positions

- | | |
|------------|-----------------------------------------------------------|
| Since 2019 | Director, Capital Market Development Fund Committee |
| Since 2019 | Member, The SET Foundation |
| Since 2019 | Honorary Advisor to the Senate Committee on the Economy |
| Since 2018 | Chairman, Federation of Thai Capital Market Organizations |
| Since 2018 | Director, Thai Capital Market Development Committee |
| Since 2009 | Chairman, Investment Analysts Association |
| Since 2008 | Chief Executive Officer, TISCO Securities Co., Ltd. |

Past experience

- | | |
|-------------|------------------------------------------------------------------------------------|
| 2016 – 2017 | Honorary Advisor to the National Reform Steering Assembly Committee on the Economy |
| 2014 – 2015 | Chairman, the Sub-committee on Capital Market Reforms, the National Reform Council |
| 2014 – 2015 | Member, the National Reform Council |
| 2012 – 2014 | Director, Thai Capital Market Development Committee |
| 2011 – 2014 | Member, Joint Public and Private Sector Consultative Committee |
| 2010 – 2014 | Chairman, Federation of Thai Capital Market Organizations |



Dr. Seree Nonthasoot

Governor

Education

- Doctor of Philosophy, University Of Oxford, England, United Kingdom
- Master of Philosophy, University of Oxford, England, United Kingdom
- Magister Juris (European And Comparative Law), University of Oxford (Chevening Scholarship)
- LL.M. (International Law), Columbia University School of Law, (Fulbright Scholarship)
- Barrister-At-Law, The Thai Bar Under the Royal Patronage
- LL.B., Thammasat University, Bangkok, Thailand

Executive Education

- Executive Certificate Programme in Justice Administration
- Certificate Programme in Good Governance for Medical Executives, King Prajadhipok Institute
- Ministry of Foreign Affairs, Civil Servant Commission, Sasin School of Management
- Certificate, Directors Certification Program and Advanced Audit Committee Program, Thai Institute of Directors Association
- Certificates: 1. Infrastructure in a Market Economy: Public-Private Partnerships in a Changing World; and 2. The Practice of Trade Policy: Economics, Negotiations, and Rules, Harvard Kennedy School of Government, Cambridge, Massachusetts, USA
- Asia-Europe Programme, Institut D'etudes Politiques (Sciences Po)
- Certificates: 1. CMA-GMS 1, Capital Market Academy Executive Education; 2. Capital Market Academy Leadership Program, The Stock Exchange of Thailand

Other current positions

Since 2021	Member of the United Nations Committee on Economic, Social and Cultural Rights (CESCR)
Since 2019	Chairman, Legal Committee, The Stock Exchange of Thailand
Since 2019	Member, Disciplinary Committee, The Stock Exchange of Thailand
Since 2019	Member, Sustainability Committee, The Stock Exchange of Thailand
Since 2019	Member, The SET Foundation
Since 2018	Director and Chair of the Audit Committee, Thailand Post Co., Ltd.
Since 2018	Board Member and Chair of the Corporate Governance Committee, Government Pension Fund
Since 2015	Director and Chair of the Audit Committee, Small and Medium Enterprise Development Bank of Thailand (SME D Bank)
Since 2012	Senior Executive Vice President, Institute of Research and Development for Public Enterprises

Past experience

2018 – 2019	Chairman, Securities Investor Protection Fund Committee, The Stock Exchange of Thailand
2016 – 2018	Member of Law Reform Committee
2015 – 2018	Director, KTB Computer Services Co., Ltd.
2013 – 2018	The Representative of Thailand to the ASEAN Intergovernmental Commission on Human Rights (AICHR)
2012 – 2019	Director and Chair of the Audit Committee, KTB Law Co., Ltd.
2012 – 2014	Director, General Hospital Products Public Company Limited (GHP)
2003 – 2012	Legal Counsel, State Enterprise Policy Office, Ministry of Finance (Drafted the bills on public, private partnerships and state enterprise reform)
1995 – 2000	Legal Advisor, Office of the Council of State, Office of the Prime Minister

Sopawadee Lertmanaschai

Governor

Education

- Master of Science (Accounting), Thammasat University
- Bachelor of Law, Thammasat University
- Bachelor of Science (Accounting), Thammasat University

Executive Education

- The Wharton Advanced Management Program, University of Pennsylvania, USA
- Certificates: 1. Director Certification Program; 2. Audit Committee Program and 3. Successful Formulation & Execution of Strategy, Thai Institute of Directors Association
- King Prajadhipok's Institute, Intermediate Certificate Course in Good Governance for Executives
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

Other current positions

Since Nov 2020	Director, Chotiwat Manufacturing Co., Ltd.
Since 2019	Member, The SET Foundation
Since 2019	Independent Director, Dohome Public Company Limited
Since 2018	Independent Director and Chairman of The Audit Committee, Central Plaza Hotel Public Company Limited
Since 2018	Chairperson and Independent Director, Ktbtst Reit Management Co., Ltd.
Since 2015	Independent Director and Chairman of The Audit Committee, Maybank Kim Eng Securities (Thailand) Public Company Limited
Since 2014	Independent Director and Member of The Audit Committee, Intouch Holdings Public Company Limited
Since 2014	Advisor to Chairman of the Board of Directors and Member of the Investment Committee, Dhipaya Insurance Public Company Limited

Past experience

2015 – 2017	Director and Chairperson of Audit Committee, Metropolitan Electricity Authority
2014 – 2018	Director and Executive Directors, Government Pharmaceutical Organization
2013 – 2016	Commissioner, The Securities and Exchange Commission, Thailand (SEC)
2010 – 2013	Secretary General, Government Pension Fund
2010 – 2013	Director, IRPC Public Company Limited
2010 – 2013	Director, Nok Airlines Public Company Limited

Thiti Tantikulan

Governor

Education

- Bachelor's degree (Business Administration), University of Washington, USA

Executive Education

- Certificate, Corporate Governance for Capital Market Intermediaries, Thai Institute of Directors Association
- Certificate, Thailand Insurance Leadership Program, OIC Advanced Insurance Institute
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

Other current positions

Since 2019	Member, Risk Management Committee, The Stock Exchange of Thailand
Since 2019	Member, Information Technology Management Committee, The Stock Exchange of Thailand
Since 2019	Member, Legal Committee, The Stock Exchange of Thailand
Since 2019	Member, The SET Foundation
Since 2019	Director, TRIS Corporation Limited
Since 2019	Director, Association of Thai Securities Companies
Since 2013	Executive Chairman, Kasikorn Securities Public Company Limited
Since 2008	Capital Markets Business Division Head, Kasikornbank Public Company Limited

Past experience

2013 – Apr 2019	Director and Member of The Audit Committee, The Thai Bond Market Association
2009 – 2011	President, ACI Thailand
2006 – 2008	Capital Markets Business Head, Kasikornbank Public Company Limited
2003 – 2006	Vice President and Head of Trading, HSBC, Bangkok
2000 – 2003	Vice President and Head of Trading, JP Morgan, Bangkok
1994 – 2000	Vice President and Head of FX Trading, Citibank, Bangkok
1993 – 1994	Trader, Standard Chartered Bank, Bangkok

Voravan Tarapoom

Governor

Education

- MBA, University of North Texas, Denton, Texas, USA
- Bachelor of Architecture, Silpakorn University

Executive Education

- Certificates: 1. Corporate Governance for Capital Market Intermediaries; 2. Role of the Compensation Committee; 3. Director Certification Program; 4. Audit Committee Program; 5. Role of the Chairman Program; 6. Risk Management Committee Program, Thai Institute of Directors Association
- Certificate, Capital Market Academy Leadership Program, The Stock Exchange of Thailand

Other current positions

Since Jan 2020	Honorary Advisor, Thai Financial Markets Committee, Bank of Thailand
Since Nov 2019	Member, Sustainable Finance Working Group, The Securities and Exchange Commission, Thailand
Since Oct 2019	Member, The best practice for environmental, social and corporate governance working group, Thai Institute of Directors Association
Since 2019	Vice Chairperson, An Nimmanahaeminda Foundation
Since 2019	Chairperson, Nomination and Remuneration Committee, The Stock Exchange of Thailand
Since 2019	Chairperson, Sustainability Committee, The Stock Exchange of Thailand
Since 2018	Honorary Chairman, Association of Investment Management Companies
Since 2017	Chairperson of Executive Board and Director, BBL Asset Management Co., Ltd.
Since 2015	Member, The SET Foundation
Since 2013	Director, Bangkok Mass Transit System Public Company Limited

Past experience

2014 – Sep 27, 2020	Member, Disciplinary of Personnel in Capital Market Industry Committee, The Securities and Exchange Commission, Thailand
2018	Chairperson, Risk Management Committee, The Stock Exchange of Thailand
2014 – 2018	Chairperson, Federation of Thai Capital Market Organizations
2010 – 2016	Chief Executive Officer, BBL Asset Management Co., Ltd.
2002 – 2009	Managing Director, BBL Asset Management Co., Ltd.
2000 – 2002	Deputy Managing Director, MFC Asset Management Public Company Limited
1995 – 1999	Managing Director, Thai Asia Asset Management Co., Ltd. (currently UOB Asset Management Co., Ltd.)
1992 – 1994	Senior Vice President, Thana One Finance & Securities Co., Ltd.
1985 – 1992	Vice President, Bank of Asia Public Company Limited
1982 – 1985	Account Executive, Datamat Co., Ltd.

Dr. Pakorn Peetathawatchai

President

Education

- Doctor of Business Administration in Finance and Economics, Boston University, USA
- Master of Business Administration, Finance Major, University of Wisconsin, USA
- Bachelor of Engineering in Electronics, King Mongkut's Institute of Technology Ladkrabang

Executive Education

- Columbia Senior Executive Program, Columbia University, USA
- Certificate, Director Certification Program, Thai Institute of Directors Association
- Certificate, The Executive Program of Energy Literacy for a Sustainable Future, Thailand Energy Academy
- Certificate, Capital Market Academy Leadership Program,

The Stock Exchange of Thailand

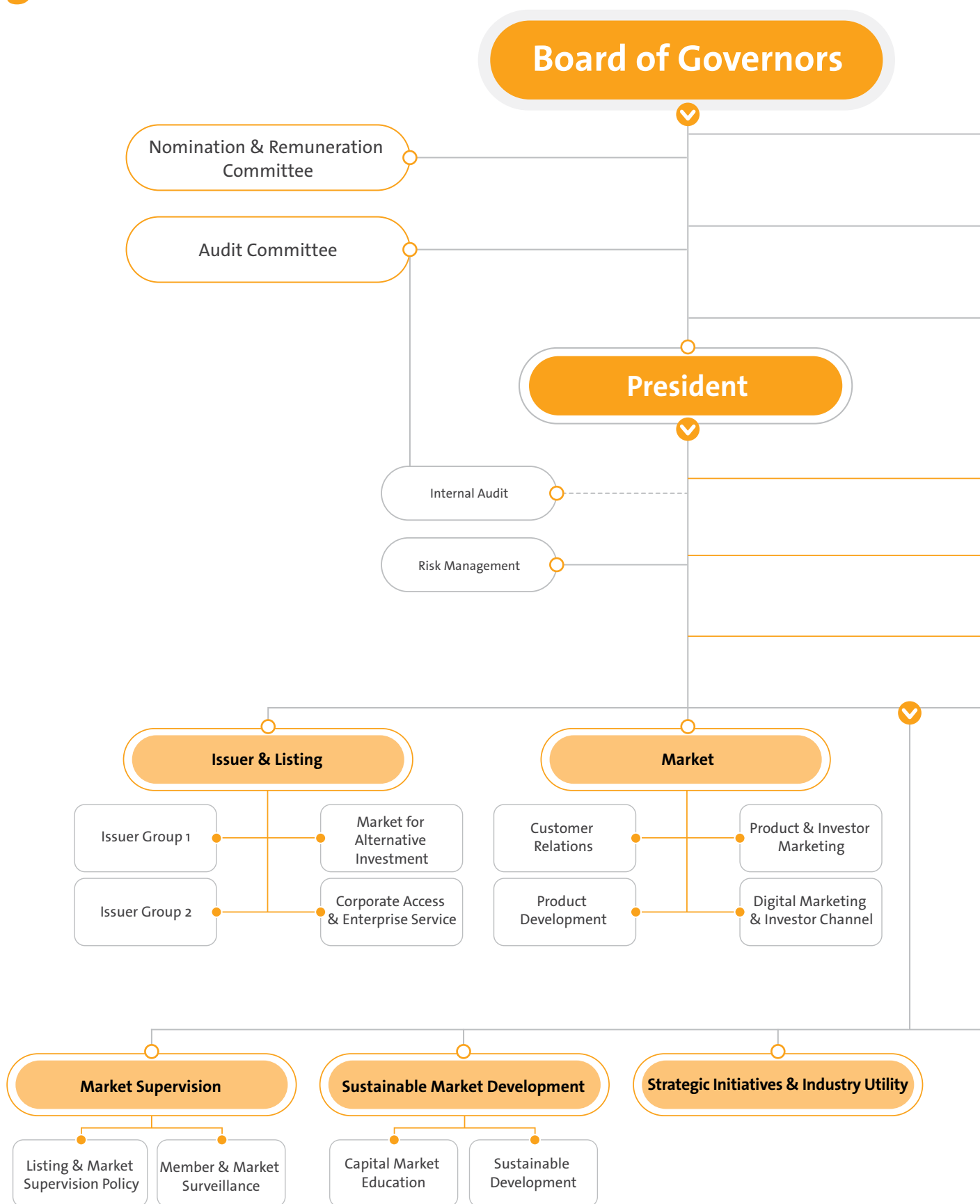
Since 2020	Chairman, SET Venture Holding Company Limited
Since 2020	Chairman, Thai Digital Assets Exchange Company Limited
Since 2019	Member, Capital Market Development Fund
Since 2018	Member and Secretariat, Capital Market Development Fund
Since 2018	Member, The SET Foundation
Since 2018	Vice Chairman, Thailand Futures Exchange Public Company Limited
Since 2018	Chairman, Thailand Clearing House Company Limited
Since 2018	Chairman, Thailand Securities Depository Company Limited
Since 2018	Chairman, Settrade.com Company Limited
Since 2018	Chairman, Thai NVDR Company Limited

Past experience

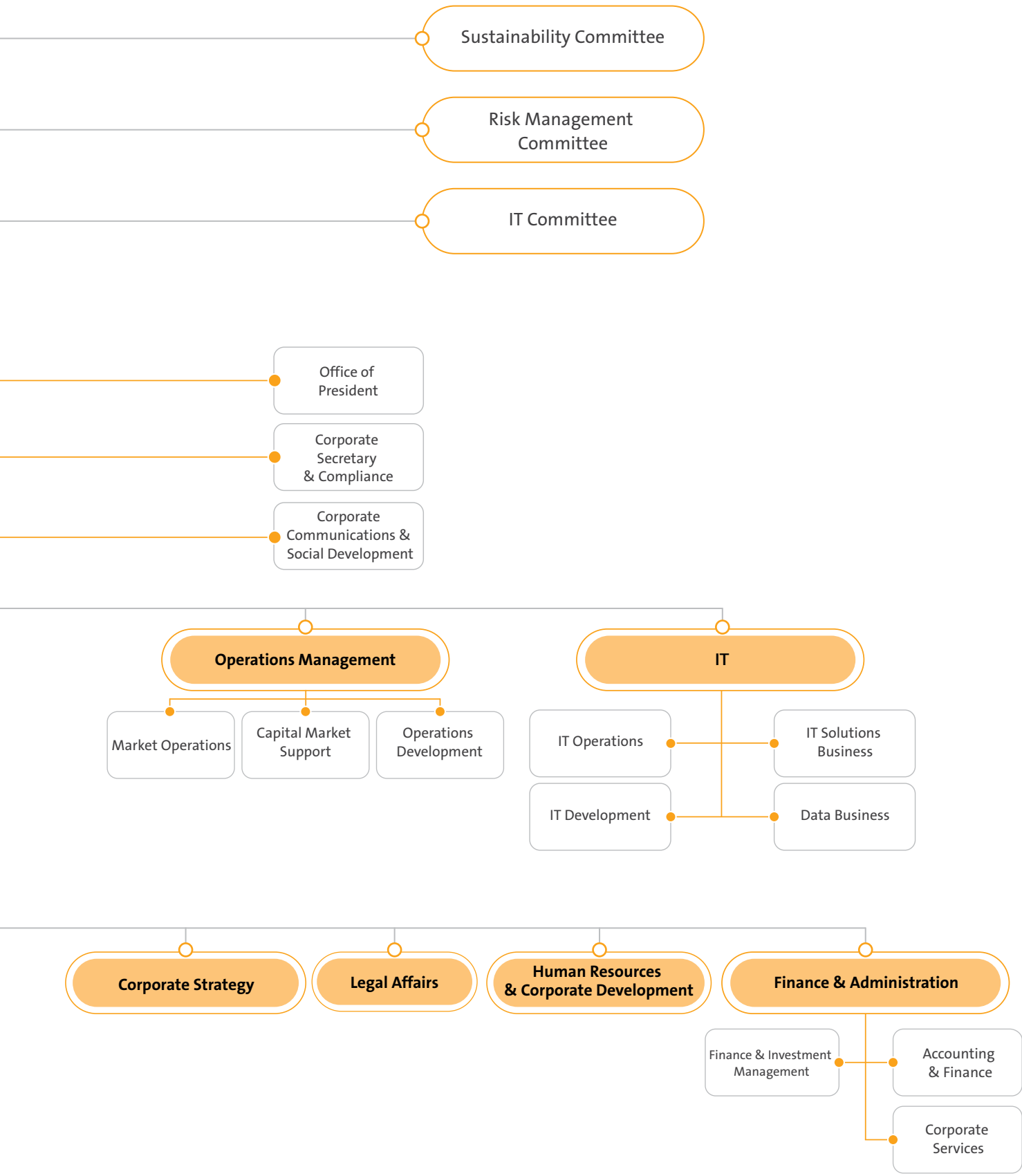
2018 – Jun 2020	Chairman, Finnet Innovation Network Company Limited
2018 – Jun 2020	Chairman, Live Fin Corp Company Limited
May 2018 – Oct 2019	Vice Chairman of the Emerging Markets Working Group and Director of World of Federation of Exchanges
2013 – 2018	Senior Executive Vice President, Head of Corporate Strategy Division and Head of Finance & Investment Division, The Stock Exchange of Thailand
2010 – 2012	Senior Executive Vice President, Chief Marketing Officer, The Stock Exchange of Thailand
2010	Senior Executive Vice President, Finance, Mitr Phol Sugar Corporation Limited
2006 – 2009	Executive Vice President, Group Head, Treasury Group, Siam Commercial Bank Public Company Limited
2005 – 2009	Director and Chairman of the Investment Committee, Siam Commercial New York Life Insurance Public Company Limited



Organization Structure



Effective from March 16, 2020





SET Executives



1 Thirapun Sanpakit
Senior Executive Vice President
Head of Information Technology Division

2 Manpong Senanarong
Senior Executive Vice President
Head of Issuer & Listing Division

3 Dr. Rinjai Chakornpipat
Senior Executive Vice President
Head of Market Division
and Managing Director -
Thailand Futures Exchange
Public Company Limited

4 Dr. Krisada Sektrakul
Senior Executive Vice President
Head of Sustainable Market Development Division



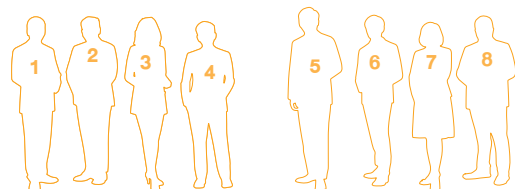
As of December 31, 2020

5 **Dr. Pakorn Peetathawatchai**
President

6 **Aphisak Kiewkarnkha**
Senior Executive Vice President
Head of Finance & Administration Division

7 **Pataravasee Suvarnsorn**
Senior Executive Vice President
Head of Operations Management Division
and Managing Director -
Thailand Clearing House Co., Ltd.

8 **Dr. Soraphol Tulayasathien**
Senior Executive Vice President
Head of Corporate Strategy Division





SET Executives



1 **Noppakao Sucharitakul**
Executive Vice President
Head of Corporate Communications
& Social Development Group

2 **Paveena Sriphothong**
Executive Vice President
Head of Market Supervision
Division

3 **Kitti Sutthiatthasil**
Executive Vice President
Head of Office of President
and Managing Director -
Finnet Innovation Network Co., Ltd.

4 **Nat Luengnaruemitchai**
Executive Vice President
Head of IT Operations Group

5 **Piyaporn Krongchan**
Executive Vice President
Head of Digital Marketing & Investor
Channel Group and Head of Product
& Investor Marketing Group

6 **Kirati Kosicharoen**
Executive Vice President
Head of Accounting & Finance
Group and Head of Corporate
Services Group

7 **Duangrat Samudavanija**
Executive Vice President
Head of Listing & Market
Supervision Policy Group

8 **Triwit Wangvorawudhi**
Executive Vice President
Head of Customer Relations Group





As of December 31, 2020

9 Paythai Petcharat
Executive Vice President
Head of Capital Market
Support Group

10 Yupawan Sirichainarumitr
Executive Vice President
Head of Market Operations Group
and Managing Director -
Thailand Securities Depository Co., Ltd.

11 Rongrak Phanapavudhikul
Executive Vice President
Head of Legal Affairs Division
and Head of Corporate Secretary
& Compliance Group

12 Pannavadee Ladavalaya Na Ayudhya
Executive Vice President
Head of Capital Market
Education Group

13 Pattana Wongnirund
Executive Vice President
Head of IT Development Group

14 Amnouy Jiramahapoka
Executive Vice President
Head of Issuer Group 1

15 Rungtip Charoenvisuthiwong
Executive Vice President
Head of Issuer Group 2

16 Prapan Charoenprawatt
Executive Vice President
and President - Market for
Alternative Investment (mai)





Messages from
the Chairman and the President

Board of Governors
and SET Executives

Business Operation

Key Developments

—○ Make it “Work” for Strong Foundation

EFFICIENCY AND RESILIENCY

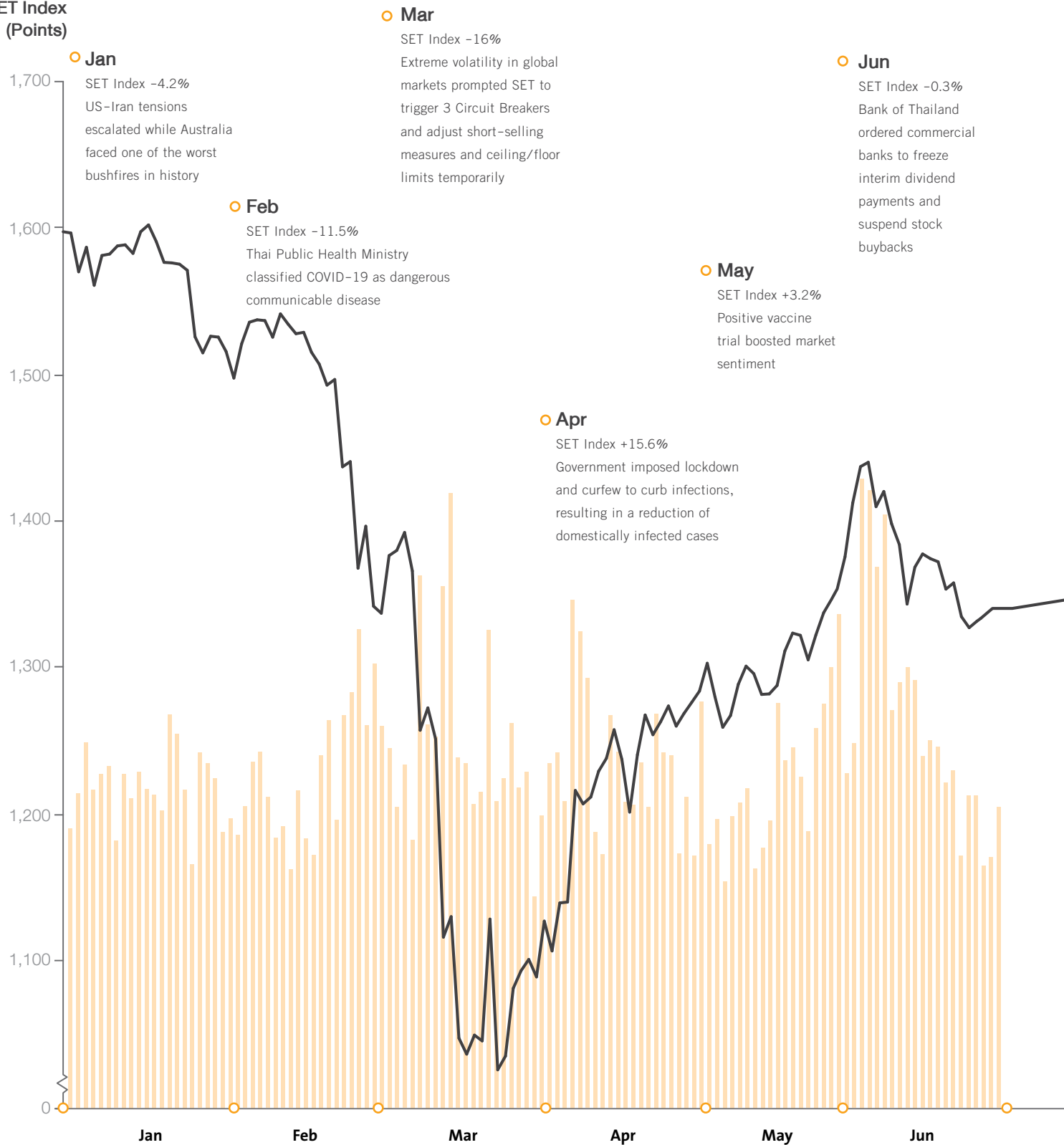






SET Market Movement 2020

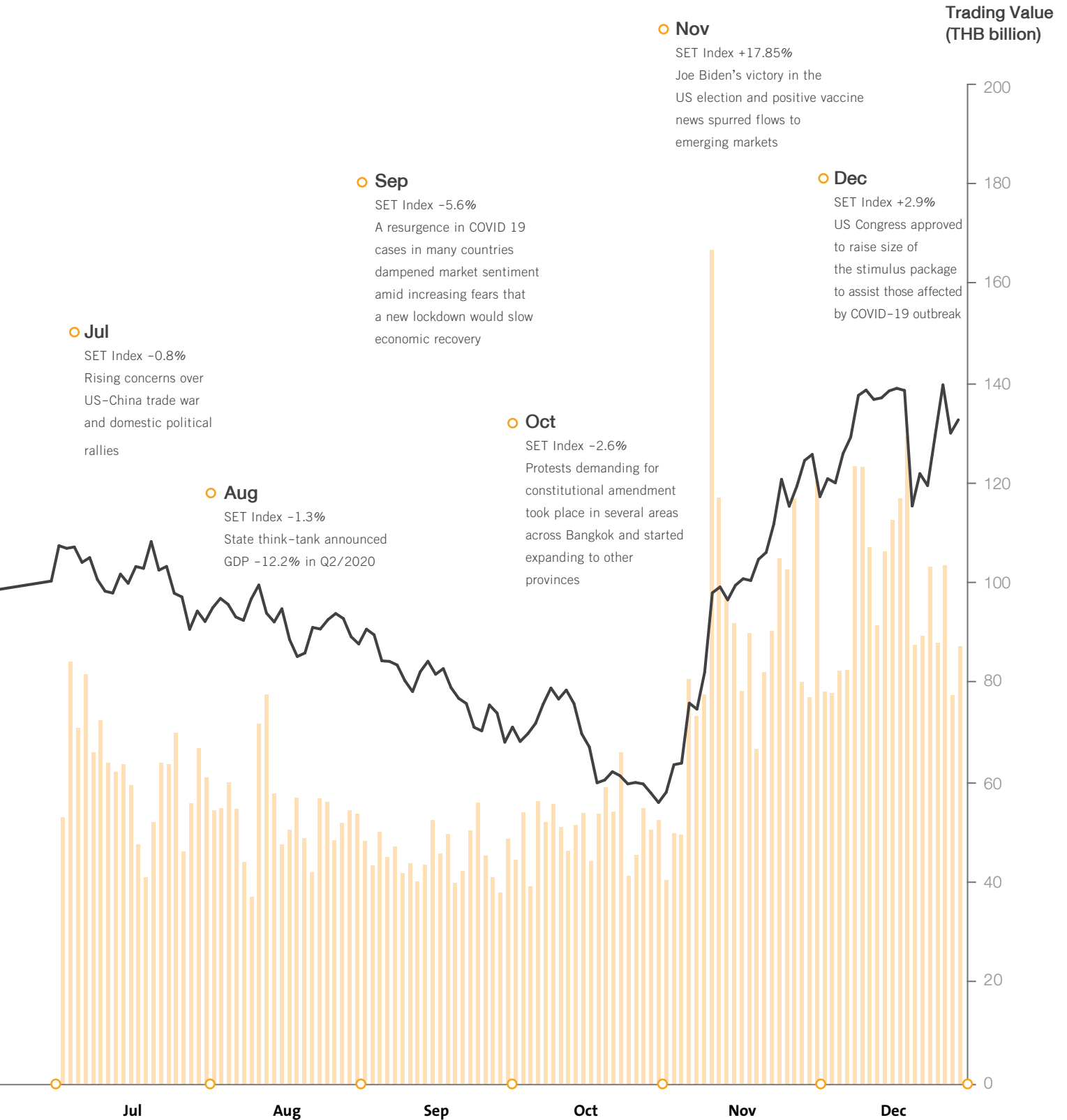
SET Index
(Points)



— SET Index
 — Trading Value (THB billion)

Highest SET Index 1,600.48 points (January 17, 2020)

Lowest SET Index 1,024.46 points (March 23, 2020)





SET Group Financial Highlights

(Unit: THB million)

	2020	2019	2018	2017	2016
Consolidated statements of revenues and expenses					
Total revenues	6,347	7,286	6,578	6,331	6,047
Operating revenues	6,548	5,890	5,725	5,007	5,099
Investment income (loss), net	(364)	948	586	1,045	767
Other income ¹	163	448	267	279	181
Operating expenses	4,289	4,217	3,978	3,818	3,694
Revenues over expenses from operation	2,058	3,069	2,600	2,513	2,353
Contribution to the Capital Market Development Fund	362	5,700	-	-	-
Revenues over (under) expenses, net	1,354	(2,599)	1,955	1,833	1,759
Consolidated statements of cash flows					
Net cash provided by (used in) operating activities	2,247	(2,681)	2,212	763	1,217
Net cash provided by (used in) investing activities	3,442	3,908	(2,353)	(217)	(2,157)
Net cash (used in) financing activities	(14)	-	-	-	-
Consolidated statements of financial position					
Total current assets ²	34,516	21,919	25,251	22,265	21,709
Non-current financial assets and long-term investments	4,769	7,904	8,838	8,478	8,312
Total assets	54,427	44,994	48,771	45,196	39,539
Total current liabilities ²	23,471	15,492	17,451	15,215	11,947
Total liabilities	26,720	18,576	20,106	17,821	14,141
Fund balances	27,707	26,418	28,665	27,375	25,398
Assets / payables of margin deposits and benefits ²	20,329	13,385	15,510	13,398	10,160
Key financial ratios					
Total revenue growth (%)	(12.89)	10.76	3.90	4.70	15.95
Operating revenue growth (%)	11.17	2.94	14.34	(1.80)	12.86
Operating expenses to operating revenues ratio (%)	65.50	71.60	69.48	76.25	72.45
Net profit margin ³ (%)	21.33	(35.67)	29.72	28.95	29.09
Return on fund balance (%)	4.89	(9.84)	6.82	6.70	6.93
Current ratio (Times)	1.47	1.41	1.45	1.46	1.82
Debt to fund ratio (Times)	0.96	0.70	0.70	0.65	0.56

¹Other income consisted of educational activities income, revenues from marketing events, revenues from fees and management funds, etc.

²Total current assets and total current liabilities included margin deposits and benefits in total shown at the same amount. (as the guarantee for derivatives contracts of the clearing house)

³Net profit margin calculated by revenues over (under) expenses, net / total revenues

Thai Bourse's 2020 Performance

2020 Overview of the Exchange Activities

In 2020, The Stock Exchange of Thailand (SET) continued to exhibit a strong performance despite global economic slowdown due to COVID-19 pandemic. Thailand, deeply integrated into the global economy especially in terms of tourism – the sector believed to be hardest hit by the pandemic, managed to contain the spread of the virus in an efficient and timely manner, thanks to its vigorous public health systems. The ability to adapt to change of Thai listed companies contributed greatly to the swift recovery of the market. At the end of 2020, SET Index closed at 1,449.35 points, a decrease of 8.3 percent from the previous year but still fared better than MSCI ASEAN Index that saw a drop of 9.3 percent during the same period. The Industry groups that outperformed the market were Technology, Industrials, Consumer Products, and Agro & Food Industry.

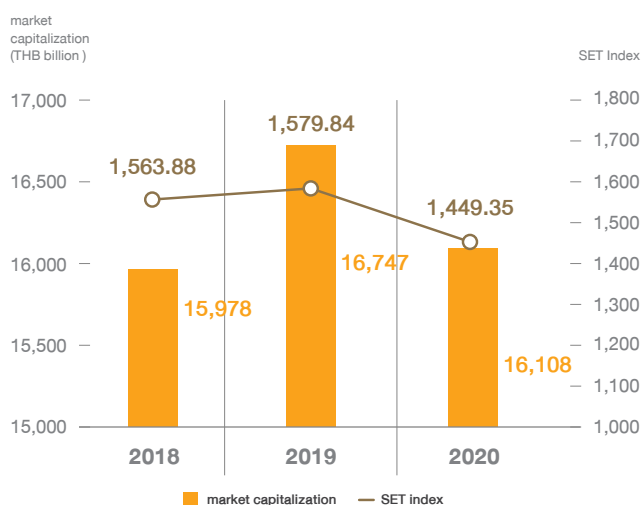
SET remained being the highest liquidity stock market in ASEAN for nine consecutive years since 2012. In 2020, the average daily trading value at SET and mai rose by 29 percent from last year, with 22 trading days having the daily trade value of more than THB 100 billion (USD 3.0 billion). SET also recorded the highest and the second highest daily trading value

in its history in December and November 2020, respectively. Thailand Futures Exchange (TFEX) had an average daily trading volume of 494,624 contracts, a 15.5 percent increase from last year. In December, the average daily trading volume surged to 757,066 contracts, the highest level since its inception. Thailand's initial public offering (IPO) by fund-raising was also the highest in ASEAN for a second straight year and the eighth in the world.

Thai listed companies continued to gain international recognition due to their continuous improvement. In 2020, there were 42 companies included in the MSCI Global Standard Index and 21 companies recognized as members of Dow Jones Sustainability Index (DJSI). Such recognition made Thailand earn top inclusions in the index in ASEAN for seven years in a row.

The dividend yield and forward P/E ratio of SET and mai at the end of 2020 remained attractive. The dividend yields of SET and mai were 2.75 percent and 2.54 percent, respectively, while forward P/E ratio was at 27.46 times and 28.84 times, respectively.

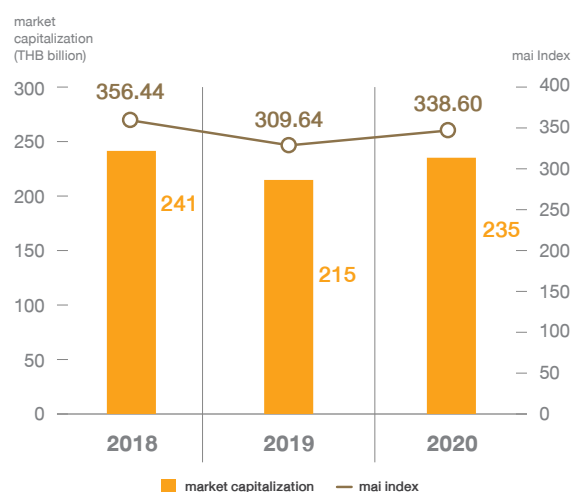
The Stock Exchange of Thailand (SET)



Source: SETSMART

As of December 30, 2020

Market for Alternative Investment (mai)

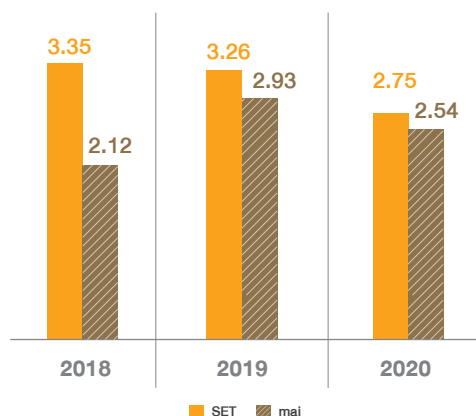


Source: SETSMART

As of December 30, 2020

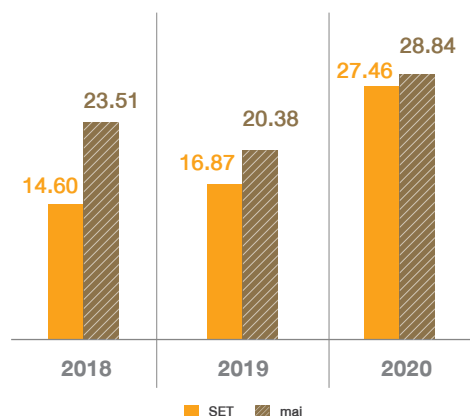


Dividend Yield (%)



Source: Bloomberg

Forward P/E (times)



Source: Bloomberg

Stock Market Trading Activities

The Thai stock market has been the most liquid market in ASEAN since 2012. In 2020, the daily trading value of SET and mai averaged THB 68.6 billion (USD 2.29 billion), up 29.0 percent from 2019.

In 2020, the total trading of SET and mai, categorized by investor types, consisted of 1) Local investors who were the most active with the average daily trading value at THB 29.96 billion (USD 997 million) or 43.66 percent of total

trading value, up from 33.72 percent last year; 2) Foreign investors with average daily trading value at THB 24.7 billion (USD 822 million) or 35.94 percent of total trading value, down from 41.38 percent in the previous year; 3) Local institutions with average daily trading value at THB 6.8 billion (USD 225 million) or 9.86 percent of total trading value, down from 11.35 percent in the previous year; 4) Proprietary traders with average daily trading value at THB 7.2 billion (USD 241 million) or 10.54 percent of total trading value, compared with 13.55 percent in 2019.

Trading Value of SET and mai during 2018 – 2020

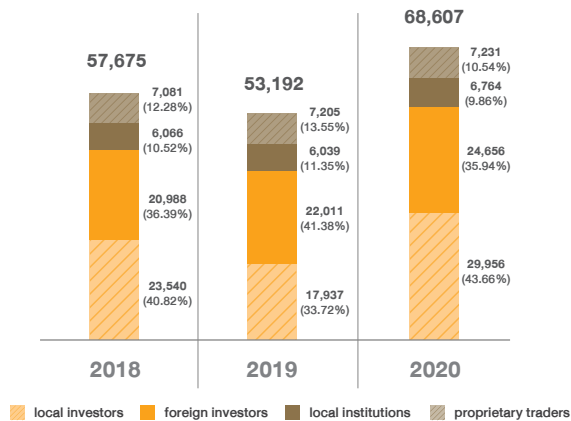
Trading Value (Unit: THB million)	2018	2019	2020
Trading value of SET	13,820,220	12,802,291	16,362,357
Trading value of mai	309,858	176,763	309,122
Trading value of SET and mai	14,130,078	12,979,054	16,671,479
Average daily trading value of SET and mai	57,674	53,192	68,607
Percentage change (y-o-y)	15.09	-7.77	29.00

Source: SETSMART

In 2020, the trading value of SET and mai can be summarized as follows: local investors, local institutions and proprietary traders were the net buyers in the Thai stock markets. Local investors bought a net THB 214.4 billion (USD 7.1 billion),

followed by local institutions and proprietary traders who invested a net THB 34.2 billion (USD 1.1 billion) and THB 14.5 billion (USD 0.5 billion) respectively. Foreign investors sold a net THB 263.1 billion (USD 8.8 billion).

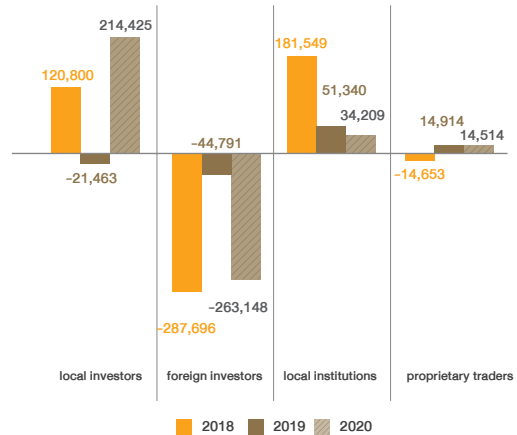
Combined Trading Value of SET and mai by Investor Types (Unit: THB million per day, %)



Source: SETSMART

The number of trading accounts continuously increased, reaching record high. The number of trading accounts at the end of 2020 tallied 3,513,997, up 27 percent from a year ago.

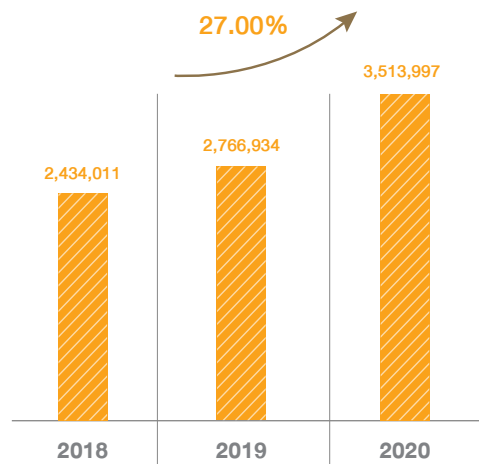
Net Position of SET and mai in 2020 by Investor Types (Unit: THB million)



Source: SETSMART

Active accounts (defined as account which has trading activity at least once in a month) represented 13.69 percent of total trading accounts in 2020.

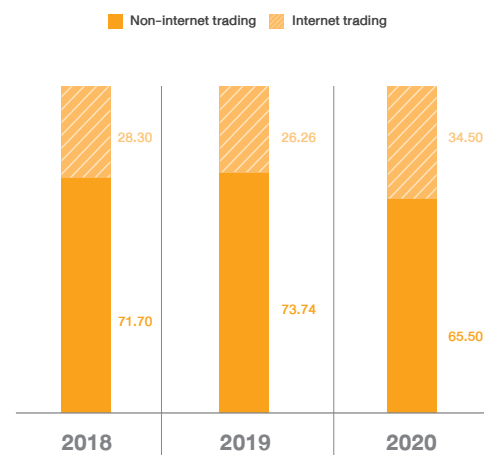
Trading Accounts of SET and mai (Unit: accounts)



Source: SET

In 2020, internet trading transactions of retail investors continued to grow. The number of Internet trading accounts at the end of 2020 amounted to 3,210,443 accounts, up 30.31 percent from the end of 2019. The number of active Internet trading accounts in 2020 reached 342,536 accounts. Internet trading value of retail investors accounted for 34.50 percent of the total trading value.

Combined Trading Value of SET and mai by Channel (Unit: %)



Source: SET

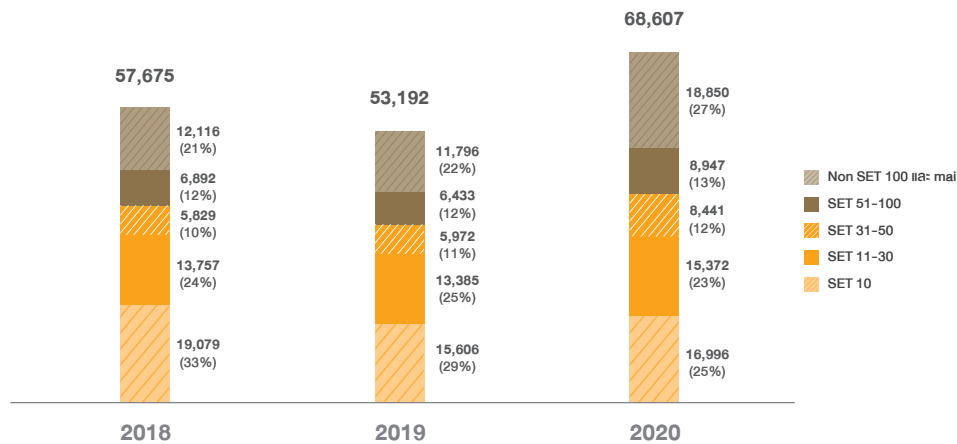
The average daily trading of stocks by constituent types of indices in 2019 can be summarized as follows: 1) SET 1-10 had the average daily trading value of THB 17.0 billion, or 25 percent compared with 29 percent in 2019; 2) SET 11-30 had the average daily trading value of THB 15.4 billion, or 22 percent compared with 25 percent in 2019; 3) SET 31-50 had



the average daily trading value of THB 8.4 billion, or 12 percent compared with 11 percent in 2019; 4) SET 51-100 had the average daily trading value of THB 8.9 billion, or 13 percent

compared with 12 percent in the previous year; 5) Non-SET 100 and mai had the average daily trading value of THB 18.9 billion or 27 percent, a significant increase from 22 percent in 2019.

Combined Trading Value of SET and mai by Market Capitalization (Unit: THB million, %)



Source: SETSMART

Derivatives Market Trading Activities

The derivatives market activities also rose considerably. In 2020, the average daily trading volume of TFEX surged to 494,624 contracts per day, a 15.5 percent rise from 2019. The significant increase in trading volume was mainly attributed to SET50 Index Futures, Gold Online futures and USD Futures. The trading volume of USD Futures tripled from the previous year, while SET50 Index Futures and Gold

Online Futures jumped by 35.9 percent and 104.8 percent respectively.

In addition, the number of investors in derivatives market has continuously increased, resulting in the increase of 186,813 accounts or 16.2 percent from end-2019 to 217,073 accounts.

Average Daily Trading Volume of TFEX (number of contracts)

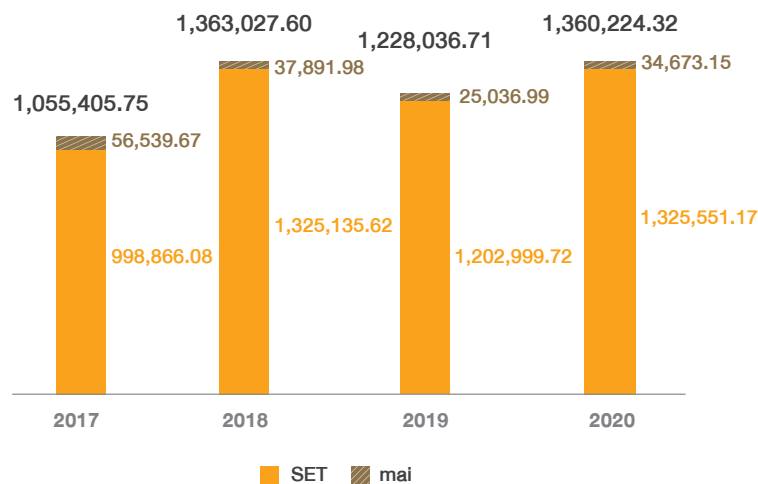
Products	2018	2019	2020
SET50 Index Futures	173,649	173,976	236,485
SET50 Index Options	5,561	6,874	6,990
Single Stock Futures	225,847	213,517	195,007
50 Baht Gold Futures	675	477	376
10 Baht Gold Futures	16,745	14,117	10,722
Gold Online Futures	2,327	16,289	33,366
USD Futures	2,799	2,758	11,536
Rubber Futures	141	224	72
Gold-D	434	136	14
Total	426,213	428,369	494,624
Change (%) from previous year	31.46	0.51	15.47

Source: SETSMART

Post-Trade Operational Review 2017- 2020

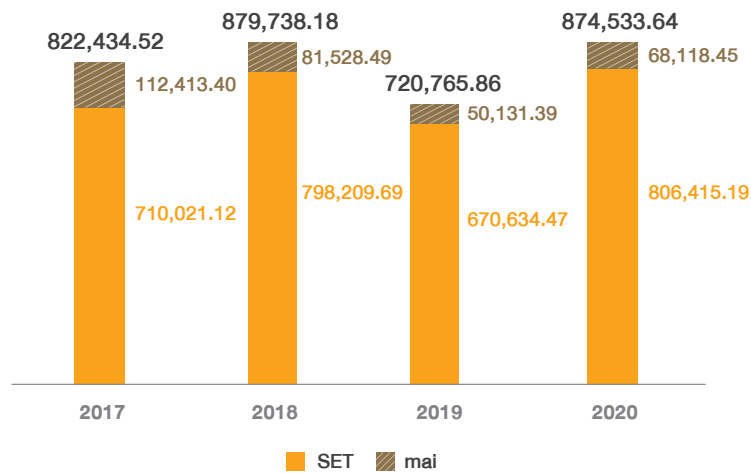
	2017	2018	2019	2020
Securities Depository				
Number of Depository Participants (Participants)	110	110	110	110
Brokers	40	40	41	41
Banks	35	35	35	35
Others	35	35	34	34
Number of Securities Deposited in the Securities Depository System (Securities)				
Equity (Include Warrant, Derrivatives Warrant, Unit Trust)	3,967	4,266	4,785	4,628
Government Bond	362	323	317	314
Corporate Bond	1,327	1,444	1,563	1,547
Securities Clearing and Settlement				
Number of Participants in the Clearing House (Participants)				
Equity & Debt	40	39	40	40
Derivatives	40	40	40	40
Securities Registration				
Number of Companies in the Securities Registration System (Companies)	747	770	800	826
Companies Listed on The Stock Exchange of Thailand (SET)	567	577	593	606
Companies Listed on The Market for Alternative Investment (mai)	150	162	170	176
Others	30	31	37	44
Number of Securities in the Securities Registration System (Securities)	2,559	2,879	3,455	3,367
The Stock Exchange of Thailand (SET)	2,187	2,410	2,987	2,809
The Market for Alternative Investment (mai)	214	210	203	207
Others	158	259	265	351
Number of Shareholders in the Securities Registration System (Citizen ID.)	1,455,618	1,568,499	1,679,051	1,939,362

Total Value of Securities Clearing and Settlement (Unit: THB million)

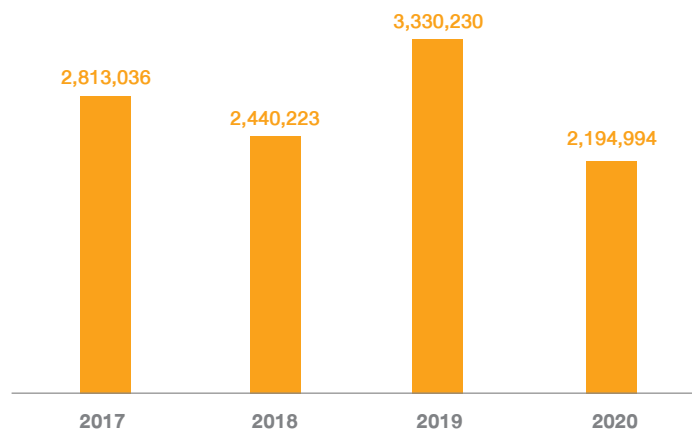




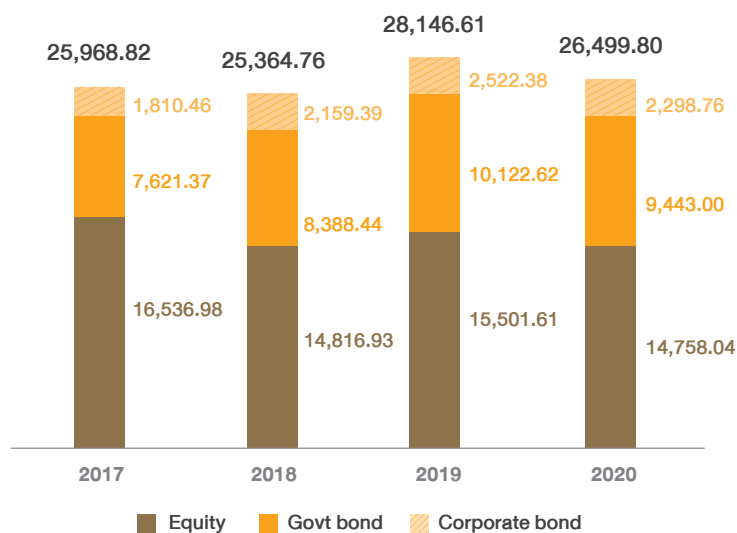
Total Volume of Securities Clearing and Settlement (Unit: million shares)



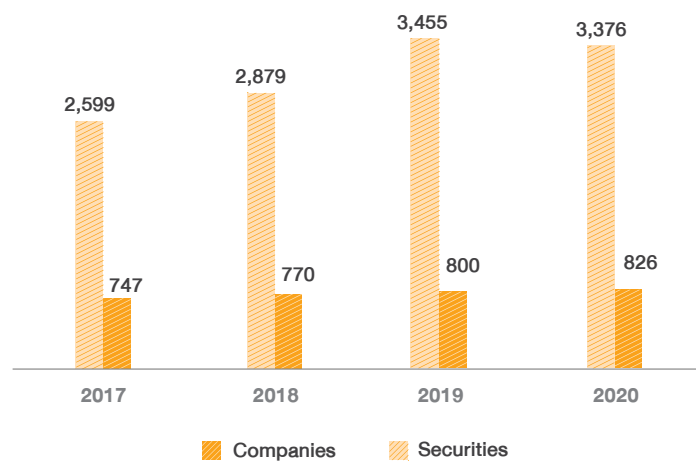
Open Interests for Derivatives (number of contracts)



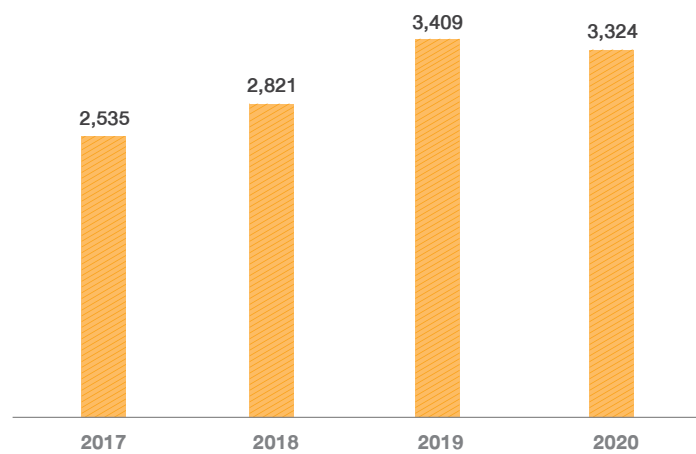
Total Value of Securities Deposited in the Securities Depository System (Unit: THB billion)



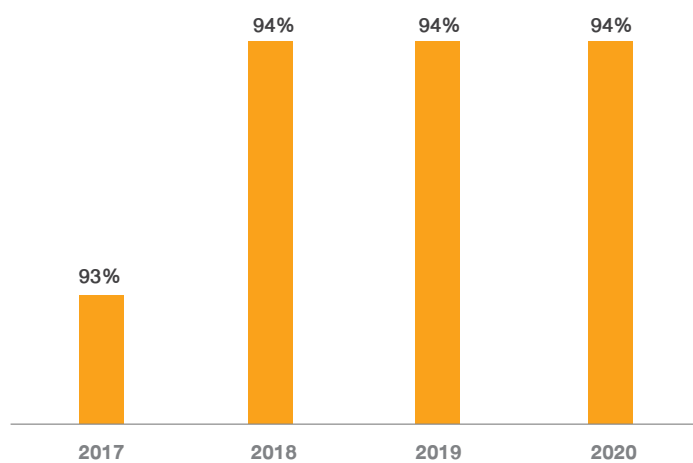
Number of Companies/Securities in Securities Registrar System



Number of Securities under e-Dividend Service



Proportion of e-Dividend Paid





Business Operation of the SET Group

Vision and Mission

Following the vision **“To Make the Capital Market ‘Work’ for Everyone”**, the Stock Exchange of Thailand (SET) group is committed to creating values for all stakeholders. It has been a driving force behind the country’s economic growth and a key promoter of sustainable business practices to catalyze social development and strengthen the country’s competitiveness.

The SET group operates under five missions: (1) To “plant” state-of-the-art financial development that is both innovative and accessible to our customers locally, regionally, and globally, (2) To innovatively “grow” product development that not only caters to market needs but also resonates the sustainable growth, (3) To “foster” people development to ensure that our people will embrace proactive working spirit with synergy, while adhering to professional integrity, (4) To “implant” an inclusive growth approach that will enable us to perform as the best business partners and social supporters, (5) To continuously “cultivate” ourselves and our stakeholders by investing in knowledge management creating, sharing and generating knowledge as part of an intangible asset.

Business Overview

At present, the SET group is the only stock exchange operator in Thailand, offering end-to-end services in the following areas:

Exchange business

1. Securities market

Listing and trading: The SET group provides securities listing and trading services for equity instruments through SET and Market for Alternative Investment (mai) while providing services for bond instruments through Thailand Bond Exchange (TBX). As of December 31, 2020, there were 568 companies listed on SET and 175 on mai along with 259 bond products listed on TBX. The SET group also lists other types of securities, such as warrants, derivative warrants (DW), depositary receipts (DR), exchange-traded fund (ETF), real estate investment trust (REIT), and infrastructure fund (IFF), among others.

Clearing and settlement: The SET group is a clearing house for transactions taking place on SET, mai, and TBX. The SET group serves as the central counterparty (CCP) for all trading activities on those exchanges. SET, as a clearing house, will guarantee all transactions of any party who fails to settle. SET will settle fund and securities in order to reduce counterpart risks incurring in the market. In addition, the group also provides clearing and settlement services for over-the-counter (OTC) bond trading.

Depository: The SET group acts as a central securities depository for stocks and bonds, using a secure and efficient scripless system. Inclusively, it provides services for securities deposit, withdrawal, transfer, pledge, and pledge revocation. Investors can conduct these transactions through SET depository members. The SET group also control shareholding limit of foreign investors as prescribed by the relevant rules and regulations.

Market supervision: The SET group supervises trading activities of all investors and market participants to ensure that the market is fair, orderly, transparent, and efficient. It also requires listed companies to disclose accurate, transparent, and timely information to investors and the public.

2. Derivatives market

The SET group operates a derivatives market that trades derivatives products with underlying assets consisting of securities, commodities, government bonds, short-term interest rates, and foreign exchange. Additionally, it supervises the trading activities of investors in the derivatives market and all market participants to ensure a well-functioning market operation.

3. Technology services and capital market infrastructures

The SET group provides both front and back office services for members, such as Front-Office Service Bureau (FSB) system, internet trading system, and Back-office Service Bureau (BSB) system. These centralized services support market participants

to benefit from economies of scale in expanding their business and speeding up their new products and services development.

It also offers market data services to data vendors, and sells trade related data and market information on listed companies directly to investors to help them make an informed decision. The group also prepares and disseminates several internationally recognized indices.

Additionally, the SET group provides the FundConnex service as a centralized mutual fund platform to connect asset management companies with their selling agents. The platform helps broaden mutual fund access and improves market efficiency. The SET group also provides the payment system infrastructure called FinNet, which centralizes payment process and sets connecting standards between intermediaries in the capital market and commercial banks, to enhance the efficiency of payment process in the capital market.

To cater to the future change, the SET group has prioritized upgrading online trading platform service to increase efficiency and convenience through settrade service. Moreover, the SET group stands ready to be the main operator of digital infrastructure, joining forces with the Association of Thai Securities Companies and the Thai Bankers' Association to develop digital infrastructure for the Thai capital market.

4. Registrar services

The SET group acts as a registrar for equity products and constantly updates the Register Book to contain accurate and complete shareholder information. Our services also cover information of shareholder benefits and connect registrar services with a direct linkage to the Securities Depository Center for the benefits of listed companies and investors.

Furthermore, the SET group has secured data storage and processing system with corresponding back-ups to ensure the continuity of our services. Our vault and data management systems have been in place to secure the rights of the securities holders and for verification purposes.

Long-term Development of Thai Capital Market

The SET group is determined to create sustainable development for the Thai capital market to enhance the country's competitiveness and ensure inclusive growth for all stakeholders. The Group has set four major capital market development strategies as follows:

1. Capital market education

The SET group has tailored their educational campaigns towards five target groups including 1) Professional Education – to enhance knowledge for professionals working in the capital market, 2) Enterprise Education – to improve the quality of listed companies and their employees, 3) Investor Education – to promote sustainable investment among investors and potential investors and to expand SET investor base, 4) General Public Education – to increase financial and investment literacy for students and general public through different channels such as Maruey Knowledge & Resource Center, INVESTORY investment discovery museum and SET Investment Center, and 5) Executive Education – to raise awareness on the importance of capital market among public and business leaders as well as strengthening network with leaders of other capital markets in ASEAN and Greater Mekong Subregion.

2. Sustainable development (SD)

To promote sustainability practices among Thai listed companies, the SET group has focused its efforts on two major areas: 1) encourage Thai listed companies to adopt corporate governance principles in consistence with international standard and 2) promote sustainability integration and create a sustainable business ecosystem. In addition, the Group has continued to promote sustainable investment principles among institutional investors, encourage more investment in social enterprise businesses, and support Thai listed companies to be listed on internationally recognized indices namely the Dow Jones Sustainability Index.



3. Capital market research

The SET group has been a key organization responsible for conducting and publishing researches on capital market. In addition, it has published leading market indicators and developed a comprehensive database to be a useful source of

information for researchers and business sector. The SET group has also facilitated knowledge sharing between researchers and business sector to ensure effective utilization of research findings and making relevant research papers publicly available.

Revenue Structure

The SET group's revenue structure during the past 3 years (2018-2020) were as follows:
(Unit: THB million)

Products and Services	2020		2019		2018	
	Revenue	%	Revenue	%	Revenue	%
Securities Market						
- Trading	1,667	25.46	1,298	22.04	1,413	24.68
- Listing	450	6.87	723	12.28	643	11.23
- Clearing and settlement	682	10.42	368	6.25	384	6.71
- Depository	296	4.52	347	5.89	341	5.96
- Membership fees	32	0.49	32	0.54	44	0.77
Total	3,127	47.76	2,768	47.00	2,825	49.35
Derivatives Market						
- Trading	677	10.34	541	9.19	509	8.90
- Clearing	290	4.43	233	3.96	220	3.84
- Membership fees	32	0.49	32	0.54	36	0.63
Total	999	15.26	806	13.69	765	13.37
Technology Services						
- Member services	437	6.67	420	7.13	451	7.88
- Information services	378	5.77	367	6.23	346	6.04
- IT support	345	5.27	277	4.70	200	3.49
Total	1,160	17.71	1,064	18.06	997	17.41
Registrar and Fund Services						
- Securities registrar	1,229	18.77	1,226	20.81	1,121	19.58
- Fund services	24	0.36	20	0.34	14	0.24
- Payment services	9	0.14	6	0.10	3	0.05
Total	1,262	19.27	1,252	21.25	1,138	19.87
Total Operating Revenues	6,548	100.00	5,890	100.00	5,725	100.00

Business Competition

In today's business world where capital markets are globally interconnected, the SET group has to face tough competition at both the regional and international levels. Although it remains the only market operator in Thailand, there are discussions regarding the opening up for more competition in the future. Besides, local business can now choose to list abroad while investors also have access to investment anywhere in the world. The fierce competition has also led to a greater product diversity with foreign exchanges developing similar products to attract both Thai and international investors. The emerging

trend in overseas securities business such as Alternative Trading System (ATS) and growth of digital asset ecosystem open opportunity for new businesses namely ICO Portal, Digital Asset Exchange and Digital Asset Wallet which grow in consistent with digital asset value. Furthermore, new technologies including blockchain have been adopted to enhance business efficiency to better serve various demands of financial service users. These technologies have potential to provide business partnership opportunities but at the same time can bring in SET's competitors in the future.



○ Make it “Work” for Inclusive Growth

PARTNERSHIP PLATFORM





Highlights of Key Developments 2020

Grow with Efficiency

THB 237,541
million

Amount of fund raised by newly listed companies

THB 555,299
million

Market capitalization at IPO



Developed new website www.setinvestnow.com for investors to be a new source of comprehensive investment knowledge



Developed investment channel “Point to Invest” project
Redeem reward points of credit cards and loyalty program to mutual funds’ unit trusts and promote investment through new channel “e-wallet”



Number of new securities listed on SET and mai

28 securities

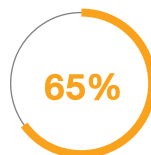
Expanding investor base: At the end of 2020, **1,506,068** investors, of which over **250,000** were new investors, nationwide had trading accounts.



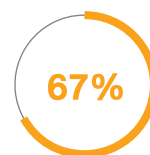
New investors hit
a record number

93% ↑

from the previous year



65% of new investors lived in
upcountry and Bangkok’s vicinity



67% of new investors were
new generation aged 20–35.

Grow with New Opportunities



Developing products and services that link with international market such as, **derivative warrants (DW)** with foreign indices as underlying assets



Launches of **Silver Online Futures** and
Japanese Rubber Futures

Grow with Stakeholders & Sustainable Society

Maintaining stability and enhancing efficiency of internal work systems



SET carried out the “CyberTrust” project to assess its readiness to prevent cyber threats together with member companies.



Adopting technologies to ensure an effective transition to the “New Normal” business environment including remote working, online meeting and the deployment of SET DNA, an enterprise mobile application, that connected employees with internal work systems.

Developing capital market infrastructures



Offering registrar services under e-services platform including “e-proxy for voting”



Providing depository service through Bank of Thailand (BOT)’s DLT Scripless Bond project

Professional link digital platform or Prof. Link, at the end of 2020, downloaded by

10,644
license holders



The new SMART Marketplace service offers intraday trading data online which disseminates at the end of every trading day.

Promoting financial knowledge for sustainable growth

The number of SET e-Learning users reached

585,206
a six-fold increase
from the previous year

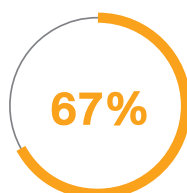
In 2020, SET e-Learning gained more than

300,000 views with **30,000** users and students.

Sustainable Growth

21 listed companies

were selected as DJSI’s members, top inclusions in ASEAN, with the world’s top score in seven industry groups.



124 listed companies, representing 67 percent of total market capitalization, passed Thailand Sustainability Investment (THSI)’s assessment criteria.

12,323.48
tons of carbon
dioxide equivalents

were reduced through platforms of Care the Bear, Care the Whale and Care the Wild.



SET's Key Developments in 2020

In 2020, The Stock Exchange of Thailand (SET) propelled the capital market by delivering on its key strategy of Creating a Partnership Platform to Drive Inclusive Growth to achieve a goal of raising efficiency for the best interests of all market participants and strengthening its role as an enabler that created sustainable values for all. The 3-pronged strategy comprising **1) Grow with Efficiency, 2) Grow with New Opportunities, and 3) Grow with Stakeholders and Sustainable Society** had led to key developments as detailed below.

1) Grow with Efficiency

Providing fund-raising opportunities

SET serves as a major fundraising platform during both normal and turbulent economic situations. In 2020, **newly and existing listed companies raised capital worth THB 237.54 billion with market capitalization of THB 687.12 billion.**

Throughout the year, 28 securities were listed on both SET and The Market for Alternative Investment (mai) with several large-scale securities including Central Retail Corporation plc (CRC), Thailand's biggest IPO ever and the world's second-largest IPO offered by retailers; and SCG Packaging plc (SCGP), a total packaging solution provider which took crown of the biggest listing in Packaging sector. Still, the new listings included companies of which businesses thrive in new normal such as Sri Trang Gloves (Thailand) plc (STGT), traded on Personal Products & Pharmaceuticals sector and considerably drew investors' interest during the COVID-19 pandemic; and Kerry Express (Thailand) plc (KEX), Thailand's leading parcel delivery service provider.

Total fundraising and market capitalization by types of fundraising

Types of Fundraising	Total Fund Raised (THB million)			Market Capitalization (THB million)		
	2018	2019	2020	2018	2019	2020
Initial Public Offering (IPO)	81,573	90,839	142,119	183,141	383,749	555,299
Secondary Offering (SO)	125,265	309,793	95,422	189,511	401,129	131,821
Total	206,838	400,632	237,541	372,652	784,878	687,120

SOURCE: SETSMART

Newly listed companies (IPO) by types of securities in 2020

Types of Securities	Number of Securities	Total Fund Raised (THB million)	Market Capitalization at IPO (THB million)
Common stocks	27	234,741	552,499
Infrastructure Fund (IFF)	1	2,800	2,800
Total	28	237,541	555,299

SOURCE: SETSMART

SET has prioritized professional quality development of listed companies and SET's training programs entered a fifth-straight year of implementation in 2020. A range of training courses had been developed for mid-level executives, and finance and accounting professionals under curricula "Guidelines for financial reporting of the COVID-19 pandemic-hit companies" and "Financial management strategy for organizations to turn the corner and thrive in the New Normal era". Knowledge gained from the courses, attended by 2,000 participants, were expected to be applicable to help listed companies regain their strength and continue to enjoy sustainable growth. For companies preparing for listing, SET has initiated CFO's Orientation and CFO's Refresher courses available in both Thai and English under e-learning format to cater to training during the outbreak, aiming at providing more insight for current and future top executives in finance and accounting to be compliance with regulations specified by the Securities and Exchange Commission (SEC) and SET.

Expanding quality investor base

Regarding investor base expansion, 2,154,900 investors, of which the numbers were 1,506,068 if stripping out those who have more than one account, nationwide had trading accounts in 2020. Among them, 250,000 were new investors, the record increase or a 93-percent rise from the previous year. Of the total new investors, 65 percent were from upcountry and Bangkok's vicinity, and 67 percent were new generation aged between 20 and 35.

To meet the digital lifestyle of today's investors, SET has developed new digital knowledge platforms as well as providing investors information and investment channels. In 2020, SET joined hands with 12 securities to introduce an e-Open Account initiative that allows investors to start investment journey in a quick, convenient and easy way. A series of online educational campaigns had also been arranged throughout the year and attracted over 2 million viewers.





SET launched www.setinvestnow.com to be a new source of comprehensive information for first-time and prospective investors while adding the ‘Education’ in www.tfex.co.th to give information on TFEX covering a broad range of levels from beginner to advanced professional. SET used an integration approach to promote investment, products and services and trading channels by disseminating relevant information through all of its social media platforms. It also deployed big data analysis and machine learning technology to personalize contents, products and services for different target users while ensuring that the data usage was in line with the Personal Data Protection Act (PDPA).

SET initiated a new investment channel, the “Point to Invest” project, that are easily accessible, and cater to the needs and lifestyles of investors. The project allows credit card holders and other loyalty program customers to turn their reward points into mutual funds’ units. An e-wallet investment channel had also been introduced during the year.

Moreover, SET, through www.settrade.com, provides investors with the information that they can use to weigh investment

decisions. In 2020, various sets of practical and useful information had been published under specific section, for example, “IPO Performance” that gives information on newly listed companies both SET and mai, and “ESG Information” that provides environmental, social and governance assessment reports of listed companies by leading organizations and world-renowned partners such as CGR, THSI, DJSI, Arabesque S-Ray®, and Vigeo Eiris. SET also issued in-depth research under the “Extended Research Coverage” project that it implemented together with SEC and the Investment Analysts Association (IAA) for the second consecutive year. The research looked into interesting stocks that had not been covered before and 99 research papers covering 77 securities have been produced under the project.



Enhancing operations and regulations for better efficiency

In 2020, SET continuously reformed regulations to increase oversight efficiency and support the businesses of listed and member companies. The revisions were also in response to the rapid changing business environment due mainly to the COVID-19 pandemic that dealt a blow to the economy, businesses of listed companies and market participants, and the overall trading environment.

The Regulatory Reform project's key developments were as follows:

- **Additional Information for Investors:** The new rules required newly listed companies to participate in the “Opportunity Day” at least once within the first year of their listing to present detailed information regarding their business and operations to shareholders, investors and those who are interested.
- **Quality improvement and support for listing:** SET lifted market capitalization criteria for the listing on mai and introduced new requirements for the listing of infrastructure companies on mai to support small-scale infrastructure projects that benefit the country and worth at least THB 2 billion.
- **Transaction support for listed and member companies:** SET, for example, revised regulation regarding listed companies' shareholder restructuring, and reduced short sales obstacles by allowing securities companies to reset outstanding short positions within 60 days after the customer placed the short sale order to be more in line with industry practice.

Temporary measures and regulations to deal with market fluctuations due to external factors: SET, for instance, temporarily allowed short sales to be conducted only at higher price than the previous trade (plus tick rule) and narrowed down ceiling and floor price limits to reduce fluctuations in securities trading. The measures were implemented from mid-March to September 30, 2020. Besides, SET, in collaboration with relevant organizations, produced and disseminated guidelines for the listed companies on holding the annual shareholder meetings under the pandemic situations. It also relaxed regulations on SP and NP trading signs for the listed companies that received leniency for their financial report submission. In addition, SET allowed the Board of Governors (BoG) to introduce measures within pre-set frameworks for temporary implementation in the event of market disruption for the sake of flexibility and swift responses. As well, SET amended its Circuit Breaker rules to cover 3 stages instead of 2 to give more time for investors to analyze information for their better investment decisions.





2) Grow with New Opportunities

Products and services with international linkage

In 2020, SET proceeded to expand its business opportunities the local and international markets.

Throughout the year, it had **developed products and services with global integration**, enabling investors to better manage their portfolios with a more diverse range of investment tools and alternatives. For example, SET, in partnership with derivative warrants issuers such as JPMorgan Securities (Thailand) Co., Ltd. and Macquarie Securities (Thailand) Co., Ltd., had issued derivative warrants based on S&P 500 Index, a market-capitalization-weighted index of the 500 largest U.S. publicly traded companies, and Hang Seng China Enterprises Index (H-Share) that tracks the performance of large Chinese companies listed on the Stock Exchange of Hong Kong.

Thailand Futures Exchange PCL (TFEX) also introduced several new products and services to meet investors' demands including launching Silver Online Futures and Japanese Rubber Futures, adding 12 new underlying stocks for Stock Futures to 122 in total, extending trading hours of the night session for all gold products until 3 a.m., adding contract series of Gold Online Futures, and

offering daily delivery services of USD Futures. Moreover, TFEX has collaborated with members on education and marketing to provide knowledge and trading tools to investors as well as boosting market liquidity all year round.

In addition, SET had **strengthened its cooperation with foreign exchanges** including Shenzhen Stock Exchange and Bursa Malaysia in organizing the first online seminar "2020 ASEAN Capital Market Cooperation (Manufacturing Session)" on October 30, 2020 to increase Chinese investor confidence in Thailand economy and its local businesses. As part of the collaboration, information of Thai listed companies had also been published on Shenzhen Stock Exchange's V-Next platform to draw international attention to Thai businesses and capital market.

Regarding **the promotion of foreigners' investment**, SET together with M-DAQ, a leading fintech company in Asia, introduced the innovative calculation of stock prices based on the Interbank FX Rate to show the prices of SET50 stocks in 10 different currencies in real time, allowing investors to make calculated decisions and enabling securities companies to use the data as reference while serving their customers.

3) Grow with Stakeholders & Sustainable Society

Maintaining stability and enhancing efficiency of internal work systems

In response to the increase in cybersecurity incidents over the past few years, SET **carried out the “CyberTrust”** project to assess its readiness to prevent cyber threats together with member companies. The project was also to encourage member companies to improve their cybersecurity measures to create investor confidence.

To raise confidence in IT service standard, SET, in 2020, was certified ISO 27701:2019 (Privacy Information Management) on top of the international standard certifications it already obtained namely ISO 27001 (Information Security Management) and ISO 20000 (IT Service Management).

Additionally, SET had **deployed technologies to ensure an effective transition to the “New Normal” business environment** including the use of Virtual Private Network (VPN) to ensure secure remote access to SET’s corporate systems and the deployment of SET DNA, an enterprise mobile application, that connected employees with internal work systems. The system also allowed SET to track staff travel history in designated risk areas and their IN/OUT office status as part of the SET’s enterprise risk management procedures.

Developing capital market infrastructures

SET has continuously developed infrastructures for the Thai capital market to help reduce costs of the industry. Major developments in this area are as follows.

Thailand Securities Depository Co., Ltd. (TSD), SET subsidiary, **introduced a suite of e-services** to address the changing business situations during to the COVID-19 pandemic including the “e-Proxy for voting”, which allows proxies to attend online shareholder meetings. The service was first introduced among foreign investors in May 2020 and became fully electronically available by the third quarter when the connection with the

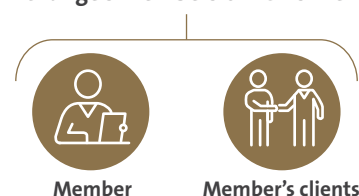
Revenue Department’s e-Stamp payment system was initiated. TSD also removed the 40-million-baht cap on dividend amounts for interbank transfers in April 2020.

Further, it had worked closely with the Bank of Thailand (BOT) to **develop a depository service as part of the BOT’s DLT Scripless Bond project** that aimed to improve operational efficiency in bond issuing process and improve investor’s buying experience by reducing the subscription period from 15 to only 2 days. The service was kicked off with the “1 Baht Bond” government savings bond in June 2020.

Meanwhile Thailand Clearing House Co., Ltd. (TCH), another subsidiary of SET, had **revised membership requirements** to suit different membership types be it a General Clearing Member (GCM) or a Direct Clearing Member (DCM). This revision aimed to increase flexibility for the member companies and to be in line with international standards.

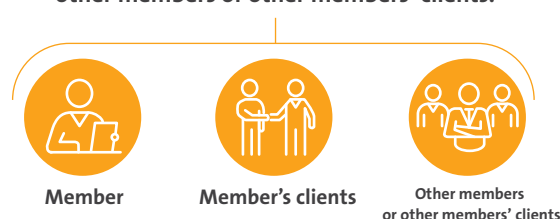
DCM

a member who undertakes the securities clearing and settlement for itself or clients whereby the member’s client must not be the Exchange’s members or TCH’s members.



GCM

a member who undertakes the securities clearing and settlement for itself or clients, or for other members or other members’ clients.





The company **adjusted regulation on members' report submission to TCH**, changing monthly report of members' net capital to be on a daily basis to be in line with the SEC regulation and to reduce redundancy and improve the monitoring and risk management process. The change came into effect in July 2020.

In addition, TSD, TCH and BOT, in June 2020, have jointly finalized business requirement documents to support global standard, namely ISO20022 for the instructions of payment and fixed incomes' transfers. They are in the process of developing relevant work systems and plan to test it at the end of 2021. The system is expected to go live in the first half of 2022.

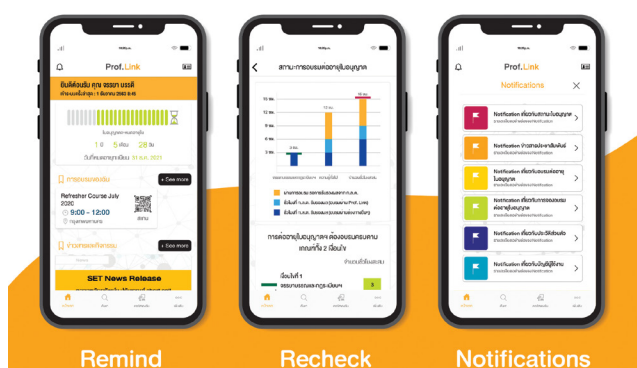
SET **developed the Professional Link Digital Platform (Prof. Link)** to bring more convenience to all parties involved in training for license renewal including the license holders and their employers, as well as training providers. The innovative system also helped enhance operational efficiency, reduce training cost and enable SET and the SEC to monitor training and knowledge development standards for professionals working in the capital market. At the end of 2020 the service, launched on October 1, 2020, had been used by 71 organizations and downloaded by 10,644 license holders.

As for **colocation services**, SET increased bandwidths between service users and SET's systems from 100 Mbps to 1 Gbps to be in line with the standard adopted by stock exchanges in other countries. Besides, SET allowed other service users including information providers and system service providers working for member companies to use the SET Data Center to support the creation of new services for member companies.

The new SMART Marketplace service offers intraday trading data online. The data, covering trading tickers, bids/offers and indices on SET and TFEX, is disseminated at the end of each trading day. Users can sign up online and receive the data right away.

In 2020, Settrade.com Co., Ltd. continued to support market participants with new services including the launch of e-Open Account service that was connected with National Digital ID (NDID) platform. The service allows investors to conveniently open trading account, verify their identity and apply for automatic debit payment services with leading bank online instead of having to go through the paper-based process or register at the ATMs machine. Users will also be instantly informed of their application approval.

3 outstanding functions Prof.Link



Promoting financial knowledge for sustainable growth

Due to the COVID-19 spread, many Thai people have adapted to the 'new normal' way of learning which is mainly reliant on online channels. SET had, therefore, **developed financial planning and investment learning platform** for investors and general public by enhancing the SET e-Learning capacity to accommodate more users with greater variety of contents including financial planning, investment and entrepreneurship, to suit each specific target segment. The improvement had drawn a lot of attention from investors and interested individuals bringing the number of users to 585,206, a six-fold increase from the previous year.

Maruey Library and the Investment Discovery Museum, "INVESTORY", also improved their services and increased online



learning channels. Maruey Library increased electronic resources for more than 7,000 items to provide users with access to capital market knowledge anywhere anytime via the Maruey eLibrary service. Last year, over one million people used facilities and content, mainly via online channels. Meanwhile, the Investment Discovery Museum also introduced a virtual tour of the museum via www.set.or.th/INVESTORY. INVESTORY also engaged in an outreach project to teach young people in the provinces on how to save and manage their money. Over the last year, INVESTORY attracted over 90,000 enthusiastic learners who are inspired to invest.

SET has continued to **develop the professional of intermediary institutions** who play an important role in serving the investors by jointly developing training courses together with the Association of Thai Securities Companies (ASCO), the Association of Investment Management Companies (AIMC) and the IAA that fit well with their duties and scope of responsibilities. The courses were designed to turn investment consultants into “smart investment consultants”, investment analysts to “strategic investment

analysts”, and HR staff to “multi asset back office specialists”, to let them keep pace with the change in business environment and regulations. In 2020, the courses were available online and attended by 7,655 staff members of intermediary institutions.

SET had **extended its educational reach to cover startups and SMEs** through its “micro learning” project to prepare them for growth and access to funding sources. The project had accumulated a vast amount of resources to equip entrepreneurs with essential knowledge and skills including information related to sustainable entrepreneur and innovation, management, marketing, accounting and entrepreneurial finance & fundraising. In 2020, 350 items of knowledge were produced and recorded more than 300,000 views by over 30,000 users and online students. Moreover, SET also arranged the “Accounting Secrets for SMEs Owners” course to equip entrepreneurs with accounting knowledge so that they know how to use key accounting data in decision-making and business planning and execution, and learn how to put in place a standardized accounting system. The first batch was attended by 80 trainees.



SET's Sustainable Development

SET's Sustainability Policies and Directions

SET has been promoting the sustainability of organizations and the capital market in accordance with the SET Sustainability Framework which covers transparent governance, value creation for the capital market, employees and society development and environmental impact management.

In 2020, SET had set out its sustainability goals and strategies and cooperated with stakeholders to ensure effective and continuous implementation. For example, it helped listed companies improve their sustainability-related performances, promoted financial literacy and sustainable investment, developed the quality of SMEs, startups and social enterprises and promoted collaboration to reduce greenhouse emissions.

For 2021, SET integrates the sustainability framework into its business strategy with the mission to **“Redefine Thai Capital Market Resiliency”**. Under the strategy, SET is committed to enhance the economy, environment and society by basing its business operations on the Sustainable Development Goals (SDGs).

For more information about the policies and plans of SET for the development of sustainability, please read the Sustainability Report 2020.

Managing Stakeholders in the Value Chain

SET plays a key role in providing business operators with access to funds for their business development and expansion. It also creates opportunities for people to invest and receive returns. The quality growth of listed companies has significant impacts on the overall economic and social development because, for example, their growth can create more jobs, resulting in higher tax revenues and more investment budget for infrastructure development projects.

Therefore, SET is determined to develop various investment products and innovations, improve the quality of issuers and investment professionals, supervise organizations and the capital market with transparency, and have a risk management system that covers social and environmental issues. Besides, it collaborates with many parties through online and offline channels to comprehensively and appropriately meet the expectations of stakeholders of all groups.

In 2020, SET continuously cooperated with stakeholders to support operators and investors to overcome difficulties during the COVID-19 pandemic. It also developed more digital channels to communicate and collaborate with stakeholders and strictly adhered to the social distancing measures imposed by the government.

For more information about the value chain and stakeholders of SET, please read the Sustainability Report 2020.

Enhancing the Capital Market and Society

SET operates responsibly by respecting human rights and giving fair treatment to stakeholders in SET's value chain. This is to ensure that everyone has access to and benefits from the capital market in accordance with the vision “To Make the Capital Market ‘Work’ for Everyone”. The key achievements of SET in 2020 were as follows:

- Continuously sharing knowledge and guidelines about sustainability with operators, listed companies, investors and securities professionals to make capital market a key driver of economic, social and environmental development, contributing to a better quality of life and a wider adoption of responsible investment practice;
- Ensuring well-being and safety of the employees while developing new learning channels that enables them to sharpen their knowledge, adapt to the new business environment and continue to live the SET values (SET DNA) while driving the organization forward



- Making finance and investment knowledge widely and accessible through ‘new-normal’ methods to help Thai people obtain a healthy financial status. SET also further developed the SET Social Impact Platform to engage social enterprises in creating positive social impacts and expanding their network to improve the quality of life of Thai people

For more information about achievements in developing sustainability for the capital market and society, please read the Sustainability Report 2020.

Environmental Impact Management

SET applies innovations and latest technologies to reduce energy and water consumption and greenhouse emissions at its buildings. It adopts the environmental friendly procurement principle as part of its ongoing waste reduction efforts. It also cooperates with partners to lower overall impacts on the environment. SET develops clearly-defined policies and action guidelines on environmental management, comply with laws, regulations and standards. SET regularly reports the progress in this area to its Board of Governors.

In 2020, SET emitted greenhouse gases totaling 4,056 tons of carbon dioxide equivalents¹, down by 298 tons or 6.80 percent from 2019. It achieved the required standards by the

6.80% ↓

carbon dioxide caused by
greenhouse gas emissions
were reduced from 2019.

ASEAN Building Fire Safety Awards 2020 and Green Office projects in 2020. In addition, its headquarters received the 3-Star Fitwel Award, marking the first one in Asia and the first one outside the US to be 3 star certified, reflecting SET’s commitment to environmental management and the well-being of its building occupants.

Moreover, SET together with listed companies, the business sector, the government sector and society promoted reduction in greenhouse gas emissions from business operations and everyday activities via the Climate Care Collaboration Platform. The collaboration reduced greenhouse gas emissions by 12,323.48 tons of carbon dioxide equivalents, comparable to growing 1,369,274 ten-year-old trees.

For more information about achievements in environmental management, please read the Sustainability Report 2020.

¹SET bases its greenhouse emission reports on the guidelines for carbon footprint assessment of Thailand Greenhouse Gas Management Organization (TGO) which cover the direct and indirect emissions of greenhouse gases (Scopes 1 and 2). Information in the reports was verified by external organizations.



Messages from
the Chairman and the President

Board of Governors
and SET Executives

Business Operation

Key Developments

—○ Make it “Work” for Balanced Growth

REDEFINING THAI CAPITAL MARKET RESILIENCY





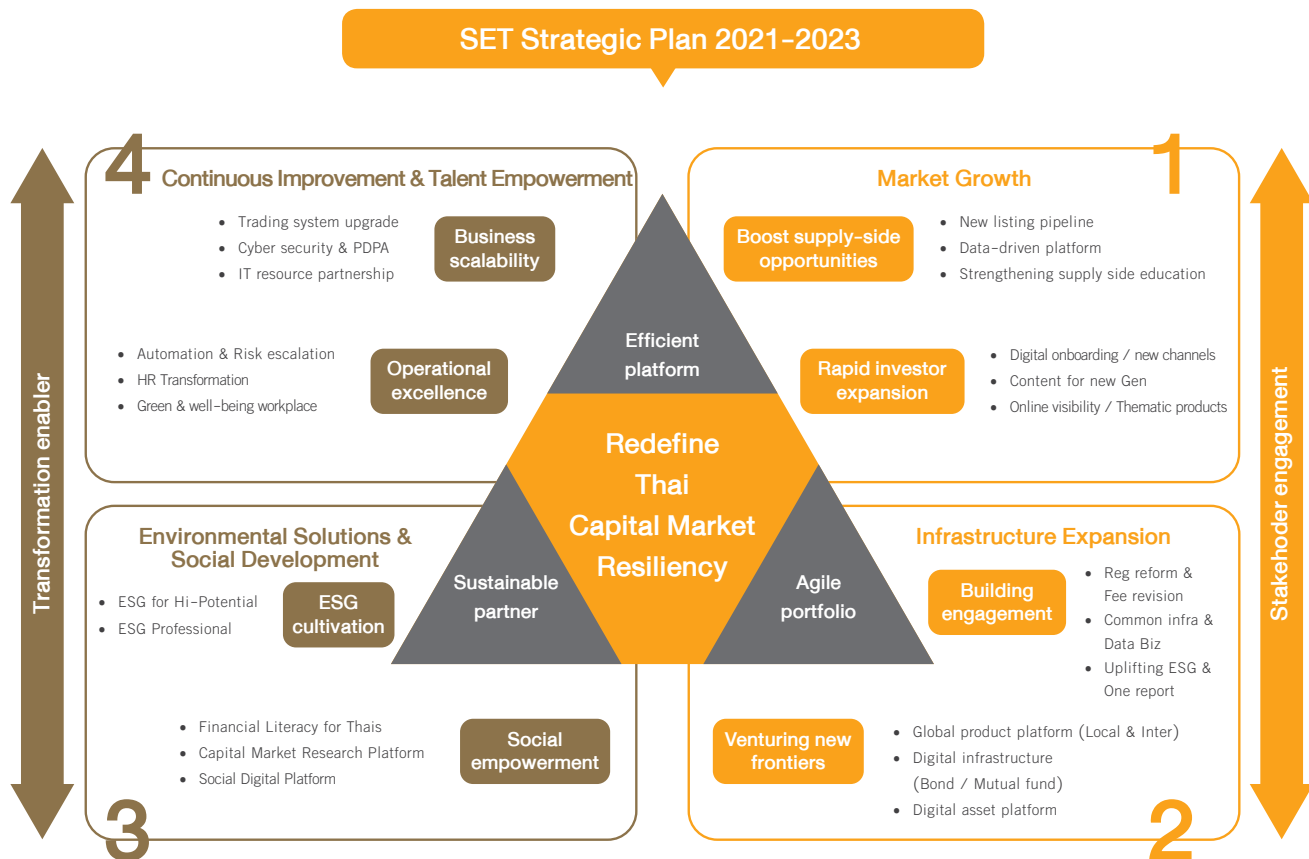
The SET Group's Strategic Plan for 2021 - 2023

To build a solid foundation for the Thai capital market amid the rapidly changing environment and heightened volatility due to the COVID-19 pandemic, The Stock Exchange of Thailand (SET) has embarked upon its 2021-2023 business strategy with a mission to **'Redefine Thai Capital Market Resiliency'**.

Under the new strategy, SET will focus on ensuring a smooth transition to the 'Next Normal' by embracing new digital technology and adopting new ways of work to strengthen its competitiveness on three strategic areas including 1) to be an **efficient platform** with innovative services, effective digital experiences, efficient operational systems and flexible ecosystem

that makes trading easier for all, 2) to build an **agile portfolio** that enhances fundraising capability and expand global participation in its products and services, and 3) to be a **sustainable partner** with all stakeholders including market participants, business sector and social enterprises in building a better society together.

To achieve this, SET has developed a 3-year strategy (2021-2023) with two strategic priorities: **1) to strengthen its stakeholder engagement to better serve the needs of market participants and 2) to be a transformation enabler that creates values for all stakeholders.**



1. Market Growth

1.1 Boost supply-side opportunities

SET will continue to create fundraising opportunities for businesses with promising potentials including those in the new economy sectors like technology, e-commerce, foreign business, SMEs and startups.

SET also aims to improve information management system to allow investors to access information in a quick and convenient manner. Accordingly, several data management initiatives have been rolled out namely the Smart FSCOMP (Financial Statement Comparability) project that helps streamline and standardize financial reporting and the IPO filing & Company Snapshot portal that gives investors a quick online IPO overview. In addition, a range of online training for entrepreneurs and listed companies have been held to equip them with new knowledge in order to stay afloat during the COVID-19 crisis.

1.2 Rapid investor expansion

SET strives to rapidly expand its investor base, and make trading easier and more attractive to the public. To meet the digital lifestyle of today's investors, SET together with its partners will jointly develop a suite of comprehensive digital services to ensure seamless onboarding experience for first-time investors including the electronic identification service (e-KYC), an e-Account opening channel and an e-wallet application.

SET will also modernize its educational contents to better connect with the new generation of investors. The contents will enhance investor knowledge on various types of investments such as stocks, mutual funds, and provident funds.

2. Infrastructure Expansion

2.1 Building engagement

SET centers on business enhancement for and cost reduction of market participants through new infrastructure services like e-Service platform and back-office services. It also will contemplate adjusting fees to be appropriate for the changing business landscape. SET plans to develop data analytics and open API platforms that allow market participants to easily access necessary

information. To evolve with the changing business environment, SET continues to work with the regulatory body and relevant parties to amend outdated rules to reduce redundancy, increase flexibility, and boost investor confidence in the Thai capital market.

2.2 Venturing new frontiers

SET will develop global products issuing and trading platform to connect with new opportunities abroad through Exchange Traded Fund (ETF) and Depositary Receipt (DR). The platform will help broaden investment opportunities with various currencies trading to provide convenience to intermediaries and customers.

Additionally, SET will further advance the capital market's digital infrastructures with new services. In the pipelines are a new corporate bond system and a digital asset platform, scheduled to be launched in 2022, to offer businesses new revenue-generating opportunities and provide investors with a more diverse range of investment alternatives.

3. Environmental Solutions & Social Development

3.1 ESG cultivation

SET has always valued the integration of Social, Environment and Governance (ESG) aspects into operations and committed to keeping Thailand at the forefront of ESG practice in the region. Through continuous advocacy efforts, SET has successfully encouraged Thai listed companies to adopt ESG principles and will continue to increase the number of companies listed in the Thailand Sustainability Investment Index (THSI) while engaging more medium and small listed companies in the SET's Accelerating Program and Sustainable Development Journey. SET will also continue to promote sustainable investing by encouraging leading organizations to disclose their ESG best practices for other market participants to follow their example in developing more ESG products.

SET also plans to increase the number and quality of ESG experts through trainings at the market and educational institutions to accommodate the expansion of sustainable investing in the future.



3.2 Social empowerment

SET places an importance on raising financial literacy among Thai people. To this end, it has developed a number of online learning platforms to enhance public knowledge on financial and investment. Together with media, public and private organizations, SET has also constantly created new educational channels to cover a wider audience. It also deploys big data analysis to evaluate the learning journey and its effectiveness while utilizing accumulated data to customize contents for different target segments.

SET recognizes the importance of capital market research and will enhance the capacity of its database to facilitate more industry-focused studies. SET also brings together social enterprises and business sectors to jointly create positive and sustainable social impacts through the SET Social Impact Platform.

4. Continuous Improvement and Talent Empowerment

4.1 Business scalability

SET aims to be the trusted infrastructure provider for the capital market by strengthening its trading system, cybersecurity, and

personal data protection capabilities while maintaining stability of all systems according to the global standards. In addition, SET will partner with technology companies to support IT resources management and jointly develop IT systems and infrastructures in response to the industry's increased demand.

4.2 Operation excellence

SET will deploy Robotic Process Automation (RPA) technology to increase operational efficiency. It will also improve its risk management system and put in place a crisis communication plan to prepare itself for an emergency or unexpected event.

Regarding employee development, SET is focused on enhancing their digital and technical skills critical for the digital era as well as embedding perseverance culture for them to stay competitive in the rapidly changing business environment. SET is also committed to creating safe and healthy workplace under the 'new normal' concept such as the introduction of 'work from home' policy during the COVID-19 pandemic.

Corporate Governance Report

The Stock Exchange of Thailand's Board of Governors (BoG) is committed to applying good corporate governance principles to strengthen the SET group's credibility and create trust among all stakeholders. In 2020, the BoG has continued to maintain the corporate governance practices with key activities summarized below.

Promoting Corporate Governance across the SET Group

- **Approved Corporate Governance Guidelines for Subsidiaries:** SET carried out an organizational restructuring in 2020 to extend its reach to cover infrastructure developments for the capital market. The new organizational and business structure aimed to enhance SET's business expansion while building a solid foundation of investment infrastructures for the market's participants. Under the new structure, a number of new subsidiaries had been set up to devise the Group's new business strategies. To support effective subversion and enforcement of corporate governance across the Group, the BoG had approved a Corporate Governance Guidelines to be adopted by the subsidiaries to ensure adequacy and effectiveness of risk management and internal control processes.

- **Reviewed Corporate Governance Policy and Code of Conduct:** The BoG approved a revision of the Corporate Governance Policy and Code of Conduct, proposed by the Sustainability Committee, to increase committees' competence and ensure that their performance was in accordance with the Corporate Governance principles. Among the updates were a revised scope of duties and responsibilities for the Audit Committee (AC) and the Sustainability Committee (SC)¹, and the new term limits for external expert working for different committees across the Group. The BoG also acknowledged the review of the "Measures to prevent the acquisition of confidential information between functions and employees (Chinese Wall)" to ensure adequacy of

measures to safeguard confidential information under the new organization and business structure.

- **Increased Employee Understanding on Corporate Governance and Code of Conduct:** SET continued to arrange awareness-raising activities to create a better understanding regarding corporate governance practices, Code of Conduct and relevant laws among its employees, both through one-way communication channels like e-newsletter and two-way communications such as online meetings led by each business function's Compliance Champion.

Promoting Corporate Governance outside the Group

SET continued to advocate good corporate governance and sustainability practices among Thai listed companies to not only help strengthen their business but also enable them to achieve a long-term sustainable growth. In addition, SET also encouraged listed companies and member companies to enhance their personnel capabilities as well as professionalism of intermediaries in the capital market.

Through the efforts, a larger number of Thai listed companies had put more emphasis on applying corporate governance and sustainability principles in their operations. One clear evidence of such improvement is when 21 Thai listed companies had been internationally recognized as members of Dow Jones Sustainability Indices (DJSI). Such recognition made Thailand earn top inclusions in the index among ASEAN for the seventh straight year. In addition, seven of the companies scored the highest as leaders in each industry. It was also worth noting that most companies with outstanding achievement in sustainability were listed on significant industry groups that played a vital role in driving the country's economic growth.

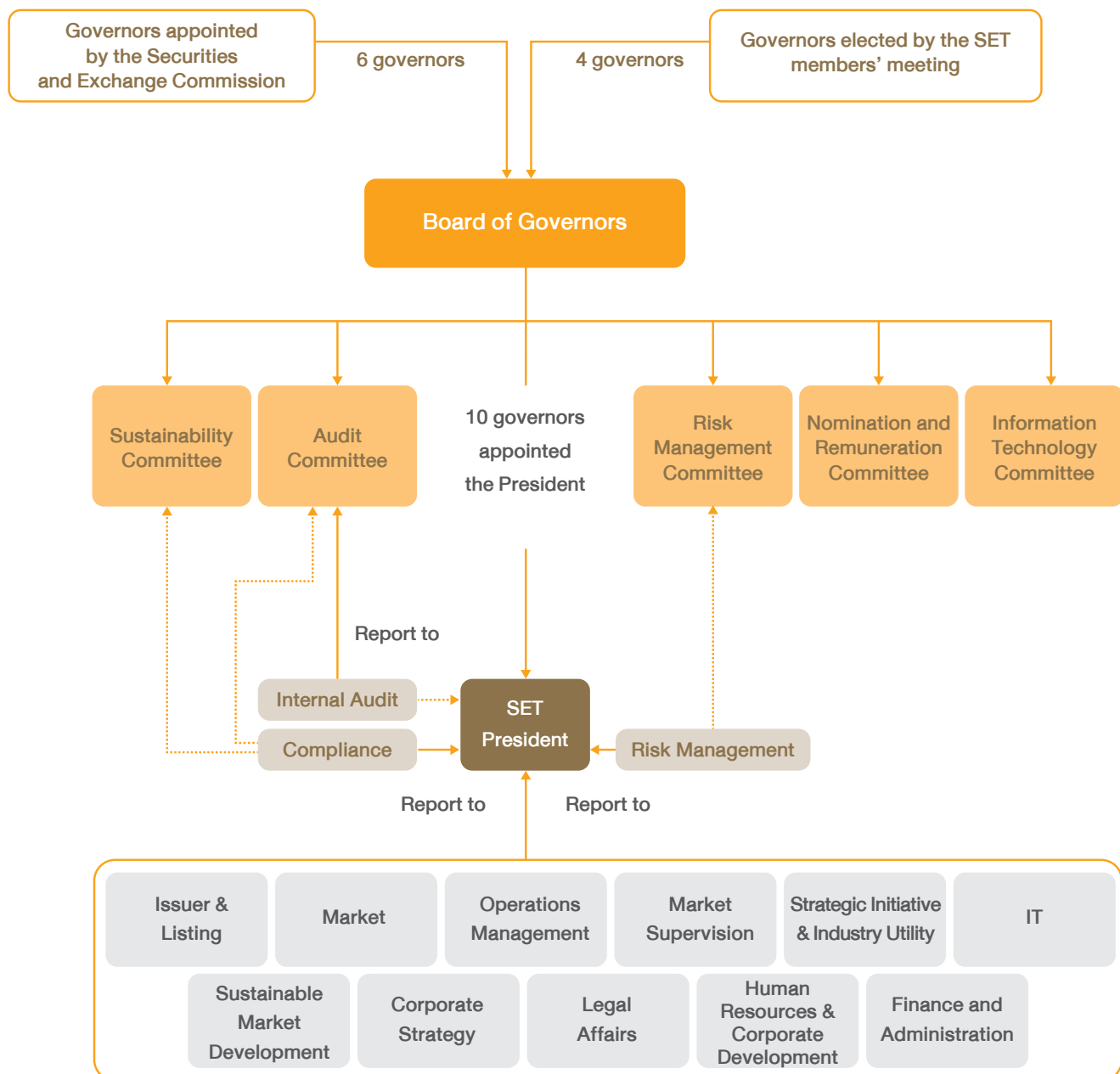
¹Renamed from "Corporate Governance and Social Responsibility Committee" to "Sustainability Committee" to be consistent with the BoG's resolution in the meeting on February 19, 2020



Part 1 Governance Structure and Board of Governors

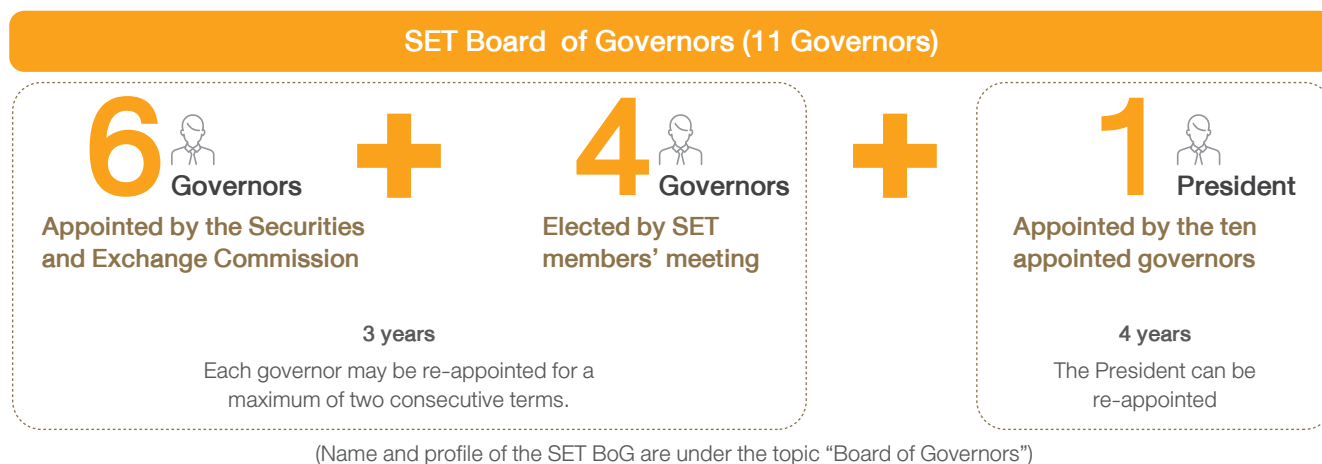
1. Governance Structure

The BoG is responsible for the oversight of corporate governance of the SET group with the SET President acting as the top leader, accountable to the Board and responsible for executing the corporate governance policies assigned by the BoG. The Board also set up committees to review governance related issues and delegate the discharge of corporate governance oversights to other internal functions as illustrated in the Governance Structure below:



2. Board Composition

According to the Securities and Exchange Act, the SET BoG comprises six appointees of the Securities and Exchange Commission (SEC), four members elected by SET's member companies and a de facto position held by the SET President. The Board will nominate one of the governors, except the President, as the Chairman and may select another governor to be the Vice Chairman. The current composition of the Board is as follows:



Chairman and Vice Chairman

- Dr. Chaiyawat Wibulswasdi (Chairman of the SET BoG)
- Pattera Dilokrunghthirapop (Vice Chairperson of the SET BoG)

President

- Dr. Pakorn Peetathawatchai

The BoG Secretary (appointed by the BoG)

- Rongrak Phanapavudhikul, Executive Vice President Head of Legal Affairs Division and Head of Corporate Secretary & Compliance Group

3. SET Committees

To ensure good corporate governance, effectiveness, efficiency and compliance with relevant rules and regulations, the Board has approved the establishment of the following Committees:

For Good Corporate Governance Purpose	For Regulatory or Business Purpose
Nomination and Remuneration Committee (NRC)	Appeal Committee
Sustainability Committee (SC)	Securities Investor Protection Fund Committee
Audit Committee (AC)	Legal Committee
Risk Management Committee (RMC)	Disciplinary Committee
Information Technology Committee (ITC)	

(More details are available under the topic "Committees of The Stock Exchange of Thailand". Charter and requirements regarding the committees' responsibilities are published on the SET website).



4. Meetings of the Board of Governors and Committees

(1) Meetings are scheduled on a monthly and quarterly basis in advance for the whole year. The BoG is informed of the meeting schedule for the coming year so that governors and executives are given ample notice and can effectively attend as many meetings as possible. Special meetings are convened as necessary.

(2) The Chairman and the President review and approve the agenda for board meetings.

(3) The Corporate Secretary Department is responsible for preparing meeting notification letters, including the agenda, and distributing meeting documentation at least seven (7) days prior to each meeting to allow the governors sufficient time to study in advance. If a special meeting is convened in case of emergency, meeting documentation may be distributed less than seven days

prior to or on the day of the meeting. The corporate secretary is responsible for preparing meeting minutes and submitting them to the BoG for approval at the next meeting.

(4) Each director is responsible for attending board meetings, except for urgent reasons or having other serious matters.

(5) For the meetings of the BoG and committees, at least half of the total members must be present to constitute a quorum. If any member of the BoG or any committee has any interests in the issue to be considered, the member must notify the meeting of such interests. The minutes must record all declarations of possible conflict of interests and such member shall leave the meeting and refrain from voting on the issue.

The Chairman of the Board encourages non-executive directors to hold meetings among themselves to debate various issues without participation of the management. In 2020, the BoG held a meeting without participation of the management. (on November 10).

The board meetings and committees meetings

Name of the SET BoG	BOG (11 persons)	AC (3 persons)	NRC (5 persons)	SC (5 persons)	RMC (8 persons)	ITC (8 persons)
Number of Meetings	13 times	12 times	9 times	4 times	14 times	11 times
Name of the BoG						
Dr. Chaipayat Wibulswasdi ¹	12/13					
Pattera Dilokrunthirapop ²	12/13				14/14	9/11
Professor Kittipong Urapeepatanapong ¹	13/13					
Charamporn Jotikasthira ¹	12/13		7/9		10/14	11/11
Thiti Tantikulan ²	13/13				13/14	11/11
Norachet Sangruji ²	12/13	12/12	9/9		14/14	
Paiboon Nalinthrangkurn ²	13/13			4/4	11/14	10/11
Voravan Tarapoom ¹	13/13	12/12	9/9	4/4		
Sopawadee Lertmanaschai ¹	13/13	12/12	9/9	4/4		
Dr. Seree Nonthasoot ¹	13/13			3/4		
Dr. Pakorn Peetathawatchai	13/13		9/9	4/4	11/14	11/11
Experts / External Specialist						
Dr. Vachira Arromdee					12/14	
Professor Dr. Anya Khanthavit					12/14	
Pannaporn Sapsomboon						11/11
Pichet Sithi-Amnuai						11/11
Tharatporn Techakitkachorn ³						6/6
Attendance Rate	97.20	100	95.56	95	86.61	96.39

¹ Appointed by the Securities and Exchange Commission

² Elected by the SET members' meeting

³ Appointed by the SET BoG, effective from May 20, 2020

5. The Board of Governors and Committees' Remuneration

Subject to the provisions of the Securities and Exchange Act, the BoG Chairman and other BoG members will receive remuneration as determined by a meeting of member companies. This ensures that all payments are decided transparently and without the BoG's involvement.

NRC examined the compensation policy and criteria for the BoG prior to proposing to the member companies' meeting for approval, in accordance with the provisions of the Securities and Exchange Act.

Monthly Fees (THB)	BOG	AC	NRC	SC	RMC	ITC
Chairman	135,000	75,000	52,500	52,500	52,500	52,500
Members	90,000	50,000	35,000	35,000	35,000	35,000

As for committees in charge of legal or regulatory requirements, their members receive meeting allowance. The Chairman of the committee receives the allowance of THB 15,000 per meeting and the committee members receive the allowance of THB 10,000 per meeting.

Total remuneration in 2020 (THB) (excluding the President)

Name of the SET BoG	BOG	AC	NRC	SC	RMC**	ITC**
Dr. Chaiyawat Wibulswasdi	6,060,000	-	-	-	-	-
Pattera Dilokrunghthirapop	1,080,000	-	-	-	630,000	420,000
Professor Kittipong Uraepatanapong	1,080,000	-	-	-	-	-
Charamporn Jotikasthira	1,080,000	-	420,000	-	420,000	630,000
Thiti Tantikulanan	1,080,000	-	-	-	420,000	420,000
Norachet Sangruji	1,080,000	600,000	420,000	-	420,000	-
Paiboon Nalinthangkurn	1,080,000	-	-	420,000	420,000	420,000
Voravan Tarapoom	1,080,000	600,000	630,000	630,000	-	-
Sopawadee Lertmanaschai	1,080,000	900,000	420,000	420,000	-	-
Dr. Seree Nonthasoot	1,080,000	-	-	420,000	-	-

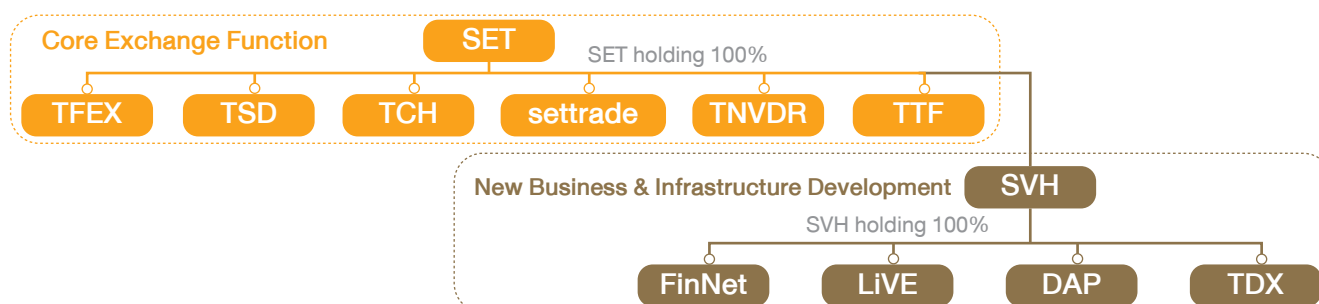
Note

* The Chairman's remuneration included THB 370,000 per month, as approved by the annual general meeting of member companies in accordance with the additional roles and responsibilities designated by the BoG.

** Excluding remuneration of committee members who are experts / advisors

6. Governance for Subsidiaries and Affiliates

The SET group consists of SET and its subsidiaries whose businesses can be categorized into two main business functions according to the Group's Business Structure² as detailed below:



²The business structure of the SET group is in accordance with the resolution of the BoG adopted during the meeting No.13/2019 dated November 20, 2019 and the resolution of the SEC Board adopted during the meeting No.6/2020 dated April 2, 2020



Core Exchange Function

The business function is directly associated with the SET business as stipulated in the Securities and Exchange Act. This function comprises the following SET subsidiaries and affiliates:

- (1) Thailand Futures Exchange PCL (TFEX)
- (2) Thailand Securities Depository Co., Ltd (TSD)
- (3) Thailand Clearing House Co., Ltd (TCH)
- (4) Settrade.com Co., Ltd. (settrade)
- (5) Thai NVDR Co., Ltd. (TNVDR)
- (6) Thai Trsut Fund Co., Ltd (TTF)

New Business & Infrastructure Development Function

The function focuses on new businesses or businesses related to infrastructure development to support SET business and build solid foundation for the capital market players. The function consists of the following SET subsidiaries:

- (1) SET Venture Holding Co., Ltd. (SVH)
- (2) Finnet Innovation Network Co., Ltd. (FinNet)
- (3) Live Fin Corp Co., Ltd. (LiVE)
- (4) Digital Access Platform Co., Ltd. (DAP)
- (5) Thai Digital Assets Exchange Co., Ltd. (TDX)

As a parent company, SET is responsible for overseeing operational and support functions for the entire Group. The subsidiaries strategically responsible for developing of product and services and executing sales and marketing activities in support of the core businesses such as securities depository, registrar services and the development of derivatives products.

The subsidiaries must follow and implement the Group's key governance policies including, but not limited to, accounting principles, IT security procedure and the appointment of external auditor and approval of their remuneration. The subsidiaries will also be under the oversight of the Group's corporate governance related committees and to be assessed by SET's internal functions such as Internal Audit Department, Risk Management Department and Compliance Department.

The subsidiaries under the "New Business & Infrastructure Development Function" will be managed by its holding company SET Venture Holding Co., Ltd. (SVH), and operates under a flat organizational structure. The SVH's board of directors is responsible for reporting the subsidiaries' performance to the SET's Board on a regular basis.

7. Executives Management

SET executive management consists of the President, seven Senior Executive Vice Presidents and 16 Executive Vice Presidents, totaling 24 members. The President is the top executive, responsible for running SET operations in accordance with SET policies, strategic goals, laws and others as specified by the BoG. The management is responsible for reporting the progress of business strategies' implementation, the operational results, and the Group's performances to the Board on a quarterly basis.

In considering remuneration for the President and senior executives, the BoG assigns NRC to consider the remuneration policies and criteria for the committee members, president and senior executives and make recommendations for the BoG's approval. The criteria to assess the performance of governors, president and senior executives have been clearly prescribed and linked with the payment rate per specified criteria. The remuneration will be considered based on the organization's performance and the execution of policies assigned by the BoG together with other external factors such as the overall socio-economic conditions.

As of December 31, 2020, SET senior executives receive remuneration including salaries, allowances, special gratuities, bonuses and contributions to the provident fund from SET for 2020 worth a total amount of THB 246.72 million.

(Name and profile of senior executives are under the topic of "SET Executives")

8. Human Resources

SET has always regarded its employees as valuable resources, whose roles are fundamental to the organization's growth and success. Accordingly, it has put emphasis on applying equal, transparent, fair and non-discriminatory principles in recruitment, welfare and benefits offerings and people development plans. SET is also committed to creating a good working environment to unify and create a long-term engagement with its employees.

As of December 31, 2020, there were 751 employees working for SET and subsidiaries, consisting of 241 male and 510 female staff. In 2020, SET paid a total of THB 1,947.18 million worth of compensation to employees consisting of salary, bonus and provident fund.

Employee Benefits and Welfares

SET provides an extensive employee benefits and welfare packages covering insurance coverage, medical expenses, on-site medical clinic with professional medical practitioners, home loans, provident funds and co-operative savings programs. Scholarships for both local and international master degree's programs are also available for employees to pursue higher education. To create safe and healthy workplace, SET has also focused on designing an ergonomic working environment, maintaining sanitation, and promoting work-life balance principle.

During the COVID-19 pandemic, SET had ensured that all employees are well protected and taken care of through the following initiatives:

- Introduced work-from-home policy and enabled rotations of in-office presence when necessary
- Implemented a proper cleaning and disinfection system in the office to reduce the risk of exposure
- Arranged appropriate communications channels and systems to ensure employees' continued productivity during the work-from-home period
- Provided COVID-19 protective gears and aid money to assist employees while working from home

SET had also arranged a series of educational and awareness-raising activities on COVID-19 situation through various channels including Facebook Live, hosted by senior management, and internal e-newsletter.

Compensations and Career Development Opportunities

SET bases their compensation and reward structure on the organization's financial achievements, the economic situation in which it operates and the level of its competitiveness against other leading corporations. By deploying the Balanced Scorecard to track organizational and individual Key Performance Indicators (KPIs), management and employees will be thoroughly evaluated, rewarded and promoted based on their individual achievement and their contributions to the organization's goals on a yearly basis. SET holds an annual ceremony to honor employees who have continuously worked in the organization for long periods, with token of appreciation at every five years of service, starting from year 10th onwards.

Training and Development

As people development is SET's top priority, a range of training and development programs have been arranged to increase their competence and skills. Training on other significant areas including sustainability and workplace safety have also been arranged on a regular basis. Additionally, the employees have the opportunities to attend local and overseas business field trips as well as having access to scholarships to enhance their knowledge and expertise.

A list of training programs for management and employees in 2020 is as below:



Executives training

- Leadership development
 - The Executive Program in Energy Literacy for a Sustainable Future
 - Capital Market Academy Programs – Executives Education
 - Strategy and Innovation for Businesses in Asia (SIBA)
 - Digital Economy CEO Program
 - CEO Learning through experiences Program
 - Thai Institute of Directors Programs (DCP/DAP/CSP/BRP/CSP)
 - Security Management and Leadership for Executives Program
 - Lawyers’ Enhance Agility Program
 - WINS Program by Ministry of Higher Education, Science and Technology
 - IMD–TLCA Digital Disruption Program
 - McKinsey Management Program (MMP)
- In 2020, SET’s 26 senior executives attended the above trainings with a total of 189 man-days

Internal training

- Focused on providing more online learning courses to suit nowadays lifestyle
- Continued to emphasize on leadership and management development
- Arranged monthly sharing sessions on health, financial management and technologies

External training

- Encouraged employees to participate in external training programs to improve skills and capabilities while enhancing their networking with other organizations
- 34 percent of executives and staff attended various types of training for the average 7.2 man-days per person.

Furthermore, SET promoted knowledge and organized training courses about environmental responsibility, safety, occupational health, and workplace environment for executives and employees.

In 2020, these actions were taken:

(1) Social responsibility

- SET initiated various environmental protection campaigns to become “Green Office” such as
 - The “Zero Foam...No Plastic” campaign held annually to promote the use of cloth bags and other packages made of environmentally friendly materials instead of foam and plastic
 - The “Green Canteen” initiative to encourage employees and visitors to say no to plastic bags
 - The “Minimal Desk” campaign to promote environmental friendly workspace

(2) Safety, Health and Environment

- Trainings for management and employees:
 - Arranged a training on occupational safety in the workplace covering workplace safety procedure,

fire prevention and control, CPR training and a demonstration of how to use the Automatic External Defibrillator (AED) in emergency. The training was attended by 47 employees

- Arranged trainings as required by applicable laws including those for the security team and the Safety, Health and Environment Committee, as well as arranging a registration of security team to be under the Department of Labor Protection, comprising 8 executives at the management level and 33 supervisors
- Organized the annual fire drill and evacuation exercise in October 2020, participated by 745 employees (on site 342, and off-site 403), accounting for 100 percent of total employees
- Awarded the “ASEAN Building Fire Safety Awards 2020” in Fire Safety category from the ASEAN Inspectorate in Building of EIT Committee

Number of Sick Leave Days and Accident or Sickness Rate

In 2020, the employees' sick leaves were recorded at approximately 1.62 man-days/year with no incidents that risked disruption to work, or contraction of diseases arising from work.

9. Compensation of External Auditors

SET commissioned the Deloitte Touche Tohmatsu Jaiyos Audit Co., Ltd. be the auditor of SET and its subsidiaries for the 2020 financial statement. In 2020, the compensation for external auditors included:

- **Audit Fee:** In 2020, SET and its subsidiaries paid the audit fee of THB 5,255,000 to the audit firm.
- **Non-Audit Service Fee:** SET paid other service fees of THB 3,564,382 to the audit firm for the cost of Black Box Penetration Testing.

The management considered that using the audit firm's other services apart from an audit work is not regarded as conflict of interests and not self-examined. This did not result in the lack of independence nor impartiality in auditing, and has been approved by AC.

Part 2 Corporate Governance

1. SET Group Corporate Governance Policy and Code of Conduct

The BoG is committed to upholding the highest standard of corporate governance principles and ensuring effective enforcement of applicable laws and regulations. To achieve this, the BoG approved the SET group's Corporate Governance Policy and Code of Conduct to be strictly followed by management, board committees, experts, and employees of all levels across the organization. The SET group's Corporate Governance and Code of Conduct was in line with international standards: the Organisation for Economic Co-operation and Development (OECD) as well as the SEC's Corporate Governance Code for listed companies, which is the mechanism for economic and social development for sustainable growth.

The SET group's Corporate Governance Policy and Code of Conduct, available on its website, comprises two parts:

- Part I: The "Corporate Governance Policy" focuses on the principles in compliance with the OECD practice. SET has applied such principles in four sections: Section 1: Role of the Stock Exchange of Thailand; Section 2: Roles and Treatment of Stakeholders; Section 3: Disclosure and Transparency; and Section 4: Responsibilities of the Board.
- Part II: 'Policies and Code of Conduct' specifies the policy and code of conduct for business operations; code of conduct for governors, committee members and experts; and code of conduct for employees.

A summary of implementation of the Corporate Governance Policy and the Code of Conduct on major areas including anti-corruption, acquisition or disposition of listed securities, conflict of interests management, and information confidentiality is as follows:

Anti-Corruption

• Anti-Corruption Guidelines

The BoG approved the "Anti-Corruption Guidelines" outlining a set of conducts and behaviors expected of the SET governors, committee members, experts and employees, in respect to anti-corruption practices. The guidelines are in consistence with the Anti-Corruption Practical Guide developed by the Private Sector Collective Action Coalition Against Corruption Council (CAC). Additional details are available on the SET's website.

In 2020, SET hired the Thai Institute of Directors (IOD), a leading organization dedicated to improving director professionalism and corporate governance in Thailand, to advise on SET's internal implementation of its anti-corruption measures, based on CAC's guidance. There were also communications with SET governors, management and employees to create a better understanding on the importance of anti-corruption prevention within the SET group.



- **Fraud and Corruption Risk Assessments**

Fraud and corruptions are important risk for the organization. To ensure effective risk management, each department must undertake an annual evaluation of their identified risk management measures. The Risk Management Department is responsible for regularly monitoring and updating key risk status to the management team, RMC and the BoG while Internal Audit is in charge of assessing the effectiveness of anti-corruption internal controls.

- **Monitoring and Review of Anti-Corruption Guidelines'**

Implementation

The Compliance Department is responsible for giving practical advice, ensuring compliance with the Anti-Corruption Guidelines and managing whistle-blowing channels to receive complaints on issues related to fraud and corruptions within the organization. Upon

the receipt of complaints, the Compliance department and Internal Audit are responsible for jointly conducting a fair and transparent investigation into such matters and reporting the results to the President and AC.

- **Anti-Corruption Awareness Building**

The BoG expects all governors and employees to strictly adhere to the Anti-Corruption Guidelines including the "No Gift Policy" which prohibits employees from exchanging gifts in any forms, in their dealings with with third parties. Implementation of such measures helps set the high standard of integrity, increase employees awareness and embed strong governance culture within the organization. It also increases professionalism and prevents misconducts and conflict of interests.

Key anti-corruption awareness activities in 2020 are as below:

Employees

- Published Anti-Corruption Guidelines and No Gift Policy on SET Intranet
- Promoted the Anti-Corruption Guidelines and No Gift Policy on various occasions including at the management meeting and through online meetings hosted by each business function's Compliance Champion. Special workshops were also arranged for relevant functions including Internal Audit, Risk Management and Procurement Department
- Published E-Newsletter to raise awareness on the implementation of ant-corruption and other governance related policies
- Included Anti-Corruption Guidelines in the orientation program for new employees
- Developed online Anti-Corruption training and test to be attended by all employees
- Encouraged active participation of management and employees in key campaigning events organized by external organizations such as the Anti-Corruption Day (on September 15, 2020) and the International Anti-Corruption Day (on December 9, 2020)

Suppliers and potential suppliers

- Maintained regular communications on SET's Anti-Corruption Guidelines through various channels including an insert of the compliance principles in bidding announcements, contract agreements and terms of references (TOR)
- Ensured all suppliers had signed the SET's Supplier Code of Conduct and complied with the SET corporate governance principles and anti-corruption standard

External stakeholders

- Encouraged stakeholders namely listed companies, securities and vendors to adhere to the "No Gift Policy" through different communications channels:
- Social Media: SET Facebook, SET Line, SET Twitter and SET Instagram
 - SET Website and SET Contact Center's e-newsletter

Acquisition or Disposition of Listed Securities by Governors and Employees

To foster public trust, the SET BoG has stipulated the securities trading practices that governors and employees are required to follow. These practices require that subscription to and trading of securities must be done honestly, without exploitation of confidential information or misuse of authority or position.

In 2020, there was no case involving a Board member or SET employee (as well as their securities holdings or those of their spouses, cohabiting couple or minor children) for violation of SET rules and regulations or using insider information or misusing authority in securities trading. There were no complaints involving wrongdoing or business malpractice by SET governors, management or staff who went against the Corporate Governance Policy and Code of Conduct of the SET group.

Managing Conflict of Interests

In order to prevent employees from engaging in any act that may lead to conflict of interests, the following guidelines have been established:

- Employees are not allowed to serve as board member or consultant of listed companies or member firms.
- In order to serve as a board member of other companies or organizations, the employee must seek prior approval from the President. As for the case of the President, he or she must seek prior approval from the Chairman.
- Employees must disclose in writing any relationship, both direct and indirect, with any supplier engaged in business transactions with SET, and must abstain from participating in the procurement process.

As of December 31, 2020, Dr. Krisada Sektrakul, SET Senior Executive Vice President, was the only senior executive who was serving as a board member of other entities outside the SET group (Sukhumvit Asset Management Co., Ltd. (SAM)).

Policies on Confidentiality and Data Usage

To safeguard classified and confidential information and prevent data leak, SET formulated the Data Classification Policy to be implemented both during normal operations and work-from-home period. Information tools that support effective information dissemination have also been made available to employees.

In addition, SET introduced the “Measures to prevent the acquisition of confidential information between functions and employees (Chinese Wall)” in 2019 to properly control the flow of confidential information. The measure was updated in 2020 to also cover implementation by the Group’s new subsidiaries. The revisions together with an assessment of adequacy and effectiveness of the Chinese Wall implementation were presented to the BoG on December 2020.

2. SET’s Key Activities to Enhance Corporate Governance

Roles and Treatment of Stakeholders

SET plays a vital role in developing the capital market and the Thai economy. It treats all groups of stakeholders with transparency and fairness, and always strives to create sustainable development for the capital market and all stakeholders. The details of the SET best practice regarding stakeholder treatment are included in the Corporate Governance Policy and Code of Conduct of the SET group, available on the SET website.

SET is committed to developing diverse products, services and investment innovations; enhancing the quality of listed companies, investors and securities professionals; governing the organization and the capital market with transparency and fairness; and effectively managing risks while also developing society and the environment for sustainable growth – for the benefits of all stakeholders. (Please refer to SET’s Sustainability Report 2020 for more details)



A service satisfaction survey conducted in 2020 among customers and other stakeholders including listed companies, member companies and asset management companies demonstrated that SET services had been highly appreciated with an overall satisfaction score of 85%.

Compliance with Laws, Rules and Regulations

The SET BoG emphasizes the importance of operating in compliance with the Securities and Exchange Act B.E.2535 and other applicable laws regarding money laundering, labor, and intellectual property. In 2020, SET and its subsidiaries had no case of violations against the laws relating to labor, employment, consumer protection, trade competition and environment.

Whistle-Blowing Policy

The SET established the policy to provide opportunities for all groups of stakeholders to report or voice their concerns about controversial issues, infringement of rights, unlawful or unethical conducts, incorrect financial report, and defective internal control system of the SET group. In addition, the whistleblower protection policy was also formulated where the persons reporting such matters can either reveal their identity or remain anonymous. The SET officer who takes such whistleblowing information shall keep the information confidential and take into account the safety and damage possibly incurred to the reporting persons. In this regard, those who suffer from the damage shall be entitled to fair and appropriate process. SET arranges whistleblowing channels to report non-compliance issues and complaints as follows:

For stakeholders	<p>Issues and complaints can be directly submitted to SET via:</p> <ol style="list-style-type: none"> 1. Email: whistleblow@set.or.th, 2. Postal mail: Internal Audit Department, The Stock Exchange of Thailand 93 Ratchadaphisek Road, Dindaeng, Bangkok 10400 3. SET Contact Center: 02 009 9999 (during business days/hours), SET Contact Center will further submit the information and complaints to SET's Internal Audit Department.
For employees	<p>Submit whistleblowing information or report any violating action to Human Resource Department, Compliance Department, and supervisors at all levels that they trust</p>

In this connection, whistleblowing information and complaints submitted to SET will be examined, reviewed, and filtered to assess possible impact. The matters will be presented to AC to consider which appropriate measures to be carried out in line with the complaints handling process.

In 2020, SET received two cases of whistleblowing information and complaints. AC had already taken actions according to procedures described in the Corporate Governance Policy and Code of Conduct. Details of the complaints are as follows:

- A complaint regarding SET oversight of member companies. The investigation concluded that SET had treated all companies fairly and equally by following the procedures and guidelines specified in SET regulations and related procedures. The complainant was notified of the result accordingly.
- Complaint concerning the transparency on trading during computer system failure. The investigation concluded that such

complaint was caused by a misunderstanding of the complainant. The complainant was clarified and informed of the result.

Disclosure and Transparency

SET has played a critical role in promoting information disclosure and transparency among Thai listed companies. The BoG ensures that SET corporate information, both Thai and English, is provided correctly, accurately, timely and transparently through channels that are trustworthy and equally easy to access for the public.

The information disclosed through the SET website includes the SET group's business performance results, both financial and non-financial information; and information for listed companies, securities companies, investors or interested persons.

SET financial reports comprise the annual financial statements and the Management Discussion and Analysis (MD & A) which will be published on the SET website within 60 days from the end of accounting period (the same standard applicable to listed companies). The 2020 financial statements were published on February 17, 2021 along with the auditor's report to ensure that the statements were accurate, complete and true according to generally accepted accounting standards. The financial statements had been reviewed and assessed by AC before presenting to the BoG for approval.

SET's annual report is available on its website within 120 days after the end of the calendar year and will be distributed to SET member companies at the Annual General Meeting on April 28, 2021.

SET provides several communications channels for general public and has the SET Contact Center to provide information on SET group's services and follow up on customers' enquiries. Enquiries on SET services channels are handled accordingly and appropriately.



+662 009 9999



www.set.or.th/contactcenter
www.facebook.com/set.or.th



SETContactCenter@set.or.th



Customer Contact Department

The Stock Exchange of Thailand
 93 Ratchadaphisek Road, Dindaeng,
 Bangkok 10400

3. Roles and Responsibilities of the Board

The BoG is responsible for defining company's objectives, policies and directions as well as overseeing the SET group's operation in accordance with the Securities and Exchange Act and other applicable laws. The details of the scope of duties and responsibilities of the BoG are outlined in the Board of Governors' Charter, published on the SET website.

The independence of the BoG is measured against the best practice standard as demonstrated below:

Governance Best Practice Standard	SET Board of Governors
• The Chairman is an independent non-executive director, not the same person as the President and has no relationship with management.	/
• The Chairman is not a member of any committees.	/
• Governors have independence and impartiality in carrying out their duties	/
	(The BoG requires that all governors, committee members and experts appointed by the BoG sign a Letter of Independence every time each person is appointed or reappointed for another term)
• When a governor has a conflict or potential conflict of interests in relation to any matter, he/she must declare his/her interests at the meeting and abstain from participation in any discussion on the matter	/
• Governors shall report the acquisition or disposition of listed securities and other interests	/



Furthermore, to ensure that governors are fully capable of performing the tasks, each governor shall not hold a position in more than three listed companies except for the position being held before elected or selected as the members of the Board.

Functions and Responsibility of the Board of Governors and the President

The BoG	<ul style="list-style-type: none"> To set SET's strategic policies and direction. Monitor the management's operations to ensure effective implementation in compliance with rules and regulations To approve the strategic plan, annual budget and manpower plan To ensure effective and reliable accounting, financial reporting, internal control, internal audit and risk management systems To appropriately assign and delegate authority to management and internal functions for efficient operation, with decent internal control
The Chairman	<ul style="list-style-type: none"> To convene the meetings of the Board and act as chairman of the meeting. In an event a final decision by the meeting is required and there is an equality of votes, the Chairman shall have a casting vote To determine the agenda of the meetings of the BoG in consultation with the President to ensure that important matters are included To conduct the meetings of the BoG according to the agenda, relevant laws and good corporate governance. Allocate sufficient time and encourage active participation by all governors. Exercise prudent discretion while ensure freedom of expression To oversee and follow up on the performance of the BoG to ensure efficiency and achievement as set out in the corporate goals To build good relationship between the Board and the management team.
The President	<ul style="list-style-type: none"> To hold the highest executive position responsible for managing SET's business in compliance with the policies, strategic goals, rules and regulations, as well as the Board's decisions To have managerial command over the employees and all personnel To update the BoG on the SET group's business operations on a quarterly basis To act as SET's representative in dealing with external affairs and may delegate the tasks to certain individual to act on his / her behalf as specified in the rules and regulations approved by the BoG.

The BoG has the authority to approve the SET strategic policies and policies relating to corporate governance and risk management. The BoG is also responsible for approving the business plans, annual budgets and the manpower management plan

To ensure that the operation is effective and under proper control, the BoG has granted the management the following authorities:

- The authority to use fixed assets and operational budgets within the limits approved by the BoG

- The authority to purchase or procure products and services within the THB 20 million budget
- The authority to increase manpower or employee salary structure by 10 per cent at the maximum

Establishment of Vision, Mission and Strategic Plan

The BoG approved vision, missions, objectives and long-term strategic framework proposed by management to address the rapid changes in global business environment and customer behaviors. With the advent of new technologies, the changing demands of market participants and the changes in regulatory landscape, it is extremely important for the SET group to swiftly adapt to the 'new normal' and put more focus on leveraging innovative technologies to ensure business resiliency and sustainable growth.

Accordingly, the BoG at its meeting no. 11/2563 dated October 31, 2020, approved a new three-year strategic framework (2021–2023) under theme to ‘Redefine Thai Capital Market Resiliency’. Under the new strategy and in line with the vision “To make the capital market ‘work’ for everyone”, SET will focus on strengthening its competitiveness in three strategic areas including 1) to be an **efficient platform** with innovative services, effective digital experiences, efficient operational systems and flexible ecosystem that makes trading easier for all, 2) to build an **agile portfolio** that enhances fundraising capability and expands global participation in its products and services, and 3) to be a **sustainable partner** with all stakeholders including market participants, business sector and social enterprises in building a better society together.

In addition, the BoG approved short and long-term Corporate KPIs, manpower proposal and annual budget for the year 2021. To ensure effective oversight of business operations, the management has been assigned to present KPI report and update progress of new strategy’s implementation and business performance to the BoG on a quarterly basis.

Review of the SET Group’s Corporate Governance Policy and Code of Conduct

The BoG specifies that the SET group’s Corporate Governance Policy and Code of Conduct (“The Corporate Governance Policy”) be reviewed on an annual basis. In this regard, SC is responsible for reviewing relevant documents before proposing to the BoG for approval. In 2020, the BoG granted the approval at its meetings dated Feb 19, 2020 on the proposed updates to the Code of Conduct for Governors to require Governors, Committee Members and Experts to sign a letter of independence every time upon their appointment or reappointment.

The BoG also approved the following amendments to the Corporate Governance Policy to be consistent with resolutions passed during the meetings in 2020:

- **Committees related updates:**

- **AC:** Clarified the committee’s scope of responsibilities and adapted the frequency of meetings accordingly
- **SC:** Changed the name of the Committee from Corporate Governance and Social Responsibility Committee to Sustainability Committee, and revised scope of responsibilities to cover promotion and development of sustainable business practices among all stakeholders
- **ITC:** Changed the composition of the Committee by including Chairman of the Information Technology Club of the Association of the Securities Companies as ex officio member to improve corporations and communications with member companies

- **Updated governance policy for subsidiaries under the New Business and Infrastructure Development Function** and revised the SET group’s business structure to accommodate new business operations and goals

- **Revised the tenure of outside committee members** to be more appropriateness and clarity

SET has also organized a range of activities to promote corporate governance among employees namely:

- Included a session on the Corporate Governance Policy and Code of Conduct in new employee orientation program. During the session, staff will also learn about other significant policies regarding acquisition or disposal of securities, anti-corruption and conflict of interest management
- Published internal e-newsletters to build a better understanding on Corporate Governance Policy and other related rules and regulations on a regular basis
- Encouraged employee participation in trainings and seminars, arranged by SET and/or outside organizations, on topics relating to corporate governance to promote continuous learning



The Compliance Department under the Corporate Secretary and Compliance Group performs its duty with independence in presenting to SC the revision of the Corporate Governance Policy and Code of Conduct for the SET group as well as related CG guidelines. After the Committee has considered and provided opinions, the revised document will be submitted to the BoG for approval. These include recommendations and follow-ups on the implementation in accordance with the policy and regulations specified by SET. All these operations are reported to AC and SC on a regular basis.

Internal Audit and Internal Control

Recognizing the importance of efficient internal control at all levels, the BoG has strongly supported management in setting up transparent working processes, restructuring and segregating duties with checks and balances, clearly specifying authority in writing and putting in place an efficient monitoring system. The BoG also assigns AC to supervise and review SET's internal controls to ensure conformity with international standards, and the Internal Audit Department to ensure that internal controls over operation process, financial reporting and regulatory compliance are in line with the Committee of Sponsoring Organization of Treadway Commission (COSO)'s Guidance on Monitoring Internal Control Systems.

The Internal Audit Department is an independent function that generally reports to AC with administrative reporting to the SET President. AC considers and recommends the appointment, transfer or removal, and evaluation of the Head of the Internal Audit Department. At present, Chanapai Supphasuk is Head of the Internal Audit Department.

The Internal Audit Department has access to all information necessary to perform their duty. The Department is responsible for auditing and evaluating adequacy, suitability and efficiency of the internal controls and other operating systems according to the annual audit plan approved by AC. The plan, using risk based approach, is under constant reviews throughout the year

to address new emerging risks. The audit results and follow up reports on actions taken by the management are directly reported to AC on a regular basis.

In 2020, SET held a number of projects to enhance effectiveness of its internal control and internal audit systems with details summarized below:

- Deployed new computer systems including Professional Link and new ERP to accommodate new business requirements. The systems had gone through an intensive IT validation to ensure compliance with standard required and relevant regulations. A thorough assessment had also been conducted by the Internal Audit Department prior to the actual implementation (Pre-implementation Review)
- Continued to improve internal audit operations and encouraged internal auditors to attend training courses to enhance their professional knowledge and skills. The auditors also participated in certification programs and received a total of 15 certificates from international and local institutions namely Certified Internal Auditor (CIA), Certified Information Systems Auditor (CISA), Cyber security Nexus (CSX), Certified Professional Internal Audit of Thailand (CPIAT), Internal Auditing Certificate Program (IACP), and Forensic Accounting Certificate (FAC). In 2020, the auditors attended training courses for a total of 109 man-days.
- Utilized audit tools to increase speed and number of audit sampling as well as deploying the Internal Audit Management System to standardize and enhance the efficiency of internal audit process
- Carried out a Quality Assessment Review (QAR) to assess the effectiveness of internal audit activities based on the International Professional Practices Framework. The Internal Audit Department conducts peer review assessment every year and hires external independent appraisers every five years to ensure conformity to international standards. The last assessment by external independent appraisers was in 2016 with the next one set to be carried out in 2021.

Risk Management

The BoG places emphasis on having a systematic risk management framework in place and ensures that enterprise-wide risk management is effectively and efficiently implemented by management. The BoG also assigns RMC to review processes regarding IT, cyber security, operational, financial and investment risk management and assure that they are compliant with the enterprise risk management policy, framework and process. Meanwhile, the Risk Management Department is in charge of reporting significant risks of the SET group to the BoG and RMC on a regular basis as well as coordinating and ensuring that consistent risk management process has been implemented across the SET group.

(Please refer to the “Enterprise risk management” section)

Information and Communications Technology

Recognizing the importance of IT security, the BoG approved the information technology and security management policy to be in line with international standards and applicable rules. SET also asks all employees to exercise caution while using IT systems to avoid any negative consequences on the organization and its stakeholders.

The SET group’s existing IT security management systems are compatible with global standards such as ISO 27001 (Information Security Management System) and ISO 20000 (Information Technology Service Management System), and consistent with Confidential, Integrity, Availability (CIA) principles.

Board Assessment

In line with good corporate governance principles, the BoG conducts a performance assessment on an annual basis to review its performance and reflect on challenges and opportunities over past the year. There are five performance assessment methods adopted comprising 1) Performance evaluation of the board as a whole 2) Individual self-evaluation (Self-assessment) 3) Individual assessment by other board members (Cross-assessment) 4) Evaluation

of the Chairman’s performance and 5) Assessment of the skills, knowledge and abilities of the Board members.

SC is in charge of reviewing the assessment process and submitting a the assessment results with recommendations (if any) to the board for further development.

For the assessment of the Chairman’s performance, the Chairman of SC reported the result directly to the Chairman.

The competency assessment of individual board directors is conducted separately from directors’ self-assessment and the scores will not be calculated.

Board Assessment Topics:

- Assessment of the Board as a whole covers the topics of performance and responsibilities, board meetings, corporate governance and social responsibility, human resource management and succession planning for executives
- Individual assessments, both self-assessment and cross-assessment, covering the topics: 1) duties and responsibilities, 2) board meetings, 3) independence and 4) self-development

Performance Evaluation of Committees

All committees involved in corporate governance oversight must assess their own performance and report to the BoG annually. In 2020, AC, NRC, SC, RMC and ITC each evaluated their performance and submitted the report to the SET BoG.

Performance Evaluation of the President

NRC considers the criteria for performance assessment of the President in connection with the payment rate per specified criteria. The remuneration will be considered based on the organization’s performance and the execution of policies assigned by the BoG together with other external factors such as the overall socio-economic conditions.



Succession Planning

SET recognizes the importance of executive succession planning and assigns NRC to review and propose the succession plan for board approval on a yearly basis. The Committee is also responsible for identifying potential successors together with external consultants by taking the candidate's knowledge, experience, capabilities, attitudes and integrity into consideration. The succession planning progress is updated to the BoG on a regular basis.

Enhancement Plan for the Board of Governors

SET gives utmost importance to the continuous and consistent enhancement plan for the governors. SET governors regularly participate in educational courses and observe relevant business activities in both Thailand and abroad to enhance their knowledge and broaden their perspectives. Newly appointed governors are

required to attend orientation program to familiarize themselves with SET operations, business strategies and overall operations of the subsidiaries. The new governors will also receive a Board of Governors manual, containing key facts and other useful information essential for their duty.

In 2020, the SET governors had participated in a number of trainings and seminars including a workshop on cybersecurity impacts on financial sector that gave them an opportunity to learn more about the subject and engaged in an in-depth exchange of opinions.

In addition, the governors attended the “CEO Networking 2020” event to establish a meaningful and constructive dialog on industry development, and strengthen relationships and collaborations with other industry leaders.

Current Governors / Courses	DCP	DAP	RCP	AACP	ACP	RMP	RCC	CGI	others
Dr. Chaiyawat Wibulswadi	/	/							
Pattera Dilokrunthirapop	/	/	/				/	/	
Professor Kittipong Urapeepatanapong	/		/						DCP Re, TOT, ITG*
Charamporn Jotikasthira	/	/							ITG
Thiti Tantikulan								/	
Norachet Sangruji	/	/						/	
Paiboon Nalinthangkurn	/								
Voravan Tarapoom	/		/		/	/	/	/	MFR, MIR, ELP, SFE
Sopawadee Lertmanaschai	/	/			/			/	SFE
Dr. Seree Nonhasoot	/								
Dr. Pakorn Peetathawatchai	/	/						/	

* seminar course in which governors attended in 2020

DCP: Director Certification Program
DAP: Director Accreditation Program
RCP: The Role of Chairman Program
AACP: Advance Audit Committee Program
ACP: Audit Committee Program
RMP: Risk Management Committee Program
RCC: Role of the Compensation Committee

CGI: Corporate Governance for Capital Market Intermediaries
TOT: Train of the trainer
ITG: IT Governance and Cyber Resilience Program
MFR: Monitoring the Quality of Financial Reporting
MIR: Monitoring the System of Internal Control and Risk Management
ELP: Ethical Leadership
SFE: Strategic Executive

As of December 31, 2020

Committees of The Stock Exchange of Thailand (SET) 2020

1. Appeal Committee
2. Audit Committee
3. Disciplinary Committee
4. Information Technology Management Committee
5. Legal Committee
6. Nomination and Remuneration Committee
7. Risk Management Committee
8. Securities Investor Protection Fund Committee
9. Sustainability Committee

1. Appeal Committee

Supporting unit : Enforcement Department

Structure :

The committee consists of three to five members (appointed by the SET BoG with the approval of the SEC Board): Each member must be expert in at least one of the following fields: law, accounting and finance, or securities business.

Term : Term in compliance with the SET regulation : Consideration and Decision on Appeal, 2000

Name		Position
1. Chalee	Chantanayingyong ¹	Chairman
2. Dr. Kulpatra	Sirodom ¹	Member
3. Chatrapee	Tantixalerm ²	Member
4. Wanchart	Santikunchorn ¹	Member
5. Yaowaluk	Aramthaveethong ²	Member

¹ Term on Oct 3, 2018 – Oct 2, 2021

² Term on Jan 9, 2020 – Jan 8, 2022

Responsibilities of the Appeal Committee are:

1. To review any appeal made against any punishment or orders issued by the SET BoG, Disciplinary Committee or President, and to determine the innocence or guilt of appellants
2. To review any request for suspension of punishment execution orders (if any) and may also specify conditions or collaterals as necessary

3. To advise the SET BoG regarding punishments, reductions in punishments, orders not to punish, or confirming punishment orders being appealed, or any other matters raised by appellants
4. To give an order to cease and dispose of the appeal if the appellant withdraws the case before or during the process of the consideration and decision of the Appeal Committee



2. Audit Committee

Supporting unit : Internal Audit Department

Structure :

1. Members consist of three to five SET governors.
2. At least half must be governors appointed by the SEC
3. At least one member must have knowledge, understanding and expertise in accounting, finance or auditing.

Term : Until the end of each given person's tenure as governor

Name		Position
1. Sopawadee	Lertmanaschai	Chairperson
2. Voravan	Tarapoom	Member
3. Norachet	Sangruji	Member

Responsibilities of the Audit Committee are:

1. Financial reports
 - (1) To review financial reports of the SET group and the SET Foundation
 - (2) To consider and review the accounting policies
 - (3) To review important items or unusual transactions that have an effect on financial statements
2. Internal Audit
 - (1) To consider and review the operations of the internal audit department
 - (2) To consider internal audit plan
 - (3) To consider budget and resource of internal audit
 - (4) To consider and approve the appointment, transfer, termination of employment, compensation, and evaluate the performance of the head of the internal audit department
3. External Audit
 - (1) To advise management on the appointment of SET's auditor and determine the auditor's remuneration, and evaluate performance of the SET group's auditor and the SET Foundation's auditor
 - (2) To review the audit scope and planning of the SET group's auditor and the SET Foundation's auditor
4. Internal Control and Risk Management
 - (1) To consider and evaluate the adequacy of the internal control system and risk management of the SET group
 - (2) To ensure compliance with the laws and regulations of the regulatory entities of the SET group including the standard and internal regulations as specified by the SET group
5. Compliance
 - (1) To ensure compliance with the laws and regulations set by the SET regulatory authorities, as well as standards and internal regulations stipulated by the SET group
 - (2) To consider and provide advice concerning the related party transaction or any transactions which may cause conflict of interest with SET group's benefit
6. Whistleblowing and Fraud
 - (1) To review and proceed to report clues and investigate to conflicts or suspicions of illegal behavior, ethics, rights violations, invalid financial report, defective internal control system and fraud
 - (2) To review prevent process and detect fraud
7. To be responsible for any duty related to AC as assigned by the BoG

3. Disciplinary Committee

Supporting unit : Enforcement Department

Structure : The five committee members consist of:

1. At least one member being a SET governor
2. At least one member having expertise and experience in the Exchange business, securities business or finance
3. At least one member being a legal expert
4. At least one member being the SET President or an executive being at least Executive Vice President as assigned by the SET President

Term : January 1, 2019 – December 31, 2020 (Term in compliance with the SET regulation : Consideration of Offence and Disciplinary Action, 2000)

Name		Position
1. Professor Kitipong	Urapeepatanapong	Chairman
2. Dr. Seree	Nonhasoot	Member
3. Chao	Arunyawat	Member
4. Sutthi	Sookying	Member
5. The SET President or an executive being at least Executive Vice President as assigned by the SET President		Member

Responsibilities of the Disciplinary Committee are:

1. To examine any alleged wrongdoing and punish any individual or juristic person who violates or associates in violating SET's rules and regulations, and report the punishment to the SET BoG, except in cases concerning:
 - (1) Securities delisting
 - (2) Temporary trading suspension of a member company
 - (3) Membership revocation
 - (4) Other cases as specified by the SET BoG
2. To examine and give explicit instructions according to SET's rules and regulations, including taking any other action necessary for the disciplinary process



4. Information Technology Management Committee

Supporting unit : Information Technology Division

Structure : At least five committee members, but not more than nine, consisting of:

1. At least two member being SET governors
2. The SET president
3. At least two members must be experts in IT management

Term : The term ended on December 31, 2020

Name		Position
1. Charamporn	Jotikasthira	Chairman
2. Pattera	Dilokrunthirapop	Member
3. Paiboon	Nalinthrangkurn	Member
4. Thiti	Tantikulanani	Member
5. Tharatporn	Techakitkachorn	Member
6. Pichet	Sithi-Amnuai	Member
7. Pannaporn	Sapsomboon	Member
8. The SET President		Member

Responsibilities of the Information Technology Management

Committee are:

1. To provide advice and recommendations on SET's strategies, IT development policies and new IT strategic projects of the SET group. To support operations as a capital market center, promote operations and provide opinions which can benefit the development of SET's IT in compliance with the standard accepted by the industry, and support the innovations development and appropriate technology implementation in order to enhance the Thai capital market to be competitive to leading stock exchanges in the region
2. To consider and approve the followings:
 - (1) Procurement of IT projects which cost more than THB 20 million but not more than THB 50 million. If over THB 50 million budget, the Committee's duty is to screen before presenting to the SET BoG for consideration and approval
 - (2) Procurement of IT maintenance for items that cost more than THB 20 million, which must be within the approved budget In addition, (ITC) has to report Procurements No. (1) and No. (2) above to the SET BoG
 - (3) To carry out other duties assigned by the SET BoG

5. Legal Committee

Supporting unit : Enforcement Department

Structure : At least five committee members, consisting of:

1. At least one SET governor acting as committee chairman
2. With expertise in law and/or capital market

Term : The term ended on December 31, 2020.

	Name	Position
1. Dr. Seree	Nonthasoot	Chairman
2. Thiti	Tantikulan	Member
3. Surasak	Vajasit	Member
4. Somkiet	Kuwawattananont	Member
5. Associate Professor Tithiphan	Chuerboonchai	Member
6. Wichien	Harnpraween	Member

Responsibility of the Legal Committee

To provide the SET BoG, SET and SET subsidiaries with advice, opinions and recommendations regarding the

Securities and Exchange ACT, the Derivatives Act and other laws including the SET group's rules and regulations.

6. Nomination and Remuneration Committee

Supporting unit : Human Resources Management Department

Structure :

1. Member consists of three to five SET governors
2. At least half must be governors appointed by the SEC
3. The committee chairman must be appointed by the SEC Board

Term : Until the end of each given person's tenure as governor

	Name	Position
1. Voravan	Tarapoom	Chairperson
2. Charamporn	Jotikasthira	Member
3. Norachet	Sangruji	Member
4. Sopawadee	Lertmanaschai	Member
5. The SET President		Member



Responsibilities of the Nomination and Remuneration

Committee are:

1. Nomination
 - (1) To review and screen candidates for members of the SET committees before presenting to SET BoG for appointment, including reviewing the list of committee members and sub-committee members of SET subsidiaries before seeking approval from the BoG
 - (2) To review and screen the list of experts for SET and subsidiaries before seeking approval from the BoG or the subsidiaries' board of directors depending on each case, for approval and appointment
 - (3) To review and recruit SET senior executive vice presidents and other positions equivalent to Head of Division including top executives of the subsidiaries before presenting to the BoG or the subsidiaries' board of directors for approval and appointment
 - (4) To review the annual succession plan for SET's key positions before presenting to the BoG for consideration, as well as reviewing such plan regularly every year
 - (5) To carry out other duties assigned by the BoG
2. Remuneration
 - (1) To review and screen the policies, criteria and remuneration of the SET BoG, committees, advisors, and SET subsidiaries' BoD nominated by the SET BoG, before presenting to the BoG or the subsidiaries' board of directors for approval
 - (2) To review and screen the policies, criteria and overall remuneration structure of SET employees before seeking approval from the BoG
 - (3) To review and screen the budget for annual salary adjustments including annual bonus before seeking approval from the BoG
 - (4) To review and screen criteria concerning remuneration including salary adjustment and the annual remuneration adjustment for SET's executives nominated by the Committee, before seeking approval from the BoG
 - (5) To carry out other duties assigned by the BoG

7. Risk Management Committee

Supporting unit : Risk Management Department

Structure :

1. At least five, but not more than nine committee members, consisting of:
2. At least two SET governors
3. The SET President
4. At least two members must be experts in finance, accounting, risk management or IT; at least one member must be IT expert, and one member must be risk management expert

Term : The term terminated on December 31, 2020.

Name		Position
1. Pattera	Dilokrunthirapop	Chairperson
2. Charamporn	Jotikasthira	Member
3. Norachet	Sangruji	Member
4. Paiboon	Nalinthrangkurn	Member
5. Thiti	Tantikulan	Member
6. Professor Dr. Anya	Khanthavit	Member
7. Dr. Vachira	Arromdee	Member
8. The SET President		Member

Responsibilities of the Risk Management Committee are:

1. To consider and advise on SET's Risk Management policy and framework, including IT security and cyber security
2. To consider and provide opinions on risk appetite and risk tolerance to be presented to SET's BoG for consideration and approval
3. To consider and provide opinions on risk assessment, guidelines, and risk management measures, including IT risks, cyber security, operational risk and financial and investment risks
4. To advice on Enterprise risk management as well as encouraging and supporting improvement and development of corporate risk management system continuously
5. To carry out other duties assigned by the SET BoG

8. Securities Investor Protection Fund Committee

Supporting unit : Member Supervision Department

Structure : Six committee members consist of:

1. One governor appointed by the SEC
2. One governor elected by SET members
3. One fund member elected by Securities Investor Protection Fund members
4. President of the Thai Investor Association
5. The SET President or an executive delegated by the SET President
6. SET's Executive Vice President – Market Supervision Division, or higher level, who also serves as Secretary

Term : In accordance with the rules of membership of the fund to protect investors in securities



Name		Position
1. Professor Kitipong	Urapeepatanapong	Chairman
2. Pattera	Dilokrunthirapop	Member
3. Pornpring	Suksantisuwan	Member
4. Kengkla	Rakpaopan	Member
5. The SET President or the executive delegated by the SET President		Member
6. The Executive Vice President level responsible for Market Supervision Division		Member and Secretary

Responsibilities of the Securities Investor Protection Funds

Committee are:

1. To determine fund management policies which may be invested in securities or other assets, or other alternative investments to make profits, as deemed appropriate
2. To consider all relevant facts and evidences concerning investor protection as requested by investors and report the findings to the SET BoG
3. To boost investors' confidence in buying or selling securities traded on SET
4. To carry out other tasks and activities assigned by the SET BoG

9. Sustainability Committee

Supporting unit : Sustainable Development Department

Structure :

1. At least three but not more than five SET governors
2. At least half must be governors appointed by the SEC
3. Committee Chairman must be appointed by the SEC

Term : Until the end of each given person's tenure as governor

Name		Position
1. Voravan	Tarapoom	Chairperson
2. Sopawadee	Lertmanaschai	Member
3. Paiboon	Nalinthrangkurn	Member
4. Dr. Seree	Nonthasoot	Member
5. The SET President		Member

Responsibilities of the Sustainability Committee are:

1. Corporate governance and social responsibility for the

SET group

1.1 Corporate Governance (CG)

- (1) To consider and advise the SET BoG regarding the SET's CG framework in line with the SET operational structure and comparable to international standard on CG practices or principles
- (2) To consider the appropriateness and adequacy of the CG and best practice policies of the SET group, improving in line with the international principles before presenting to the SET BoG for consideration
- (3) To examine the SET CG report as disclosed in the annual report
- (4) To recommend the development plan of the SET group in accordance with the SET policy
- (5) To provide consultation, advice and suggestions to the SET BoG and management on CG development of the SET group
- (6) To advise on the appropriateness of the BoG charter before presenting to the BoG for consideration
- (7) To consider and recommend regarding the BoG performance assessment process, as well as preparing the summary of the assessment result before presenting it to the BoG

1.2 Social Responsibility (SR)

- (1) To consider and recommend the SR policy framework and SR development guidelines in line with international standard on SR practices or principles in order to ensure sustainable growth for the SET group, before presenting them to the SET BoG for consideration
- (2) To recommend the preparation of SR development plan of the SET group according to the set SR policy framework
- (3) To provide consultation and suggestions, including recommendations to the SET BoG and management regarding SR development of the SET group

2. Corporate governance and social responsibility for listed companies, social enterprises and related organizations in the capital market

- 2.1 To consider and recommend to the SET BoG regarding SR and CG policy frameworks and development guidelines for listed companies, social enterprises and related organizations in the capital market, including building systems and developing guidelines on how to apply CG and SR principles in the companies' management to achieve sustainable growth as well as creating value added for the Thai capital market, the society and the country
- 2.2 To provide consultations and suggestions to the SET BoG, and the SET management for the benefit of CG and SR development to enhance the Thai capital market

3. Other duties assigned by the BoG within the scope of related work



Audit Committee Report

The Stock Exchange of Thailand (SET)'s current Audit Committee was appointed by the Board of Governors (BoG) on August 27, 2019. The Committee consists of three independent non-executive directors with expertise and experience in various fields including capital market, accounting, finance, and management. It is chaired by Sopawadee Lertmanaschai, with Voravan Tarapoom and Norachet Sangruji as committee members.

In 2020, the Audit Committee held 14 meetings, two of which were joint meetings with other Committees. There were three meetings with the external auditor, one of which was held without the presence of management to ensure independent discussion, to provide opinions on the audit plan and review the audit plan and audit results. The attendance record of the Audit Committee's members is available on the Corporate Governance Report section of the Annual Report (page 57).

The Audit Committee has performed its duties and expressed its views independently under the scope of authority and responsibilities assigned by the BoG as specified on page 76. The Committee reports its performance to the BoG on a quarterly basis. A summary of key activities in 2020 is as follows:

- **Financial statements:** To ensure the accuracy of financial reports, the appropriateness in accounting policy and the adequacy of information disclosure, the Committee jointly reviewed the quarterly financial statements with management and the annual financial statements with the external auditor. The Committee and the external auditor also jointly reviewed the effects of implementing the new Thai Financial Reporting Standards (TFRS) such as TFRS9 on financial instruments and TFRS16 on financial leases as well as internal control related to preparation of financial statements.

- **Risk management:** The Committee oversaw the key risk management implementation. The Committee held one joint meeting with the Risk Management Committee (RMC) to consider and acknowledge the summary of incidents and audit

operations according to the key risks in 2020. Moreover, there was one meeting with RMC and the Information Technology Committee (ITC) to consider risk mitigation for system disruption. The Committee also arranged quarterly meetings with executives overseeing risk management to acknowledge the roles, duties and responsibilities, and collaboration to facilitate better alignment between risk management and internal audit services for the utmost benefits to the organization.

In addition, The Committee placed importance on SET's technology risk management by assigning the internal auditor to conduct the pre-implementation review of new systems such as Professional Link and internal systems such as New Financial ERP.

- **Internal control:** The Committee reviewed the adequacy, efficiency and effectiveness of SET's internal control system based on the Internal Audit's report and followed up progress of internal control system improvement. The Committee also considered the external auditor's viewpoints, invited executives of key departments to provide information and viewpoints on their implementations, and reviewed the assessment of the adequacy of internal control in consistent with the COSO (The Committee of Sponsoring Organizations of the Treadway Commission) standard.

- **Internal audit:** In 2020, the Committee approved the annual internal audit plan and budget, as well as the adequacy and suitability of the resources and the independence of the Internal Audit Department's operation. The Committee has also continuously provided recommendations on audit quality improvement for more efficiency. In addition, The Committee considered the assessment of self-quality assurance which was conducted by the Internal Audit Department to ensure the Internal Audit operation in compliance with the International Professional Practices Framework (IPPF). There was one meeting with the high-ranking executives without the presence of the Internal Audit team to share the viewpoints on the Internal Audit Department's operation.

The Committee encouraged internal auditors to continuously improve their professional competence through trainings and seminars, and supported them to get certifications from both local and international institutions such as the CIA, CISA, CSX, CPIAT and IACP. The Committee also endorsed the adoption of audit tools to enhance efficiency in terms of speed and increase numbers of audit sample size, and facilitated the deployment of Internal Audit Management System to support Internal Audit Department's operations to comply with standards for more efficiency.

- **Whistleblowing and fraud:** SET provides channels for employees and stakeholders to report concerns about the SET group's misconduct, controversial issues and doubts on unlawful and unethical conducts, violations of rights, accuracy of financial reports and efficiency of internal controls for further investigation. The details of whistleblowing channels are published on SET's website under the "Whistleblowing policy" section.

In 2020, SET received two complaints related to the Code of Conduct. The Committee conducted the investigation into the matter according to the SET's Good Corporate Governance Policy and found that there had been no breach of the Code of Conduct

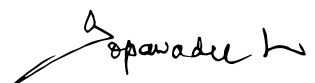
- **Compliance with related laws and regulations:** The Committee regularly met with executives responsible for legal and regulatory compliance to ensure that SET's operations comply with relevant

laws and regulations. In 2020, there were no practices that were significantly non-compliant with relevant laws and regulations, and the practices were rectified.

- **Related party transaction:** The Committee quarterly reviewed the related party transactions. In 2020, there was no related party transaction with persons or business other than SET's subsidiaries.

- **Appointment of 2021 external auditor:** The Committee considered and provided opinions to the BoG on the appointment of the external auditor. For 2021, the Committee considered that EY Office Limited has suitable experience and professional expertise with independence. The Committee then proposed the appointment of the company as the external auditor of SET and its subsidiaries for the year 2021 with a proposed audit fee of THB 3.5 million to the BoG for consideration. The BoG will further seek approval and appointment of the auditor and the audit fee from the meeting of SET member companies.

In summary, the Committee completely performed duties in compliance with the Audit Committee Charter, the Committee was of opinion that SET's financial statements were accurate in essence, with adequate information disclosure, and in line with Generally Accepted Accounting Principles. In addition, the Committee also viewed that the internal control system and the risk management were sufficient and appropriate for the business.



Sopawadee Lertmanaschai

Chairperson

Audit Committee

January 18, 2021



Nomination and Remuneration Committee Report

The current Nomination and Remuneration Committee (NRC) was appointed by The Stock Exchange of Thailand (SET)'s Board of Governors (BoG) on August 6, 2019. NRC consists of five committee members, chaired by Voravan Tarapoom, and the other four committee members are Charamporn Jotikasthira, Norachet Sangruji, Sopawadee Lertmanaschai and Dr. Pakorn Peetathawatchai.

In 2020, the Committee held nine meetings. The Committee has completely performed its duties under the scope of responsibilities specified in the Charter. A summary of key activities is as follows:

Nomination

1. Considered the recruitment for the positions of Executive Vice President (EVP), by taking into consideration the qualifications, knowledge, experience and competency, as well as determining compensation rates that are appropriate for the jobs assigned and competitive to the industry.
2. Considered the list of SET representatives to fill the roles of TSFC board members, responsible for establishing direction of the board to be consistent with the SET's corporate governance principles.
3. Considered and screened the 2020 list of candidates to fill the role of the Board of Directors of SET's subsidiaries and made recommendations for further actions as follows:
 - 3.1 To revise the tenure of the Board to be the same as that of the committees
 - 3.2 To add each additional outside member to TCH's and TSD's Board of Directors and the newly added members must not be the same person.
 - 3.3 To build a pool of experts (Experts Pool) and notify the identified individuals prior to the approval to ensure prompt acceptance of appointment.

4. Considered and screened a list of candidates to be additional members of the Information Technology Committee to ensure adequacy of diverse expertise and effective implementation of the SET's new IT Strategic Projects.
5. Considered the board appointment guidelines and screened the list of candidates to fill the roles of the Board of Directors of SET's subsidiaries under the New Business & Infrastructure Development Function.
6. Reviewed the Experts Pool for nomination of board and committee members, and experts.
7. Considered the appointment of Board of Directors for InnoSpace (Thailand) Co., Ltd.
8. Considered and screened the candidates to fill vacant seats on the Sub-committee on Derivatives Investor Protection Fund (DIPF)
9. Considered the nomination guidelines for SET Board of Governors and screened the list of candidates to be appointed by the Securities and Exchange Commission (SEC).
10. Considered and screened the list of sustainability experts approved by the Sustainability Committee.
11. Considered the appointments and re-appointments of SET's and subsidiary companies' committee members, and determined their remuneration for the year 2021.

Remuneration

1. Considered and proposed, for the approval of the Board, the 2019 employee bonus payment guidelines, based on Corporate KPIs assessment
2. Considered and acknowledged the overall allocation of remuneration for the president, executives and employees for the year 2019 in accordance with the assigned guidelines
3. Considered and proposed, for the approval of the Board, the 2020 performance appraisal and remuneration payment for the President based on Corporate KPIs and Competency assessment
4. Acknowledged the guidelines and timeline for employee bonus payment and overall remuneration budget for the year 2020

Others

1. Considered the alignment of line managers according to the new organization structure and assigned management to be responsible for the following tasks:
 - Personnel transfer and appointment
 - Organization restructuring and communications on the new structure
 - Realignment of human resource management and development to be in line with the new organization strategy and structure
2. Considered the 2019 President's direct reports feedback evaluation.
3. Redefined the scope of responsibilities and tenures of SET experts as follows
 - Redefined the Sustainability (ESG) Expert to reflect their

actual roles and determined appropriate remuneration rates accordingly.

- Set the maximum number of ESG Experts at 7 persons.
- Adjusted the tenure to be 3 years and, if necessary, can be extended for another 3 years but the total duration shall not be longer than 6 consecutive years. The experts cannot resume their position within one year after the completion of their tenure.
- Developed potential successors and conducted an annual review of the Succession Plan.

In summary, the Committee has carried out its duty in line with the missions, duties, experiences and responsibilities assigned to each member, in accordance with the SET's corporate governance and best practice guidelines.



Voravan Tarapoom

Chairperson

Nomination and Remuneration Committee

March 1, 2021



Risk Management Committee Report

The current Risk Management Committee (RMC) was appointed by The Stock Exchange of Thailand (SET)'s Board of Governors (BoG) on August 24, 2019. RMC consists of eight committee members: five Board members, the SET President, and two non-executive experts, as follows:

- | | | |
|-----------------------|------------------|---------------|
| 1. Pattera | Dilokrunghirapop | (Chairperson) |
| 2. Charamporn | Jotikasthira | |
| 3. Norachet | Sangruji | |
| 4. Paiboon | Nalinthrangkurn | |
| 5. Thiti | Tantikulan | |
| 6. Dr. Pakorn | Peetathawatchai | |
| 7. Dr. Vachira | Arromdee | (expert) |
| 8. Professor Dr. Anya | Khanthavit | (expert) |

RMC oversees risk management process to ensure that it is in compliance with the corporate risk management policy and framework. RMC also regularly reports key risk status of the SET group to the BoG under the scope of responsibilities specified in the Charter.

In 2020, RMC held sixteen meetings, two of which were joint meetings with other committees. The attendance record of the committee members is available in the Corporate Governance Report section. A summary of key activities and performance in 2020 is as follows:

- **Risk management of new business and projects:** RMC reviewed and provided additional suggestions and recommendations on the risk management related to SET's various projects: 1) E-Service Platform; 2) The service of digital infrastructure

platform; 3) New ERP – Financial Management System; 4) Care the wild reforestation.

- **Risk management of key operations:** RMC reviewed and provided recommendations on the risk management of various key operations: 1) The review of Strategic Asset Allocation – SAA and risk limit of SET investment portfolio; 2) The implementation in compliance with Personal Data Protection Act – PDPA; 3) Summary of actions in accordance with BCP during COVID-19 situation; 4) The annual review of IT security policy; 5) The annual review of D&O and FIPI insurance policy; 6) The annual review of selection criteria of SET's insurance company; 7) Principle of setting amount of reserve money for investment volatility.
- **Risk management of SET's subsidiaries:** RMC has continuously and regularly reviewed and provided recommendations on the risk management of SET's subsidiaries to ensure that the risk management of the subsidiaries were carried out in line with the SET group, such as the project of digital gateway under Digital Access Platform Company Limited that provides linkage with 1) government agencies; 2) Department of Business Development; 3) Anti – Money Laundering Office.
- **Risk monitoring:** RMC has regularly monitored the status of key risks of the SET group, including risk status during COVID-19 situation, to ensure continuous and efficient risk monitoring and overseeing. In 2020, RMC's performance had been reported to the BoG on a quarterly basis.

- **Risk management and internal audit:** RMC has communicated, exchanged information and coordinated with related parties regarding risk management and internal audit. In 2020, RMC held one joint meeting with the Audit Committee (AC) to consider and acknowledge the summary of incidents and audit operations according to the key risks in 2020. In addition, RMC held one meeting with AC and Information Technology Committee (ITC) to consider risk mitigation for system disruption. This will further boost the organizational operations

and will benefit the organization as a whole.

In summary, RMC viewed that the SET group has developed and enhanced enterprise risk management to cover all key aspects continuously, in line with the changing environment. The regular meetings within RMC and those between AC and ITC have enhanced efficiency and appropriateness of SET's risk management operations to control and minimize risks at acceptable level.



Pattera Dilokrunthirapop

Chairperson

Risk Management Committee

January 15, 2021



Sustainability Committee Report

The Sustainability Committee (“the Committee”) consists of five directors from the SET Board of Governors (BoG), four of whom are not involved in internal management affairs, and the other is governor-cum-SET president. Over the course of 2020, a total of five joint meetings were held (details of each meeting’s attendance are available under the “Corporate Governance” section) and all duties and responsibilities were carried out according to the Sustainability Committee’s charter. The Committee presented its performance to the Board of Governors on a quarterly basis. 2020 performance highlight is as follows:

1. Policy setting and monitoring of corporate governance and sustainability practices across the SET group

1.1 Updated the SET Group’s Corporate Governance Policy and Code of Conduct to be consistent with corporate governance principle and international best practice. Opinions were also offered on the development of a corporate governance framework to be adopted by subsidiaries under the New Business and Infrastructure Development Function with suggestions that the framework be based on the SET group’s Corporate Governance Policy and other important policies to ensure common and consistent corporate governance practice. The Committee also recommended that SET Venture Holding Co., Ltd, as a holding company, be held responsible for overseeing the business of the subsidiaries.

1.2 Revised the BoG charter and the Sustainability Committee’s name and its charter.

- Opinions were made to the BoG on the following matters: 1) signing of letter of independence, 2) tenure of committees’ outside members, and 3) BoG’s assessment processes and results. The BoG approved the proposed amendment to the board charter to be consistent with the SET group’s Corporate Governance guidelines.
- A proposal was made to amend the Sustainability Committee charter to cover development and promotion of

sustainability practices among all stakeholders namely securities companies, asset management companies, analysts and investors. A recommendation was also made to change the name of the Committee from ‘Corporate Governance and Social Responsibility Committee’ to ‘Sustainability Committee’ to reflect the aforementioned roles and responsibility.

1.3 Monitored SET’s corporate governance and sustainability practices

- Recommendations were made to the management to build a network of Compliance Champions to facilitate communications and gather feedback to improve corporate governance related policies and practices. In addition, it was recommended that new governors and employees participate in an orientation session on the SET group’s corporate governance policies and codes of conduct and raised awareness via e-newsletters and other internal communication channels on a continuous basis.
- The Committee supported the proposal to invite the Thai Institute of Directors (IOD) to assess the SET’s corporate governance and sustainability practices, in accordance with the Thailand’s Private Sector Collective Action Coalition Against Corruption (CAC) guidelines, and provide recommendations for further improvement of SET internal control system. This was not a request for evaluation certification.

2. Development of Sustainability Policy for listed companies and other market participants

Views and recommendations were made to ensure that the sustainability development policy for listened companies and intermediaries is formulated in consistence with the SET Sustainability Framework, developed in accordance with the UN Sustainable Stock Exchanges (SSE) Initiative and relevant international standards.

2.1 Sustainability development for listed companies

- Opinions were made regarding the development of sustainability plan for listed companies with recommendations on classification of listed companies according to the level of their sustainability performance from ones with basic standard to those ready to be developed into ESG Investment Stars and a group of high performers with outstanding potentials to compete internationally.

- A support policy was issued to enable small and medium-sized listed companies to carry out sustainability work in a manner befitting their organizational situation and contributing to effective outcomes

- A policy was introduced to support more large Thai listed companies to be included in the international accepted sustainability indexes. Thailand has been at the forefront of ESG practice in ASEAN with 21 Thai listed companies internationally recognized as members of Dow Jones Sustainability Indices (DJSI) in 2020. Such recognition made Thailand earn top inclusions in the index among ASEAN with seven of the companies scored the highest as leaders in each industry.

2.2 Sustainability development for capital-market-related organizations

- Opinions and recommendations were provided to develop an ESG curriculum tailored to each stakeholder

demands to promote sustainability principles among professionals working in the capital market and other market participants including non-listed companies who are interested in adopting sustainable business practices.

- Viewpoints and suggestions were made regarding the development of financial literacy for general public through collaboration with relevant agencies such as the Government Pension Fund (GPF), the Bank of Thailand (BOT) and the Thai Bankers' Association (TBA) to leverage economies of scale and to ensure quality outputs

- Opinions and recommendations were offered to fully leverage the capabilities of the capital market and leading listed companies to help social enterprises achieve sustainable growth.

In conclusion, the Sustainability Committee is of the opinion that SET has conducted appropriate and efficient undertakings in the area of corporate governance and sustainability development for the SET group, listed companies, and stakeholders and that these actions are in line with the goals of promoting and developing the Thai capital market's sustainability. Furthermore, information in the corporate governance report has been provided in a transparent, suitable manner meeting international standards.



Voravan Tarapoom

Chairperson

Sustainability Committee

January 11, 2021



Information Technology Committee Report

The Information Technology Committee was appointed by the Stock Exchange of Thailand (SET)'s Board of Governors (BoG) on August 27, 2019, consisting of four SET Board members, the SET President and two information technology experts. During 2020, SET's BoG mandated the appointment of the Chairman of the Information Technology Club (IT Club), Association of Thai Securities Companies as an additional committee member. The current eight committee members are:

1. Charamporn Jotikasthira (Chairperson)
2. Pattera Dilokrunthirapop
3. Paiboon Nalinthangkurn
4. Thiti Tantikulanan
5. Pichet Sithi-Amnuai (expert)
6. Pannaporn Sapsomboon (expert)
7. Tharatporn Techakitkachorn (Chairperson of IT Club, ASCO)
8. Dr. Pakorn Peetathawatchai

In 2020, The Information Technology Committee held a total of 11 meetings, one of which is a joint meeting with the Audit Committee and the Risk Management Committee. The Information Technology Committee has performed its duties and expressed opinions in accordance with the scope of power, duties and responsibilities assigned by the SET's BoG. The performance of the Committee is reported to the SET's BoG on a quarterly basis. The Committee's duties can be summarized as follows:

Information technology development strategy and policy advisory

- **Execution of strategic projects:** The Information Technology Committee provided considerations, advice, and recommendations on technology projects in the SET group, with the objectives of complying with industry standards and

raising the competitiveness of the Thai capital market to be a leading stock exchange in the region. Notable projects under their supervision were the Trading System Upgrade project, Common Infrastructure for Broker Back Office System, Digital Infrastructure for Capital Markets to support large volumes of transactions and reduce errors in the fundraising and investment processes, New Financial Management System, as well as an IT Resource Partnership management plan to sustainably support future system enhancements.

- **Recommendations to prepare SET's group services during the COVID-19 pandemic.** The Information Technology Committee recommended adjustments to some project implementation plans, with considerations for economic recession and the readiness of business partners to reduce the impact on the stakeholders and the overall industry. The Committee also considered the suitability of the infrastructure and network preparations for Disaster Recovery site (DR Site) of securities companies.
- **Personal data protection.** The Information Technology Committee considered and gave opinions on operations related to the Personal Data Protection Act (PDPA), in conjunction with advices from legal, information technology, and ISO27701 Standard (Privacy Information Management System) consultants in assessing and setting the operating guidelines of the SET group to be compliance with the Personal Data Protection Act, and to enable ISO27701 certification for key systems.
- **Cyber security.** With the increased news coverage of damages incurred as a result of a continued rise of cyber threats, the Information Technology Committee has considered hiring an information technology security consultant from Deloitte to

conduct a Black Box Penetration Test to manage potential risks to the systems in the SET group. Phishing e-mail test campaign was also conducted to raise cyber threat awareness among employees to further reduce internal risks, and to promote an understanding of the safe use of the organization's systems. The Committee also supported and encouraged securities brokers to similarly assess the security of their information technology systems to raise awareness and be readiness to

deal with cyber threats in an appropriate manner.

In summary, the Information Technology Committee has performed the duties of the committee appropriately with duties, experience and responsibilities that each member assigned, in accordance with the principles of good corporate governance that the Stock Exchange of Thailand has used as a guideline for operations.



Charamporn Jotikasthira

Chairman

Information Technology Committee

January 13, 2021



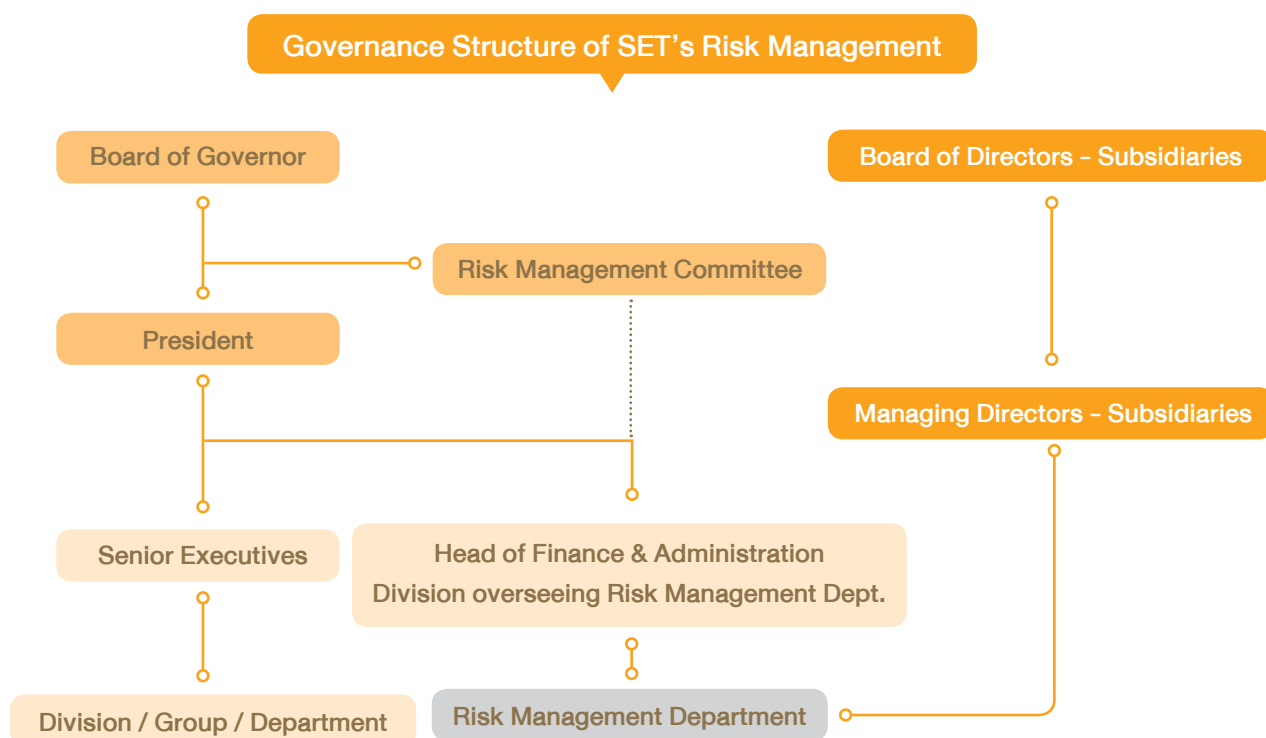
Enterprise Risk Management (ERM)

1. Overview of Risk Management

The Stock Exchange of Thailand (SET) places great emphasis on the Enterprise Risk Management, which is a key process to help achieve the organization's goals and create confidence, value added and sustainability for all stakeholders including investors, regulatory organizations, member companies, employees and other related parties. SET risk management is in line with

relevant policies and international standards, and has been applied across the SET group.

The governance structure of SET's risk management is illustrated below:



Based on the clearly defined risk management structure, the Board of Governors (BoG) is responsible for overseeing the implementation of enterprise-wide risk management to ensure that the process used by senior management are efficient and effective. The BoG also assigns the Risk Management Committee (RMC) to review and assess risk management process to be compliant with the enterprise risk management policy, framework and process. RMC regularly updates to the BoG on the Group's key risk status.

All executives and staff have the responsibilities to assess and manage their related risks based on the set policy, guidelines and process. The same requirement is applicable to all subsidiaries.

Meanwhile, the Risk Management Department is tasked with assisting and reporting risk management performance to RMC. The Department is also responsible for coordinating and enforcing risk management policies across the entire Group.

2. Risk Management in Various Aspects

SET recognizes the importance of managing operational risks to safeguard its operational resilience. The SET's risk management process, in line with the COSO¹ Enterprise Risk Management Framework and those of other leading exchanges, is designed to identify risks and their causes, assess effectiveness of the existing risk control system, and consider inherent risk and residual risk compared with acceptable risk level. SET also uses Key Risk Indicators (KRIs) to monitor all key risks, determine risk level and give early warnings such that appropriate response measures could be put in place on a timely basis. SET's key risks are identified below:

Strategic risk

New business and projects risk

SET has adopted new strategic plans to create inclusive, balanced and sustainable growth for all stakeholders while continue to foster closer collaborations with partners to improve operation efficiency and enhance business development.

Amidst technological change, domestic and global uncertainty in 2020, risk management of new business and projects has become even more vital. As a result, SET has assigned RMC to review and give recommendations on risk management for the following services : 1) e-service platform: an electronic one-stop service including those related to organizing meetings and seminars for listed companies to help reduce the industry cost 2) Digital infrastructure services for the capital market: a comprehensive range of end-to-end services to ensure seamless investment experience from listing and trading to clearing and settlement and other services for investors and 3) Digital gateway service: a service, provided by Digital Access Platform Co., Ltd. (DAP), to connects with additional other organizations' systems.

Financial risk

Credit risk (counterparty or clearing and settlement-related risk)

Thailand Clearing House Co., Ltd. (TCH), as the central counterparty (CCP) for SET and Thailand Futures Exchange PCL (TFEX), has continued to develop risk management measures in line with international standards and best practice. In 2020, TCH revised membership requirement on financial status and the level of minimum contribution to the clearing fund to suit each membership type be it a General Clearing Member (GCM) or a Direct Clearing Member (DCM).² This revision is to ensure that members' risks are appropriately managed and in line with the changing situation. In addition, the company changed its monthly monitoring of members' net capital to be on a daily basis to gain a better control over risk management and to ensure proper payment and delivery of securities by the members.

In preparation for future risk, TCH revised the stress test calculation methodology of new listed securities on SET and TFEX. TCH also revised the calculation methodology of Inter-Commodity Spread for maintenance margin. These revisions will take effect in January 2021.

Investment risk

SET's investment portfolio, managed by the Investment Committee (IC), operates under investment and strategic asset allocation policies and ratio as approved by the BoG. SET monitors and reports investment risk status to IC, RMC, Audit Committee (AC) and the BoG regularly to ensure that risks are kept within the acceptable level.

As part of its investment risk management, SET has diversified its investment across different asset classes and setting an investment limit in each financial institution and

¹The Committee of Sponsoring Organizations of the Treadway Commission (COSO)

²General Clearing Member (GCM): a member who undertakes the securities clearing and settlement for itself or clients, or for other members or other members' clients. Direct Clearing Member (DCM): a member who undertakes the securities clearing and settlement for itself or clients whereby the members' clients must not be the members of SET or the members of TCH



issuer to ensure proper asset allocation and to retain the risk up to a certain loss limit. Furthermore, the Value at Risk (VAR) calculation has been applied to measure and control the level of the aggregate portfolio risk to be within a specified limit. SET invests in instruments such as government bonds, bank deposits, money market funds and corporate funds with at least “A-” credit rating or equivalent.

Operational risk

Risk from critical system failure and business interruption

SET has put in place a thorough process for assessing, monitoring and managing risks that may affect its computerized system. The process includes incident reports, root cause analysis and solution recommendation to ensure service continuity and continuous improvements.

Additionally, the Business Continuity Management (BCM) Guidelines has been developed to cover the following key components: emergency response plan, crisis management plan, business continuity plan and IT disaster recovery plan. SET has also conducted crisis management exercises and industry-wide Business Continuity Plan (BCP) test on a regular basis. Through these combined efforts, during COVID-19 pandemic in 2020, SET had successfully delivered on its BCP and effectively maintained its operational resiliency. The organization also put in place an ongoing COVID-19 monitoring system to ensure appropriate controls if and when any crisis arises.

Cyber-attack risk

In response to the rapid increase of cyber attacks, SET, as a leading financial institution, has carried out the following measures to safeguard its operation resiliency and secure stakeholders’ trust and confidence:

1. Implementing information security management systems that are in line with international standards including ISO27001 (Information Security Management System), ISO20000 (IT Service Management System) and ISO27701 (Privacy Information Management System), and compliant with relevant laws and regulations. The systems have been deployed to protect all SET’s critical technology infrastructures

2. Conducting regular reviews and assessments of the cybersecurity and IT security guidelines to keep pace with changing situation, and running cyber security testing to measure the effectiveness of existing systems

3. Having the Cybersecurity Incident Response Team in place to give advice and recommendations on response measures against cyber threats

4. Deploying effective cyber security tools in accordance with standards such as Antivirus and AntiMalware, Firewall and DDoS Protection Service

5. Communicating and sharing knowledge on IT security with staff regularly as well as supporting member firms to improve their IT security standard

Fraud and corruption risk

SET is committed to anti-corruption principles. Every year, each business function is responsible for assessing fraud and corruption risks, identifying appropriate measures and regularly monitoring and reporting their risk status to ensure proper risk management within the acceptable level. The Risk Management Department is in charge of monitoring and updating risk status to the management, RMC and the BoG on a regular basis while Internal Audit is tasked with assessing the effectiveness of existing control systems.

Compliance risk

SET strives to ensure compliance with applicable laws and regulations. It has imposed high standards in the oversight of its management and employees to ensure strict adherence to the SET compliance policies. There are three key departments specifically assigned to oversee SET compliance risk management process: The Risk Management Department, in charge of assisting management and staff to keep compliance risks at an acceptable level; the Compliance Department, responsible for monitoring, advising and raising internal awareness; and Internal Audit, responsible for reviewing overall business operations to ensure compliance with relevant laws and regulations.



○ Make it “Work” for Transparency

INTEGRITY AND RISK MANAGEMENT







Management Discussion and Analysis (MD&A)

Overview

The operating results of the SET group for the year ended December 31, 2020 are as follows:

(Unit: THB million)

	For the year ended December 31,			
	2020	2019	Increase / (Decrease)	
			Amount	%
Operating revenues	6,548	5,890	658	11
Other income	163	448	(285)	(64)
Investment income (loss)	(364)	948	(1,312)	(138)
Total revenues	6,347	7,286	(939)	(13)
Operating expenses	(4,289)	(4,217)	72	2
Non-operating revenue	36	60	(24)	(40)
Reversal of contributions to The Stock Exchange of Thailand Foundation (SET Foundation)	-	186	(186)	(100)
Revenues over expenses before contribution to the Capital Market Development Fund (CMDf) and income tax	2,094	3,315	(1,221)	(37)
Income tax expense	(378)	(214)	164	77
Revenues over expenses before contribution to CMDf	1,716	3,101	(1,385)	(45)
Contribution to CMDf	(362)	(5,700)	(5,338)	(94)
Revenues over (under) expenses	1,354	(2,599)	3,953	152

In 2020, the SET group had total revenues of THB 6,347 million, decreased by THB 939 million or 13%. The operating revenue, net of discounts on various fees as part of the relief measures for stakeholders during the COVID-19 pandemic, increased by THB 658 million, mainly driven by the rise in average daily trading volume of both equity and derivatives especially from SET50 Index Futures and Gold Online Futures, whereas investment income and other income dropped by THB 1,312 million and THB 285 million, respectively, due to the fluctuations in global financial and capital markets caused by the COVID-19 pandemic. The decline in revenue was also due to the absence of the one-time gain of insurance proceeds worth THB 145 million recorded in 2019 for the arson attack on the SET old building. Meanwhile, the operating expenses amounted to THB 4,289 million, an increase of 2%, from the rise in SEC fees in line with the growing equity trading volumes. The SET group had revenues over expenses before contribution to CMDf and income tax of THB 2,094 million.

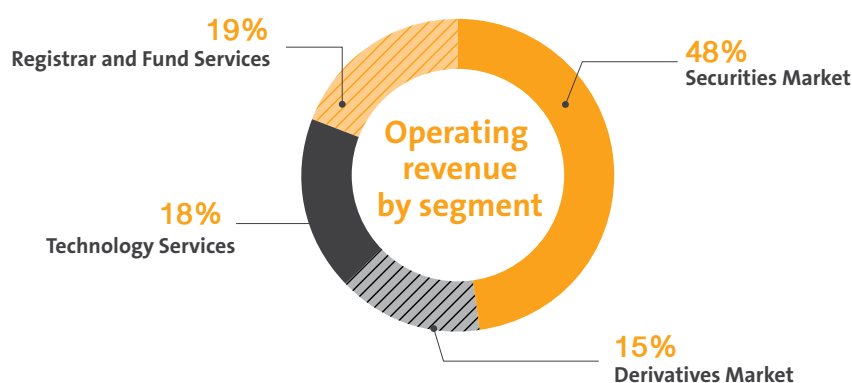
Pursuant to the Securities and Exchange Act (No. 6), SET transferred a sum of THB 5,700 million as the first contribution to CMDf in 2019. For 2020, the contribution to CMDf totaled THB 362 million, accounting for 90% of the revenue after deduction of expenses, tax and reserves, based on the yearly consolidated financial statements. After the CMDf payment, the SET group had revenue over expenses of THB 1,354 million in 2020.

1. Analysis of Operating Results

1.1 Operating revenue

Operating revenue by segment

Operating revenue classified by key business segment consists of Securities Market, Derivatives Market, Technology Services, and Registrar and Fund Services.



For the year ended December 31, 2020

(Unit: THB million)

Securities Market	
- Trading	1,667
- Clearing and settlement	450
- Listing	682
- Depository	296
- Membership	32
Total	3,127
Derivatives Market	
- Trading	677
- Clearing	290
- Membership	32
Total	999
Technology Services	
- Member services	437
- Information services	378
- IT support	345
Total	1,160
Registrar and Fund Services	
- Securities registrar	1,229
- Fund services	24
- Payment services	9
Total	1,262
Total Operating Revenue	6,548

**1.1.1 Securities Market**

(Unit: THB million)

	2020	2019	Increase / (Decrease)	
			Amount	%
Revenue – Securities Market	3,127	2,768	359	13
Trading fees	1,667	1,298	369	28
Clearing and settlement fees	450	368	82	22
Listing fees	682	723	(41)	(6)
Depository fees	296	347	(51)	(15)
Membership fees	32	32	-	-
Key market indicators				
SET Index at the end of the year (points)	1,449	1,580	(131)	(8)
Average daily trading value – Equity (THB million)	68,607	53,192	15,415	29
Average market capitalization (THB trillion)	14.72	17.17	(2.45)	(14)
No. of listed securities at the end of the year (securities)	2,853	3,022	(169)	(6)

Operating revenue from securities market, net of discounts on various fees as relief measures for stakeholders during the COVID-19 pandemic, increased by THB 359 million or 13%. The increase mainly resulted from the rise in average daily trading value, while the listing and depository fees decreased by THB 41 million and THB 51 million, in accordance with the decrease in the number of listed securities and market capitalization, respectively.

1.1.2 Derivatives Market

(Unit: THB million)

	2020	2019	Increase / (Decrease)	
			Amount	%
Revenue – Derivatives Market	999	806	193	24
Trading fees	677	541	136	25
Clearing fees	290	233	57	24
Membership fees	32	32	-	-
Key market indicators				
Average daily trading volume – Derivatives (contracts)	494,624	428,368	66,256	15

Operating revenue from derivatives market, net of trading fees discounts to help stakeholders during the COVID-19 pandemic, increased by THB 193 million or 24%, mainly resulting from the rise in average daily trading volume of derivatives, especially from SET50 Index Futures and Gold Online Futures.

1.1.3 Technology Services

(Unit: THB million)

	2020	2019	Increase / (Decrease)	
			Amount	%
Revenue – Technology services	1,160	1,064	96	9
Member services fees	437	420	17	4
Information service fees	378	367	11	3
Customization and IT support fees	345	277	68	25

Operating revenue from technology services increased by THB 96 million or 9%, driven mainly by the rise in technology support fees in line with the higher number of users.

1.1.4 Registrar and Fund Services

(Unit: THB million)

	2020	2019	Increase / (Decrease)	
			Amount	%
Revenue – Registrar and fund services	1,262	1,252	10	1
Securities registrar fees	1,229	1,226	3	-
Fund services	24	20	4	20
Payment service fees	9	6	3	50

Operating revenue from registrar and services rose by THB 10 million or 1%, mainly due to the increase in corporate actions services with discounts on annual registrar fees as part of the COVID-19 relief measures during 2020.

1.2 Other income

(Unit: THB million)

	2020	2019	Increase / (Decrease)	
			Amount	%
Total other income	163	448	(285)	(64)
Revenue from fees and management funds	60	37	23	62
Revenue from education activities	23	64	(41)	(64)
Revenue from fines	12	80	(68)	(85)
Revenue from rental and utilities	12	15	(3)	(20)
Revenue from securities borrowing and lending	4	35	(31)	(89)
Revenue from marketing events	1	23	(22)	(96)
Compensation income from insurance companies	-	145	(145)	(100)
Others	51	49	2	4

Other income decreased by THB 285 million or 64% due mainly to the absence of the one-time gain of insurance proceeds of THB 145 million recorded in 2019 for the arson attack on SET's old building. The decrease was also due to the decline in revenues from education activities, fines and securities borrowing and lending.



1.3 Investment income (loss)

(Unit: THB million)

	2020	2019	Increase / (Decrease)	
			Amount	%
Investment income (loss)	(364)	948	(1,312)	(138)
Interest income	152	217	(65)	(30)
Dividend income	66	144	(78)	(54)
Realized gain (loss) from investments	(320)	420	(740)	(176)
Unrealized gain (loss) from investments	(165)	90	(255)	(283)
Gain (loss) on exchange rate and others	(78)	63	(141)	(224)
Unrealized gain (loss) on exchange rate	(15)	14	(29)	(207)
Allowance for expected credit loss	(4)	-	(4)	(100)

In 2020, the SET group had net investment loss of THB 364 million, due mainly to the COVID-19 pandemic that affected almost all asset classes especially equity and property funds that experienced a sharp decline. The SET group had closely monitored the fluctuations in asset prices as it put the Group's investment at significantly higher risks. As a result, the Group decided to adjust its investment strategies during the year to address the changing situation and revisited its Strategic Asset Allocation (SAA) to ensure that the Group's risk levels were appropriately revised and in line with the business directions moving forward.

1.4 Operating expenses

(Unit: THB million)

	2020	2019	Increase / (Decrease)	
			Amount	%
Operating expenses	4,289	4,217	72	2
Employee benefit expenses	1,947	1,939	8	-
The SEC fees	669	521	148	28
Depreciation and amortization	529	525	4	1
Direct service expenses	379	344	35	10
Technology expenses	226	191	35	18
Building and office expenses	180	193	(13)	(7)
Marketing expenses	125	172	(47)	(27)
Fees and compensation expenses	116	128	(12)	(9)
Educational activities expenses	29	65	(36)	(55)
Others	89	139	(50)	(36)

Operating expenses in 2020 amounted to THB 4,289 million, an increase of 2%. This mainly resulted from the increase in SEC fees in line with the rise in equity trading volume, whereas the increase in registrar service expenses was in accordance with the growth in corporate action transactions. Most other operating expenses decreased from the previous year due to the adoptions of new way of working (new normal) as a result of COVID-19 pandemic.

2. Analysis of Financial Position

(Unit: THB million)

	Dec 31, 2020	Dec 31, 2019	Increase / (Decrease)	
			Amount	%
Total assets	54,427	44,994	9,433	21
Total liabilities	26,720	18,576	8,144	44
Fund balances	27,707	26,418	1,289	5

Significant movements in assets, liabilities and funds of the SET group as at December 31, 2020 in comparison with the balance as at December 31, 2019, are as follows:

2.1 Analysis of assets

As at December 31, 2020, total assets of the SET group amounted to THB 54,427 million, an increase of THB 9,433 million or 21% in comparison with the balance as at December 31, 2019. Significant details are as follows:

2.1.1 Cash and cash equivalents, cash at banks for financial benefits payable and financial assets were THB 17,324 million or 32% of total assets, a THB 1,621 million or 10% increases, categorized as follows:

(Unit: THB million)

	Dec 31, 2020	Dec 31, 2019	Increase / (Decrease)	
			Amount	%
Cash and cash equivalents	8,012	2,329	5,683	244
Cash at banks for financial benefits payable	76	86	(10)	(12)
Financial assets	9,236	13,288	(4,052)	(30)
- Investment in debt instruments measured at FVTPL	7,087	-	7,087	100
- Investment measured at amortized cost	2,095	-	2,095	100
- Investment in equity instruments measured at FVTOCI	54	-	54	100
- Investment in trading	-	3,408	(3,408)	(100)
- Investment in available-for-sale	-	8,202	(8,202)	(100)
- Investment in held-to-maturity	-	1,641	(1,641)	(100)
- General investments	-	37	(37)	(100)
Total	17,324	15,703	1,621	10

The SET group maintains a policy to invest in various types of investments such as fixed deposits, debt instruments (such as government bonds, corporate debentures, among others), mutual funds and other domestic and foreign financial instruments. Total cash and financial assets increased from yearly operating results, whereas the total financial assets decreased due to the adjustment of investment portfolio to suit investment conditions and overall market volatility.

2.1.2 Assets for margin deposits and benefits, and assets for clearing system protection and benefits recorded at THB 22,543 million or 41% of total assets, an increase of THB 6,953 million or 45%. This resulted from the deposit of collaterals of Thailand Clearing House Co., Ltd. (TCH)'s members, in accordance with the increase in trading volume of derivatives at the end of the year.

2.1.3 Reserve fund for TCH security on clearing and settlement amounted to THB 5,804 million or 11% of total assets, up by THB 214 million or 4%, supported by the reserve for TCH's clearing and settlement on SET's part which was established in 2017 as a source of funds for the clearing house. In 2020, SET transferred the additional reserve fund of THB 250 million to TCH.



2.2 Analysis of liabilities

As at December 31, 2020, total liabilities of the SET group amounted to THB 26,720 million, increased by THB 8,144 million or 44%, in comparison with the balance as at December 31, 2019. Significant details are as follows:

2.2.1 Margin deposits and assets for clearing system protection and benefits payable amounted to THB 22,396 million or 84% of total liabilities, an increase of THB 6,954 million, or 45%. The increase in deposits at TCH resulted from the deposit of collaterals of TCH's members in accordance with the increase in trading volume of derivatives at the end of year.

2.3 Analysis of funds

As at December 31, 2020 the total funds of the SET group amounted to THB 27,707 million, an increase of THB 1,289 million or 5%, in comparison with the balance as at December 31, 2019. The SET group's revenues over expenses for 2020 reached THB 1,354 million. In 2020, there was no other comprehensive revenue and expense following the adoption of new accounting policies according to the Thai Financial Reporting Standard, which recorded unrealized profit based on the mark to market of the investment in the statement of revenue and expense instead of other comprehensive revenue and expense.

3. Analysis of Liquidity

Cash flows of the SET group for the year ended December 31, 2020 and 2019 can be summarized as follows:

(Unit: THB million)

	2020	2019	Increase /(Decrease)	
			Amount	%
Cash flows from provided by (used in) operating activities	2,247	(2,680)	4,927	184
Cash flows from investing activities	3,442	3,908	(466)	(12)
Cash flow used in financing activities	(14)	-	14	100
Cash and cash equivalents at the end of year	8,088	2,415	5,673	235

Cash and cash equivalents as at December 31, 2020 amounted to THB 8,088 million, an increase of THB 5,673 million or 235%. The details of the inflows and outflows are as follows:

- Net cash provide by operating activities totaled THB 2,247 million.
- Net cash receipt from investing activities totaled THB 3,442 million, mainly from sales of financial instruments of THB 3,492 million, investment income and dividend income of THB 181 million, investment in new assets amounted to THB 257 million.
- Net cash used in financing activities totaled THB 14 million, mainly from the payment of lease liability. The SET group had applied a new lease accounting policy in accordance with the Thai Financial Reporting Standard.

4. Reserve and Contribution to the Capital Market Development Fund ("CMDF")

The Securities and Exchange Act (No. 6), enacted on April 16, 2019, requires SET to contribute at least 90% of the revenue after deduction of expenses, tax and reserves. In this regard, the consolidated financial statements of SET shall be used to calculate the contribution amount. The provision of reserves shall be in accordance with the type and amount prescribed by the SET's Board of Governor. Details are as follows:

Reserves

Type, allocation principles and reserve amount presented as follows:

(Unit: THB million)

Type of reserve	Reserve allocation principles to ensure adequacy of funding sources	Reserve amount
1. Reserves set aside according to law or criteria in business operation specified, including reserve amount to accommodate special situations	1.1 Legal reserve	24
	1.2 Reserves according to business operation such as EMIR (European Market Infrastructure Regulation), PFMI (Principles for Financial Market Infrastructures) to meet an increase (decrease) of business operation during the year	(37)
	1.3 Reserves allocated for specific funds such as approval of additional capital in specific funds during the year, benefit sharing of Securities Investor Protection Fund (SIPF), Derivatives Investor Protection Fund (DIPF), Clearing Fund (CLF) or other similar funds	261
	1.4 Reserves allocated to accommodate operations risks and emergency measures	424
2. Reserves set aside to accommodate the fluctuation of investments	According to unrealized gain/(loss) during the year	(180)
3. Reserves set aside for investment in business or fixed assets	According to the investment amount in businesses and fixed assets approved by the Board of Governors	822
Total reserves		1,314

Contribution to CMDF

Annual contribution calculation for 2020 is as follows:

(Unit: THB million)

Revenue after deduction of expenses (presented in the statement of comprehensive revenue and expenses)	2,094
<u>Less</u> Income tax expense	(378)
Revenue after deduction of expenses and tax before reserves	1,716
<u>Less</u> Reserves	(1,314)
Revenue after deduction of expenses, tax and reserves	402
Annual contribution amount at rate of 90%	362

Accumulated contribution expenses to CMDF according to the financial statements as of December 31, 2020 can be presented as follows:

(Unit: THB million)

Money transferred to CMDF in 2019	5,700
Annual contribution amount for 2020	362
Total accumulated contribution expenses	6,062



Report of the Board of Governors Relating to Responsibility for Financial Reporting

The Board of Governors is responsible for the consolidated financial statements of The Stock Exchange of Thailand (SET) and its subsidiaries, and the separate financial statements of The Stock Exchange of Thailand, including the financial information presented in this annual report. The financial statements for the year ended December 31, 2020 have been prepared in accordance with Thai Financial Reporting Standards. In preparing the financial statements, appropriate accounting policies have been adopted and regularly adhered to, using careful discretion and reasonable estimates. Important information has also been adequately disclosed in the notes to financial statements, so as to reflect the financial status, performance and cash flows in an accurate and transparent manner, providing benefits to the public.

The Board of Governors has provided and maintained the risk management system, internal control system, internal audit system and effective corporate governance to ensure that accounting records are accurate, complete and adequate to secure its assets and prevent risks, while preventing fraud or irregular operations in essence as well.

To accomplish this task, the Board of Governors has appointed an Audit Committee, consisting of independent non-executive

directors, to be responsible for the quality of financial reports, the review of internal control system, internal audit system and risk management system. The opinions of the Audit Committee are included in the Audit Committee Report section of this annual report.

The consolidated financial statements of The Stock Exchange of Thailand (SET) and its subsidiaries, and the separate financial statements of The Stock Exchange of Thailand have been examined by an external auditor, Deloitte Touche Tohmatsu Jaiyos Audit Co., Ltd. In conducting the audit, SET has provided supporting information and documents so that the auditor could examine and express opinions in accordance with Thai Standards on Auditing. The auditor's opinion is presented in the auditor's report as part of this annual report.

The Board of Governors is of the opinion that the SET's overall internal control system is adequate and appropriate, and can create confidence that the consolidated financial statements of The Stock Exchange of Thailand (SET) and its subsidiaries, and the separate financial statements of The Stock Exchange of Thailand for the year ended December 31, 2020 are reliable and in compliance with Thai Financial Reporting Standards and related regulations.

Dr. Chaipayat Wibulswasdi
Chairman

Dr. Pakorn Peetathawatchai
President

Report of the Independent Certified Public Accountants

To the Members of The Stock Exchange of Thailand and The Stock Exchange of Thailand

Opinion

We have audited the consolidated financial statements of The Stock Exchange of Thailand and its subsidiaries (the “Group”) and the separate financial statements of The Stock Exchange of Thailand (the “SET”), which comprise the consolidated and separate statements of financial position as at December 31, 2020, and the related consolidated and separate statements of comprehensive revenues and expenses, changes in fund balances and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated and separate financial statements present fairly, in all material respects, the financial position of The Stock Exchange of Thailand and its subsidiaries and of The Stock Exchange of Thailand as at December 31, 2020, and financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards (“TFRSs”).

Basis for Opinion

We conducted our audit in accordance with Thai Standards on Auditing (“TSAs”). Our responsibilities under those standards are further described in the Auditor’s Responsibilities for the Audit of the Consolidated and Separate Financial Statements section of our report. We are independent of the Group in accordance with the Federation of Accounting Professions’ Code of Ethics for Professional Accountants together with the ethical requirements that are relevant to the audit of the consolidated and separate financial statements, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of Matter

We draw attention to Note 2.2 to the financial statement that The Stock Exchange of Thailand and its subsidiaries have adopted group of Financial Instruments Standards which become effective for fiscal years beginning on or after January 1, 2020. The Group elected to recognize the cumulative effect of initially applying such Standards as an adjustment to the beginning balance of retained earnings and other components of fund balances of the reporting period. Our opinion is not modified in respect of this matter.

Key Audit Matters

Key audit matter is the matter that, in our professional judgment, was of most significance in our audit of the consolidated and separate financial statements of the current period. This matter was addressed in the context of our audit of the consolidated and separate financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on this matter.



Key Audit Matter

Audit Response

Revenue recognition – trading fees

Trading fees have terms and conditions to charge the fees based on trading volume. The Group makes use of information and technology system in storing of trading volume and calculating trading fees.

We focused on the audit of revenue from trading fees in the following areas:

- Storing of securities trading data and processing of the information and technology system.
- Accuracy and completeness of trading volume information used in calculating revenue amount.

The accounting policies of revenue recognition, operating segment and details of trading fees were disclosed in Note 3.12, Note 6 and Note 27 to the financial statements, respectively.

Our key audit procedures were as follows:

- Understand the revenue recognition – trading fees process and related internal control procedures.
 - Review the design and implementation of the internal control procedures in relation to revenue recognition of trading fees.
 - Perform the operating effectiveness testing over the internal control procedures around revenue recognition process including related information and technology system.
 - We involve our IT specialists to assist in the audit of automated controls, including interface controls and access to information system, where testing the application systems, database, and reports that relevant to the audit of financial statements. This control testing includes consideration of
 - data used in the operation that relevant to controls.
 - automated controls.
 - system-generated reports used in the operation of relevant controls.
 - Perform substantive testing as follows:
 - Examine the trading volume information of the customers and trading fees rates, recalculate the trading fees and examine the related supporting documents of those revenues whether the trading fees have been completely and accurately recognized.
 - Perform substantive analytical procedures relating to the trading fees.
-

Other Information

Management is responsible for the other information. The other information comprises information in the annual report, which is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated and separate financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated and separate financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

When we read the annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to management and those charged with governance for correction of the misstatement.

Responsibilities of Management and Those Charged with Governance for the Consolidated and Separate Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRSs, and for such internal control as management determines is necessary to enable the preparation of the consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, management is responsible for assessing the Group's and the SET's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the

going concern basis of accounting unless management either intends to liquidate the Group and the SET or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with TSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the SET's



internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the SET's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group and the SET to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and the separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Dr. Suphamit Techamontrikul
Certified Public Accountant (Thailand)
Registration No. 3356

DELOITTE TOUCHE TOHMATSU JAIYOS AUDIT CO., LTD.

BANGKOK

February 17, 2021

Statements of Financial Position

The Stock Exchange of Thailand and its Subsidiaries

As at December 31, 2020

(Unit: THB Thousand)

	Notes	Consolidated Financial Statements		Separate Financial Statements	
		2020	2019	2020	2019
Assets					
Current assets					
Cash and cash equivalents	8	8,011,828	2,329,358	7,386,963	2,092,736
Cash at banks for financial benefits payable		76,323	85,569	-	-
Assets for margin deposits and benefits	18	20,326,369	13,384,662	-	-
Other current financial assets	9	4,467,120	-	2,452,742	-
Short-term investment	9	-	5,383,557	-	3,183,195
Trade and other current receivables	10	1,261,229	518,753	683,435	525,182
Other current assets	11	372,645	217,505	338,944	184,849
Total current assets		34,515,514	21,919,404	10,862,084	5,985,962
Non-current assets					
Other non-current financial assets	14	4,768,844	-	4,763,844	-
Long-term investment	14	-	7,903,958	-	7,903,958
Investments in subsidiaries	12	-	-	1,787,291	1,697,291
Investments in associates and joint venture entity	13	995,351	988,420	790,061	791,015
Assets for clearing system protection and benefits	19	2,216,908	2,205,298	150,723	147,916
Securities Investor Protection Fund	26	840,604	832,028	840,604	832,028
Derivatives Investor Protection Fund	26	111,797	110,237	-	-
Long-term loans to a subsidiary	7	-	-	5,690,834	5,440,834
Reserve Fund for clearing and settlement	20	5,804,065	5,590,438	-	-
Property, plant and equipment	15	4,485,549	4,737,773	4,485,172	4,737,156
Right-of-use assets	16	25,313	-	25,313	-
Intangible assets	17	660,225	612,385	657,788	609,788
Deferred tax assets	21	595	91,768	-	91,743
Refundable deposits		2,485	2,485	2,485	2,485
Total non-current assets		19,911,736	23,074,790	19,194,115	22,254,214
Total assets		54,427,250	44,994,194	30,056,199	28,240,176

Notes to the financial statements form an integral part of these financial statements



Statements of Financial Position (Continued)

The Stock Exchange of Thailand and its Subsidiaries

As at December 31, 2020

(Unit: THB Thousand)

	Notes	Consolidated Financial Statements		Separate Financial Statements	
		2020	2019	2020	2019
Liabilities and fund balances					
Current liabilities					
Margin deposits and benefits payable	18	20,329,161	13,384,662	-	-
Trade and other current payables	22	2,497,259	1,490,467	1,726,274	1,296,758
Current portion of lease liabilities	16	14,629	-	14,629	-
Fees received in advance		346,164	353,399	318,752	318,156
Income tax payable		114,547	90,638	-	-
Short-term borrowings from subsidiary	7	-	-	2,416,422	1,918,713
Other current liabilities	23	169,258	172,997	107,405	98,423
Total current liabilities		23,471,018	15,492,163	4,583,482	3,632,050
Non-current liabilities					
Lease liabilities	16	12,593	-	12,593	-
Assets for clearing system protection and benefits payable	19	2,066,872	2,057,869	-	-
Contributions and benefits to					
Securities Investor Protection Fund	26	337,673	336,254	337,673	336,254
Contributions and benefits to					
Derivatives Investor Protection Fund	26	54,878	54,041	-	-
Deferred tax liabilities	21	15,684	12,676	-	-
Non-current provision for employee benefit	24	751,187	613,393	751,187	613,393
Other non-current liabilities		10,166	9,849	10,166	9,849
Total non-current liabilities		3,249,053	3,084,082	1,111,619	959,496
Total liabilities		26,720,071	18,576,245	5,695,101	4,591,546
Fund balances					
Funds	25	27,707,178	26,090,633	24,361,098	23,313,433
Other components of fund balances		-	327,315	-	335,197
Non-controlling interests		1	1	-	-
Total fund balances		27,707,179	26,417,949	24,361,098	23,648,630
Total liabilities and fund balances		54,427,250	44,994,194	30,056,199	28,240,176

Notes to the financial statements form an integral part of these financial statements

Statements of Comprehensive Revenues and Expenses

The Stock Exchange of Thailand and its Subsidiaries

For the year ended December 31, 2020

(Unit: THB Thousand)

		Consolidated Financial Statements		Separate Financial Statements	
	Notes	2020	2019	2020	2019
Revenues					
Operating revenues	27	6,547,755	5,890,126	3,059,298	2,652,268
Investment income (expense), net	28	(363,689)	947,954	122,442	1,549,021
Other income	29	163,088	447,718	1,906,820	2,060,116
Total revenues		6,347,154	7,285,798	5,088,560	6,261,405
Expenses					
Employee benefit expenses	30	1,947,178	1,939,471	1,947,378	1,938,260
Directors' remuneration	7	30,434	27,714	26,337	24,200
Direct service expenses		378,964	344,368	-	-
Building and office expenses		179,802	192,513	179,371	192,118
Technology expenses		225,913	191,142	225,745	190,933
Marketing expenses		124,615	172,390	103,099	158,446
Educational activity expenses		29,411	64,603	29,411	64,698
SEC fees	31	668,859	521,154	666,859	519,154
Depreciation and amortisation	15, 16 and 17	528,998	524,849	527,699	523,700
Other expenses	32	174,884	238,615	146,104	214,870
Total expenses		4,289,058	4,216,819	3,852,003	3,826,379
Revenues over expenses		2,058,096	3,068,979	1,236,557	2,435,026
Non-operating revenues (expenses)					
Income derived from Securities Investor Protection Fund, net	26	7,157	13,930	7,157	13,930
Income derived from Derivatives Investor Protection Fund, net	26	723	848	-	-
Share of profit of investments in associates and joint venture entity, net of tax	13	28,025	45,383	-	-
Reversal contribution to the Stock Exchange of Thailand Foundation	7	-	186,132	-	186,132
Revenues over expenses before contribution to the Capital Market Development Fund					
Contribution to the Capital Market Development Fund	33	(361,641)	(5,700,000)	(361,641)	(5,700,000)
Revenues over (under) expenses before income tax expense		1,732,360	(2,384,728)	882,073	(3,064,912)
Income tax (expense) revenue	34	(378,279)	(214,271)	(107,314)	46,687
Revenues over (under) expenses		1,354,081	(2,598,999)	774,759	(3,018,225)
Revenues over (under) expenses for the years attributable to:					
Owners of the parent		1,354,081	(2,598,999)	774,759	(3,018,225)
Non-controlling interests		-	-	-	-
		1,354,081	(2,598,999)	774,759	(3,018,225)



Statements of Comprehensive Revenues and Expenses (Continued)

The Stock Exchange of Thailand and its Subsidiaries

For the year ended December 31, 2020

(Unit: THB Thousand)

	Notes	Consolidated Financial Statements		Separate Financial Statements	
		2020	2019	2020	2019
Revenues over (under) expenses for the years		1,354,081	(2,598,999)	774,759	(3,018,225)
Other comprehensive revenues (expenses):					
Items that will be reclassified subsequently					
to revenues or expenses:					
Share of other comprehensive profit of investments in associates	13	-	158	-	-
Gain on measurement of investments managed by SET	26	-	417,992	-	417,992
Gain on measurement of investments in					
Securities Investor Protection Fund	26	-	6,218	-	6,218
Income tax relating to items that will be reclassified					
subsequently to revenues or expenses	26	-	(82,910)	-	(82,912)
Total items that will be reclassified					
subsequently to revenues or expenses		-	341,458	-	341,298
Items that will not be reclassified subsequently					
to revenues or expenses:					
Gain (loss) on remeasurements of post-employment					
benefits obligations	26	(77,291)	10,226	(77,291)	10,226
Income tax relating to items that will not be reclassified					
subsequently to revenues or expenses	26	15,571	-	15,571	-
Total items that will not be reclassified					
subsequently to revenues or expenses		(61,720)	10,226	(61,720)	10,226
Other comprehensive revenues (expenses) for the years, net of tax		(61,720)	351,684	(61,720)	351,524
Total comprehensive revenues over (under) expenses for the years		1,292,361	(2,247,315)	713,039	(2,666,701)
Total comprehensive revenues over (under) expenses					
for the years attributable to:					
Owners of the parent		1,292,361	(2,247,315)	713,039	(2,666,701)
Non-controlling interests		-	-	-	-
		1,292,361	(2,247,315)	713,039	(2,666,701)

Notes to the financial statements form an integral part of these financial statements

Statement of Changes in Fund Balances

The Stock Exchange of Thailand and its Subsidiaries

For the year ended December 31, 2020

(Unit: THB Thousand)

		Consolidated Financial Statements								
		Fund balances (See Note 25)	Other components of fund balances				Total fund balances	Non- controlling interests	Total fund balances	
			Gain (losses) on measurement of investments managed by SET (net of tax)	In Securities Investor Protection Fund (net of tax)	Share of other comprehensive profit (loss) of associates (net of tax)	Total other components of fund balances				
Notes										
Balances as at January 1, 2019		28,679,406	(20,093)	6,081	(131)	(14,143)	28,665,263	1	28,665,264	
Other comprehensive revenues										
	(expenses), net of tax	25	10,226	335,082	6,218	158	341,458	351,684	-	351,684
	Revenues under expenses	25	(2,598,999)	-	-	-	-	(2,598,999)	-	(2,598,999)
Balances as at December 31, 2019		26,090,633	314,989	12,299	27	327,315	26,417,948	1	26,417,949	
Balances as at January 1, 2020										
before adjusted		26,090,633	314,989	12,299	27	327,315	26,417,948	1	26,417,949	
Effect of change in new accounting policies		2.2 and 25	324,184	(314,989)	(12,299)	(27)	(327,315)	(3,131)	-	(3,131)
Balances as at January 1, 2020										
after adjusted		26,414,817	-	-	-	-	26,414,817	1	26,414,818	
Other comprehensive revenues										
	(expenses), net of tax	25	(61,720)	-	-	-	-	(61,720)	-	(61,720)
	Revenues over expenses	25	1,354,081	-	-	-	-	1,354,081	-	1,354,081
Balances as at December 31, 2020		27,707,178	-	-	-	-	27,707,178	1	27,707,179	

(Unit: THB Thousand)

	Notes	Separate Financial Statements				
		Other components of fund balances			Total fund balances	
		Fund balances (See Note 25)	Gain (losses) on measurement of investments managed by SET (net of tax)	Gain (losses) on measurement of investments in Securities Investor Protection Fund (net of tax)		
Balances as at January 1, 2019		26,321,432	(12,182)	6,081	(6,101)	26,315,331
Other comprehensive revenues						
(expenses), net of tax	25	10,226	335,080	6,218	341,298	351,524
Revenues under expenses	25	(3,018,225)	-	-	-	(3,018,225)
Balances as at December 31, 2019		23,313,433	322,898	12,299	335,197	23,648,630
Balances as at January 1, 2020 before adjusted		23,313,433	322,898	12,299	335,197	23,648,630
Effect of change in new accounting policy	2.2 and 25	334,626	(322,898)	(12,299)	(335,197)	(571)
Balances as at January 1, 2020 after adjusted		23,648,059	-	-	-	23,648,059
Other comprehensive revenues						
(expenses), net of tax	25	(61,720)	-	-	-	(61,720)
Revenues over expenses	25	774,759	-	-	-	774,759
Balances as at December 31, 2020		24,361,098	-	-	-	24,361,098

Notes to the financial statements form an integral part of these financial statements



Statements of Cash Flows

The Stock Exchange of Thailand and its Subsidiaries

For the year ended December 31, 2020

(Unit: THB Thousand)

	Notes	Consolidated Financial Statements		Separate Financial Statements	
		2020	2019	2020	2019
Cash flows from operating activities					
Revenues over (under) expenses before income tax expense		1,732,360	(2,384,728)	882,073	(3,064,912)
Adjustments for					
Depreciation and amortisation	15, 16 and 17	528,998	524,849	527,699	523,700
Financial cost from lease liabilities		1,578	-	1,578	-
Investment income (expense), net		173,947	(843,366)	(326,948)	(1,516,714)
Income derived from Securities Investor Protection Fund, net	26	(7,157)	(13,930)	(7,157)	(13,930)
Income derived from Derivatives Investor Protection Fund, net	26	(723)	(848)	-	-
Reversal of allowance for impairment of investments		-	(3,395)	-	(3,395)
Allowance for expected credit loss		3,812	-	3,504	-
Doubtful debts expenses		-	1,763	-	3,544
Employee benefits obligation expenses	24	68,003	192,132	68,003	192,132
(Gain) loss from disposal/write-off of assets		(490)	52	(490)	52
Share of profit of investments in associates and joint venture entity - net of tax	13	(28,025)	(45,383)	-	-
		2,472,303	(2,572,854)	1,148,262	(3,879,523)
Changes in operating assets and liabilities					
(Increase) decrease in operating assets					
Assets for margin deposits and benefits		(6,944,499)	2,125,742	-	-
Trade and other current receivables		(755,967)	102,061	(198,099)	127,681
Other current assets		(45,170)	13,827	(45,503)	9,197
Assets for clearing system protection and benefits		(11,610)	(222,749)	(2,807)	(3,760)
Securities Investor Protection Fund		(6,488)	(33,457)	(6,488)	(33,457)
Derivatives Investor Protection Fund		(1,910)	(6,321)	-	-
Refundable deposits		-	3,000	-	3,000

Statements of Cash Flows (Continued)

The Stock Exchange of Thailand and its Subsidiaries

For the year ended December 31, 2020

(Unit: THB Thousand)

	Notes	Consolidated Financial Statements		Separate Financial Statements	
		2020	2019	2020	2019
Cash flows from operating activities (continued)					
Increase (decrease) in operating liabilities					
Margin deposits and benefits payables		6,944,499	(2,125,742)	-	-
Trade and other current payables		957,671	180,274	377,330	184,538
Fees received in advance		(7,235)	18,144	596	19,597
Other current liabilities		(1,187)	35,889	11,534	(13,219)
Assets for clearing system protection and benefits payable		9,003	219,476	-	-
Contributions and benefits to Securities Investor					
Protection Fund		1,419	13,407	1,419	13,407
Contributions and benefits to Derivative Investor					
Protection Fund		837	5,239	-	-
Employee benefits paid	24	(10,052)	(4,076)	(10,052)	(4,076)
Other non-current liabilities		317	2,099	317	2,099
Cash flows generated from (used in) operations		2,601,931	(2,246,041)	1,276,509	(3,574,516)
Less Income tax paid		(354,587)	(434,413)	(108,592)	(171,030)
Net cash provided by (used in) operating activities		2,247,344	(2,680,454)	1,167,917	(3,745,546)
Cash flows from investing activities					
Investment income received		114,398	695,567	142,146	661,827
Dividend received		66,708	143,356	195,102	814,866
Purchase of other current financial assets		(1,987,402)	-	(1,843,446)	-
Purchase of short-term investments	9	-	(2,472,237)	-	(271,875)
Proceeds from disposals of other current financial assets		2,893,314	-	2,559,836	-
Proceeds from disposals of short-term investments	9	-	4,904,849	-	4,904,849
Proceeds from disposals of investment in joint venture entity		-	13,000	-	13,000
Purchase of investments in subsidiaries		-	-	(90,000)	-
Proceeds from short-term loans to joint venture entity		-	7,500	-	7,500
Purchase of other non-current financial assets		(3,039,796)	-	(3,034,796)	-
Purchase of long-term investments	14	-	(2,023,880)	-	(2,023,880)
Proceeds from disposals of other non-current financial assets		5,839,659	-	5,839,659	-
Proceeds from disposals of long-term investments	14	-	3,398,504	-	3,398,504
Payment for long-term loans to a subsidiary	7	-	-	(250,000)	(200,000)
Reserve fund for clearing and settlement		(213,627)	(261,862)	-	-
Purchase of property, plant and equipment		(113,405)	(148,220)	(113,405)	(148,220)
Proceeds from disposals of property, plant and equipment		2,269	1,643	2,269	1,643
Purchase of intangible assets		(146,336)	(381,177)	(145,436)	(381,177)



Statements of Cash Flows (Continued)

The Stock Exchange of Thailand and its Subsidiaries

For the year ended December 31, 2020

(Unit: THB Thousand)

	Notes	Consolidated Financial Statements		Separate Financial Statements	
		2020	2019	2020	2019
Cash flows from investing activities (continued)					
Proceeds from share of profit of investments in associates	13	20,151	15,743	-	-
Benefits received from Securities Investor Protection Fund		5,069	13,832	5,069	13,832
Benefits received from Derivatives Investor Protection Fund		1,073	1,082	-	-
Net cash provided by investing activities		3,442,075	3,907,700	3,266,998	6,790,869
Cash flows from financing activities					
Cash paid for lease liabilities	16	(14,135)	-	(14,135)	-
Cash inflow on short-term borrowings from subsidiary	7	-	-	1,010,000	458,713
Repayment of short-term borrowings from subsidiary	7	-	-	(112,000)	(2,323,500)
Interest paid		-	-	(22,493)	(36,569)
Net cash provided by (used in) financing activities		(14,135)	-	861,372	(1,901,356)
Net increase in cash and cash equivalents		5,675,284	1,227,246	5,296,287	1,143,967
Allowance for expected credit loss		(2,060)	-	(2,060)	-
Beginning balances		2,414,927	1,187,681	2,092,736	948,769
Ending balances		8,088,151	2,414,927	7,386,963	2,092,736
Supplemental disclosures of cash flows information					
Cash and cash equivalents are as follows:					
Cash and cash equivalents	8	8,011,828	2,329,358	7,386,963	2,092,736
Cash at a banks for financial benefits payable		76,323	85,569	-	-
		8,088,151	2,414,927	7,386,963	2,092,736
Significant non-cash transactions					
Loss on investment measured at fair value					
through profit or loss		(392,260)	-	(400,030)	-
Unrealized gain on available-for-sale securities		-	418,150	-	417,992
Unrealized gain on available-for-sale securities					
from Securities Investor Protection Fund	26.2	-	6,218	-	6,218
Other payables from purchase of assets		70,921	18,735	70,921	18,735
Asset from right-of-use assets		(25,313)	-	(25,313)	-
Liability from right-of-use-assets		13,087	-	13,087	-
Payment of short-term borrowings from subsidiaries					
with dividend received	7	-	-	400,291	-

Notes to the financial statements form an integral part of these financial statements

Notes to the Consolidated and Separate Financial Statements

The Stock Exchange of Thailand and its Subsidiaries

For the year ended December 31, 2020

1. General Information

The Stock Exchange of Thailand (SET) is a juristic entity incorporated in Thailand under the Securities Exchange of Thailand Act B.E. 2517 (1974). The principal business activities of SET are serving as the market or the centre for trading of securities and providing related services without the objective of distribution of profit to members. SET commenced its trading of securities on April 30, 1975 and operates under the framework of the Securities and Exchange Act B.E. 2535 (1992). Its registered office is located at 93 Floor 17th Ratchadapisek Road, Kwaeng Din Daeng, Khet Din Daeng, Bangkok 10400, Thailand.

For reporting purposes, SET and its subsidiaries are referred to as the Group.

The principal activities of SET and its subsidiaries are summarised as follows:

- 1) Securities markets comprise the operation of securities listing, trading system, clearing and settlement, depository, including market surveillance and supervision of listed companies and member companies.
- 2) Derivatives markets comprise the operation of trading and clearing of futures contracts and financial securities, providing other services related to futures trading transactions.
- 3) Technology services comprise the operation of internet trading platform for securities and derivatives, information services and other member services.
- 4) Registrar services and fund services comprise the operation of securities registrar and fund services.

Details of SET's subsidiaries, associates and joint venture entity as at December 31, 2020 and 2019 are as follows:

Name of entity	Type of business	Country of incorporation	Ownership interest (%)	
			2020	2019
Direct subsidiaries				
Thailand Securities Depository Co., Ltd.	Securities depository and registrar services	Thailand	100.00	100.00
Thai Trust Fund Management Co., Ltd.	Mutual fund management	Thailand	100.00	100.00
Thai NVDR Co., Ltd.	Investment management in Non-Voting Depository Receipts	Thailand	100.00	100.00
SETTRADE.COM Co., Ltd.	Computer system services	Thailand	100.00	100.00
Thailand Futures Exchange Public Company Limited	Derivatives exchange	Thailand	100.00	100.00
Thailand Clearing House Co., Ltd.	Clearing house and related back-office services for securities and derivatives contracts	Thailand	100.00	100.00



Details of SET's subsidiaries, associates and joint venture entity as at December 31, 2020 and 2019 are as follows:

Name of entity	Type of business	Country of incorporation	Ownership interest (%)	
			2020	2019
Finnet Innovation Network Co., Ltd.*	Rendering payment service for the capital market	Thailand	-	100.00
Live Fin Corp Co., Ltd.*	Provider of electronic network system for investment	Thailand	-	100.00
SET Venture Holding Co. ,Ltd. (Date of incorporation on May 21, 2020)	Holding company	Thailand	100.00	-

* On May 20, 2020, SET's Board of Governors passed the resolution to approve transferring common shares of Finnet Innovation Network Co., Ltd. and Live Fin Corp Co., Ltd., which held by SET at the quantity of 20,000,000 shares and 3,000,000 shares, respectively, to SET Venture Holding Co., Ltd. This share transferring has been registered with Ministry of Commerce on July 1, 2020.

Name of entity	Type of business	Country of incorporation	Ownership interest (%)	
			2020	2019
Indirect subsidiaries				
Finnet Innovation Network Co., Ltd.	Rendering payment service for the capital market	Thailand	100.00	-
Live Fin Corp Co., Ltd.	Provider of electronic network system for investment	Thailand	100.00	-
Digital Access Platform Co., Ltd. (Date of incorporation on May 22, 2020)	Providing electronic networking service and/or supporting system to support electronic and digital transactions	Thailand	100.00	-
Thai Digital Assets Exchange Co., Ltd. (Date of incorporation on September 14, 2020)	Trading center for digital assets and providing infrastructure or related systems to support digital assets trading	Thailand	100.00	-
Joint venture entity				
Family Know-how Co., Ltd. ⁽¹⁾ (the dissolution was registered on December 26, 2018)	Media business specialising in financial and investment information	Thailand	50.00	50.00
Associates				
Clearing Fund ⁽²⁾	Fund	Thailand	7.76	8.59
TSFC Securities Public Company Limited ⁽³⁾	Securities financing services and securities borrowing and lending	Thailand	40.70	40.65

Details of SET's associates and joint venture entity as at December 31, 2020 and 2019 are as follows:

1) Family Know-how Co., Ltd.

Family Know-how Co., Ltd. is a media company that broadcasts information about economics and investment for the benefits of investor. SET has performed joint arrangement with a company which have rights to the net assets of the arrangement. Therefore, the investment in Family Know-how is classified as investment in joint venture entity.

Family Know-how Co., Ltd. is a private limited company and its stock is not trade in the market price.

A Company has registered the dissolution with the Ministry of Commerce on December 26, 2018, and is currently in the process of liquidation.

2) Clearing Fund

The Clearing Fund operates under the Regulations of the Clearing Fund (No.1) B.E. 2541 (1998), which require that a one-time payment of THB 100 million be made as an initial contribution by SET. The ownership interest percentage will be reduced based on further contributions made by other members of the Clearing Fund in the future. SET has no control over the Clearing Fund's operations, but has influences in policy and operation. Therefore, the investment in the Clearing Fund is classified as investment in an associate.

3) TSFC Securities Public Company Limited (TSFC)

TSFC Securities Public Company Limited has been established to provide liquidity for securities companies and support the further development of securities market. SET has appointed 5 representatives to be member of the 11-member Board of Directors of TSFC. The Board of Directors will participate in the decision-making on monetary policies and operations of the company. Therefore, the investment in TSFC is classified as investment in an associate.

TSFC Securities Public Company Limited is a public company and its stock is not trade in the market price.

Coronavirus Disease 2019 Pandemic

The Coronavirus disease 2019 ("COVID-19") pandemic is continuing to evolve, resulting in an economic slowdown and adversely impacting most businesses and industries. This situation may bring uncertainties and have an impact on the environment in which the group operates. Nevertheless, the Group management will continue to monitor the ongoing development and regularly assess the financial impact in respect of valuation of assets, provisions and contingent liabilities.

2. Basis of Preparation and Presentation of Consolidated and Separate Financial Statements

2.1 Basis of preparation of financial statements

The consolidated and separate financial statements have been prepared in accordance with Thai Financial Reporting Standards under the Accounting Act B.E. 2543 (2000), being those Thai Financial Reporting Standards issued under the Accounting Profession Act B.E. 2547 (2004).

The consolidated and separate financial statements have been prepared under the historical cost convention except as disclosed in the accounting policy for investments below.

The preparation of financial statements in conformity with Thai Financial Reporting Standards requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated and separate financial statements are disclosed in Note 3.17.

An English version of the consolidated and separate financial statements has been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.



2.2 Thai Financial Reporting Standards affecting the presentation and disclosure in the current period financial statements

During the year, the Group has adopted the revised and new financial reporting standards and guidelines on accounting issued by the Federation of Accounting Professions which become effective for fiscal years beginning on or after January 1, 2020. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards, with most of the changes directed towards revision of wording and terminology, and provision of interpretations and accounting guidance to users of standards. The adoption of these financial reporting standards does not have any material impact on the Group's financial statements, except the following financial reporting standards:

Group of Financial Instruments Standards

Thai Accounting Standards ("TAS")

TAS 32 Financial Instruments: Presentation

Thai Financial Reporting Standards ("TFRS")

TFRS 7 Financial Instruments: Disclosures

TFRS 9 Financial Instruments

Thai Financial Reporting Standard Interpretations ("TFRIC")

TFRIC 16 Hedges of a Net Investment in a Foreign Operation

TFRIC 19 Extinguishing Financial Liabilities with Equity Instruments

In the current period, the Group has initially applied Group of Financial Instruments Standards. The Group has elected to recognize the cumulative effect of initially adopting of TFRS 9 as an adjustment to the opening balance of general fund of the reporting period.

TFRS 9 introduced new requirements for:

- 1) The classification and measurement of financial assets and financial liabilities;
- 2) Impairment of financial assets; and
- 3) General hedge accounting

The Group has applied TFRS 9 in accordance with the transition provisions set out in TFRS 9.

- 1) Classification and measurement of financial assets and liabilities

The date of initial application is January 1, 2020. Accordingly, the Group has applied the requirements of TFRS 9 to instruments that continue to be recognized as at January 1, 2020 and has not applied the requirements to instruments that have already been derecognized as at January 1, 2020. Comparative amounts in relation to instruments that continue to be recognized as at January 1, 2020 have not been restated.

Classification and measurement of financial assets

All recognized financial assets that are within the scope of TFRS 9 are required to be measured subsequently at amortized cost or fair value on the basis of the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets, specifically:

- Debt instruments that are held within a business model whose objective is to collect the contractual cash flows, and that have contractual cash flows that are solely payments of principal and interest on the principal amount outstanding, are measured subsequently at amortized cost;
- All other debt investments and equity investments that is held for trading are measured subsequently at fair value through revenues and expenses (FVTPL).
- The Group may irrevocably elect to present subsequent changes in fair value of an equity investment that is neither held for trading nor contingent consideration recognized by an acquirer in a business combination in other comprehensive income;
- The Group may irrevocably designate a debt investment that meets the amortized cost or FVTOCI criteria as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

Debt instruments that are measured subsequently at amortized cost are subject to impairment.

The director of the Group reviewed and assessed the Group's existing financial assets as at January 1, 2020 based on the facts and circumstances that existed at that date and concluded that the initial application of TFRS 9 has had the following impact on the Group's financial assets as regards their classification and measurement:

- There is no change in the measurement of the Group's investments in equity instruments that are held for trading; those instruments were and continue to be measured at FVTP;
- Investments are classified as held-to-maturity under TAS 105 "Accounting for Investments in Debt and Equity Securities" and loans and receivables as they are held within a business model to collect contractual cash flows and these cash flows consist solely of payments of principal and interest on the principal amount outstanding.

2) Impairment of financial assets

In relation to the impairment of financial assets, TFRS 9 requires an expected credit loss model. The expected credit loss model requires the Group to account for expected credit losses and changes in those expected credit losses at each reporting date to reflect changes in credit risk since initial recognition of the financial assets. In other words, it is no longer necessary for a credit event to have occurred before credit losses are recognized.

TFRS 9 requires the Group to recognize a loss allowance for expected credit losses on;

- (1) Debt investments measured subsequently at amortized cost;
- (2) Lease receivables;
- (3) Trade receivables and contract assets; and
- (4) Financial guarantee contracts to which the impairment requirement of TFRS 9 apply

TFRS 9 requires the Group to measure the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses (ECL) if the credit risk on that financial instrument has increased significantly since initial recognition, or if the financial instrument is a purchased or originated credit-impaired financial asset. However, if the credit risk on a financial instrument has not increased significantly since initial recognition (except for a purchased or originated credit-impaired financial asset), the Group are required to measure the loss allowance for that financial instrument at an amount equal to 12-month ECL. TFRS 9 also requires general approach and simplified approach for measuring the loss allowance at an amount equal to lifetime ECL for trade receivables, contract assets and lease receivables in certain circumstances.

Because the Group has elected to recognize the cumulative effect as an adjustment of retained earnings at the date of initial application, for the purpose of assessing whether there has been a significant increase in credit risk since initial recognition of financial instruments that remain recognized on the date of initial application of TFRS 9.

The result of the assessment is as follows:

(Unit: THB Thousand)

Items existing as at January 1, 2020 that are subject to the impairment provisions of TFRS 9	Additional allowance for expected credit loss recognized on	
	Consolidated financial statements January 1, 2020	Separate financial statements January 1, 2020
Cash and cash equivalents	438	438
Short-term investment	104	104
Long-term investment	29	29
Assets for clearing system protection and benefits	2,453	-
Reserve Fund for clearing and settlement	107	-
	<u>3,131</u>	<u>571</u>

The additional expected credit loss of consolidated and separate financial statements of THB 3.13 million and THB 0.57 million, respectively as at January 1, 2020 has been recognized against general fund, resulting in a net decrease in general fund at the same amount.

The tables below show the amount of adjustment for each financial statement line item affected by the application of TFRS 9.

(Unit: THB Thousand)

Consolidated Financial Statements
As at January 1, 2020

Messages from the Chairman and the President Board of Governors and SET Executives Business Operation Key Developments

Previous classification	Previous Measurement	Previous book value amount	Effect from new classification	New classification	Type of Measurement by TFRS 9	New book value amount
<u>Current Financial assets</u>						
Cash and cash equivalents	Cost value	2,329,358	(438)	Cash and cash equivalents	Amortised cost	2,328,920
Cash at banks for financial benefits payable	Cost value	85,569	-	Cash at banks for financial benefits payable	Amortised cost	85,569
Assets for margin deposits and benefits	Fair value	840,265	-	Assets for margin deposits and benefits	Fair value through profit or loss	840,265
	Amortised cost	12,544,397	(2,453)		Amortised cost	12,541,944
<u>Short-term investment</u>						
Trading securities	Fair value	3,396,804	-	Other current financial assets	Fair value through profit or loss	3,396,804
Available-for-sale securities	Fair value	1,275,060	-		Fair value through profit or loss	1,275,060
Held-to-maturity securities	Amortised cost	711,693	(104)		Amortised cost	711,589
Trade and other receivables	Cost value	518,753	-	Trade and other current receivables	Amortised cost	518,753
<u>Non-Current Financial Assets</u>						
<u>Long-term investments</u>						
Available-for-sale securities	Fair value	6,926,536	-	Other non-current financial assets	Fair value through profit or loss	6,926,536
Held-to-maturity securities	Amortised cost	940,561	(29)		Amortised cost	940,532
General investments	Cost less impairment	36,861	-		Fair value through other comprehensive income	36,861
Assets for margin deposits and benefits	Fair value	1,498,835	-	Assets for margin deposits and benefits	Fair value through profit or loss	1,498,835
	Amortised cost	706,463	(107)		Amortised cost	706,356
Securities Investor Protection Fund	Fair value	291,505	-	Securities Investor Protection Fund	Fair value through profit or loss	291,505
	Amortised cost	540,523	-		Amortised cost	540,523
Derivatives Investor Protection Fund	Amortised cost	110,237	-	Derivatives Investor Protection Fund	Amortised cost	110,237
Reserve Fund for clearing and settlement	Fair value	5,577,063	-	Reserve Fund for clearing and settlement	Fair value through profit or loss	5,577,063
	Amortised cost	13,375	-		Amortised cost	13,375
<u>Financial Liabilities</u>						
<u>Margin deposits and benefits payable</u>						
	Fair value	(840,265)	-	Margin deposits and benefits payable	Fair value through profit or loss	(840,265)
	Amortized cost	(12,544,397)	-		Amortised cost	(12,544,397)
<u>Trade and other payables</u>	Cost value	(1,490,467)	-	Trade and other current payables	Amortised cost	(1,490,467)
Assets for clearing system protection and benefits payable	Cost value	(2,057,869)	-	Assets for clearing system protection and benefits payable	Amortised cost	(2,057,869)
Contributions and benefits to Securities Investor Protection Fund	Cost value	(336,254)	-	Contributions and benefits to Securities Investor Protection Fund	Amortised cost	(336,254)
Contributions and benefits to Derivatives Investor Protection Fund	Cost value	(54,041)	-	Contributions and benefits to Derivatives Investor Protection Fund	Amortised cost	(54,041)
<u>Fund balances</u>						
Securities Investor Protection Fund	-	(483,475)	(12,299)	Securities Investor Protection Fund	-	(495,774)
General fund (See Note 25)	-	(19,896,965)	(311,885)	General fund (See Note 25)	-	(20,208,850)
Gain (loss) on re-measuring available-for-sale investments	-	(327,315)	327,315	Investment measured fair value through profit or loss	-	-

(Unit: THB Thousand)

Separate Financial Statements
As at January 1, 2020

Previous classification	Previous Measurement	Previous book value amount	Effect from new classification	New classification	Type of Measurement by TFRS 9	New book value amount
Sustainability Developments						
Current Financial assets						
Cash and cash equivalents	Cost value	2,092,736	(438)	Cash and cash equivalents	Amortised cost	2,092,298
Short-term investment						
Trading securities	Fair value	1,198,403	-	Other current financial assets	Fair value through profit or loss	1,198,403
Available-for-sale securities	Fair value	1,275,060	-		Fair value through profit or loss	1,275,060
Held-to-maturity securities	Amortised cost	709,732	(104)		Amortised cost	709,628
Trade and other receivables	Cost value	525,182	-	Trade and other current receivables	Amortised cost	525,182
Corporate Governance						
Non-Current Financial Assets						
Long-term investment						
Available-for-sale securities	Fair value	6,926,536	-	Other non-current financial assets	Fair value through profit or loss	6,926,536
Held-to-maturity securities	Amortised cost	940,561	(29)		Amortised cost	940,532
General investments	Cost less impairment	36,861	-		Fair value through other comprehensive income	36,861
Securities Investor Protection Fund	Fair value	291,505	-	Securities Investor Protection Fund	Fair value through profit or loss	291,505
	Amortised cost	540,523	-		Amortised cost	540,523
Long-term loans to a subsidiary	Cost value	5,440,834	-	Long-term loans to a subsidiary	Amortised cost	5,440,834
Risk Management						
Financial Liabilities						
Trade and other payables	Cost value	(1,296,758)	-	Trade and other current payables	Amortised cost	(1,296,758)
Short-term borrowings from subsidiaries	Cost value	(1,918,713)	-	Short-term borrowings from subsidiaries	Amortised cost	(1,918,713)
Contributions and benefits to Securities Investor Protection Fund	Cost value	(336,254)	-	Contributions and benefits to Securities Investor Protection Fund	Amortised cost	(336,254)
Financial Reports						
Fund balances						
Securities Investor Protection Fund	-	(483,475)	(12,299)	Securities Investor Protection Fund	-	(495,774)
General fund (See Note 25)	-	(17,175,961)	(322,327)	General fund (see Note 25)	-	(17,498,288)
Gain (loss) on re-measuring available-for-sale investments	-	(335,197)	335,197	Investment measured fair value through profit or loss	-	-



Thai Financial Reporting Standards No. 16 “Leases” (“TFRS 16”)

The Group has applied TFRS 16 using the cumulative catch-up approach which:

- Requires the Group to recognize the cumulative effect of initially applying TFRS 16 as an adjustment to the opening balance of retained earnings at the date of initial application.
- Does not restate the comparative information and continue to present comparative information under TAS 17 and TFRIC 4.

Impact of the new definition of a lease

The change in definition of a lease mainly relates to the concept of control. TFRS 16 determines whether a contract contains a lease on the basis of whether the customer has the right to control the use of an identified asset for a period of time in exchange for consideration. This is in contrast to the focus on “risk and rewards” in TAS 17 and TFRIC 4.

The Group applies the definition of a lease and related guidance set out in TFRS 16 to all lease contracts entered into or changed on or after January 1, 2020 (whether it is a lessor or a lease in the lease contract). In preparation for the first-time application TFRS 16, the Group has carried out an implementation project. The project has shown that the new definition in TFRS 16 will not significantly change the scope of contracts that meet the definition of a lease for the Group.

Impact on Lessee Accounting

TFRS 16 changes how the Group accounts for lease previously classified as operating leases under TAS 17, which were off balance sheet.

Applying TFRS 16, for all leases, the Group:

- 1) Recognizes right-of-use assets and lease liabilities in the consolidated and separate statements of financial position, initially measured at the present value of the future lease payments, with the right-of-use asset adjusted by the amount of any prepaid or accrued lease payments in accordance with TFRS 16.
- 2) Recognizes depreciation of right-of-use assets and interest on lease liabilities in the consolidated and separate statements of comprehensive revenue and expense.
- 3) Separates the total amount of cash paid into a principal portion (presented within financing activities) and interest (presented within financing activities) in the consolidated and separate statements of cash flows.
- 4) Lease incentives (e.g. rent free period) are recognized as part of the measurement of the right-of-use assets and lease liabilities whereas under TAS 17 they resulted in the recognition of a lease incentive, amortized as a reduction of rental expenses on a straight line basis.

Under TFRS 16, right-of-use assets are tested for impairment in accordance with TAS 36.

For short-term leases (lease term of 12 months or less) and leases of low-value assets, small items, the Group has opted to recognize a lease expense on a straight-line basis as permitted by TFRS 16. This expense is presented within “other expenses” in the consolidated and separate statements of comprehensive revenue and expense.

The Group has used the following practical expedients when applying the cumulative catch-up approach to leases previously classified as operating leases applying TAS 17.

- The Group has applied a single discount rate to a portfolio of leases with reasonably similar characteristics.
- The Group has adjusted the right-of-use asset at the date of initial application by the amount of provision for onerous leases recognized under TAS 37 in the statement of financial position immediately before the date of initial application as an alternative to performing an impairment review.
- The Group has elected not to recognize right-of-use assets and lease liabilities to leases for which the lease term end within 12 months of the date of initial application.
- The Group has excluded initial direct costs from the measurement of the right-of-use asset at the date of initial application.
- The Group has used hindsight when determining the lease term when the contract contains options to extend or terminate the lease.

Financial impact of the initial application of TFRS 16

The Group recognized lease liabilities in relation to leases, which had previously been classified as operating leases under the principles of TAS 17. The right-of-use assets were measured at amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognized in the statement of financial position immediately before the date of initial application. These liabilities were measured at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rates.

The following table shows the operating lease commitments disclosed applying TAS 17 at December 31, 2019, discounted using incremental borrowing rate at the date of initial application and the lease liabilities recognized in the statement of financial position at the date of initial application.

	(Unit: THB Thousand)
	Consolidated and Separate Financial Statements
Operating lease commitments as at December 31, 2019	51,793
Short-term leases and leases of low-value assets	(16,239)
Operating lease commitments recognized as lease liabilities	35,554
Effect of discounting the above amounts	(2,584)
Lease liabilities recognized as at January 1, 2020	32,970

The Group has recognized THB 32.97 million of right-of-use assets and THB 32.97 million of lease liabilities upon transition to TFRS 16.

In addition, the Federation of Accounting Professions has announced two Accounting Treatment Guidances, which have been announced in the Royal Gazette on April 22, 2020, detail as follows:

Accounting Treatment Guidance on "The temporary relief measures for entities supporting their debtors who effected from the situations that affected Thailand's economy"

The objective of this accounting treatment guidance is to grant the temporary relief measures for entities helping their debtors who effected from the situations that affected Thailand's economy with the helping period during January 1, 2020 to December 31, 2021 or until there are any changes from the Bank of Thailand, which require the compliance for such changes. The entities who support their debtors and elect to apply this accounting treatment guidance should be comply with all relief measures specified in this accounting treatment guidance.

The Group has not adopted such accounting treatment guidance in the preparation of the financial statements for the year ended December 31, 2020.

Accounting Treatment Guidance on "The temporary relief measures for additional accounting alternatives to alleviate the impacts from COVID-19 outbreak"

This accounting treatment guidance is the option for all entities applying Financial Reporting Standards for Publicly Accountable Entities. Since the preparation of financial statements during the period, which COVID-19 situation still be highly uncertainty as at the end of reporting period may cause the entities' management to use the critical judgment in the estimation or the measurement and recognition of accounting transactions. Objective of this accounting treatment guidance is to alleviate some of the impact of applying certain financial reporting standards, and to provide clarification about accounting treatments during the period of uncertainty relating to this situation. The entities can apply this accounting treatment guidance for the preparation of financial statements with the reporting period ending within the period from January 1, 2020 to December 31, 2020.

The Group has not adopted such accounting treatment guidance in the preparation of the financial statements for the year ended December 31, 2020.



Thai Financial Reporting Standard No.16 “Leases”

TFRS 16 has been amended for the Rent Concessions related to COVID-19, which is effective from June 1, 2020 with earlier application permitted. The amendment permits lessees, as a practical expedient, not to assess whether rent concessions that occur as a direct consequence of the COVID-19 pandemic and meet specified conditions are lease modifications and, instead, to account for those rent concessions as if they were not lease modifications. In addition, the revised TFRS 16 also added the requirements for the temporary exception arising from interest rate benchmark reform, which an entity shall apply these amendments for annual reporting periods beginning on or after January 1, 2022 with earlier application permitted. This revised TFRS 16 has been announced in the Royal Gazette on January 27, 2021.

The Group has no transactions in relation to the amendment of rent concessions. Therefore, the Group have not adopted such accounting treatment guidance in the preparation of the financial statements for the year ended December 31, 2020.

2.3 Thai Financial Reporting Standards announced in the Royal Gazette but not yet effective

The Federation of Accounting Professions has issued the Notification regarding Thai Accounting Standards, Thai Financial Reporting Standards, Thai Accounting Standards Interpretation and Thai Financial Reporting Standard Interpretation, which have been announced in the Royal Gazette and will be effective for the financial statements for the period beginning on or after January 1, 2021 onwards. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards, with most of the changes directed towards revisions to references to the Conceptual Framework in TFRSs, except for the revisions of definitions and accounting requirements as follows:

Conceptual Framework for Financial Reporting

The revised Conceptual Framework for Financial Reporting consisted of the revised definitions and recognition criteria of asset and liability as well as new guidance on measurement, derecognition of asset and liability, presentation and disclosure. In addition, this Conceptual Framework for Financial Reporting clearly clarifies management’s stewardship of the entity’s economic resources, prudence, and measurement uncertainty of financial information.

Definition of Business

The revised Thai Financial Reporting Standard No.3 “Business Combinations” clearly clarifies the definition of business and introduce an optional concentration test. Under the optional concentration test, the acquired set of activities and assets is not a business if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar assets. This revised financial reporting standard requires prospective method for such amendment. Earlier application is permitted.

Definition of Materiality

The revised definition of materiality resulted in the amendment of Thai Accounting Standards No.1 “Presentation of Financial Statements” and Thai Accounting Standards No.8 “Accounting Policies, Changes in Accounting Estimates and Errors”, including other financial reporting standards which refer to materiality. This amendment is intended to make the definition of material to comply with the Conceptual Framework which requires prospective method for such amendment. Earlier application is permitted.

The Interest Rate Reform

Due to the interest rate reform, there are the amendments of specific hedge accounting requirements in Thai Financial Reporting Standard No.9 “Financial Instruments” and Thai Financial Reporting Standard No.7 “Financial Instruments: Disclosures”.

The Group’s management will adopt such TFRSs in the preparation of the Group’s financial statements when it becomes effective. The Group’s management is in the process to assess the impact of these TFRSs on the financial statements of the Group in the period of initial application.

2.4 Group Accounting – Investments in subsidiaries, associates and joint ventures entity

1) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Intercompany transactions, balances and unrealized gains or loss on transactions between the Group are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

In the separate financial statements, investments in subsidiaries are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of investment.

2) Transactions and non-controlling interests

The Group treats transactions with non-controlling interests as transactions with the Fund. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in the Fund. Gains or losses on disposals to non-controlling interests are also recorded in the Fund.

3) Disposal of subsidiaries

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value, with the change in carrying amount recognized in revenues and expenses. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive revenues and expenses in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities.

4) Associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting. Under the equity method, the investment is initially recognized at cost, and the carrying amount is increased or decreased to recognize the investor's share of the revenues and expenses of the investee after the date of acquisition. The Group's investment in associates includes goodwill identified on acquisition.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognized in other comprehensive revenues and expenses is reclassified to revenues and expenses where appropriate.

The Group's share of its associates' post-acquisition profits or losses is recognized in the revenues and expenses, and its share of post-acquisition movements in other comprehensive revenues and expenses is recognized in other comprehensive revenues and expenses. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the associate.



The Group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognizes the amount adjacent to share of profit/(loss) of associates in the statement of comprehensive revenues and expenses.

Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group. Dilution gains and losses arising in investments in associates are recognized in the revenues and expenses.

In the separate financial statements, investments in associates are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of investment.

5) Joint venture entity

Under the equity method of accounting, interests in joint ventures are initially recognized at cost and adjusted thereafter to recognize the Group's share of the post-acquisition profits or losses and movements in other comprehensive revenues and expenses. When the Group's share of losses in a joint venture equals or exceeds its interests in the joint ventures (which includes any long-term interests that, in substance, from part of the Group's net investment in the joint ventures), the Group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the joint ventures.

Unrealized gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

2.5 Foreign currencies

a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in Thai Baht, which is the Group's functional and the Group's presentation currency.

b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the revenues or expenses.

When a gain or loss on a non-monetary item is recognized in other comprehensive revenues and expenses, any exchange component of that gain or loss is recognized in other comprehensive revenues and expenses. Conversely, when a gain or loss on a non-monetary item is recognized in revenues or expenses, any exchange component of that gain or loss is recognized in revenues or expenses.

2.6 Underlying assets

Underlying assets are the financial assets carried by Thai NVDR Co., Ltd. (the subsidiary). The financial liabilities are the Non-Voting Depository Receipts (NVDRs). The subsidiary will offset the financial assets and financial liabilities, and show the net amount in the financial statements. According to the regulations and conditions in the prospectus, the subsidiary are

responsible for issuing and selling NVDRs and making investments in listed companies in the Stock Exchange of Thailand at the same amount and in the same period (back to back). In addition to the entitlement of financial benefits of those underlying securities as the registered holder, the subsidiaries have an obligation to repay those financial benefits to the investors in the NVDRs as mentioned in the prospectus. Those benefits are not recognized as revenues or expenses of the subsidiary.

3. Accounting Policies

3.1 Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, call deposits (excluding deposits held to maturities), other short-term highly liquid investments held for working capital and short-term commitment payment purposes with maturities from acquisition date of three months or less.

3.2 Financial instruments

Policies applicable from January 1, 2020

Financial assets and financial liabilities are recognized in the Group's consolidated and separate statements of financial position when the Group becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in statements of comprehensive revenues and expenses.

Financial assets

All recognized financial assets are measured subsequently in their entirety at either amortized cost or fair value, depending on the classification of the financial assets.

Classification of financial assets

Debt instruments that meet the following conditions are measured subsequently at amortized cost;

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

By default, all other financial assets are measured subsequently at fair value through profit or loss (FVTPL). Despite the foregoing, the Group may make the following irrevocable election/designation at initial recognition of a financial asset;

- The Group may irrevocable elect to present subsequent changes in fair value of an equity investment in other comprehensive income if certain criteria are met (see (2) below); and
- The Group may irrevocable designate a debt investment that meets the amortized cost or FVTOCI criteria as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch (see (3) below).

(1) Amortized cost and effective interest method

The effective interest method is a method of calculating the amortized cost of a debt instrument and of allocating interest income over the relevant period.

Interest income is recognized in revenues and expenses and is included in "investment income – interest income".

(2) Equity instruments designated as at FVTOCI

On initial recognition, the Group may make an irrevocable election (on an instrument-by-instrument basis) to designate investments in equity instruments as at FVTOCI. Designation at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.



A financial asset is held for trading if;

- It has been acquired principally for the purpose of selling it in the near term; or
- On initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has evidence of a recent actual pattern of short-term profit-taking; or
- It is a derivative (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument).

Investments in equity instruments at FVTOCI are initially measured at fair value plus transaction costs.

Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in the investments revaluation reserve. The cumulative gain or loss is not be classified to revenues or expenses on disposal of the equity investments, instead, it is transferred to general fund.

Dividends on these investments in equity instruments are recognized in revenues and expenses in accordance with TFRS 9, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in “Investment income” in revenue or expense.

(3) Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortized cost or FVTOCI (1) – (2) as above are measured at FVTPL. Specifically;

- Investments in equity instruments that is held for trading are classified as at FVTPL, unless the Group designates an equity investment that is neither held for trading nor a contingent consideration arising from a business combination as at FVTOCI on initial recognition ((2) as above).
- Debt instruments that do not meet the amortized cost criteria or the FVTOCI criteria (see (1) and (2) as above) are classified as at FVTPL. In addition, debt instruments that meet either the amortized cost criteria or the FVTOCI criteria may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency (so called “accounting mismatch”) that would arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases. The Group has not designated any debt instruments as at FVTPL.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognized in revenues and expenses to the extent they are not part of a designated hedging relationship (see hedge accounting policy). The net gain or loss recognized in revenues and expenses includes any dividend or interest earned on the financial asset and is included in revenue or expense. Fair value is determined in the manner described in Note 2.2.

Impairment of financial assets

The Group always recognizes lifetime ECL for trade receivables, and contract assets. The expected credit losses on these financial assets are estimated using a provision matrix based on the Group’s historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money where appropriate.

For all other financial instruments, the Group recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

(1) Write-off policy

The Group writes off a financial asset when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. Any recoveries made are recognized in revenue or expense.

(2) Measurement and recognition of expected credit losses

The measurement of expected credit losses is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information. As for the exposure at default, for financial assets, this is represented by the asset's gross carrying amount at the reporting date; for financial guarantee contracts, the exposure includes the amount drawn down as at the reporting date, together with any additional amounts expected to be drawn down in the future by default date determined based on historical trend, the Group's understanding of the specific future financing needs of the debtors, and other relevant forward-looking information.

For financial assets, the expected credit loss is estimated as the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the original effective interest rate. For a lease receivable, the cash flows used for determining the expected credit losses is consistent with the cash flows used in measuring the lease receivable in accordance with TFRS 16 "Leases".

For a financial guarantee contracts, as the Group is required to make payments only in the event of a default by the debtor in accordance with the terms of the instrument that is guaranteed, the expected loss allowance is the expected payments to reimburse the holder for a credit loss that it incurs less any amounts that the Group expects to receive from the holder, the debtor or any other parties.

If the Group has measured the loss allowance for a financial instrument at an amount equal to lifetime ECL in the previous reporting period, but determines at the current reporting date that the conditions for lifetime ECL are no longer met, the Group measures the loss allowance at an amount equal to 12-month ECL at the current reporting date, except for assets for which simplified approach was used.

The Group recognizes an impairment gain or loss in revenues and expenses for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and accumulated in the investment revaluation reserve, and does not reduce the carrying amount of the financial asset in the statement of financial position.

Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.



On derecognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. In addition, on derecognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the investments revaluation reserve is not reclassified to profit or loss, but is transferred to general fund.

Financial liabilities

Financial liabilities measured subsequently at amortized cost

Financial liabilities that are not (i) contingent consideration of an acquirer in a business combination, (ii) held-for-trading, or (iii) designated as at FVTPL, are measured subsequently at amortized cost using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or (where appropriate) a shorter period, to the amortized cost of a financial liability.

Derecognition of financial liabilities

The Group derecognizes financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in revenue or expense.

When the Group exchanges with the existing lender one debt instrument into another one with the substantially different terms, such exchange is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, the Group accounts for substantial modification of terms of an existing liability or part of it as an extinguishment of the original financial liability and the recognition of a new liability. It is assumed that the terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective rate at least 10% different from the discounted present value of the remaining cash flows of the original financial liability. If the modification is not substantial, the difference between; (1) the carrying amount of the liability before the modification; and (2) the present value of cash flows after modification should be recognized in revenue or expense.

Policies applicable before January 1, 2020

1) Trade and other receivables

Trade and other receivables are carried at original invoice amount less allowance for doubtful accounts (if any).

The allowance for doubtful accounts is assessed primarily on analysis of payment histories and future expectations of customer payments, assessment of the future cash flows, known and identified instances of default and consideration of market trends. Bad debts are written off when incurred and recognized as part of other expenses in the statement of comprehensive revenues and expenses.

2) Investments

Investments other than investments in subsidiaries, associates and joint ventures are classified into the following four categories: 1) trading investments; 2) held-to-maturity investments; 3) available-for-sale investments; and 4) general investments. The classification is dependent on the purpose for which the investments were acquired. Management determines the appropriate classification of its investments at the time of the purchase and re-evaluates such designation on a regular basis.

- 1) Trading investments are acquired principally for the purpose of generating a profit from short-term fluctuations in price are classified as trading investments and included in current assets.
- 2) Held-to-maturity investments are investments with fixed maturity that the management has the intent and ability to hold to maturity are classified as held-to-maturity and are included in non-current assets, except for maturities within 12 months from the statement of financial position date which are classified as current assets.
- 3) Available-for-sale investments are investments intended to be held for an indefinite period of time, which may be sold in response to liquidity needs or changes in interest rates, are classified as available-for-sale; and are included in non-current assets unless management has expressed the intention of holding the investment for less than 12 months from the statement of financial position date or unless they will need to be sold to raise operating capital, in which case they are included in current assets.
- 4) General investments are investments in non-marketable equity.

All categories of investments are initially recognized at cost, which is equal to the fair value of consideration paid plus transaction cost.

Trading investments and available-for-sale investments are subsequently measured at fair value. The fair value of investments is based on quoted bid price at the close of business on the statement of financial position date by reference to the Stock Exchange of Thailand and the Thai Bond Dealing Centre. The unrealized gains and losses of trading investments are recognized in revenues and expenses. The unrealized gains and losses of available-for-sale in investments are recognized in other comprehensive revenues and expenses.

Held-to-maturity investments are carried at amortised cost using the effective yield method less impairment loss.

General investments are carried at cost less impairment loss.

A test for impairment is carried out when there is a factor indicating that an investment might be impaired. If the carrying value of the investment is higher than its recoverable amount, impairment loss is charged to revenues and expenses.

On disposal of an investment, the difference between the net disposal proceeds and the carrying amount is charged or credited to the revenues and expenses. When disposing part of the holding of a particular investment in debt or equity securities, the carrying amount of the disposed part is determined by the weighted average carrying amount of the total holding of the investment.

3.3 Property, plant and equipment

Land is stated at cost less impairment losses. Property and equipment are stated at cost less accumulated depreciation and impairment losses (if any).

Depreciation is charged to expenses in the statement of comprehensive revenues and expenses on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment, except for land which is considered to have an unlimited useful life. The estimated useful lives are as follows:

Buildings	10 – 50 years
Building improvements	5 – 30 years
Furniture and fixtures	5 – 20 years
Office equipment	5 – 20 years
Vehicles	5 years

Management determines the estimated useful lives and residual values for the Group's property and equipment. Management will appropriately revise the residual values and useful lives of assets when the residual values and useful lives differ from previous estimations, or it will write-off technically obsolete assets or assets which have been sold or abandoned.



Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately to its recoverable amount.

Repair and maintenance expenses are charged to the statement of comprehensive revenues and expenses during the financial period in which they are incurred. The cost of major renovation is included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the Group. Major renovations are depreciated over the remaining useful lives of the related assets.

Gains and losses on disposal are determined by comparing the proceeds with the carrying amount and are included in the statement of comprehensive revenues and expenses.

3.4 Borrowings

Borrowings are recognized initially at fair value, net of transaction cost incurred. Borrowings are subsequently stated at amortised cost; any difference between proceeds (net of transaction costs) and the redemption value is recognized in revenues or expenses over the period of the borrowings using the effective yield method.

3.5 Intangible assets

Intangible assets, computer software, patent and right in operation, that are acquired by the Group, which have finite useful lives, are recognized at cost less accumulated amortization and impairment losses. Intangible assets are amortized in the statement of comprehensive revenues and expenses on a straight-line basis over their estimated useful lives from the date that they are available for use. The estimated useful lives are 2 – 10 years.

Costs associated with developing or maintaining computer software are recognized as expenses as incurred in the statement of comprehensive revenues and expenses. Costs that are directly associated with identifiable and unique software products controlled by the Group and have probable economic benefits exceeding the cost beyond one year are recognized as intangible assets. Direct costs include the purchase price and an appropriate portion of relevant overheads to allow such asset to be ready for its intended use. Expenditure which is incurred to enhance or extend the performance of computer software beyond its original specifications is recognized as an intangible asset.

Management determines the estimated useful lives of intangible assets. Management will revise the amortisation charge where useful lives differ from the previous estimations or it will write-off technically obsolete assets or assets which have been sold or abandoned.

3.6 Impairment

Assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Non-financial assets that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

3.7 Interest-bearing liabilities

Interest-bearing liabilities are recognized initially at fair value less attributable transaction charges. Subsequent to initial recognition, interest-bearing liabilities are stated at amortized cost with any difference between cost and redemption value being recognized in the statement of comprehensive revenues and expenses over the period of the borrowings on an effective interest basis.

3.8 Trade and other payables

Trade and other payables are stated at cost.

3.9 Employee benefits

1) Short-term benefits

The Group recognizes salaries, wages, bonus, contributions to the social security fund and cumulative annual leave as expenses when incurred.

2) Contributions to provident fund

The Group operates a provident fund, being a defined contribution plan. The assets of which are held in a separate trustee-administered fund. The provident fund is funded by payments from employees and by the Group. The Group's contributions to provident fund are charged to expenses in the statement of comprehensive revenues and expenses in the period to which the contributions relate.

3) Retirement benefits and other benefits

Employee benefits that will be paid upon retirement usually depends on one or more factors such as age of employees, years of service and compensation. In addition, the Group provides other long-term employee benefit plans, namely long service awards.

The liability recognized in the statement of financial position in respect of defined benefit retirement plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using market yield of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related retirement liability. The Group reviews the assumptions used annually.

Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to the Fund in other comprehensive revenues and expenses in the period in which they arise.

Past service cost are recognized immediately in revenues and expenses.

Past service cost related to the plan amendment is recognized as an expense in the statement of revenues and expenses when the plan amendment is effective.

4) Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognizes termination benefits when it is demonstrably committed to either: terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal; or providing termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

3.10 Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognized for future operating losses.



Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognized even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognized as interest expense.

3.11 Lease – where a Group is the lessee

Policies applicable from January 1, 2020

The Group assesses whether a contract is or contains a lease, at inception of the contract. The Group recognizes a right-of-use asset and corresponding lease liability with respect to all lease arrangements in which it is the lease, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low value assets. For these leases, the Group recognizes the lease payments as an operating expense on a straight-line basis over the term of the lease unless another systematic basis is more representative of the time pattern in which economic benefits from the leases assets are consumed.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the Group uses its incremental borrowing rate.

Lease payments included in the measurement of the lease liability comprise:

- Fixed lease payments (including in-substance fixed payments), less any lease incentives receivable;
- Variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- The amount expected to be payable by the lease under residual value guarantees;
- The exercise price of purchase options, if the lease is reasonably certain to exercise the options; and
- Payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease

The lease liability is presented as a separate line in the statements of financial position.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- The lease term has changed or there is a significant event or change in circumstances resulting in a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.
- The lease payments change due to changes in an index or rate or a change in expected payment under a guaranteed residual value, in which cases the lease liability is remeasured by discounting the revised lease payments using an unchanged discount rate (unless the lease payments change is due to a change in a yield interest rate, in which case a revised discount rate is used).
- A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The Group did not make any such adjustments during the periods presented.

The right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day, less any lease incentives received and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses.

Whenever the Group incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease, a provision is recognized and measured under TAS 37. To the extent that the costs relate to a right-of-use asset, the costs are included in the related right-of-use asset, unless those costs are incurred to produce inventories.

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that the Group expects to exercise a purchase option, the related right-of-use is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

The right-of-use assets are presented as a separate line in the statements of financial position.

The Group applies TAS 36 to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as described in the “Property, Plant and Equipment” policy.

Variable rents that do not depend on an index or rate are not included in the measurement the lease liability and the right-of-use asset. The related payments are recognized as an expense in the period in which the event or condition that triggers those payments occurs and are included in the line “Other expenses” in revenue or expense.

Policies applicable before January 1, 2020

Leases of assets under which all the risks and benefits of ownership are effectively retained by the lessor are classified as operating leases.

Payments made under operating leases are recognized in the statement of comprehensive revenues and expenses on a straight-line basis over the term of the lease. Lease incentives granted are recognized in the statement of comprehensive revenues and expenses as an integral part of the total rental income. Contingent rentals are charged to the statement of comprehensive revenues and expenses for the accounting period in which they are incurred.

When an operating lease is terminated before the lease period has expired, any payment required to be made to the lessor by way of penalty is recognized as an expense in the period in which termination takes place.

3.12 Revenue

Trading fees, initial securities registrar fees, initial listing fees, clearing and settlement fees, member services fees, initial of information service fees, depository fees, initial customization and IT support fees, initial membership fees and initial fund service fees is recognized revenue when the entity has fulfilled the obligations to be completed.

Annual stock registrar fees, annual listing fees, member service fees by overtime, information service fees by overtime, customization and IT support fees by overtime, annual membership fees and fund service fees by overtime is recognized revenue according to the obligations that must be completed throughout the period.

Interest income is recognized on a time proportion basis, taking into account the principal outstanding and the effective rate over the period to maturity, when it is determined that such income will accrue to the Group.

Dividend income is recognized in the statement of comprehensive revenues and expenses when the Group’s right to receive payment is established.

Other income is recognized when the right to receive cash is established.

3.13 Expense

Expense is recognized in the statement of comprehensive revenues and expenses on an accrual basis.



3.14 Directors' remuneration

Directors' remuneration comprises the benefits paid to the Board of Governors of SET and the Board of Directors of subsidiaries including benefits received by the members of sub-committees (excluding salaries, bonus and related benefits payable to management).

3.15 Current and deferred income taxes

The tax expense for the period comprises current and deferred tax. Tax is recognized in revenue or expense, except to the extent that it relates to items recognized in other comprehensive revenues and expenses or directly in fund balance. In this case the tax is also recognized in other comprehensive revenues and expenses or directly in fund balance, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognized, using the liability method, on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

3.16 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the Group's senior management.

3.17 Critical accounting estimates, assumptions and judgements

Use of management's judgements and key sources of estimation uncertainty

3.17.1 Management's judgements in applying accounting policies

The preparation of financial statements in conformity with Thai Financial Reporting Standards requires the Group's management to exercise various judgements in applying accounting policies that can significantly affect the recognition and disclosures in the financial statements. Significant judgements in applying accounting policies are as follows:

Allowance for expected credit loss

Detail of the allowance for expected credit loss is set out in Note 3.2.

Impairment

Detail of the impairment of asset is set out in Note 3.6.

Provision for employee benefit

Details of the provision for employee benefit are set out in Notes 3.9 and 24.

Provisions

Detail of the provisions is set out in Note 3.10.

Deferred tax

Details of the deferred tax are set out in Notes 3.15 and 21.

3.17.2 Key sources of estimation uncertainty

The Group has estimates with the assumptions concerning the future. Although these estimates are based on management's reasonable consideration of current events, actual results may differ from these estimates. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below.

Fair value measurements and valuation processes

Fair value measurements are for information disclosure purposes. The Group regularly review significant unobservable inputs and valuation adjustments. If third party information is used to measure fair values, then the Group assess the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of TFRS 13, including the level in the fair value hierarchy.

When measuring the fair value of an asset or a liability, the Group use market observable data as the first priority. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques for fair value measurement as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
- Level 2 inputs are inputs, other than quoted prices included within Level 1, which are observable for the asset or liability, either directly or indirectly.
- Level 3 inputs are unobservable inputs for the asset or liability.

4. Financial Risk Management

4.1 Financial risk factors

The Group's activities are exposed to a variety of financial risks: currency risk, fair value interest rate risk and cash flow interest rate risk, credit risk, liquidity risk and risk from investments and deposits. The Group's financial risk management programme focuses on investment management under investment policies and strategic asset allocation which is approved by SET's Board of Governors and subsidiaries' Board of Director. The investment committees are strictly established to oversee the investment in compliance with the policies and strategic asset allocation defined. The investment policy aims on maintaining stability of the principal, liquidity and return on the appropriate level of risk.

1) Foreign exchange risk

The Group has no significant exposure to foreign currency risk relates due to its accounts receivable and accounts payable are mainly made in Thai Baht, except for investments in some foreign mutual funds which is in foreign currency. The Group has appropriately applied forward exchange contracts to hedge foreign exchange risk of such investments.

2) Interest rate risk

Interest rate risk arises from fluctuations in market interest rates which may affect the Group's operating results and cash flow. The Group does not have interest rate derivatives in order to manage fluctuation of the interest rate.

3) Credit risk

The Group has no significant concentrations of credit risk. The Group has appropriate policies in place to ensure that the Group provides services to customers who have appropriate credit history.

4) Liquidity risk

The Group has no significant exposure to liquidity risk as the Group has sufficient cash to support its operations. The Group aims on maintaining flexibility of funding by using internal capital of the Group.

5) Risk from investments and deposits

The Group is exposed to market risks as the investor of financial instruments, and credit risk from the issuer of financial instruments. Therefore, the Group has a policy of diversifying its investments and deposits to high credit financial institutions according to the investment policy prescribed by the resolution of the investment committee.



The investment policies framework regarding types and proportion of investments are as follows:

Investments in domestic debt securities

Type of investment	Proportion of investment
Government securities, debentures or bonds of state enterprises or entities incorporated by specific laws and guaranteed by the Ministry of Finance	Unlimited
Fixed deposits or NCDs at commercial banks and promissory notes of finance companies or financial institutions incorporated by specific laws	Not to exceed 15% of total debt investment per institution
Debentures or warrants of debentures and bills of exchange	Not to exceed 5% of total debt investment per issuer
Investment units or warrants of investment units in mutual funds invested in debt securities	Not to exceed 10% of total debt investment per mutual fund

Investments in domestic equity securities

Type of investment	Proportion of investment
Investment units or warrants of investment units in mutual funds invested in equity securities	Not to exceed 10% of total equity investment per each Fund, and not to exceed 10% of fund size

Investments in property funds

Type of investment	Proportion of investment
Property funds	Not to exceed 10% of fund size per each Fund, except for Fund of Property Funds, not to exceed 20% of fund size

Investments in foreign debt securities

Type of investment	Proportion of investment
Foreign debt securities	<ul style="list-style-type: none"> - Foreign investment funds in Thailand; not to exceed 30% of fund size per each fund - Direct investment in Mutual Fund in Foreign and Exchange Traded Fund “ETF”: not to exceed 20% of all foreign debt value per each fund

Investments in foreign equity securities

Type of investment	Proportion of investment
Foreign equity securities	<ul style="list-style-type: none"> - Foreign investment funds in Thailand : not to exceed 20% of Active fund size and not to exceed 30% of Passive fund size (2019: not to exceed 30% of fund size per each fund) - Direct investment in Mutual Fund in Foreign and Exchange Traded Fund “ETF”: not to exceed 20% of all foreign equity value per each fund (2019: not to exceed 10% of foreign equity value per each fund)

Investments in Absolute Return Strategy

Type of investment	Proportion of investment
Absolute Return Strategy funds	<ul style="list-style-type: none"> - Foreign investment funds in Thailand; not to exceed 20% of fund size per each fund - Direct investment in Index Mutual Fund in Foreign and Exchange Traded Fund “ETF”: not to exceed 25% of all Absolute Return Strategy value per each fund (2019: not to exceed 25% of primary Absolute Return Strategy value per each fund)

Investments in gold funds

Type of investment	Proportion of investment
Gold funds	Not to exceed 10% of fund size per mutual fund

Investments in each asset management company should not exceed 40% of total investments.



4.2 Accounting for derivatives financial instruments and hedging activities

Foreign currency forward contracts protect the Group from movements in exchange rates. The Group enters into contract establishing the rate at which a foreign currency asset will be realized or a foreign currency liability will be settled in the future. The Group recognises foreign currency forward contracts transaction in the financial statements in fair value measurement. The unrealized gain (loss) from fair value measurement of foreign currency forward contracts will be included in unrealized gain (loss) on exchange rate in the statements of comprehensive revenues and expenses.

Disclosures about derivative financial instruments to which the Group is a party are provided in Note 38.

5. Capital Risk Management

The Group's objectives when managing capital are to safeguard the subsidiaries in the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and maintain an optimal capital structure to increase investor and stakeholder confidence.

In order to maintain or adjust the capital structure, the subsidiaries in the Group may adjust the amount of dividends paid to shareholders depending on their operating performance.

6. Segment Information

Segment information is presented in respect of the Group's business segments. The primary format, business segments, is based on the Group's management and internal reporting structure.

The Group comprises the following 5 main business segments:

- 1) Securities Markets (including securities trading, clearing and settlement, listing, depository and membership fees)
- 2) Derivatives Markets (including trading and clearing of future contracts and membership fees)
- 3) Technology Services (including member services, information services and technology support)
- 4) Registrar Services (including securities registrar)
- 5) Capital Market Development and others, i.e., rental income and other miscellaneous income. Capital Market Development including capital market education improving financial and investment capabilities, promoting sustainable development of capital market industry and conducting of capital market research.

Financial information presented in respect of the Group's business segments in the consolidated financial statements as at December 31, 2020 and 2019 and for the years ended December 31, 2020 and 2019 are as follows:

(Unit: THB Thousand)

Consolidated Financial Statements							
	Securities Markets	Derivatives Markets	Technology Services	Registrar Services	Capital Market Development and others	Elimination	Total
For the year ended December 31, 2020							
Revenues from operation	3,327,932	1,237,580	765,452	1,228,987	150,893	-	6,710,844
Revenue from inter-segment	712,061	571,468	70,534	566,174	88,547	(2,008,784)	-
Total revenue	4,039,993	1,809,048	835,986	1,795,161	239,440	(2,008,784)	6,710,844
Segment revenues over expenses	<u>1,443,632</u>	<u>556,019</u>	<u>425,434</u>	<u>304,151</u>	<u>(307,451)</u>	<u>-</u>	<u>2,421,785</u>
Investment expense, net							(363,689)
Share of profit of investments in joint venture entity, net of tax							(35)
Share of profit of investments in associates, net of tax							28,060
Revenues over expenses in operations							2,086,121
Non-operating revenues (expenses)							
Income derived from Securities Investor Protection Fund, net							7,157
Income derived from Derivatives Investor Protection Fund, net							723
Contributions to the Capital Market Development Fund							(361,641)
Revenues over expenses before income tax expenses							1,732,360
Income tax expense							(378,279)
Revenues over expenses							<u>1,354,081</u>
As at December 31, 2020							
Segment assets	4,650,427	35,299,608	735,913	732,995	260,965	(6,197,188)	35,482,720
Other assets	-	-	-	-	23,242,978	(4,298,448)	18,944,530
Total assets	<u>4,650,427</u>	<u>35,299,608</u>	<u>735,913</u>	<u>732,995</u>	<u>23,503,943</u>	<u>(10,495,636)</u>	<u>54,427,250</u>
Segment liabilities	1,714,977	29,271,194	259,962	499,393	1,171,733	(6,197,188)	26,720,071
Other liabilities	-	-	-	-	2,416,422	(2,416,422)	-
Total liabilities	<u>1,714,977</u>	<u>29,271,194</u>	<u>259,962</u>	<u>499,393</u>	<u>3,588,155</u>	<u>(8,613,610)</u>	<u>26,720,071</u>



(Unit: THB Thousand)

Consolidated Financial Statements

	Securities Markets	Derivatives Markets	Technology Services	Registrar Services	Capital Market Development and others	Elimination	Total
For the year ended December 31, 2019							
Revenues from operation	3,052,745	1,020,689	684,848	1,226,040	353,523	-	6,337,845
Revenue from inter-segment	707,417	501,619	79,415	566,721	75,765	(1,930,937)	-
Total revenue	3,760,162	1,522,308	764,263	1,792,761	429,288	(1,930,937)	6,337,845
Segment revenues over expenses	1,195,706	382,197	381,245	366,746	(204,869)	-	2,121,025
Investment income, net							947,954
Share of profit of investments in joint venture entity, net of tax							7,248
Share of profit of investments in associates, net of tax							38,135
Revenues over expenses in operations							3,114,362
Non-operating revenues (expenses)							
Income derived from Securities Investor Protection Fund, net							13,930
Income derived from Derivatives Investor Protection Fund, net							848
Contributions to the Capital Market Development Fund							(5,700,000)
Reversal of contributions to the Stock Exchange of Thailand Foundation							186,132
Revenues under expenses before income tax expenses							(2,384,728)
Income tax expense							(214,271)
Revenues under expenses							(2,598,999)
As at December 31, 2019							
Segment assets	4,131,925	27,709,288	895,417	690,872	254,054	(5,944,386)	27,737,170
Other assets	-	-	-	-	20,675,624	(3,418,600)	17,257,024
Total assets	4,131,925	27,709,288	895,417	690,872	20,929,678	(9,362,986)	44,994,194
Segment liabilities	1,676,534	21,474,802	238,203	482,867	648,225	(5,944,386)	18,576,245
Other liabilities	-	-	-	-	1,918,713	(1,918,713)	-
Total liabilities	1,676,534	21,474,802	238,203	482,867	2,566,938	(7,863,099)	18,576,245

Reconciliation of reportable segment assets/liabilities as at December 31, 2020 and 2019 were as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements	
	2020	2019
Assets		
Assets for reportable segments	35,482,720	27,737,170
Unallocated amounts:		
– Cash and investments	16,904,931	15,185,428
– Investments in related parties	995,351	988,420
– Accrued interest receivables	18,348	31,298
– Land and work in process	1,025,900	1,051,878
Total assets	<u>54,427,250</u>	<u>44,994,194</u>
Liabilities		
Liabilities for reportable segments	<u>26,720,071</u>	<u>18,576,245</u>
Total liabilities	<u>26,720,071</u>	<u>18,576,245</u>

7. Transactions with Related Parties

Enterprises and individuals that directly, or indirectly through one or more intermediaries, control, or are controlled by, or are under common control with, the entity, including holding companies, subsidiaries and fellow subsidiaries are related parties of the entity. Associates and individuals owning, directly or indirectly, an interest in the voting power of the entity that gives them significant influence over the enterprise, key management personnel, including directors and officers of the company and close members of the family of these individuals and companies associated with these individuals also constitute related parties.

In considering each possible related party relationship, attention is directed to the substance of the relationship, and not merely the legal form.

Transactions with related parties are conducted at prices based on market prices or at contractually agreed prices where no market price exists.

The pricing policies for particular types of transactions are explained below:

Transaction	Pricing policy
Service income	Cost plus margin
Purchase of services	Cost plus margin
Interest income	With reference to the return of bank deposit and debt securities
Interest expense	The interest rate on the loan is based on the floating market interest rate which is referred to the higher interest rate for one-year government bond or one-year fixed deposit on average of 4 banks for corporate credit line of THB 10 million
Contribution to the Capital Market Development Fund	Not less than 90% of the revenue after deduction of expense, tax and reserve. The consolidated financial statements of SET shall be used to calculate the contribution amount.



Related party transactions for the years ended December 31, 2020 and 2019 were as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Service income				
Subsidiaries	-	-	1,842,323	1,778,466
Joint venture entity	-	7	-	7
Associates	1,680	1,680	-	-
Common directorships	11,688	-	11,688	-
	<u>13,368</u>	<u>1,687</u>	<u>1,854,011</u>	<u>1,778,473</u>
Purchase of services				
Subsidiaries	-	-	13,432	13,407
	<u>-</u>	<u>-</u>	<u>13,432</u>	<u>13,407</u>
Contribution to the Capital Market Development Fund				
Common directorships	361,641	5,700,000	361,641	5,700,000
	<u>361,641</u>	<u>5,700,000</u>	<u>361,641</u>	<u>5,700,000</u>
Interest income				
Subsidiaries	-	-	140,635	170,388
Joint venture entity	-	41	-	41
	<u>-</u>	<u>41</u>	<u>140,635</u>	<u>170,429</u>
Interest expense				
Subsidiaries	-	-	22,492	36,569
	<u>-</u>	<u>-</u>	<u>22,492</u>	<u>36,569</u>

Related party balances as at December 31, 2020 and 2019 were as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Accounts receivable				
Joint venture entity	-	2	-	2
	<u>-</u>	<u>2</u>	<u>-</u>	<u>2</u>
Accrued income				
Subsidiaries	-	-	202,818	163,490
Associates	140	140	-	-
	<u>140</u>	<u>140</u>	<u>202,818</u>	<u>163,490</u>
Accrued interest receivable				
Subsidiaries	-	-	136,058	164,825
	<u>-</u>	<u>-</u>	<u>136,058</u>	<u>164,825</u>
Accrued expenses				
Subsidiaries	-	-	1,360	11,641
Common directorships	361,641	-	361,641	-
	<u>361,641</u>	<u>-</u>	<u>363,001</u>	<u>11,641</u>
Fees received in advance				
Subsidiaries	-	-	2,585	2,585
	<u>-</u>	<u>-</u>	<u>2,585</u>	<u>2,585</u>

Long-term loans to a subsidiary

Long-term loans to a subsidiary as at December 31, 2020 and 2019

(Unit: THB Thousand)

	Separate Financial Statements	
	2020	2019
Long-term loans to a subsidiary	5,690,834	5,440,834

SET lent to a subsidiary to use as a reserve fund to enhance the competitiveness and support the future business expansion. The rate of return on loan is referred to the net return of a private fund plus 0.30% - 0.47% per annum of principle balance. The rate of return will be reviewed on an annual basis (see Note 20).

Movements of long-term loans to a subsidiary for the years ended December 31, 2020 and 2019 are as follows:

(Unit: THB Thousand)

	Separate Financial Statements	
	2020	2019
A subsidiary		
Opening balance	5,440,834	5,240,834
Additions	250,000	200,000
Closing balance	5,690,834	5,440,834

Short-term borrowings from subsidiary

Short-term borrowings from subsidiary as at December 31, 2020 and 2019

(Unit: THB Thousand)

	Interest rate (% per annum)		Separate Financial Statements	
	2020	2019	2020	2019
Short-term borrowings from subsidiary	0.20 - 1.81	0.80 - 1.81	2,416,422	1,918,713

The Group has a policy of centralizing the investments and managed by SET in order to maximize its efficiency and overall returns. The parent will borrow from its subsidiaries in the form of one-year promissory notes. The interest rate on the loan is based on the floating market interest rate which is referred to the higher interest rate for one-year government bond or one-year fixed deposit on average of 4 banks for corporate credit line of up to THB 10 million (interest rate may be revised as appropriate).

Movements of short-term borrowings from subsidiary for the years ended December 31, 2020 and 2019 were as follows:

(Unit: THB Thousand)

	Separate Financial Statements	
	2020	2019
Subsidiary		
Beginning balances	1,918,713	3,783,500
Additions	1,010,000	458,713
Repayments by cash	(112,000)	(2,323,500)
Repayments by offset with dividend received	(400,291)	-
Ending balances	2,416,422	1,918,713



Contributions to the Stock Exchange of Thailand Foundation (Foundation)

SET realizes the importance of corporate social responsibility (CSR) alongside the core business. To grow the business sustainably, the corporation must be CSR-minded and must put into practice basis, SET has established the Foundation to support outstanding CSR projects that greatly benefit the society and the country as a whole.

The Foundation was established on August 9, 2006. SET's Board of Governors are also the committee members of the foundation, by position. The Foundation supports three key CSR areas; 1) Special events or important national projects and donations 2) Flagship project 3) High impact project.

SET allocated its annual revenues over expenses to support the implementation of the Foundation. Since 2006, SET appropriated one-third of revenues over expenses. On August 9, 2016, an adjustment was made to allocate 13% of revenues over expenses before income tax.

On July 24, 2019, SET's Board of Governors has resolved to cancel the allocation of funds to the Foundation which will be effective for revenue over expense before income tax expense of the fiscal year 2018 onwards. However, if the Foundation requests for contributions, SET may consider allocating funds to the Foundation from time to time as appropriate.

Therefore, SET reversed an accrued contribution to the Foundation in 2018 of THB 186.13 million for the year ended December 31, 2019.

Directors' remuneration

The directors' remuneration represents director fees and compensation fees for the Group's Board of Directors and other sub-committees for the years ended December 31, 2020 and 2019.

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Directors' remuneration	30,434	27,714	26,337	24,200
	<u>30,434</u>	<u>27,714</u>	<u>26,337</u>	<u>24,200</u>

8. Cash and Cash Equivalents

Cash and cash equivalents as at December 31, 2020 and 2019

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Cash on hand	326	322	323	319
Savings and current accounts	8,013,562	2,329,036	7,388,700	2,092,417
<u>Less</u> Allowance for expected credit loss	<u>(2,060)</u>	<u>-</u>	<u>(2,060)</u>	<u>-</u>
	<u>8,011,828</u>	<u>2,329,358</u>	<u>7,386,963</u>	<u>2,092,736</u>

For the year ended December 31, 2020, savings accounts carried the interest at rates ranging from 0.05% – 1.30% per annum (2019 : from 0.10% – 1.30% per annum).

9. Other Current Financial Assets and Short-Term Investment

Other current financial assets as at December 31, 2020 are as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements	Separate Financial Statements
	2020	2020
Investment managed by SET and subsidiaries		
Debt instruments measured at FVTPL		
Government bond	1,511,207	949,256
	1,511,207	949,256
Investments measured at amortized cost		
Fixed deposit maturities within 1 year	801,286	801,286
Government bond maturities within 1 year	199,986	199,986
	1,001,272	1,001,272
<u>Less</u> Allowance for expected credit loss	(296)	(296)
	1,000,976	1,000,976
Total investment managed by SET	2,512,183	1,950,232
Investment managed by private funds		
Debt instruments measured at FVTPL		
Government bond	1,505,577	54,288
Debenture	364,360	364,360
	1,869,937	418,648
Investments measured at amortized cost		
Saving accounts	85,000	83,862
	85,000	83,862
Total investment managed by private funds	1,954,937	502,510
Total other current financial assets	4,467,120	2,452,742



Short-term investment, net as at December 31, 2019 are as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements	Separate Financial Statements
	2019	2019
Investments managed by SET and subsidiaries		
Trading securities	Fair value	Fair value
Government bond	1,404,201	505,921
	1,404,201	505,921
Available-for-sale securities		
Investments in money market funds	1,275,060	1,275,060
	1,275,060	1,275,060
Held-to-maturity investments	Amortized Cost, net	Amortized Cost, net
Fixed deposit maturities within 1 year	700,000	700,000
	700,000	700,000
Total investments managed by SET	3,379,261	2,480,981
Investments managed by private funds		
Trading securities	Fair value	Fair value
Share capital	702	702
Government bond	1,354,362	54,241
Debenture	637,539	637,539
	1,992,603	692,482
Held-to-maturity investments	Fair value	Fair value
Savings account	11,693	9,732
	11,693	9,732
Total investments managed by private funds	2,004,296	702,214
Total short-term investments, net	5,383,557	3,183,195

Movements of short-term investments for the year ended December 31, 2019 were as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements	Separate Financial Statements
	2019	2019
Opening balance	7,838,876	7,838,876
Purchases	2,472,237	271,875
Disposals	(4,904,849)	(4,904,849)
Unrealized loss on available-for-sale securities	(22,707)	(22,707)
Closing balance	5,383,557	3,183,195

10. Trade and Other Current Receivables

Trade and other current receivables as at December 31, 2020 and 2019

(Unit: THB Thousand)

	Note	Consolidated Financial Statements		Separate Financial Statements	
		2020	2019	2020	2019
Trade receivable					
Related parties	7	-	2	-	2
Other parties		79,256	84,787	41,823	50,502
		79,256	84,789	41,823	50,504
<u>Less</u> Allowance for expected credit loss		(16,891)	-	(8,568)	-
Allowance for doubtful accounts		-	(16,891)	-	(8,568)
		62,365	67,898	33,255	41,936
Other current receivable					
Cash at bank for clearing collateral		541,538	327	-	-
Accrued income					
Related parties	7	140	140	202,818	163,490
Other parties		459,228	299,732	212,623	101,207
Cash at banks for dividend accounts of investors		93,505	89,032	-	-
Other receivables from sale of investments		55,207	-	55,207	-
Prepaid expense		29,766	27,213	29,646	27,213
Accrued interest receivable					
Related parties	7	-	-	136,058	164,825
Other parties		18,348	31,297	13,025	23,563
Others		1,132	3,114	803	2,948
		1,198,864	450,855	650,180	483,246
		1,261,229	518,753	683,435	525,182



Aging analysis for trade receivable are as follows:

(Unit: THB Thousand)

	Note	Consolidated Financial Statements		Separate Financial Statements	
		2020	2019	2020	2019
Related parties	7				
Within credit terms		-	2	-	2
		-	2	-	2
Other parties					
Within credit terms		36,616	54,114	9,145	29,201
Overdue:					
Less than 3 months		25,749	13,782	24,110	12,733
3 - 6 months		-	906	-	906
6 - 12 months		-	1,853	-	1,853
Over 12 months		16,891	14,132	8,568	5,809
		79,256	84,787	41,823	50,502
<u>Less</u> Allowance for expected credit loss		(16,891)	-	(8,568)	-
Allowance for doubtful accounts		-	(16,891)	-	(8,568)
		62,365	67,896	33,255	41,934
		62,365	67,898	33,255	41,936

The normal credit terms granted by the Group range from 15 days to 30 days.

As at December 31, 2020 and 2019, the Group had receivables with book values totaling THB 91.19 million and THB 73.83 million, respectively on which recognition of income have been ceased.

As at December 31, 2020 and 2019, SET had receivables with book values totaling THB 36.77 million and THB 29.69 million, respectively on which recognition of income have been ceased.

11. Other Current Assets

Other current assets as at December 31, 2020 and 2019

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Withholding tax receivable	270,451	160,479	240,116	131,523
Accounts receivable from net fair values of forward exchange contracts	42,140	10,673	42,140	10,673
Loans to employees	29,132	30,242	29,132	30,242
Future margin deposit	16,570	-	16,570	-
Pending input tax	4,171	4,612	4,150	4,573
Inventory - publication	3,725	4,666	3,725	4,666
Refundable value-added-tax	3,345	3,662	-	-
Others	3,111	3,171	3,111	3,172
	372,645	217,505	338,944	184,849

12. Investments in Subsidiaries

Investments in subsidiaries as at December 31, 2020 and 2019, and dividend income for the years then ended were as follows:

(Unit: THB Thousand)

	Separate Financial Statements							
	Ownership interest (%)		Paid-up capital		Cost method		Dividend income	
	2020	2019	2020	2019	2020	2019	2020	2019
Subsidiaries								
Thailand Securities Depository Co., Ltd.	100.00	100.00	200,000	200,000	200,000	200,000	269,776	252,294
Thai Trust Fund Management Co., Ltd.	100.00	100.00	100,000	100,000	100,000	100,000	345	185
Thai NVDR Co., Ltd.	100.00	100.00	10,000	10,000	10,000	10,000	2,673	-
SETTRADE.COM Co., Ltd.	100.00	100.00	80,000	80,000	74,591	74,591	-	204,783
Thailand Futures Exchange Public Company Limited	100.00	100.00	500,000	500,000	500,000	500,000	130,515	121,645
Thailand Clearing House Co., Ltd.	100.00	100.00	600,000	600,000	602,700	602,700	105,234	76,872
SET Venture Holding Co., Ltd.	100.00	-	300,000	-	300,000	-	-	-
Finnet Innovation Network Co., Ltd.	-	100.00	-	200,000	-	200,000	-	-
Live Fin Corp Co., Ltd.	-	100.00	-	10,000	-	10,000	-	-
			<u>1,790,000</u>	<u>1,700,000</u>	<u>1,787,291</u>	<u>1,697,291</u>	<u>508,543</u>	<u>655,779</u>

The business place of all subsidiaries is in Thailand and the nature of business of each subsidiary has already disclosed in Note 1.

13. Investments in Associates and Joint Venture Entity

The amounts recognized in the statement of financial position as at December 31, 2020 and 2019 are as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements Equity method		Separate Financial Statements Cost method	
	2020	2019	2020	2019
Associates	975,496	966,875	779,717	779,015
Joint venture entity	19,855	21,545	10,344	12,000
As at December 31,	<u>995,351</u>	<u>988,420</u>	<u>790,061</u>	<u>791,015</u>



The amounts recognized in the statement of comprehensive revenues and expenses are share of profit (loss) of investments in associates and joint venture entity, net of tax for the years ended December 31, 2020 and 2019 are as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements Equity method		Separate Financial Statements Cost method	
	2020	2019	2020	2019
Associates	28,060	38,135	-	-
Joint venture entity	(35)	7,248	-	-
For the years ended December 31,	<u>28,025</u>	<u>45,383</u>	<u>-</u>	<u>-</u>

a) Investment in associates

Set out below are the associates of the Group as at December 31, 2020 and 2019, which are not material to the Group.

The associates as listed below have share capital consisting solely of ordinary shares, which are held directly by the SET.

(Unit: THB Thousand)

	Consolidated Financial Statements									
	Ownership interest (%)		Paid-up capital		Cost method - net		Equity method		Dividend income	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Associates										
Clearing Fund ("CLF")	7.76	8.59	2,694,253	2,396,979	100,000	100,000	209,193	205,897	-	-
TSFC Securities Public Company Limited ("TSFC")	40.70	40.65	1,549,126	1,549,126	679,717	679,015	766,303	760,978	-	-
					<u>779,717</u>	<u>779,015</u>	<u>975,496</u>	<u>966,875</u>	<u>-</u>	<u>-</u>

(Unit: THB Thousand)

	Separate Financial Statements											
	Ownership interest (%)		Paid-up capital		Cost method		Impairment		At cost, net		Dividend income	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Associates												
Clearing Fund ("CLF")	7.76	8.59	2,694,253	2,396,979	100,000	100,000	-	-	100,000	100,000	-	-
TSFC Securities Public Company Limited ("TSFC")	40.70	40.65	1,549,126	1,549,126	679,717	679,015	-	-	679,717	679,015	20,151	15,743
					<u>779,717</u>	<u>779,015</u>	<u>-</u>	<u>-</u>	<u>779,717</u>	<u>779,015</u>	<u>20,151</u>	<u>15,743</u>

The business place of all associates is in Thailand and the nature of business of each associate has already disclosed in Note 1.

The Group also has interests in a number of individually associates for the years ended December 31, 2020 and 2019 that are accounted for using the equity method in the consolidated financial statements.

(Unit: THB Thousand)

	2020			2019		
	CLF	TSFC	Total	CLF	TSFC	Total
Aggregate carrying amount of individually immaterial associates	209,193	766,303	975,496	205,897	760,978	966,875
Aggregate amounts of the reporting entity's share of:						
Revenues over expenses from continuing activities, net of tax	3,297	24,763	28,060	4,337	33,798	38,135
Other comprehensive revenues and expenses, net of tax	-	-	-	-	158	158
Total comprehensive revenues and expenses, net of tax	<u>3,297</u>	<u>24,763</u>	<u>28,060</u>	<u>4,337</u>	<u>33,956</u>	<u>38,293</u>

The Group has no contingent liabilities relating to associates.

**b) Investment in joint venture entity**

Set out below is a joint venture entity of the Group as at December 31, 2020 and 2019, which are not material to the Group. A joint venture listed below has share capital consisting solely of preferred shares, which is held directly by the SET.

(Unit: THB Thousand)

	Consolidated Financial Statements							
	Ownership interest (%)		Paid-up capital		Equity method		Dividend income	
	2020	2019	2020	2019	2020	2019	2020	2019
Joint venture entity								
Family Know-how Co., Ltd. ⁽¹⁾	50.00	50.00	50,000	50,000	19,855	21,545	-	-

(Unit: THB Thousand)

	Separate Financial Statements							
	Ownership interest (%)		Paid-up capital		Cost method		Dividend income	
	2020	2019	2020	2019	2020	2019	2020	2019
Joint venture entity								
Family Know-how Co., Ltd. ⁽¹⁾	50.00	50.00	50,000	50,000	10,344	12,000	-	-

The business place of joint venture entity is in Thailand and the nature of business of each entity has already disclosed in Note 1.

⁽¹⁾At the Extraordinary Shareholder's meeting no. 1/2018 held on December 14, 2018, the shareholders resolved to dissolve the company. The dissolution was registered with the Ministry of Commerce on December 26, 2018 which is currently in the process of liquidation.

The Group also has interests in a joint venture entity for the years ended December 31, 2020 and 2019 that is accounted for using the equity method, are as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements	
	2020	2019
Aggregate carrying amount of joint venture entity	19,855	21,545
Aggregate amounts of the joint venture entity's share of:		
Revenues over (under) expenses from continuing activities, net of tax	(35)	7,248
Total comprehensive revenue (expenses), net of tax	(35)	7,248

The Group has no contingent liabilities related to joint venture entity.

14. Other Non-Current Financial Assets and Long-Term Investments

Other non-current financial assets as at December 31, 2020 are as follows:

(Unit: THB Thousand)

	Consolidated financial statements	Separate financial statements
Debt instruments measured at FVTPL		
Debenture	2,482	2,482
Mutual fund	3,703,172	3,703,172
	<u>3,705,654</u>	<u>3,705,654</u>
Equity instruments measured at FVTOCI		
Share capital	54,336	49,336
	<u>54,336</u>	<u>49,336</u>
Investment measured at amortized cost		
Cash at banks under a Memorandum of Understanding (M.O.U.)	512,153	512,153
Government bond maturities after 1 year	296,759	296,759
Debenture maturities after 1 year	200,000	200,000
	<u>1,008,912</u>	<u>1,008,912</u>
<u>Less</u> Allowance for expected credit loss	<u>(58)</u>	<u>(58)</u>
	<u>1,008,854</u>	<u>1,008,854</u>
Total other non-current financial assets	<u><u>4,768,844</u></u>	<u><u>4,763,844</u></u>



Long-term investments, net as at December 31, 2019

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements
Available-for-sale securities	Fair value
Investments in general mutual funds	3,001,150
Investments in property funds	1,231,033
Investments in foreign investment funds	2,694,353
	6,926,536
Held-to-maturity investments	Amortized Cost, net
Cash at banks under a Memorandum of Understanding (M.O.U.)	501,153
Government bond maturities after 1 year	239,408
Debenture maturities after 1 year	200,000
	940,561
General investments	Cost
Ordinary shares	36,861
	36,861
Total long-term investments – net	7,903,958

Movements of long-term investments for the year ended December 31, 2019 were as follows:

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements
Beginning balance	8,837,845
Purchases	2,023,880
Disposals	(3,398,504)
Unrealized gain on available-for-sale securities	440,737
Ending balance	7,903,958

As at December 31, 2020, debt instruments measured at amortized cost which was classified by maturity was as follows:

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements			
	Within 1 year	1 to 5 years	Over 5 years	Total
Investment measured at amortized cost				
Cash at banks under a Memorandum of Understanding (M.O.U.)	-	-	512,153	512,153
Government bond maturities after 1 year	-	296,759	-	296,759
Debenture maturities after 1 year	-	200,000	-	200,000
	<u>-</u>	<u>496,759</u>	<u>512,153</u>	<u>1,008,912</u>

As at December 31, 2019, cash at banks and debt instruments, which were classified by maturity were as follows:

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements			
	Within 1 year	1 to 5 years	Over 5 years	Total
Deposits at banks	-	-	501,153	501,153
Government bonds	-	239,408	-	239,408
Debentures	-	200,000	-	200,000
	<u>-</u>	<u>439,408</u>	<u>501,153</u>	<u>940,561</u>

As at December 31, 2020, the fair value of debt instruments measured at amortized cost were as follows:

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements	
	Amortized cost	Fair value
Investment measured at amortized cost		
Cash at banks under a Memorandum of Understanding (M.O.U.)	512,153	472,852
Government bond maturities after 1 year	296,759	307,224
Debenture maturities after 1 year	200,000	210,420
	<u>1,008,912</u>	<u>990,496</u>

As at December 31, 2019, the fair value of held-to-maturity investments were as follows:

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements	
	Amortized cost, net	Fair value
Deposits at banks	501,153	422,062
Government bonds	239,408	245,774
Debentures	200,000	206,414
	<u>940,561</u>	<u>874,250</u>



15. Property, Plant and Equipment

(Unit: THB Thousand)

	Consolidated Financial Statements					
	Land and land improvements	Buildings and building improvements	Furniture, fixtures and office equipment	Motor vehicles	Work in process	Total
As at January 1, 2019						
Cost	1,014,097	4,252,326	1,458,070	388	43,803	6,768,684
<u>Less</u> Accumulated depreciation	-	(882,127)	(907,227)	(248)	-	(1,789,602)
Net book amount	1,014,097	3,370,199	550,843	140	43,803	4,979,082
For the year ended						
December 31, 2019						
Opening net book amount	1,014,097	3,370,199	550,843	140	43,803	4,979,082
Additions	-	10,985	43,158	1,450	76,578	132,171
Disposals/write-off	-	(79)	(166)	(1,450)	-	(1,695)
Depreciation charge	-	(197,654)	(174,418)	(60)	-	(372,132)
Transfer	-	22,469	57,716	-	(80,185)	-
Adjustments	-	(221,285)	224,047	-	(2,415)	347
Closing net book amount	1,014,097	2,984,635	701,180	80	37,781	4,737,773
As at December 31, 2019						
Cost	1,014,097	4,064,289	1,424,648	388	37,781	6,541,203
<u>Less</u> Accumulated depreciation	-	(1,079,654)	(723,468)	(308)	-	(1,803,430)
Net book amount	1,014,097	2,984,635	701,180	80	37,781	4,737,773
For the year ended						
December 31, 2020						
Opening net book amount	1,014,097	2,984,635	701,180	80	37,781	4,737,773
Additions	-	11,275	68,311	1,398	28,167	109,151
Disposals/write-off	-	-	(14)	(1,398)	-	(1,412)
Depreciation charge	-	(202,640)	(156,896)	(60)	-	(359,596)
Transfer	-	315	56,122	-	(56,437)	-
Adjustments	-	(1,036)	777	-	(108)	(367)
Closing net book amount	1,014,097	2,792,549	669,480	20	9,403	4,485,549
As at December 31, 2020						
Cost	1,014,097	4,074,843	1,454,252	388	9,403	6,552,983
<u>Less</u> Accumulated depreciation	-	(1,282,294)	(784,772)	(368)	-	(2,067,434)
Net book amount	1,014,097	2,792,549	669,480	20	9,403	4,485,549

(Unit: THB Thousand)

	Separate Financial Statements					
	Land and land improvements	Buildings and building improvements	Furniture, fixtures and office equipment	Motor vehicles	Work in process	Total
As at January 1, 2019						
Cost	1,014,097	4,252,326	1,414,454	388	43,803	6,725,068
<u>Less</u> Accumulated depreciation	-	(882,127)	(864,496)	(248)	-	(1,746,871)
Net book amount	1,014,097	3,370,199	549,958	140	43,803	4,978,197
For the year ended						
December 31, 2019						
Opening net book amount	1,014,097	3,370,199	549,958	140	43,803	4,978,197
Additions	-	10,985	43,158	1,450	76,578	132,171
Disposals/write-off	-	(79)	(166)	(1,450)	-	(1,695)
Depreciation charge	-	(197,654)	(174,150)	(60)	-	(371,864)
Transfer	-	22,469	57,716	-	(80,185)	-
Adjustments	-	(221,285)	224,047	-	(2,415)	347
Closing net book amount	1,014,097	2,984,635	700,563	80	37,781	4,737,156
As at December 31, 2019						
Cost	1,014,097	4,064,291	1,420,732	388	37,781	6,537,289
<u>Less</u> Accumulated depreciation	-	(1,079,656)	(720,169)	(308)	-	(1,800,133)
Net book amount	1,014,097	2,984,635	700,563	80	37,781	4,737,156
For the year ended						
December 31, 2020						
Opening net book amount	1,014,097	2,984,635	700,563	80	37,781	4,737,156
Additions	-	11,275	68,311	1,398	28,167	109,151
Disposals/write-off	-	-	(14)	(1,398)	-	(1,412)
Depreciation charge	-	(202,640)	(156,656)	(60)	-	(359,356)
Transfer	-	315	56,122	-	(56,437)	-
Adjustments	-	(1,036)	777	-	(108)	(367)
Closing net book amount	1,014,097	2,792,549	669,103	20	9,403	4,485,172
As at December 31, 2020						
Cost	1,014,097	4,074,845	1,450,517	388	9,403	6,549,250
<u>Less</u> Accumulated depreciation	-	(1,282,296)	(781,414)	(368)	-	(2,064,078)
Net book amount	1,014,097	2,792,549	669,103	20	9,403	4,485,172



16. Right-Of-Use Assets and Lease Liabilities

The statement of financial position included following transactions relating to leases as at December 31, 2020 as follows:

Right of use assets

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements					
	Balances as at January 1, 2020 (Before adjusted)	Effects of the initial Adoption of TFRS 16	Balances as at January 1, 2020, (Adjusted)	Additions	Decreases	Balances as at December 31, 2020
Cost						
Vehicles	-	32,970	32,970	6,809	(582)	39,197
Total cost	-	32,970	32,970	6,809	(582)	39,197
Accumulated depreciation						
Vehicles	-	-	-	(14,466)	582	(13,884)
Total accumulated depreciation	-	-	-	(14,466)	582	(13,884)
Total right of use assets	-					25,313
Depreciation for the year ended December 31, 2020						14,466

Lease liabilities

Movements in lease liabilities during the year ended December 31, 2020 are as follows:

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements
Lease liabilities as at January 1, 2020,	32,970
Addition	6,809
Interest expense	1,578
Lease obligation repayment	(14,135)
Lease liabilities as at December 31, 2020	27,222

The undiscounted maturity analysis of lease liabilities as at December 31, 2020 are as follows:

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements
Lease liabilities	
Within 1 year	14,629
Over 1 year and up to 5 years	12,593
Total	27,222

The Group has adopted TFRS 16 from January 1, 2020 under the modified retrospective approach and the comparative figures have not been restated. The impact from the adoption of new financial reporting standards on the lease liabilities as at January 1, 2020 has been presented in Note 2.2.

17. Intangible Assets

(Unit: THB Thousand)

	Consolidated Financial Statements			
	Computer software	Patent	Work in process	Total
As at January 1, 2019				
Cost	1,600,127	2,867	39,860	1,642,854
<u>Less</u> Accumulated amortisation	(1,265,422)	(1,675)	-	(1,267,097)
Net book amount	<u>334,705</u>	<u>1,192</u>	<u>39,860</u>	<u>375,757</u>
For the year ended December 31, 2019				
Opening net book amount	334,705	1,192	39,860	375,757
Additions	272,972	1,050	114,398	388,420
Amortisation charge	(152,330)	(387)	-	(152,717)
Transfer	84,353	-	(84,353)	-
Adjustments	929	-	(4)	925
Closing net book amount	<u>540,629</u>	<u>1,855</u>	<u>69,901</u>	<u>612,385</u>
As at December 31, 2019				
Cost	1,958,376	3,917	69,901	2,032,194
<u>Less</u> Accumulated amortisation	(1,417,747)	(2,062)	-	(1,419,809)
Net book amount	<u>540,629</u>	<u>1,855</u>	<u>69,901</u>	<u>612,385</u>
For the year ended December 31, 2020				
Opening net book amount	540,629	1,855	69,901	612,385
Additions	32,346	-	170,322	202,668
Amortisation charge	(154,455)	(481)	-	(154,936)
Transfer	83,506	-	(83,506)	-
Adjustments	(1,497)	-	1,605	108
Closing net book amount	<u>500,529</u>	<u>1,374</u>	<u>158,322</u>	<u>660,225</u>
As at December 31, 2020				
Cost	2,075,614	3,917	158,322	2,237,853
<u>Less</u> Accumulated amortisation	(1,575,085)	(2,543)	-	(1,577,628)
Net book amount	<u>500,529</u>	<u>1,374</u>	<u>158,322</u>	<u>660,225</u>



(Unit: THB Thousand)

	Separate Financial Statements			
	Computer software	Patent	Work in process	Total
As at January 1, 2019				
Cost	1,518,511	2,006	39,860	1,560,377
<u>Less</u> Accumulated amortisation	<u>(1,187,044)</u>	<u>(1,054)</u>	<u>-</u>	<u>(1,188,098)</u>
Net book amount	<u>331,467</u>	<u>952</u>	<u>39,860</u>	<u>372,279</u>
For the year ended December 31, 2019				
Opening net book amount	331,467	952	39,860	372,279
Additions	272,972	1,050	114,398	388,420
Amortisation charge	(151,572)	(264)	-	(151,836)
Transfer	84,353	-	(84,353)	-
Adjustments	929	-	(4)	925
Closing net book amount	<u>538,149</u>	<u>1,738</u>	<u>69,901</u>	<u>609,788</u>
As at December 31, 2019				
Cost	1,876,760	3,056	69,901	1,949,717
<u>Less</u> Accumulated amortisation	<u>(1,338,611)</u>	<u>(1,318)</u>	<u>-</u>	<u>(1,339,929)</u>
Net book amount	<u>538,149</u>	<u>1,738</u>	<u>69,901</u>	<u>609,788</u>
For the year ended December 31, 2020				
Opening net book amount	538,149	1,738	69,901	609,788
Additions	31,447	-	170,322	201,769
Amortisation charge	(153,613)	(264)	-	(153,877)
Transfer	83,506	-	(83,506)	-
Adjustments	(1,497)	-	1,605	108
Closing net book amount	<u>497,992</u>	<u>1,474</u>	<u>158,322</u>	<u>657,788</u>
As at December 31, 2020				
Cost	1,993,099	3,056	158,322	2,154,477
<u>Less</u> Accumulated amortisation	<u>(1,495,107)</u>	<u>(1,582)</u>	<u>-</u>	<u>(1,496,689)</u>
Net book amount	<u>497,992</u>	<u>1,474</u>	<u>158,322</u>	<u>657,788</u>

18. Assets for Margin Deposits and Benefits

Thailand Clearing House Co., Ltd. (TCH) is the clearing house for derivatives market. Members of TCH who have outstanding positions are obliged to place the required margin deposits as a guarantee according to the rate or amount called by TCH. TCH may invest the margin proceeds according to specified terms and conditions. The benefits, after deducting management fees, shall be distributed to members at the announced rates and procedures.

As at December 31, 2020 and 2019, the details of investments for which margin deposits were placed by members consist of:

	(Unit: THB Thousand)	
	Consolidated Financial Statements	
	2020	2019
Savings and fixed deposit accounts	13,266,083	10,360,966
Savings account in foreign currency	2,415,879	514,544
Investments measured by the amortized cost	4,558,309	-
Held-to-maturity investments	-	1,605,133
Securities collateral	68,538	840,265
Accrued benefits	20,352	63,754
	20,329,161	13,384,662
<u>Less</u> Allowance for expected credit loss	(2,792)	-
	20,326,369	13,384,662

As at December 31, 2020, savings account in foreign currency of USD 80.89 million (2019 : USD 17.16 million) was translated into Thai Baht using the average transfer buying rate announced by the Bank of Thailand at the end of the accounting period.

The Group presented margin deposits placed by members separately in the account “Assets for margin deposits and benefits” in current assets in the statement of financial position and presented liabilities in the account “Margin deposits and benefits payable” in current liabilities in the statement of financial position.

19. Assets for Clearing System Protection and Benefits

The assets for clearing system protection are established to secure the clearing system of Thailand Clearing House Co., Ltd. (TCH) against any damage caused by defaults by members or other incidents.

Assets for clearing system protection comprise of 2 categories as the following:

19.1 Securities Deposit

Members of TCH are required to place a Securities Deposit according to the announcement made by TCH (the current Securities Deposit for members, who are allowed to clear all types of derivatives, is not less than THB 5 million and for only one type of derivatives is not less than THB 4 million).



19.2 Clearing fund contributions comprising contributions from:

- 1) SET amounting to THB 100 million
- 2) Members of TCH:
 - Initial contributions according to the announced rates (currently the initial contribution members, who are allowed to clear all types of derivatives, are not less than THB 6 million and for only one type of derivatives is not less than THB 1 million).
 - Monthly contributions at a value of not less than THB 1,000.

TCH manages the assets for clearing system protection and there are benefits incurred thereon, if such benefits are derived from the assets for clearing system protection of members, TCH shall return them to members after deduction of a management fees in accordance with the procedures and within the period prescribed by TCH.

In the event that members defaults in clearing on damage is caused by act of members in connection with clearing. TCH shall have the power to use assets for the Clearing System Protection in the following order:

- 1) Security Deposit of the Member who is in default or causes damage to the Clearing System of TCH, as the case maybe;
- 2) Contribution to the Clearing Fund by the Member who is in default or causes damage to the Clearing of TCH;
- 3) Contributions to the Clearing Fund by the SET in accordance with the amount prescribed by TCH as the first part;
- 4) Assets contributed to the Clearing Fund in the part of other Clearing Fund Members who are not in default or who do not cause the damage to the Clearing System of TCH, as the case maybe;
- 5) The remaining amount of the contributions to the Clearing Fund by the SET after deducting the first part of the contributions to the Clearing Fund by the SET;
- 6) Additional contribution according to the proportion made to the Clearing Fund by respective members
- 7) SET Reserve Fund

The use of the assets under 4) and 6) shall be in proportion with the assets contributed by the Clearing Fund Members to the Clearing Fund.

The use of contributions to the Clearing Fund under 3) in accordance with the proportion prescribed by TCH, TCH may notify the change of the proportion in the use of such contributions as appropriate.

A Member who is in default or causes damage to the Clearing of TCH has the duty to return the assets for the Clearing System Protection or other assets which TCH has used according to the Regulation.

In the case that the Clearing Fund has been used, TCH may charge interest for the use of such fund at the maximum rate permitted by the law on interests on loans of financial institutions, as from the date of the use of such fund until the date of the return thereof unless other interest rate is prescribed by TCH.

When the defaulting Member or the Member who causes damage to the Clearing of TCH, has reimbursed the assets for the Clearing System Protection which are equal to the used amount of the assets together with the interest incurred thereon to TCH, the assets shall be allocated as per the order below:

- 1) SET Reserve Fund
- 2) Additional contribution according to the proportion made to the Clearing Fund by respective Members
- 3) The remaining amount of the contributions to the Clearing Fund by the SET after deducting the first part of the contributions to the Clearing Fund by the SET;
- 4) Assets contributed to the Clearing Fund in the part of other Clearing Fund Members who are not in default or who do not cause the damage to the Clearing System of TCH, as the case maybe;
- 5) Contributions to the Clearing Fund by the SET in accordance with the amount prescribed by TCH as the first part;
- 6) Contribution to the Clearing Fund by the Member who is in default or causes damage to the Clearing of TCH as the case maybe;
- 7) Security Deposit of the Member who is in default or causes damage to the Clearing System of TCH

The allocation for the return of the assets under 2) and 4) shall be in proportion with that such assets are used pursuant.

When TCH has a resolution to terminate the membership of any members, TCH shall return the assets which such members has provided for the Clearing of TCH, including the remaining benefits therefore after deduction of debts as well as damages and penalty that the member owes to TCH, within the period prescribed by TCH.

The Group has shown the assets to which members have joined as security assets in accordance with the rules specified as a separate item in the account. "Assets for margin deposits and benefits" under non-current assets and have shown the same amount of liabilities in the account "Margin deposits and benefits payable" under non-current liabilities in the statement of financial position.

As at December 31, 2020 and 2019, assets for clearing system protection and benefits consist of:

(Unit: THB Thousand)

	Consolidated Financial Statements					
	Securities Deposit and benefits		Clearing fund and benefits		Total	
	2020	2019	2020	2019	2020	2019
Investments managed by TCH	505,498	698,988	-	-	505,498	698,988
Investments managed by private fund						
Savings accounts	469	69	252	52	721	121
Investments measured fair value through profit or loss	200,336	-	1,491,176	-	1,691,512	-
Trading securities	-	203,120	-	1,295,715	-	1,498,835
	200,805	203,189	1,491,428	1,295,767	1,692,233	1,498,956
Accrued interest receivable	173	354	1,205	1,955	1,378	2,309
Other assets	51	46	17,825	4,999	17,876	5,045
	201,029	203,589	1,510,458	1,302,721	1,711,487	1,506,310
Total investments	706,527	902,577	1,510,458	1,302,721	2,216,985	2,205,298
Less Allowance for expected credit loss	(77)	-	-	-	(77)	-
	706,450	902,577	1,510,458	1,302,721	2,216,908	2,205,298



(Unit: THB Thousand)

	Separate Financial Statements	
	2020	2019
Clearing fund and benefits		
Contributions	100,000	100,000
Accumulated benefits	50,723	47,916
	<u>150,723</u>	<u>147,916</u>

Investments managed by TCH

For the year ended December 31, 2020, savings accounts carried interest rates at rates ranging between 0.05% – 0.30% per annum (2019 : between 0.375% – 1.00% per annum).

Investments managed by private fund

As at December 31, 2020, investments in private fund are managed by 1 asset management company (2019 : 1 asset management company).

The investments policy of private fund is reference to the TCH's regulations in relation to deposits with financial institution and TCH's investment policies. For the year ended December 31, 2020, the investment in private fund have return rates ranging from 2.19% – 2.23% per annum (2019 : from 2.45% – 2.46% per annum).

As at December 31, 2020 and 2019, assets for clearing system protection and benefits payable consist of:

(Unit: THB Thousand)

	Consolidated Financial Statements	
	2020	2019
Securities Deposit and benefits		
Contributions	705,000	897,000
Benefits (semi-annually distribute to members)	2,071	5,997
	<u>707,071</u>	<u>902,997</u>
Clearing fund and benefits		
Contributions	1,193,293	1,011,551
Accumulated benefits	166,508	143,321
	<u>1,359,801</u>	<u>1,154,872</u>
	<u>2,066,872</u>	<u>2,057,869</u>

20. Reserve Fund for Clearing and Settlement

Reserve Fund for clearing and settlement from SET established as a source of funds for clearing house to compensate for any damage that may result from default or damages that may be caused by the actions of members in the business relating to the settlement and delivery of securities of the clearing house.

On January 14, 2015 and April 27, 2016, SET's Board of Governors approved an appropriation of reserve fund for clearing and settlement for compliance with the standard of clearing house set by the Overseas Securities Regulator and for enhance competitiveness and support future business expansion. SET will reserve fund for clearing and settlement in the approximate THB 5,690 million by 2020. As at December 31, 2020, the reserve fund for clearing and settlement was THB 5,804.07 million (2019 : THB 5,590.44 million).

As at December 31, 2020 and 2019, reserve fund for clearing and settlement consist of:

(Unit: THB Thousand)

	Consolidated Financial Statements	
	2020	2019
Investments managed by private fund		
Savings accounts	3,599	2,202
Investments measured at fair value through profit or loss	5,790,352	-
Trading securities	-	5,577,063
	5,793,951	5,579,265
Accrued interest income	6,543	10,364
Other assets	3,571	809
	5,804,065	5,590,438

As at December 31, 2020, investments in private fund are managed by 2 asset management companies (2019 : 2 asset management companies).

The investment policy of private fund is reference to the TCH's regulations in relation to deposits with financial institution and company's investment policies. For the year ended December 31, 2020, the investments in private fund have return rates ranging between 1.94% - 2.20% per annum (2019 : between 2.46% - 2.54% per annum).

21. Deferred Income Taxes

Deferred tax assets and liabilities as at December 31, were as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Deferred tax assets	595	91,768	-	91,743
Deferred tax liabilities	(15,684)	(12,676)	-	-
Deferred tax, net	(15,089)	79,092	-	91,743



Movements of deferred tax assets and liabilities during the years ended December 31, 2020 and 2019 were as follows:

As at December 31, 2020

(Unit: THB Thousand)

	Consolidated Financial Statements					
	As at December 31, 2019	Recognized as revenue (expense) in		As at December 31, 2020	Adjust deferred tax that shall not to be utilized*	As at December 31, 2020 (After Adjust)
		profit or loss	other comprehensive income			
Deferred tax assets						
Allowance for expected credit loss	3,374	6,400	113	9,887	(8,227)	1,660
Unrealized loss on financial asset	-	38,085	-	38,085	(38,085)	-
Difference on useful life of assets	44,195	(4,003)	-	40,192	(40,192)	-
Provision for employee benefits						
from accumulated annual leave	5,325	1,248	-	6,573	(6,573)	-
Provision for employee benefits	123,571	11,590	15,458	150,619	(150,619)	-
Total	176,465	53,320	15,571	245,356	(243,696)	1,660
Deferred tax liabilities						
Unrealized gain on financial asset	(102,877)	84,528	-	(18,349)	1,600	(16,749)
Adjustments in SIPF's fund balances	5,504	(5,504)	-	-	-	-
Total	(97,373)	79,024	-	(18,349)	1,600	(16,749)
Deferred tax, net	79,092	132,344	15,571	227,007	(242,096)	(15,089)

* As at December 31, 2020, there are temporary differences for which deferred tax assets have not been recognised since there remains uncertainty and SET is not able to estimate the time frame within which it would be able to utilise them in the future.

As at December 31, 2019

(Unit: THB Thousand)

	Consolidated Financial Statements			
	As at January 1, 2019	Recognized as revenue (expense) in		As at December 31, 2019
		profit or loss	other comprehen- sive income	
Deferred tax assets				
Allowance for doubtful accounts	3,026	348	-	3,374
Unrealized loss on revaluation of investments	14,176	(789)	(13,387)	-
Difference on useful life of assets	39,316	4,879	-	44,195
Provision for employee benefits from accumulated annual leave	5,161	164	-	5,325
Provision for employee benefits	88,005	34,871	695	123,571
Total	<u>149,684</u>	<u>39,473</u>	<u>(12,692)</u>	<u>176,465</u>
Deferred tax liabilities				
Unrealized gain on revaluation of available-for-sale securities	(13,112)	-	(70,219)	(83,331)
Unrealized gain on revaluation of trading securities	(2,255)	(17,291)	-	(19,546)
Adjustments in SIPF's fund balances	5,504	-	-	5,504
Total	<u>(9,863)</u>	<u>(17,291)</u>	<u>(70,219)</u>	<u>(97,373)</u>
Deferred tax, net	<u>139,821</u>	<u>22,182</u>	<u>(82,911)</u>	<u>79,092</u>



As at December 31, 2020

(Unit: THB Thousand)

	Separated Financial Statements					
	As at December 31, 2019	Recognized as revenue (expense) in		As at December 31, 2020	Adjust deferred tax that shall not to be utilized*	As at December 31, 2020 (After Adjust)
		profit or loss	other comprehensive income			
Deferred tax assets						
Allowance for expected credit loss	1,714	6,400	113	8,227	(8,227)	-
Unrealized loss on financial asset	-	38,085	-	38,085	(38,085)	-
Difference on useful life of assets	44,195	(4,003)	-	40,192	(40,192)	-
Provision for employee benefits						
from accumulated annual leave	5,326	1,249	-	6,575	(6,575)	-
Provision for employee benefits	123,570	11,589	15,458	150,617	(150,617)	-
Total	174,805	53,320	15,571	243,696	(243,696)	-
Deferred tax liabilities						
Unrealized gain on financial asset	(88,566)	86,966	-	(1,600)	1,600	-
Adjustments in SIPF's fund balances	5,504	(5,504)	-	-	-	-
Total	(83,062)	81,462	-	(1,600)	1,600	-
Deferred tax, net	91,743	134,782	15,571	242,096	(242,096)	-

* As at December 31, 2020, there are temporary differences for which deferred tax assets have not been recognised since there remains uncertainty and SET is not able to estimate the time frame within which it would be able to utilise them in the future.

As at December 31, 2019

(Unit: THB Thousand)

	Separated Financial Statements			
	As at January 1, 2019	Recognized as revenue (expense) in		As at December 31, 2019
		Profit or loss	Other comprehensive income	
Deferred tax assets				
Allowance for doubtful accounts	1,005	709	-	1,714
Unrealized loss on revaluation of investments	14,028	(641)	(13,387)	-
Difference on useful life of assets	39,316	4,879	-	44,195
Provision for employee benefits from accumulated annual leave	5,162	164	-	5,326
Provision for employee benefits	88,004	34,871	695	123,570
Total	147,515	39,982	(12,692)	174,805
Deferred tax liabilities				
Unrealized gain on revaluation of available-for-sale securities	(13,112)	-	(70,219)	(83,331)
Unrealized gain on revaluation of trading securities	(2,252)	(2,983)	-	(5,235)
Adjustments in SIPF's fund balances	5,504	-	-	5,504
Total	(9,860)	(2,983)	(70,219)	(83,062)
Deferred tax, net	137,655	36,999	(82,911)	91,743



22. Trade and Other Current Payables

Trade and other current payables as at December 31, 2020 and 2019

(Unit: THB Thousand)

	Note	Consolidated Financial Statements		Separate Financial Statements	
		2020	2019	2020	2019
Trade payable					
Other parties		29,904	91,662	29,880	89,536
		29,904	91,662	29,880	89,536
Other current payable					
Accrued expense					
Subsidiaries	7	-	-	1,360	11,641
Other parties		1,658,691	1,085,998	1,623,708	1,061,803
Clearing collateral payable		541,427	3	-	-
Dividend payable from registrar services to investors		93,505	89,032	-	-
Financial benefits payable		76,323	85,569	-	-
Other payable from purchase of investments		59,735	121,325	59,735	121,325
Others		37,674	16,878	11,591	12,453
		2,467,355	1,398,805	1,696,394	1,207,222
		2,497,259	1,490,467	1,726,274	1,296,758

23. Other Current Liabilities

Other current liabilities as at December 31, 2020 and 2019

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Withholding tax payable	57,689	79,403	9,886	9,581
Other retention payables	36,378	27,407	29,686	27,404
Provision for employee benefits from accumulated annual leave	32,872	26,631	32,872	26,631
Value added tax payable	26,533	19,927	21,047	16,862
Ngoen-Thong-khong-Mee-Kha Fund	11,576	11,576	11,576	11,576
Current portion of provision for employee benefit (see Note 24)	1,904	4,456	1,904	4,456
Others	2,306	3,597	434	1,913
	169,258	172,997	107,405	98,423

24. Non-Current Provision for Employee Benefit

(Unit: THB Thousand)

	Consolidated Financial Statements As at December 31,		Separate Financial Statements As at December 31,	
	2020	2019	2020	2019
Statement of financial position				
Provision to be settled within 1 year				
Retirement benefits (see Note 23)	1,904	4,456	1,904	4,456
	1,904	4,456	1,904	4,456
Provision to be settled after 1 year				
Retirement benefits	703,296	571,483	703,296	571,483
Other benefits	47,891	41,910	47,891	41,910
	751,187	613,393	751,187	613,393
	753,091	617,849	753,091	617,849

(Unit: THB Thousand)

	Consolidated Financial Statements For the year ended December 31,		Separate Financial Statements For the year ended December 31,	
	2020	2019	2020	2019
Expenses charge included in the statement of comprehensive revenues and expenses				
Retirement benefits	56,427	175,446	56,427	175,446
Other benefits	11,576	16,686	11,576	16,686
	68,003	192,132	68,003	192,132

The amounts recognized in the statement of financial position are determined as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements As at December 31,		Separate Financial Statements As at December 31,	
	2020	2019	2020	2019
Present value of obligations				
Retirement benefits	705,200	575,939	705,200	575,939
Other benefits	47,891	41,910	47,891	41,910
Liabilities in the statement of financial position	753,091	617,849	753,091	617,849



The movement in the defined benefit obligation during the years is as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements As at December 31,		Separate Financial Statements As at December 31,	
	2020	2019	2020	2019
Balances as at January 1,	617,849	440,020	617,849	440,020
Current service costs	42,804	36,115	42,804	36,115
Interest costs	14,670	12,712	14,670	12,712
Past service costs	1,767	143,305	1,767	143,305
Remeasurements recognized in the statement of comprehensive revenues and expenses	8,762	-	8,762	-
Remeasurements recognized in other comprehensive revenues and expenses:				
Loss from change in demographic assumptions	-	42,550	-	42,550
Loss (gain) from changes in financial assumptions	50,431	(9,274)	50,431	(9,274)
Loss (gain) from experience	26,860	(43,503)	26,860	(43,503)
	763,143	621,925	763,143	621,925
<u>Less</u> Benefits paid	<u>(10,052)</u>	<u>(4,076)</u>	<u>(10,052)</u>	<u>(4,076)</u>
Balances as at December 31,	753,091	617,849	753,091	617,849
<u>Less</u> Current portion within 1 year (see Note 23)	<u>(1,904)</u>	<u>(4,456)</u>	<u>(1,904)</u>	<u>(4,456)</u>
Total non-current portion	<u>751,187</u>	<u>613,393</u>	<u>751,187</u>	<u>613,393</u>

For the years ended December 31, 2020 and 2019, the amounts recognized in the statement of comprehensive revenues and expenses are as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Current service costs	42,804	36,115	42,804	36,115
Interest costs	14,670	12,712	14,670	12,712
Past service costs	1,767	143,305	1,767	143,305
Remeasurements	8,762	-	8,762	-
	<u>68,003</u>	<u>192,132</u>	<u>68,003</u>	<u>192,132</u>

The Labor Protection Act (No. 7) B.E. 2562 has been announced in the Royal Gazette on April 5, 2019, which will be effective after 30 days from the date announced in Royal Gazette. This Labor Protection Act stipulates additional legal severance pay rates for employees who have worked for an uninterrupted period of twenty years or more. Such employees are entitled to receive compensation of not less than 400 days at the employees' latest wage rate. This change is considered an amendment to post-employment benefits plan. The Group reflects the effect of such change by recognizing past service cost as an expense in the statement of comprehensive revenues and expenses of the period in which the law is effective.

The principal actuarial assumptions used were as follows:

	2020	2019
Discount rate as of December 31,	0.38% - 2.89%	1.78% - 3.82%
Salary incremental rate	5.00% - 11.00%	7.00%
Average turnover rate	0.00% - 12.00%	0.00% - 12.00%
Pre-retirement mortality rate	Adjust 3% of TMO2017	Adjust 3% of TMO2017
Retirement age	60 years old	60 years old

	Impact on defined benefit obligation					
	Change in assumption		Increase in assumption		Decrease in assumption	
	2020	2019	2020	2019	2020	2019
Discount rate	0.5%	0.5%	Decrease by 6%	Decrease by 6%	Increase by 7%	Increase by 7%
Salary growth rate	1%	1%	Increase by 13%	Increase by 13%	Decrease by 11%	Decrease by 11%
Turnover growth rate	20%	20%	Decrease by 3%	Decrease by 4%	Increase by 4%	Increase by 4%

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the pension liability recognized within the statement of financial position.

The weighted average duration of the defined benefit obligation is 16 years (2019 : 19 years).

Expected maturity analysis of undiscounted retirement and other benefits:

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements			
	Within a year	1-5 years	Over 5 years	Total
As at December 31, 2020				
Retirement benefits	23,600	83,902	330,518	438,020
Other benefits	5,187	17,672	23,099	45,958
Total	28,787	101,574	353,617	483,978

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements			
	Within a year	1-5 years	Over 5 years	Total
As at December 31, 2019				
Retirement benefits	5,092	62,741	254,584	322,417
Other benefits	4,518	13,790	14,699	33,007
Total	9,610	76,531	269,283	355,424



25. Fund Balances

The statement of change in the fund for the years ended December 31, 2020 and 2019 presented as part of the consolidated and separate financial statements as follows:

		Consolidated Financial Statements								(Unit: THB Thousand)
		Fund balances								
	Notes	Securities Clearing Reserve Fund	Derivatives Clearing Reserve Fund	Indemnity Fund	Staff Welfare Fund	Securities Investor Protection Fund	Derivatives Investor Protection Fund	General Fund	Total	
Opening balance as at January 1, 2019		4,240,000	1,000,000	100,000	112,074	469,545	55,348	22,702,439	28,679,406	
Appropriation of general fund	25.1	200,000	-	-	-	-	-	(200,000)	-	
Other comprehensive revenues (expenses), net of tax	26.2	-	-	-	-	-	-	10,226	10,226	
Revenues over (under) expenses	26.2	-	-	-	1,923	13,930	848	(2,615,700)	(2,598,999)	
Closing balance as at December 31, 2019		4,440,000	1,000,000	100,000	113,997	483,475	56,196	19,896,965	26,090,633	
Opening balance as at January 1, 2020 before adjusted		4,440,000	1,000,000	100,000	113,997	483,475	56,196	19,896,965	26,090,633	
Effect of change in new accounting policies	2.2	-	-	-	-	12,299	-	311,885	324,184	
Opening balance as at January 1, 2020 after adjusted		4,440,000	1,000,000	100,000	113,997	495,774	56,196	20,208,850	26,414,817	
Appropriation of general fund	25.2	-	250,000	-	-	-	-	(250,000)	-	
Appropriation of reserve fund	25.1 and 25.2	(1,000,000)	1,000,000	-	-	-	-	-	-	
Other comprehensive revenues (expenses), net of tax	26.2	-	-	-	-	-	-	(61,720)	(61,720)	
Revenues over expenses	26.2	-	-	-	1,261	7,157	723	1,344,940	1,354,081	
Closing balance as at December 31, 2020		3,440,000	2,250,000	100,000	115,258	502,931	56,919	21,242,070	27,707,178	

(Unit: THB Thousand)

Separate Financial Statements								
Fund balances								
Notes	Securities Clearing Reserve Fund	Derivatives Clearing Reserve Fund	Indemnity Fund	Staff Welfare Fund	Securities Investor Protection Fund	General Fund	Total	
Opening balance as at January 1, 2019								
25.1	4,240,000	1,000,000	100,000	112,074	469,545	20,399,813	26,321,432	
	200,000	-	-	-	-	(200,000)	-	
26.2	-	-	-	-	-	10,226	10,226	
26.2	-	-	-	1,923	13,930	(3,034,078)	(3,018,225)	
Closing balance as at December 31, 2019								
	4,440,000	1,000,000	100,000	113,997	483,475	17,175,961	23,313,433	
Opening balance as at January 1, 2020 before adjusted								
2.2	-	-	-	-	12,299	322,327	334,626	
Opening balance as at January 1, 2020 after adjusted								
	4,440,000	1,000,000	100,000	113,997	495,774	17,498,288	23,648,059	
25.2	-	250,000	-	-	-	(250,000)	-	
25.1 and 25.2	(1,000,000)	1,000,000	-	-	-	-	-	
26.2	-	-	-	-	-	(61,720)	(61,720)	
26.2	-	-	-	1,261	7,157	766,341	774,759	
Closing balance as at December 31, 2020								
	3,440,000	2,250,000	100,000	115,258	502,931	17,952,909	24,361,098	



Details of fund balances are as follows:

25.1 Securities Clearing Reserve Fund

In 1997 and 2013, the Board of Governors of SET approved an appropriation of general funds of THB 2,000 million and THB 500 million, respectively, totalling THB 2,500 million to the Securities Clearing Reserve Fund, which is operated by a subsidiary of SET, in order to resolve liquidity risk in the event of default on clearing and settlement from securities trading on SET.

In 2015, the Board of Governors of SET approved an appropriation of general funds to the Securities Clearing Reserve Fund from 2015 – 2019, totalling THB 2,640 million, starting from 2015 of THB 1,840 million and in the following years of THB 200 million per year.

In 2018, the Board of Governors of SET approved an appropriation of the Securities Clearing Reserve Fund to Derivatives Clearing Reserve Fund of THB 700 million, in order for the clearing house to have sufficient funds in both markets.

In 2020, the Board of Governors of SET approved an appropriation of the Securities Clearing Reserve Fund to Derivatives Clearing Reserve Fund of THB 1,000 million, in order for the clearing house to have sufficient funds in both markets.

25.2 Derivatives Clearing Reserve Fund

In 2004, the Board of Governors of SET approved an appropriation of general funds of THB 300 million to the Derivatives Clearing Reserve Fund in order to assure contingent losses from the clearing system of futures contracts at Thailand Clearing House Co., Ltd.

In 2018, Derivatives Clearing Reserve Fund has been allocated from Securities Clearing Reserve Fund of THB 700 million according to the resolution of the Board of Governors of SET, in order for the clearing house to have sufficient funds in both markets.

In 2020, Derivatives Clearing Reserve Fund has been allocated from Securities Clearing Reserve Fund of THB 1,000 million and from general fund of THB 250 million according to the resolution of the Board of Governors of SET, in order for the clearing house to have sufficient funds in both markets.

25.3 Indemnity Fund

In 1993 and 2002, the Board of Governors of SET approved appropriations of general funds totalling THB 100 million to the Indemnity Fund in order to assist and assure the Board of Governors of SET and those appointed assignees on matters requiring consideration and decisions which may affect or cause damages to other parties.

25.4 Staff Welfare Fund

In 1997 and 2004, the Board of Governors of SET approved appropriations of general funds was THB 75 million to the Staff Welfare Fund. All benefits earned from this fund are retained in the fund.

25.5 Securities Investor Protection Fund

In 2004, the Board of Governors of SET approved an appropriation of THB 300 million from broker seat admission fees as an initial fund for the establishment of the Securities Investor Protection Fund (SIPF).

The SIPF was formally established under SIPF regulations on October 1, 2004. The objective of the fund is to protect and build investor confidence in trading listed securities on SET through the members of the SIPF. As at December 31, 2020, there were 33 SIPF members from securities companies (2019 : 34 SIPF members).

The assets of SIPF consist of:

- 1) the initial fund from SET of THB 300 million;
- 2) the cumulative membership entrance fees and monthly fees collected from the members;
- 3) the future benefits generated from investments in the SIPF.

SIPF will protect the investors' assets which are in the custody of the securities brokers who are members of the SIPF. In the event that the members of the SIPF fail to return the assets to investors, each investor shall be compensated by the SIPF for the related damages at the actual cost, but not exceeding THB 1 million per SIPF member, in the following cases:

- 1) if any SIPF member is in receivership under the Bankruptcy Act or
- 2) if there are disputes concerning the purchase or sale of securities listed on SET between investors and any SIPF member, and the arbitrator's award is that the SIPF member shall return the assets to investors, but the SIPF member violates the award.

The protection will not include any losses from securities trading regardless of who makes the investment decision.

If the number of assets of the SIPF is not sufficient for compensation to investors as mentioned above, the investors will receive from the SIPF for assets in accordance with the proportion of damage sustained by each investor (Pro rata based).

When the Board of Governors of SET resolves to approve granting protection to any investor. SET will use the SIPF to provide protection to such investor, which shall be in the following sequence:

- 1) the SIPF with respect to the part paid by that SIPF's member who caused damage to the investors;
- 2) the SIPF with respect to the yields or benefits;
- 3) the SIPF with respect to the part paid by other member; and
- 4) the SIPF with respect to the part paid by SET

Upon SET's use of SIPF to provide protection to investors in accordance with the rules prescribed, SET shall exercise the right to demand the return of the assets which have been paid to the investors and damages from the SIPF's member in accordance with the right transferred by the investors.

SET shall allocate the assets or money to SIPF which are returned from members who caused damage to the investors in the following sequence:

- 1) the SIPF with respect to the part belonging to SET;
- 2) the SIPF with respect to the part belonging to other members;
- 3) the SIPF with respect to the yield or benefits;
- 4) the SIPF with respect to the part belonging to SIPF's members who caused damage to the investors



25.6 Derivatives Investor Protection Fund

In 2012, the Board of Directors of Thailand Futures Exchange Public Company Limited (TFEX), a subsidiary, has a resolution to establish the Derivatives Investor Protection Fund (DIPF) and approved an appropriation of THB 50 million as an initial fund.

The DIPF was established on November 15, 2012. The objective of the DIPF is to provide protection for derivatives contracts investors in accordance with the rules prescribed by TFEX. Investors need to be protected must become customers of DIPF members and is a Thai natural person, a juristic person incorporated in Thailand who is not an institutional investor under the Derivatives Act B.E. 2546 (2003). As at December 31, 2020, there were 37 DIPF members from securities companies (2019 : 37 DIPF members).

Assets of the DIPF consist of TFEX initial capital, admission fees and contributions collected from members of the DIPF, and yields or benefits obtained from the proceeds and assets of the DIPF after the deduction of expenses for the operation of the DIPF. At the time of its establishment, the DIPF will have assets worth no less than THB 100 million, which consists of initial capital of THB 50 million from TFEX and admission fees and contributions from DIPF members in the rest to make the total of THB 100 million. TFEX may collect additional sums of money as it deems necessary and appropriate.

DIPF will protect the investors' assets which are in the custody of the securities brokers who are members of the DIPF. In the event that the members of the DIPF fail to return the assets to investors, each investor shall be compensated by the DIPF for the related damages at the actual cost, but not exceeding THB 1 million per DIPF member, in the following cases:

- 1) if any DIPF member is in receivership under the Bankruptcy Act or
- 2) if there are disputes concerning the purchase or sale of securities listed on SET between investors and any DIPF member, and the arbitrator's award is that the DIPF member shall return the assets to investors, but the DIPF member violates the award.

The protection will not include any losses from derivatives trading regardless of who makes the investment decision.

If the number of assets of the DIPF is not sufficient for compensation to investors as mentioned above, the investors will receive from the DIPF for assets in accordance with the proportion of damage sustained by each investor (Pro rata based).

When the Board resolves to approve granting protection to any investor. TFEX will use the DIPF to provide protection to such investor, which shall be in the following sequence:

- 1) the DIPF with respect to the part paid by that DIPF's member who caused damage to the investors;
- 2) the DIPF with respect to the yields or benefits;
- 3) the DIPF with respect to the part paid by other member; and
- 4) the DIPF with respect to the part paid by TFEX

Upon TFEX's use of DIPF to provide protection to investors in accordance with the rules prescribed, DIPF's member who caused damage to investors has the duty to return assets to TFEX. TFEX shall exercise the right to demand the return of the assets which have been paid to the investors and damages from the DIPF's member in accordance with the right transferred by the investors.

TFEX shall allocate the funds which are returned in whole or in part to the DIPF in the following sequence:

- 1) the DIPF with respect to the part belonging to TFEX;
- 2) the DIPF with respect to the part belonging to other members;
- 3) the DIPF with respect to the yield or benefits;
- 4) the DIPF with respect to the part belonging to DIPF's members who caused damage to the investors

26. Financial Position and Results of Fund Operations

26.1 Financial position of fund

The SIPF's financial statements included as part of the consolidated and separate's financial statements are as follows:

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements As at December 31,	
	2020	2019
Assets		
Current assets		
Cash deposits	163,343	6,914
Other current financial assets	365,467	-
Short-term investments	-	290,186
Accrued interest receivable	3,197	3,836
Other current asset	3,616	300
Total current assets	535,623	301,236
Non-current assets		
Other non-current financial assets	304,981	-
Long-term investments	-	530,792
Total non-current assets	304,981	530,792
Total assets	840,604	832,028
Liabilities and fund balances		
Liabilities of members' portion		
Contributions from members	228,886	227,873
Benefits on contributions from members	108,787	108,381
Total liabilities of members' portion	337,673	336,254
Fund balances		
Initial fund	300,000	300,000
Benefits on contributions from SET	202,931	183,475
	502,931	483,475
Other components	-	12,299
Total fund balances	502,931	495,774
Total liabilities and fund balances	840,604	832,028



The DIPF's financial statement included as part of the consolidated financial statements are as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements As at December 31,	
	2020	2019
Assets		
Current assets		
Cash deposits	3,482	636
Other current financial assets	85,758	-
Short-term investments	-	67,843
Contributions from members	11	15
Accrued interest receivable	361	543
Total current assets	89,612	69,037
Non-current assets		
Other non-current financial assets	22,185	-
Long-term investments	-	41,200
Total non-current assets	22,185	41,200
Total assets	111,797	110,237
Liabilities and fund balances		
Current liabilities		
Income tax payable	338	396
Other current liabilities	1	1
Total current liabilities	339	397
Non-current liabilities		
Contributions from members	51,179	50,976
Benefits on contributions from members	3,360	2,668
Total non-current liabilities	54,539	53,644
Total liabilities	54,878	54,041
Fund balances		
Initial fund	50,000	50,000
Benefits on contributions from TFEX	6,919	6,196
Total fund balances	56,919	56,196
Total liabilities and fund balances	111,797	110,237

26.2 Results of fund operations

Details of the results of fund operations which are included as part of the consolidated and the entity's statement of comprehensive revenues and expenses are as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements				
	Staff Welfare Fund	Securities Investor Protection Fund (SET's portion)	Derivatives Investor Protection Fund (TFEX's portion)	General Fund	Total
For the year ended December 31, 2020					
Revenues					
Operating revenues	-	-	-	6,547,755	6,547,755
Investment income, net	1,261	4,686	981	(364,950)	(358,022)
Other income	-	-	-	191,113	191,113
Total revenues	1,261	4,686	981	6,373,918	6,380,846
Expenses					
Operating expenses	-	146	74	4,289,057	4,289,277
Contribution to the Capital Market Development Fund	-	-	-	361,641	361,641
Income tax expense	-	(2,617)	184	378,280	375,847
Total expenses	-	(2,471)	258	5,028,978	5,026,765
Revenues over expenses	1,261	7,157	723	1,344,940	1,354,081
Other comprehensive revenues (expenses)					
Items that will not be reclassified subsequently to revenues or expenses					
Loss on remeasurements of post-employment benefits obligations	-	-	-	(77,291)	(77,291)
Income tax relating to items that will not be reclassified subsequently to revenues or expenses	-	-	-	15,571	15,571
Total items that will not be reclassified to revenues or expenses	-	-	-	(61,720)	(61,720)
Total comprehensive revenues (expenses)	1,261	7,157	723	1,283,220	1,292,361
Total comprehensive revenues over expenses for the years attributable to:					
Owners of the parents	1,261	7,157	723	1,283,220	1,292,361
Non - controlling interests	-	-	-	-	-
	1,261	7,157	723	1,283,220	1,292,361



(Unit: THB Thousand)

	Consolidated Financial Statements				
	Staff Welfare Fund	Securities Investor Protection Fund (SET's portion)	Derivatives Investor Protection Fund (TFEX's portion)	General Fund	Total
For the year ended December 31, 2019					
Revenues					
Operating revenues	-	-	-	5,890,126	5,890,126
Investment income, net	1,923	14,016	1,110	946,031	963,080
Other income	-	-	-	493,101	493,101
Total revenues	1,923	14,016	1,110	7,329,258	7,346,307
Expenses					
Operating expenses	-	86	46	4,216,819	4,216,951
Reversal of contributions to the Stock Exchange of Thailand Foundation	-	-	-	(186,132)	(186,132)
Contribution to the Capital Market Development Fund	-	-	-	5,700,000	5,700,000
Income tax expense	-	-	216	214,271	214,487
Total expenses	-	86	262	9,944,958	9,945,306
Revenues over (under) expenses	1,923	13,930	848	(2,615,700)	(2,598,999)
Other comprehensive revenues (expenses)					
Items that will be reclassified subsequently to revenues or expenses					
Share of profit of investments in associates	-	-	-	158	158
Gain on change in value of available-for-sale investments managed by SET	-	-	-	417,992	417,992
Gain on change in value of available-for-sale investments from Securities Investor Protection Fund	-	6,218	-	-	6,218
Income tax relating to items that will be reclassified subsequently to revenues and expenses	-	-	-	(82,910)	(82,910)
Total items that will be reclassified subsequently to revenues or expenses	-	6,218	-	335,240	341,458
Items that will not be reclassified subsequently to revenues and expenses					
Gain on remeasurements of post-employment benefits obligations	-	-	-	10,226	10,226
Total items that will not be reclassified to revenues or expenses	-	-	-	10,226	10,226
Total comprehensive revenues (expenses)	1,923	20,148	848	(2,270,234)	(2,247,315)
Total comprehensive revenues over (under) expenses for the years attributable to:					
Owners of the parents	1,923	20,148	848	(2,270,234)	(2,247,315)
Non - controlling interests	-	-	-	-	-
	1,923	20,148	848	(2,270,234)	(2,247,315)

(Unit: THB Thousand)

	Separate Financial Statements			
	Staff Welfare Fund	Securities Investor Protection Fund (SET's portion)	General Fund	Total
For the year ended December 31, 2020				
Revenues				
Operating revenues	-	-	3,059,298	3,059,298
Investment income, net	1,261	4,686	121,181	127,128
Other income	-	-	1,906,820	1,906,820
Total revenues	1,261	4,686	5,087,299	5,093,246
Expenses				
Operating expenses	-	146	3,852,002	3,852,148
Contribution to the Capital Market Development Fund	-	-	361,641	361,641
Income tax expense	-	(2,617)	107,315	104,698
Total expenses	-	(2,471)	4,320,958	4,318,487
Revenues over expenses	1,261	7,157	766,341	774,759
Other comprehensive revenues (expenses)				
Items that will not be reclassified subsequently to revenues or expenses				
Loss on remeasurements of post-employment benefits obligations	-	-	(77,291)	(77,291)
Income tax relating to items that will not be reclassified subsequently to revenues or expenses	-	-	15,571	15,571
Total items that will not be reclassified to revenues or expenses	-	-	(61,720)	(61,720)
Total comprehensive revenues (expenses)	1,261	7,157	704,621	713,039
Total comprehensive revenues over expenses for the years attributable to:				
Owners of the parents	1,261	7,157	704,621	713,039
Non - controlling interests	-	-	-	-
	1,261	7,157	704,621	713,039



(Unit: THB Thousand)

	Separate Financial Statements			
	Staff Welfare Fund	Securities Investor Protection Fund (SET's portion)	General Fund	Total
For the year ended December 31, 2019				
Revenues				
Operating revenues	-	-	2,652,268	2,652,268
Investment income, net	1,923	14,016	1,547,098	1,563,037
Other income	-	-	2,060,116	2,060,116
Total revenues	1,923	14,016	6,259,482	6,275,421
Expenses				
Operating expenses	-	86	3,826,379	3,826,465
Reversal of contributions to the Stock Exchange of Thailand Foundation	-	-	(186,132)	(186,132)
Contribution to the Capital Market Development Fund	-	-	5,700,000	5,700,000
Income tax expense	-	-	(46,687)	(46,687)
Total expenses	-	86	9,293,560	9,293,646
Revenues over (under) expenses	1,923	13,930	(3,034,078)	(3,018,225)
Other comprehensive revenues (expenses)				
Items that will be reclassified				
subsequently to revenues or expenses				
Gain on change in value of available-for-sale investments managed by SET	-	-	417,992	417,992
Gain on change in value of available-for-sale investments from Securities Investor Protection Fund	-	6,218	-	6,218
Income tax relating to items that will be reclassified subsequently to revenues and expenses	-	-	(82,912)	(82,912)
Total items that will be reclassified subsequently to revenues or expenses	-	6,218	335,080	341,298
Items that will not be reclassified subsequently to revenues or expenses				
Gain on remeasurements of post-employment benefits obligations	-	-	10,226	10,226
Total items that will not be reclassified to revenues or expenses	-	-	10,226	10,226
Total comprehensive revenues (expenses)	1,923	20,148	(2,688,772)	(2,666,701)
Total comprehensive revenues over (under) expenses for the years attributable to:				
Owners of the parents	1,923	20,148	(2,688,772)	(2,666,701)
Non - controlling interests	-	-	-	-
	1,923	20,148	(2,688,772)	(2,666,701)

27. Operating Revenues

Operating revenues for the years ended December 31, 2020 and 2019 consist of:

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Trading fees	2,343,762	1,839,019	1,667,148	1,297,886
Securities registrar fees	1,228,987	1,226,039	-	-
Clearing & settlement fees	740,026	600,935	-	-
Listing fees	682,298	722,869	682,298	722,869
Member services fees	436,645	420,325	-	-
Information service fees	377,514	366,706	343,119	332,001
Customization and IT support fees	344,856	276,947	343,333	276,112
Depository fees	296,348	346,545	-	-
Membership fees	63,950	64,030	23,400	23,400
Fund services fees	24,044	20,176	-	-
Payment service fees	9,325	6,535	-	-
	<u>6,547,755</u>	<u>5,890,126</u>	<u>3,059,298</u>	<u>2,652,268</u>



Operating revenues for the years ended December 31, 2020 and 2019 classified by timing of revenue recognition consist of:
(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Timing of revenue recognition				
At a point in time				
Trading fees	2,343,762	1,839,019	1,667,148	1,297,886
Securities registrar fees	635,827	532,377	-	-
Clearing & settlement fees	740,026	600,935	-	-
Listing fees	200,300	244,945	200,300	244,945
Member services fees	419,785	379,978	-	-
Information service fees	1,418	993	1,119	476
Customization and IT support fees	580	1,375	580	1,375
Depository fees	296,348	346,545	-	-
Membership fees	-	200	-	-
Fund services fees	5,354	2,800	-	-
Payment service fees	8,845	6,351	-	-
	<u>4,652,245</u>	<u>3,955,518</u>	<u>1,869,147</u>	<u>1,544,682</u>
Overtime				
Securities registrar fees	593,160	693,662	-	-
Listing fees	481,998	477,924	481,998	477,924
Member services fee	16,860	40,347	-	-
Information service fees	376,096	365,713	342,000	331,525
Customization and IT support fees	344,276	275,572	342,753	274,737
Membership fees	63,950	63,830	23,400	23,400
Fund services fees	18,690	17,376	-	-
Payment service fees	480	184	-	-
	<u>1,895,510</u>	<u>1,934,608</u>	<u>1,190,151</u>	<u>1,107,586</u>
Total operating revenues	<u><u>6,547,755</u></u>	<u><u>5,890,126</u></u>	<u><u>3,059,298</u></u>	<u><u>2,652,268</u></u>

28. Investment Income (Expense), Net

Investment income (expense), net for the years ended December 31, 2020 and 2019

(Unit: THB Thousand)

	Notes	Consolidated Financial Statements		Separate Financial Statements	
		2020	2019	2020	2019
Interest income		327,223	436,238	198,303	278,766
<u>Less</u> Interest expense					
Short-term borrowings from subsidiaries	7	-	-	(22,492)	(36,569)
Assets for clearing system protection					
- members' portion		(174,824)	(219,577)	-	-
Interest income, net		152,399	216,661	175,811	242,197
Dividend income from					
Mutual funds		62,386	140,331	62,386	140,331
Subsidiaries	12	-	-	508,543	655,779
Associates	13	-	-	20,151	15,743
Private fund		22	31	22	17
Other entities		3,749	3,536	3,749	3,536
Realized gain (loss) from investments		(320,541)	420,168	(371,751)	396,471
Loss from derivatives		(24,429)	-	(24,429)	-
Unrealized gain (loss) from investments		(165,130)	90,398	(180,203)	18,118
Unrealized gain (loss) on exchange rate from					
foreign investments		(14,603)	14,189	(14,603)	14,189
Realized gain (loss) on exchange rate from					
foreign investments		(53,730)	59,245	(53,730)	59,245
Reversal of impairment loss		-	3,395	-	3,395
Allowance for expected credit loss		(3,812)	-	(3,504)	-
		<u>(363,689)</u>	<u>947,954</u>	<u>122,442</u>	<u>1,549,021</u>



29. Other Income

Other income for the years ended December 31, 2020 and 2019

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Revenues from fees and management funds	47,917	36,657	2,710	840
Educational activities income	22,844	64,442	22,844	64,442
Service income from related parties (see Note 7)	13,368	1,687	1,854,011	1,778,473
Fines	12,347	80,151	7,088	12,418
Rental & utilities revenues	11,832	15,295	11,832	15,295
Revenues from securities borrowing and lending	3,969	34,461	-	-
Revenue from funding for small entrepreneur	3,445	-	-	-
Revenues from marketing event	1,365	22,978	1,289	22,634
Compensation income	-	145,088	-	145,088
Revenues from transfer of rights from securities companies	-	11,200	-	10,000
Other income	46,001	35,759	7,046	10,926
	<u>163,088</u>	<u>447,718</u>	<u>1,906,820</u>	<u>2,060,116</u>

30. Employee Benefit Expenses

Employee benefit expenses for the years ended December 31, 2020 and 2019

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Management				
Salaries and other benefits	234,554	232,216	234,554	232,216
Contributions to provident fund	12,163	11,053	12,163	11,053
	<u>246,717</u>	<u>243,269</u>	<u>246,717</u>	<u>243,269</u>
Other employees				
Salaries and other benefits	1,621,849	1,622,193	1,622,049	1,620,982
Contributions to provident fund	78,612	74,009	78,612	74,009
	<u>1,700,461</u>	<u>1,696,202</u>	<u>1,700,661</u>	<u>1,694,991</u>
	<u>1,947,178</u>	<u>1,939,471</u>	<u>1,947,378</u>	<u>1,938,260</u>

The defined contribution plans comprise provident funds established by the Group for its employees. Contributions are made monthly by the employees at rates ranging from 3.00% to 15.00% of their basic salaries and by the Group at the rate of 10.00% of the employees' basic salaries. The provident funds are registered with the Ministry of Finance as juristic entities and are managed by a licensed Fund Manager.

31. SEC Fees

The Securities and Exchange Act B.E. 2535 (1992) requires SET to pay to the SEC at a rate as determined by the Board of the SEC.

In 2016, the Board of the SEC has approved to charge SET for the year 2017 – 2019 (for the period of 3 years) at the rate of 0.002% of trading value of each year. In 2019, the Board of the SEC passed a resolution to maintain the same rate for the year 2020 – 2022.

The Board of the SEC also required Thailand Future Exchange Public Company Limited (subsidiary) to pay the fee of derivatives trading exchange. The rate for year 2017 – 2020 is THB 2 million per annum.

32. Other Expenses

Other expenses for the years ended December 31, 2020 and 2019

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Fees and compensation expenses	115,508	128,067	88,306	108,152
Capital market development expenses	27,348	36,492	27,348	36,493
Donation and CSR expenses	11,094	11,206	11,096	11,006
Institution membership fees	4,798	4,897	3,463	3,661
Entertainment expenses	2,492	3,170	2,477	3,130
Travelling and vehicle expenses	2,174	35,985	2,173	34,318
Meeting expenses	1,711	2,821	1,692	2,634
Other expenses	9,759	15,977	9,549	15,476
	<u>174,884</u>	<u>238,615</u>	<u>146,104</u>	<u>214,870</u>

33. Contribution to the Capital Market Development Fund

The Securities and Exchange Act (No. 6) B.E. 2562, announced on April 16, 2019, requires that SET proceed as follows:

- 1) Transfer the money or any other assets in the amount of THB 5,700 million to the Capital Market Development Fund (“CMDF”). SET’s Board of Governors and CMDF’s Committee shall jointly determine the amount or value, type and nature of the money or assets to be transferred.
- 2) Provide the money to CMDF within 150 days from the end of the calendar year at the rate not less than 90% of the revenue after deduction of expense, tax and reserve. In this regard, the consolidated financial statements of SET shall be used to calculate the contribution amount. The provision of reserves shall be in accordance with the type and amount prescribed by the Board of Governors of SET.

SET transferred money in the amount of THB 5,700 million to the CMDF on July 4, 2019 and recognized in expense for the year 2019.

SET recorded an annual contribution amount of THB 361.64 million as an expense in the financial statements for the year ended December 31, 2020. Details of an annual contribution amount are as follows:



Reserves

At the meeting of the Board of Governors of SET held on October 31, 2020 and November 18, 2020, the Board approved the type and principle of reserves as prescribed by The Securities and Exchange Act (No. 6) B.E. 2562. At the meeting held on February 17, 2021, the Board approved amount of reserves of THB 1,314 million and annual contribution for 2020 to CMDF of THB 362 million. Details are as follows:

(Unit: THB Thousand)

Type of reserve	Reserve allocation principles to ensure adequacy of funding sources	Reserve amount
1. Reserves set aside according to law or criteria in business operation specified, including reserve amount to accommodate special situations	1.1 Legal reserve	23,635
	1.2 Reserves according to business operation such as EMIR (European Market Infrastructure Regulation), PFMI (Principles for Financial Market Infrastructures) to meet an increase (decrease) of business operation during the year	(36,960)
	1.3 Reserves allocated for specific funds such as approval of additional capital in specific funds during the year, benefit sharing of Securities Investor Protection Fund, Derivatives Investor Protection Fund, Clearing Fund or other similar funds	261,176
	1.4 Reserves allocated for accommodating operations risks and emergency measures	424,000
2. Reserves set aside to accommodate the fluctuation of investments	According to unrealized gain/(loss) during the year	(179,733)
3. Reserves set aside for investment in business or fixed assets	According to the investment amount in businesses and fixed assets approved by the Board of Governors	821,781
Total reserve		1,313,899

Annual contribution calculated as follows:

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements
	2020
Revenues over expenses before contribution to CMDF	2,094,001
<u>Less</u> Income tax expense	(378,279)
Revenue after deduction of expense, before reserves	1,715,722
<u>Less</u> Reserves	(1,313,899)
Revenue after deduction of expense, tax and reserves	401,823
Annual contribution amount at rate 90%	361,641

Accumulated contribution to CMDF according to the financial statements as of December 31, 2020 can be presented as follows.

(Unit: THB Thousand)

	Consolidated and Separate Financial Statements
	2020
Money transferred to CMDF for 2019	5,700,000
Annual contribution amount for 2020	361,641
Total accumulated contribution expenses	6,061,641

34. Income Tax

Income tax for the years ended December 31, 2020 and 2019

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Current income tax				
Previous income tax	-	-	-	(9,688)
Current income tax	268,527	236,452	-	-
Total current income tax	268,527	236,452	-	(9,688)
Deferred income tax				
Adjust deferred tax assets that shall not to be utilized	242,096	-	242,096	-
Origination and reversal of temporary differences	(132,344)	(22,181)	(134,782)	(36,999)
Total deferred income tax	109,752	(22,181)	107,314	(36,999)
Total income tax expense (revenue)	378,279	214,271	107,314	(46,687)



The tax on the Group's revenues over (under) expenses before income tax differs from the theoretical amount that would arise using the Thailand's basic tax rate as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Revenues over (under) expenses before income tax expense	1,732,360	(2,384,728)	882,073	(3,064,912)
Tax calculated at a tax rate of 20%	346,472	(476,945)	176,415	(612,982)
Income tax from the previous years	-	(9,688)	-	(9,688)
Cumulative loss carried forward from the previous years	(69,481)	(953)	(70,009)	-
Assessed income under Revenue Code	3,513	1,552	1,540	723
Income not subject to tax	(111,096)	(197,659)	(111,096)	(182,843)
Expenses additional deductible for tax purposes	(5,500)	(2,795)	(5,500)	(2,795)
Expenses not deductible for tax purposes	113,904	775,701	115,964	760,898
Eliminated transaction between related party, net of income tax	100,612	125,228	-	-
Revenues over expenses – Securities/Derivatives				
Investor Protection Fund, net of income tax	(145)	(170)	-	-
Income tax	378,279	214,271	107,314	(46,687)
The weight average applicable tax rate (%)	21.84	8.99	12.17	-

35. Commitments with Non-Related Parties

35.1 Capital commitments

As at December 31, 2020 and 2019, the Group had capital commitments of THB 78.46 million and THB 27.22 million, respectively as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Computer	28,806	14,460	28,806	14,460
Software	38,854	12,760	38,854	12,760
Buildings and other constructions	10,800	-	10,800	-
	78,460	27,220	78,460	27,220

35.2 Non-cancellable operating lease commitments and service agreements

As at December 31, 2020 and 2019, the Group had future minimum lease payments required under non-cancellable operating lease and service agreements as follows:

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Within one year	7,339	20,887	7,339	20,887
Over one year but within five years	10,549	30,906	10,549	30,906
	<u>17,888</u>	<u>51,793</u>	<u>17,888</u>	<u>51,793</u>

35.3 Long-term service commitment

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Within one year	89,085	97,917	89,085	97,917
Over one year but within five years	134,689	40,463	134,689	40,463
	<u>223,774</u>	<u>138,380</u>	<u>223,774</u>	<u>138,380</u>

35.4 Other commitments

As at December 31, 2020, SET has letters of guarantee issued by banks totalling THB 5.13 million (2019 : THB 5.13 million) in respect of electricity usage in the ordinary course of business from which management anticipates that no material liabilities will arise.

SET has issued a letter of comfort to a bank in respect of an overdraft credit line of THB 2,400 million (2019 : THB 2,400 million) granted to Thailand Clearing House Co., Ltd. (TCH), a subsidiary, for clearing and settlement of equity instruments and derivatives. Under the terms of the letter of comfort, SET is required to maintain its shareholding at 99.99% of the registered share capital in TCH to the end of the credit period. In addition, SET is required to support TCH's operations to ensure its ability to repay the debt to the bank. As at December 31, 2020, TCH had not drawn down the overdraft credit line.

36. Fair Value

The fair value disclosures of financial instruments, considerable judgment is necessarily required in estimation of fair value. Accordingly, the estimated fair value presented herein is not necessarily indicative of the amount that could be realized in a current market exchange. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value. The following methods and assumptions were used by the Group in estimating fair values of financial instruments.

Financial assets measured at fair value

Certain financial assets of the Group are measured at fair value at the end of reporting period.



The following table presents the Group's financial assets that are measured at fair value as at December 31, 2020.

(Unit: THB Thousand)

Financial assets	Consolidated Financial Statements		
	Fair value	Fair value hierarchy	Valuation techniques and key inputs
Financial Assets			
Investments			
Fair value through profit or loss			
Government bond	10,498,648	Level 2	Market price
Debenture	366,841	Level 2	Market price
Mutual Fund	83,410	Level 1	Quoted prices in active market
Mutual Fund	3,750,336	Level 2	Market price
Fair value through other comprehensive income			
Share capital	54,336	Level 3	Unobservable inputs

(Unit: THB Thousand)

Financial assets	Separate Financial Statements		
	Fair value	Fair value hierarchy	Valuation techniques and key inputs
Financial Assets			
Investments			
Fair value through profit or loss			
Government bond	1,003,544	Level 2	Market price
Debenture	366,841	Level 2	Market price
Mutual Fund	83,410	Level 1	Quoted prices in active market
Mutual Fund	3,750,336	Level 2	Market price
Fair value through other comprehensive income			
Share capital	49,336	Level 3	Unobservable inputs

Financial instruments not measured at fair value

In estimating the fair value of financial assets and financial liabilities, which are not measured at fair value, are categorized into level 2. Valuation techniques are net present value of expected cash inflow/outflow, but valuation technique for fixed deposit account measured by using discounted cash flows based on each contract with an average yield of 4 commercial banks.

The following table presents the Group's financial assets that are not measured at fair value at December 31, 2020.

(Unit: THB Thousand)

	Consolidated Financial Statements	
	Carrying amount	Fair value
Financial assets		
Investments measured at amortized cost		
Fixed deposit	5,298,583	5,281,129
Government bond and debenture	5,620,509	5,683,059

(Unit: THB Thousand)

	Separate Financial Statements	
	Carrying amount	Fair value
Financial assets		
Investments measured at amortized cost		
Fixed deposit	1,534,027	1,504,127
Government bond and debenture	1,016,032	1,046,178

There was no transfers between Levels 1 and 2 during the year.

Other financial instruments not carried at fair value are typically short-term in nature and reprice to current market rate frequently. Accordingly, their carrying amount is a reasonable approximation of fair value. These financial instruments include cash and cash equivalents, cash at banks for financial benefits payable, assets for margin deposits and benefits, accounts receivable, accrued interest receivable, deposits and other benefits in assets for clearing system protection, deposits and other benefits in Securities Investor Protection Fund, deposits and other benefits in Derivatives Investor Protection Fund, accounts payable and short-term borrowings from subsidiary.

The management believes that the fair value of the Group's financial assets does not materially differ from their carrying value.

Fair value estimation

The fair value of the financial instruments are defined into the following three different levels by valuation method as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3: Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).



The following table presents the Group's financial assets that are measured at fair value as at December 31, 2019.

(Unit: THB Thousand)

	Consolidated Financial Statements			
	2019			
	Level 1	Level 2	Level 3	Total
Trading securities	-	10,472,702	-	10,472,702
Available-for-sales	1,543,835	6,949,265	-	8,493,100
Total	1,543,835	17,421,967	-	18,965,802

(Unit: THB Thousand)

	Separate Financial Statements			
	2019			
	Level 1	Level 2	Level 3	Total
Trading securities	-	1,198,404	-	1,198,404
Available-for-sales	1,543,835	6,949,265	-	8,493,100
Total	1,543,835	8,147,669	-	9,691,504

The following table presents the Group's financial assets that are not measured at fair value as at December 31, 2019.

(Unit: THB Thousand)

	Consolidated Financial Statements			
	2019			
	Level 1	Level 2	Level 3	Total
Held-to-maturity investments	-	8,772,169	-	8,772,169
General investments	-	-	36,861	36,861
Total	-	8,772,169	36,861	8,809,030

(Unit: THB Thousand)

	Separate Financial Statements			
	2019			
	Level 1	Level 2	Level 3	Total
Held-to-maturity investments	-	1,411,316	-	1,411,316
General investments	-	-	36,861	36,861
Total	-	1,411,316	36,861	1,448,177

There was no transfers between Levels 1 and 2 during the year.

Other financial instruments not carried at fair value are typically short-term in nature and reprice to current market rate frequently. Accordingly, their carrying amount is a reasonable approximation of fair value. These financial instruments include cash and cash equivalents, cash at banks for financial benefits payable, assets for margin deposits and benefits, accounts receivable, accrued interest receivable, deposits and other benefits in assets for clearing system protection, deposits and other benefits in Securities Investor Protection Fund, deposits and other benefits in Derivatives Investor Protection Fund, accounts payable and short-term borrowings from a subsidiary.

The Group's management believes that the fair value of the financial assets and liabilities does not materially differ from their carrying value.

Valuation techniques used to derive Level 1 fair values

Available-for-sale securities which are listed in SET or foreign stock exchanges as shown in long-term investments and Securities Investor Protection Fund. The fair value of investments is measured by using last bid price at the close of business on the statement of financial position date by reference to the other Stock Exchanges in which such securities are listed.

Valuation techniques used to derive Level 2 fair values

Other available-for-sale securities presented as short-term investments, long-term investments and Securities Investor Protection Fund. The fair value of investments is measured by using last bid price at the close of business on the statement of financial position date by reference to the Association of Investment Management Companies.

Held-to-maturity investments and trading securities include fixed deposit accounts, bonds and debentures. The fair value of fixed deposit accounts, is measured by using discounted cash flows based on each contract with an average yield of 4 commercial banks. The fair value of bonds and debentures are measured by using the price published in the Thai Bond Market Association at the end of the date in the statement of financial position.

Valuation techniques used to derive Level 3 fair values

As the Group has a general investments in limited companies which the Group's shareholding was insignificant, the Group has no controlling and decision making power in the invested companies resulting in difficulty in obtaining the information to support the fair value valuation in practice. These investments are not in the stock exchange and do not have any market prices which can be used as fair value. The Group also does not have any plan for selling these investments, so the Group did not assess the fair value for the general investments. Therefore, the Group cannot disclose the fair value of the general investments in the notes to the financial statements and have stated these investments at cost less allowance for impairment (if any).

37. Contingent Liabilities

37.1 SET

On December 26, 2017, SET was claimed to recourse for damages arising from not supervising member company to carry out the force selling of the plaintiff's securities in accordance with the specified regulation. The plaintiff was seeking such alleged damages totalling THB 12.65 million. On November 20, 2019, the Appeal Court dismissed the case, and the plaintiff does not appear to appeal to the Supreme Court within the specific time. Therefore, the case has been finalized.

37.2 Subsidiary

37.2.1 On January 22, 2019, a subsidiary was claimed to recourse for the damages incurred related to the case of the wrongful acts recalling the asset and compensation from the forgery of the share certificates. The subsidiary has been claimed for the amount of THB 76.23 million.



On December 4, 2019, the Civil Court ordered the subsidiary to pay the amount of THB 62.55 million with interest rate at 7.5% per annum, and to pay THB 400,000 legal fee. The subsidiary filed an appeal to Court. As at December 31, 2020, the case was still under the consideration of the Appeal Court. The outcome of the case has not presently been finalized. As a result, the subsidiary did not record any transaction in relation to the above case in the 2020 financial statements.

The Group has purchased insurance policy covering professional liability (Financial Institutional Professional Indemnity Insurance) which has fully covered the liability for this case.

37.2.2 On December 11, 2019, a subsidiary was indicted to carry out the registration to change the name of shareholders or to pay the price of shares in the amount of THB 495 million. On January 26, 2021, the case was dismissed by the Civil Court. The plaintiff is in the process of considering an appeal to the Appeal Court. Therefore, the subsidiary did not record any transaction in relation to the above case in the 2020 financial statements.

38. Financial Instruments – Forward Foreign Exchange Contracts

SET has financial instruments, which their latest settlement date of forward foreign exchange contracts will be on July 14, 2021 (2019 : March 30, 2020). The amount of the outstanding contracts as at December 31, 2020 and 2019 to be paid are:

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
US Dollar currency	2,002,609	2,197,292	2,002,609	2,197,292

The net fair values of forward foreign exchange contracts as at December 31, 2020 and 2019 were:

(Unit: THB Thousand)

	Consolidated Financial Statements		Separate Financial Statements	
	2020	2019	2020	2019
Forward foreign exchange contracts				
- with positive (negative) fair values	(42,140)	93,623	(42,140)	93,623

The fair value of forward foreign exchange contracts is in Level 2. They are measured based on forward foreign exchange rate comparing with Thai Baht announced by the Bank of Thailand which input that are observable.

39. Reclassification

A reclassification has been made in the financial statements for the year ended December 31, 2019, to conform to the classifications used in the financial statements for the year ended December 31, 2020 as follows:

(Unit: THB Thousand)

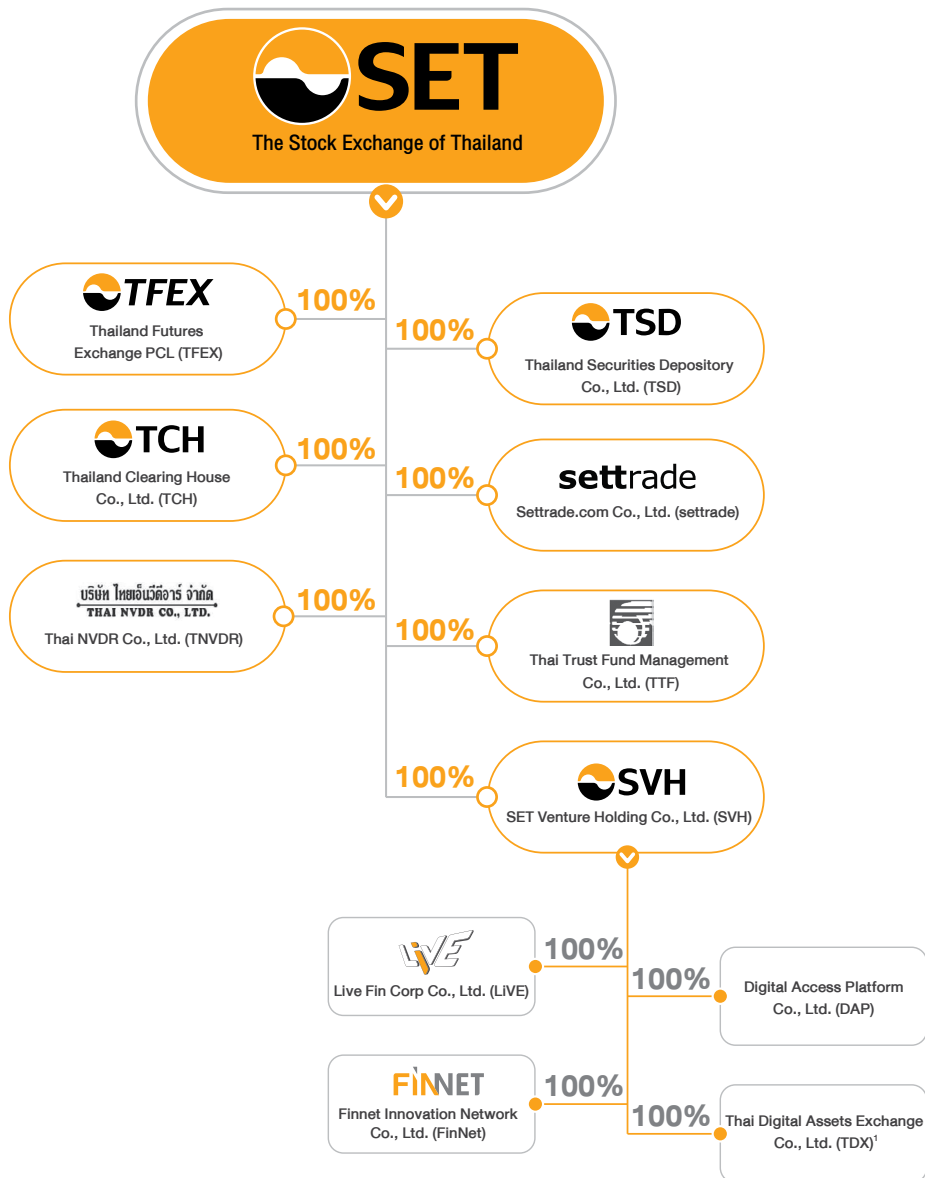
Items	Previous Classification Presentation	Current Classification Presentation	Consolidated Financial Statements	Separate Financial Statements
Revenues				
Payment service fees	Other income	Operating revenues	6,535	-

40. Approval of the Financial Statements

These financial statements have been approved for issuance by the SET's Board of Governors on February 17, 2021.

Shareholding Structure

Shareholding structure of The Stock Exchange of Thailand (SET) in the subsidiaries:



¹TDX will operate the business after obtaining a business license according to the Emergency Decree on Digital Asset Business Operation B.E. 2561 (2018) and approval from SEC.



Subsidiaries

Thailand Futures Exchange PCL

Thailand Futures Exchange PCL (TFEX), a subsidiary of The Stock Exchange of Thailand (SET), was established on May 17, 2004, as a derivatives exchange market under the Derivatives Act B.E. 2546 (2003). TFEX was granted a license to be a center of derivatives trading under the supervision of the Securities and Exchange Commission (SEC) on February 11, 2005. In November 2016, the Agricultural Futures Exchange of Thailand (AFET) was merged with TFEX.

Operations

TFEX is an exchange for derivatives products based on a variety of asset classes covering financial, precious metal, and agricultural products. By law, TFEX is allowed, under the SEC supervision, to trade futures, and options where the permitted underlying assets are:

- Equities: securities indices, stocks, etc.
- Debt instruments: government bonds, interest rate, etc.
- Commodities: precious metal, base metal, energy, etc.
- Agricultural products: rubber, rice, cassava, etc.
- Others financial instruments: exchange rate and other as may be announced by the SEC.

TFEX's objectives are to benefit investors and related parties by:

- Being a center of derivatives trading, meeting international standards and efficiency, and helping investors and entrepreneurs to effectively use as hedging instruments and manage their investment and business operations at reasonable cost.

- Offering alternative investments in a trading system that is fair, transparent and liquid according to international standards, including building confidence in the clearing and settlement of every transaction made on TFEX. Thailand Clearing House Co., Ltd. acts as a central counterparty to all counterparts in the market.
- Assisting market participants in the price discovery process. Investors and enterprises will then be able to plan their operations and manage their portfolio more effectively.

Registered Capital and Organizational Management

TFEX has a total registered capital of THB 500 million, with the SET holding 100 percent of total registered capital.

Board of Directors

(As of February 23, 2021)

1. Dr. Prasarn	Trairatvorakul	Chairman
2. Dr. Pakorn	Peetathawatchai	Vice Chairman
3. Aphisak	Kiewkarnkha	Director
4. Charnchai	Kongthongluck	Director
5. Dr. Chih-Hung	Lin	Director
6. Pataravasee	Suvarnsorn	Director
7. Dr. Somjin	Sornpaisarn	Director
8. Suthep	Peetakanont	Director
9. Dr. Rinjai	Chakornpipat	Managing Director

Thailand Securities Depository Co., Ltd.

Thailand Securities Depository Co., Ltd. (TSD) is a subsidiary of The Stock Exchange of Thailand (SET). TSD was established on November 16, 1994 and commenced its operations on January 1, 1995, to develop and support post-trade services to effectively reach international standards.

Operations

TSD provides two types of securities post-trade services:

- **Securities depository services:** acts as a central securities depository for stocks and bonds, for participants such as custodian banks, etc, using a secured and efficient scripless system and providing services for securities deposit, withdrawal, transfer, pledge, and pledge revocation both scrip and scripless. Investors can conduct the transactions through depository participants or by themselves, while providing clearing services of debt instruments in OTC market.
- **Securities registration services:** acts as a registrar for common stocks, bonds, investment trust and warrants for listed and non-listed companies. Services mainly cover the functions of preparing and maintaining the Register Book that contains correct, complete and up-to-date information of shareholders, and it is also responsible for managing the foreign holding proportion of the securities traded on the main board and foreign board of SET in compliance with related rules and regulations. The service is executed through the cutting-edge and efficient computer system that has been developed to have a direct linkage to that of the Securities Depository Center System-wise.

TSD also has secured data storage and processing system of securities registration with the corresponding backups ready for securing the continuity of the service. In addition, its vault and data management systems have been in place to secure the rights of the securities holders. In addition, TSD also has internal audit system to mitigate risks.

Registered Capital and Organizational Management

TSD has a total registered capital of THB 200 million, with SET holding 100 percent of total registered capital.

Board of Directors

(As of February 8, 2021)

1. Dr. Pakorn	Peetathawatchai	Chairman
2. Aphisak	Kiewkarnkha	Member
3. Nongram	Wongwanich	Member
4. Dr. Rinjai	Chakornpipat	Member
5. Silawat	Santivisat	Member
6. Yupawan	Sirichainarumitr	Managing Director



Thailand Clearing House Co., Ltd.

Thailand Clearing House Co., Ltd. (TCH), a subsidiary of The Stock Exchange of Thailand (SET), was established on August 9, 2004 to clear and settle derivatives trades. On February 15, 2010, SET transferred the securities clearing and settlement operation from TSD to TCH. At present, TCH is the center for clearing and settling of securities traded on SET, mai, TBX, and TFEX. Thus, there is a clear separation of operations and management between TCH and TSD, reducing the cost of managing risk and placing collateral, thus bringing the Thai capital market's post-trade services to be more in line with international standards.

Operations

TCH's most important role is to be the center of clearing and settlement of financial products in the Thai capital market by being the central counterparty and guarantor for the clearing and settlement of every transaction made on the markets mentioned above. This reduces risks, building confidence among all market participants and promoting the Thai capital market development in the long term.

Registered Capital and Organizational Management

TCH has a total registered capital of THB 600 million, with the SET holding 100 percent of total registered capital.

Board of Directors

(As of February 8, 2021)

1. Dr. Pakorn	Peetathawatchai	Chairman
2. Aphisak	Kiewkarnkha	Member
3. Nongram	Wongwanich	Member
4. Dr. Rinjai	Chakornpipat	Member
5. Sa-ard	Treerarojanawong	Member
6. Pataravasee	Suvarnsorn	Managing Director

Settrade.com Co., Ltd.

Settrade.com Co., Ltd. (settrade) was established by The Stock Exchange of Thailand (SET) on October 13, 2000 and commenced operations on November 3, 2000, to provide internet trading platforms and investment technology for securities companies, aiming to offer more channels for securities trading and make it convenient for investors.

Operations

settrade provides internet trading system for equities and derivatives, as well as investment technology for SET members and TFEX members. settrade aims to offer a broader range of trading channels to investors, while developing computer system for securities and derivatives businesses.

Registered Capital and Organizational Management

settrade has a total registered capital of THB 80 million (USD 2.33 million), with SET holding 100 percent of total registered capital.

Board of Directors

1. Dr. Pakorn	Peetathawatchai	Chairman
2. Aphisak	Kiewkarnkha	Member
3. Kirati	Kosicharoen	Member
4. Dr. Krisada	Sektrakul	Member
5. Dr. Rinjai	Chakornpipat	Member
6. Rongrak	Phanapavudhikul	Member
7. Thirapun	Sanpakit	Member
8. Amatee	Prapapant	Managing Director



Thai NVDR Co., Ltd.

Thai NVDR Co., Ltd. (Thai NVDR) was established on October 4, 2000, by The Stock Exchange of Thailand (SET). Thai NVDR is responsible for issuing and redeeming Non-Voting Depository Receipts (NVDRs) to investors.

Operations

Thai NVDR is responsible for automatically issuing and redeeming NVDRs for investors who wish to trade listed companies shares through NVDRs. NVDR holders receive the same full financial benefits as they will receive if they invest directly in shares (dividends, rights, and warrants) but there are no voting rights for NVDR holders.

Registered Capital and Organizational Management

Thai NVDR has a total registered capital of THB 10 million, with SET holding 100 percent of total registered capital.

Board of Directors

1. Dr. Pakorn	Peetathawatcha	Chairman
2. Manpong	Senanarong	Member
3. Pataravasee	Suvarnsorn	Member
4. Rongrak	Phanapavudhikul	Member

Thai Trust Fund Management Co., Ltd.

Thai Trust Fund Management Co., Ltd. (TTF) was established on December 17, 1996 by The Stock Exchange of Thailand (SET) to promote investors in Thai-listed securities through mutual funds.

Operations

TTF was licensed by the Securities and Exchange Commission (SEC) and is managed by SET and Thailand Securities Depository Co., Ltd. (TSD). Thai Trust Fund is a passive fund. When an investor places a bid through a broker, TTF will place a corresponding order to buy the underlying shares and then will issue units to the investor. TTF will not exercise its voting rights except on motions to delist the underlying shares from SET. The main function of TTF is to look after the financial benefits of unit holders on dividends and rights issues. TTF functions as an open-ended fund, and invests in shares of any listed company. The mutual funds are considered to be Thai juristic entities even though foreigners own all of the fund's units.

Registered Capital and Organizational Management

TTF has a total registered capital of THB 100 million with SET holding 100 percent of total registered capital.

Custodian of the Mutual Fund

TMB Bank Pcl.

Board of Directors

1. Dr. Pakorn	Peetathawatchai	Chairman
2. Pataravasee	Suvarnsorn	Member
3. Rongrak	Phanapavudhikul	Member
4. Yupawan	Sirichainarumitr	Member



SET Venture Holding Co., Ltd.

SET Venture Holding Co., Ltd. (SVH), a subsidiary of The Stock Exchange of Thailand (SET), was established on May 21, 2020. SVH operates the business as a holding company by managing and overseeing all the SET's businesses relating to New Business & Infrastructure Development.

Registered Capital and Organizational Management

SVH has a total registered capital of THB 300 million, with SET holding 100 percent of the total registered capital.

Board of Directors

1.	Dr. Pakorn	Peetathawatchai	Chairman
2.	Aphisak	Kiewkarnkha	Member
3.	Kitti	Sutthiatthasil	Member
4.	Dr. Krisada	Sektrakul	Member
5.	Manpong	Senanarong	Member
6.	Pataravasee	Suvarnsorn	Member
7.	Paveena	Sriphotong	Member
8.	Prapan	Charoenprawatt	Member
9.	Dr. Rinjai	Chakornpipat	Member
10.	Rongrak	Phanapavudhikul	Member
11.	Dr. Soraphol	Yulayasathien	Member
12.	Thirapun	Sanpakit	Member

Live Fin Corp Co., Ltd.

Live Fin Corp Co., Ltd. (LiVE) is a wholly-owned subsidiary of SET Venture Holding Co., Ltd. (SVH). Established on June 26, 2017, the company serves as a full-service business that helps startups grow their business. Service offerings include facilitating access to funding, providing educational and training courses, supporting capacity building and developing fundraising systems. The company also helps facilitate securities trading for SMEs and startups.

Operations

LiVE focuses on grooming startups and SME with growth potentials. Together with its partners, the company has developed three major platforms to offer entrepreneurs a wide array of online training programs that help sharpen their business competency and get them ready for fundraising in the capital market.

- 1. Education Platform :** The platform serves as a knowledge center offering e-learning services and access to numerous resources including articles and educational clips (www.live-platforms.com launched on 29 June 2020)
- 2. Scaling Up Platform :** This platform helps entrepreneurs grow their business by strengthening their business capacities and preparing them for fundraising in the capital market through the following resources and activities:
 - An in-depth training program on how to structure and manage business growth strategies by experts in accounting, tax, law and human resources management from leading organizations including Baker McKenzie, PwC and SLINGSHOT
 - An enterprise management system to get startups and SMEs ready for fundraising activities
 - A range of business enhancement activities including coaching and business matching

- 3. Fundraising and Trading Platform :** The platform aims to provide SMEs and startup business operators with fundraising facilities in the primary market and trading facilities in the secondary market (the platform is scheduled to commence in 2021 pending formulation and approval of related rules and regulations)

Registered Capital and Organizational Management

LiVE has a total registered capital of THB 30 million, with SVH holding 100 percent of total registered capital.

Board of Directors

1. Manpong	Senanarong	Chairman
2. Aphisak	Kiewkarnkha	Member
3. Prapan	Charoenprawatt	Managing Director



Finnet Innovation Network Co., Ltd.

Finnet Innovation Network Co., Ltd. (FinNet) is a subsidiary of SET Venture Holding Co., Ltd. (SVH). It was established on August 25, 2017 with the objective to enhance the efficiency of the capital market's payment process. It acts as an intermediary institution that connects payment transactions with commercial banks with the world-class standard and highest efficiency.

Operations

FinNet is a payment service provider, acting as an intermediary that processes payment instructions and data management. FinNet processes instructions for financial institutions such as securities, companies, asset management companies and listed companies before the payment is submitted by entrepreneurs. FinNet aims to be a capital market's payment system infrastructure that efficiently facilitates transactions between intermediary institutions and their customers with standardized operational procedure and economies of scale.

Registered Capital and Organizational Management

FinNet has a total registered capital of THB 200 million, with SVH holding 100 percent of total registered capital.

Board of Directors

1.	Pataravasee	Suvarnsorn	Chairperson
2.	Aphisak	Kiewkarnkha	Member
3.	Kitti	Sutthiatthasil	Managing Director

Digital Access Platform Co., Ltd.

Digital Access Platform Co., Ltd. (DAP) is a subsidiary of SET Venture Holding Co., Ltd. (SVH). It was established on May 22, 2020. The company operates infrastructure business, focusing on digital transformation.

Operations

DAP provides financial infrastructure system services related to trading and post-trade services for securities, mutual funds, provident fund, bonds, digital assets and other associated services.

Registered Capital and Organizational Management

DAP has a total registered capital of THB 20 million, with SVH holding 100 percent of total registered capital.

Board of Directors

1. Dr. Rinjai	Chakornpipat	Chairperson
2. Aphisak	Kiewkarnkha	Member
3. Kittti	Sutthiatthasil	Managing Director



Thai Digital Assets Exchange Co., Ltd.

Thai Digital Assets Exchange Co., Ltd. (TDX) is a subsidiary of SET Venture Holding Co., Ltd. (SVH). Established on 14 September 2020, the exchange arm operates the secondary market for digital asset trading and provides a digital asset trading portal or network for digital trading purposes.

Operations

TDX offers infrastructure system services or relevant systems to support digital asset trading and related businesses. The services offered include administrative system, operational system and other systems that support activities relating to digital asset exchange positioning. In addition, the exchange provides database system and data storage services to collect and record relevant data.

Registered Capital and Organizational Management

TDX has a total registered capital of THB 50 million, with SVH holding 100 percent of total registered capital.

Board of Directors

1. Dr. Pakorn	Peetathawatchai	Chairman
2. Aphisak	Kiewkarnkha	Member



The Stock Exchange of Thailand
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