

2020

ANNUAL REPORT



證券櫃檯買賣中心
Taipei Exchange

CONTENTS

CHAPTER 1 GREETINGS	04
CHAPTER 2 ABOUT TAIPEI EXCHANGE	08
CHAPTER 3 BUSINESS PERFORMANCE	16
CHAPTER 4 CORPORATE SOCIAL RESPONSIBILITY	44
CHAPTER 5 FUTURE PROSPECTS	50
CHAPTER 6 INTERNAL CONTROL AND FINANCIALS	54

CHAPTER 1

GREETINGS

TPEX reaped the rewards in both the stock and bond markets

TPEX has been committed to diversifying financial products and building multi-tiered stock markets. Now it has become a market with a wide range of products and multi-tiered boards. This market encompasses the "TPEX Main Board", "Emerging Stock Board (ESB)", and "Go Incubation Board for Startup and Acceleration Firms (GISA)", vigorously developing the bond market and innovative products. TPEX has made great efforts on building a friendly fundraising environment, enhancing fairness and efficiency in the trading environment, and promoting diverse and innovative financial products.

Due to the impact of COVID-19 in 2020, the economic environment in Taiwan and even the whole world went through drastic ups and downs. Fortunately, the pandemic in Taiwan was controlled well and thanks to Taiwan's strong fundamentals, allowing Taiwan's economy to stay active and the capital market keep vibrant. The total market capitalization of stocks listed on the TPEX Mainboard rose from NT\$3.43 trillion at the beginning of 2020 to NT\$4.35 trillion at the end of the year. The TPEX index in 2020 rose 23.26%. The total market trading value of TPEX listed equities amounted to NT\$12.9 trillion. The average daily trading value was NT\$52.788 billion and the growth rate was 45.44%, reaching an all-time high. The total issue amount in domestic bond markets in 2020 also reached a new high at NT\$3.39 trillion, with a growth rate of 88.15%. The issuance amount of NTD-denominated corporate bonds and bank debentures was over NT\$1 trillion, reaching to NT\$1.02 trillion, a gain of 79%. The total issue amount of international bonds also hit a record high at around NT\$1.79 trillion and the growth rate reached 127.89%.



As for the return on investment that most investors care about, the dividend yield of the Mainboard stocks averaged 2.81% in 2020, with 401 Mainboard companies reporting a dividend yield of more than 2%. Return on investment of bond ETFs averaged 4.7%, which outperformed the majority of fixed-income securities.

To address the influence of COVID-19, TPEX has been committed to ensuring the security market's continuous operations in addition to initiating relevant countermeasures by itself. To further improve its adaptability, TPEX has established a disaster response and recovery mechanism, which conforms to international standards and received ISO 22301 for business continuity planning in December of 2020, thus being able to continue business operation in the event of an emergency, as well as protecting issuers and investors' rights and boosting the development of the capital market.

Building an environment conducive to fundraising

TPEX has been actively fostering high-potential and innovative SMEs. These quality enterprises will gradually mature and become robust by the help of the capital market, and thereby drive the development of the overall economy. There were 1035 companies listed on the Mainboard and registered on the ESB and 87 companies registered on the GISA in total in 2020. TPEX has helped over 2200 listed companies enter the capital market since its inception, which is an excellent achievement.

Improving fairness and efficiency in the trading market

To enhance transaction transparency and to help the middle class make small investments more easily, TPEX launched a continuous trading system and odd-lot trading system for the mainboard

stocks in 2020, which invigorated and gave fresh momentum to the TPEX mainboard stock market. Over 2.45 million investors participated in trading in the TPEX market in 2020. This is an increase of 710,000 investors compared to 2019, a growth of 40%, and represents a record high in the number of investors trading in the TPEX market.

Boosting innovation and diversity of financial products

To meet the investors' needs in asset allocation and diversity of investment, TPEX continues to promote the innovation and diversity of financial products. TPEX launched three feature indexes in 2020 based on the "TPEX 200 Index", as well as other CSR-themed indexes. As of 2020, 13 ETNs were newly listed on TPEX in total. As for bond products, TPEX has successfully listed a sukuk (Islamic fixed-income securities) product on TPEX for the first time. International bonds issued by many different governments worldwide have also been listed. There were 93 bond ETFs listed on TPEX and the issue amount reached NT\$1.22 trillion. The number of listings and issue amount topped the list among the main securities exchanges in Asia and Australia and was placed 7th in the world. Moreover, the number of investors at TPEX has been increasing.

Looking to the future, TPEX will continue to assist companies in innovative industries and those relate to the six main cores businesses to grow in support of the government's policies. The Pioneer Stock Board (PSB) will be established in 2021 under the Emerging Stock Market so that TPEX can build a more comprehensive multi-tiered market sector for incubating SMEs in earlier stages. TPEX will also launch a trading system for social bonds in the first half of 2021, and will integrate green bonds with sustainability bonds to build up the Sustainable Bond Market. In addition to that, TPEX will keep promoting education and training in corporate governance in accordance with Corporate Governance 3.0 - Sustainable Development Roadmap set by the competent authority, further enhance the level of corporate governance, shape corporate culture based on integrity, and promote sustainable development. TPEX will expand its efforts to optimize R&D and enhance the function of various systems in order to sustain an internationalized capital market with fairness, efficiency, innovation, and inclusiveness.

Philip Chen
Chairman



Edith Lee
Managing Director & CEO



CHAPTER 2

ABOUT TAIPEI EXCHANGE

- ✓ Organization Structure
- ✓ Products and Services
- ✓ COVID-19 Countermeasures

✓ Organization Structure

The board of directors, consisting of 15 directors and 5 supervisors, is the highest executive body of the Taipei Exchange. The chairman convenes and presides over board meetings, and represents TPEx. Under the board, there is one Managing Director & CEO who manages organization business, along with two deputy CEOs and one Chief Administrative Officer to assist the Managing Director & CEO.

TPEx has ten departments, namely, Startup Incubation, Listing Examination, Listing Supervision, Trading, Market Surveillance, Bond, Information, Intermediaries Service, Administration, and Strategy & International Relations departments. Besides, an Internal Audit Office is subordinate to the board of directors.

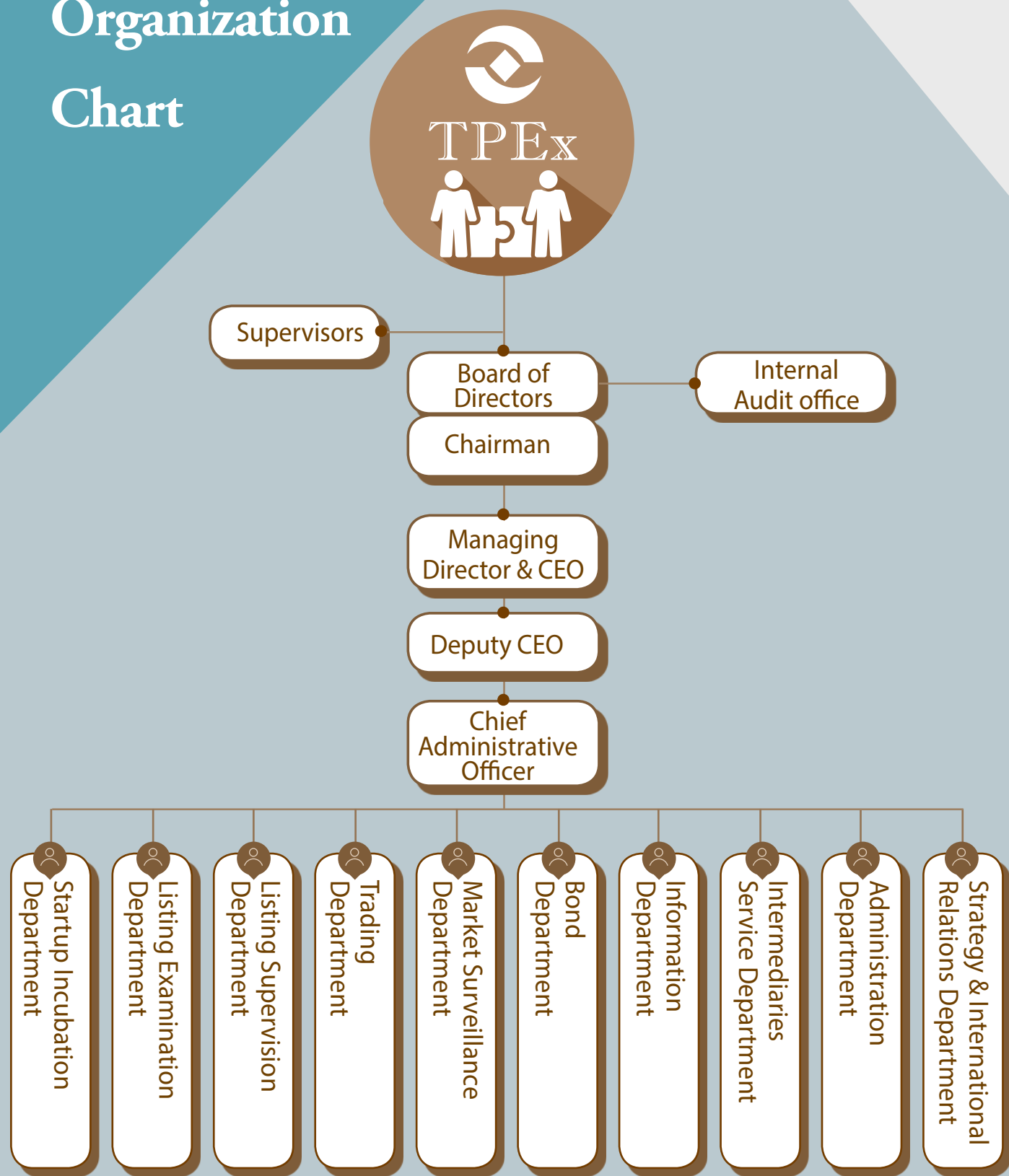


Philip Chen	Edith Lee	Alex Jiunn-Chih Wang
Shean-Bii Chiu	Sherman H.M. Lin	Suming Lin
Chien-Fu Lin	Huo Dang Lin	Conrad C. Chang
Louis Chen	Chun-Hong Chen	Ming-Hong Ho
Ming-Chien Cheng	F. J. Shiue	Lih-Chung Chien



Chen-Shan Chang	Kuei-Tseng Wang	Thomas K.H. Wu
Yo-Phy Huang	Yin-Hua Yeh	

Organization
Chart



證券櫃檯買賣中心
Taipei Exchange





Products and Services



Our Products

◆ Mainboard

- TPEX main board stocks
- Taiwan depositary receipts (TDR)
- Convertible/exchangeable
- corporate bonds
- Call (put) warrants
- Exchange-Traded Funds (ETF)
- Exchange-Traded Notes (ETN)

◆ Emerging Stock Board (ESB)

- Emerging Stocks

◆ Go Incubation Board for Startup and Acceleration Firms (GISA)

◆ Bonds

- Government bonds
- Financial debentures
- Straight corporate bonds
- Convertible/exchangeable corporate bonds
- Corporate bonds with warrants
- Foreign bonds
- International bonds
- Sukuk fixed income securities
- Beneficiary certificates of securitized products

◆ Derivatives

- Interest rate derivatives
- Bond derivatives
- Equity Derivatives Products
- Credit derivatives
- Foreign Exchange Derivatives
- Convertible/ Exchangeable bond asset swap
- Foreign exchange margin trading
- Structured notes
- Commodity CFD

◆ Listed open-ended funds

◆ Gold

◆ Security Token Offerings (STO)



Our Services

◆ Equity Crowdfunding Platform (mandated by FSC)

◆ Industry Value Chain Information Platform

◆ Market Observation Post System (MOPS)

◆ TPEX Promotion Website for domestic issuers and intermediaries



COVID-19 Countermeasures

In 2020, the whole world suffered from the tremendous impact of COVID-19. It was also a challenge for capital markets to overcome. In response to the pandemic, TPEX implements countermeasures for emergency response for the office and loosened the profitability requirements for mainboard applicant companies.

1

Initiating Emergency Response to the Pandemic

TPEX initiated emergency responses due to the epidemic on January 30, 2020, including enhanced disinfection and personnel control. TPEX also implemented the measures of "Personnel Flow Management and Working in Different Places" and work from home. Furthermore, TPEX postponed non-urgent and unnecessary education and training courses and large events such as routine seminars and performance conferences, which were changed to a livestream format or recorded films instead. TPEX has also paid close attention to the information announced by the Central Epidemic Command Center (CECC) to promptly adjust its epidemic prevention measures accordingly.

2

Relaxing the Profitability Requirement of TPEX Listing

In consideration of the influence of the pandemic on the operations and profitability of applicant companies since the beginning of 2020, TPEX issued an interpretation of relaxing the aforesaid requirements, which means applicants became exempted from the regulation of "profitability in the most recent fiscal year is higher than that of the preceding fiscal year" on July 29, 2020. TPEX listing reviews will instead focus on future stability and growth of the companies' operations. In this way, applicant companies that were affected by the epidemic in 2020 but still gained decent profitability can apply for listing in 2021 as scheduled.



CHAPTER 3 BUSINESS PERFORMANCE

- ✓ A Comprehensive Multi-tiered Market
- ✓ An Outstanding Bond Market
- ✓ Innovative Market Mechanism
- ✓ Obtained International Certificates and Promoting Online Communication

✓ Market Performance

NT\$
12.9
trillions

2020 TPEx equity market trading value hit the record high

Average daily trading value reaches NT\$52.8 billion, 45% increase from last year.

66%+

Diversified listing companies and completed industrial clusters

of listed firms are in Electronics and Biotech industries

2%+

Listed companies profit from steady growth

Over half our listed firms posted an average cash dividend yield of more than 2% as at the end of December 2020.

NT\$
1
trillion

The No.1 in Bond ETF issuance in Asia

Scale of the growing Bond ETF market

22
Issues

Promoting the development of sustainable bond market

19 green bonds and 3 sustainability bonds issued in 2020

**Involve-
ment**

Participation in international organizations aligns TPEx with the highest global standards

IOSCO Affiliate member

WFE member

AOSEF member

CCP12 member

Market Performance in 2020



	2020	2019	Change (%)
Equity Market			
Number of listed /registered			
Mainboard	782	775	0.90%
Emerging Stock Board	253	248	2.02%
Go Incubation Board	87	90	-3.33%
Number of newly listed /newly registered			
Mainboard	19	20	-5.00%
Emerging Stock Board	44	47	-6.38%
Go Incubation Board	17	18	-5.56%
Market Capitalization (NT\$ Billion)			
Mainboard	4,352.01	3,433.53	26.75%
Emerging Stock Board	749.48	489.91	52.98%
Average daily trading value (NT\$ Billion)			
Mainboard	49.335	31.436	56.94%
Emerging Stock Board	2.065	0.739	179.43%
Capital Raised (NT\$ Million)			
Average IPO raised (Amount/Number)	351	235	49.36%
Average SPO raised (Amount/Number)	560	549	2.00%
Benchmark Indices			
TPEX Index			
Highest (date)	184.24 (12/30)	149.36 (12/31)	23.35%
Lowest (Date)	103.25 (03/19)	122.33 (01/04)	-15.60%
TPEX 200 Index			
Highest (date)	7,839.70 (12/30)	6,233.36 (12/30)	25.77%
Lowest (Date)	4,147.01 (03/19)	4,949.21 (01/04)	-16.21%
TPEX 50 Index			
Highest (date)	228.68 (12/09)	183.54 (12/30)	24.59%
Lowest (Date)	123.97 (03/19)	135.47 (01/04)	-8.49%

	2020	2019	Change (%)
Equity Warrant			
Number of listed	5,881	4,776	23.14%
Number of newly listed	9,723	7,993	21.64%
Market Capital (NT\$ Billion)	20.60	24.99	-17.56%
Average daily trading value (NT\$ Billion)	0.63	0.60	5.00%
ETF/ETN and Open Ended Fund			
Number of listed			
ETF	96	96	0.00%
ETN	13	6	116.67%
Open Ended Fund	10	10	0.00%
Average Daily Trading Value (NT\$ Million)			
ETF	1,695.00	3,526.00	-53.23%
ETN	7.94	2.74	189.37%
Open Ended Fund	0.08	0.05	53.20%

	2020	2019	Change (%)
Bond Market			
Number of listed			
Government Bonds	137	129	6.20%
Bank Debentures	370	356	3.93%
Regular Corporate Bonds	681	569	19.68%
Beneficiary Securities	2	4	-50.00%
Convertible Corporate Bonds	193	166	16.27%
Foreign Bonds	38	35	8.57%
International Bonds	657	641	2.50%
(*) Green Bond	50	36	38.89%
(*)Sustainability Bond	2	-	-



	2020	2019	Change (%)
Outstanding Value (NT\$ Billion)			
Government Bonds	5,624.46	5,550.96	1.32%
Bank Debentures	1,040.58	949.43	9.60%
Regular Corporate Bonds	2,350.56	1,901.20	23.64%
Beneficiary Securities	4.29	6.51	-34.16%
Convertible Corporate Bonds	133.82	118.61	12.82%
Foreign Bonds	44.613	26.881	65.97%
International Bonds (US\$ Billion)	181.22	168.93	7.26%
(*)Green Bond	152.27	103.42	47.23%
(*)Sustainability Bond	5.8	-	-

Average daily Trading Value (NT\$ Billion)			
Government Bonds	17.06	19.23	-11.29%
Bank Debentures	0.93	0.75	23.78%
Regular Corporate Bonds	4.86	3.54	37.23%
Beneficiary Securities	0.00	0.02	-
International Bonds (USD 0.1 BN)	3.85	1.05	266.64%

(*) The outstanding value of green bonds and sustainability bonds are included in the outstanding value of corporate bonds, bank debentures, beneficiary securities, foreign bonds and international bonds.

	2020	2019	Change (%)
Derivatives			
Convertible Bond Asset Swap			
Fixed income trading :			
No. of contract securities firm	18	19	
Outstanding value of contracts (NT\$ Billion)	50.92	50.81	0.21%
Trading value (NT\$ Billion)	56.18	44.27	26.90%
Option trading :			
No. of contract securities firm	19	20	
Outstanding value of contracts (NT\$ Billion)	92.966	81.426	14.17%
Trading value (NT\$ Billion)	128.11	78.334	63.55%

	2020	2019	Change (%)
Interest Rate Derivatives			
No. of contract securities firm	16	16	
Outstanding value of contracts (NT\$ Billion)	386.82	4,62.984	-16.45%
Trading value (NT\$ Billion)	111.46	1,54.567	-27.89%

Structured Products			
No. of contract securities firm	16	15	
No. of leverage transaction merchant	1	1	
Outstanding value of contracts (NT\$ Billion)	49.039	60.657	-19.15%
Trading value (NT\$ Billion)	245.90	2,66.229	-7.64%

Equity Derivatives			
No. of contract securities firm	12	12	
No. of leverage transaction merchant	1	1	
Outstanding value of contracts (NT\$ Billion)	0.726	0.42	72.42%
Trading value (NT\$ Billion)	30.005	14.398	108.39%

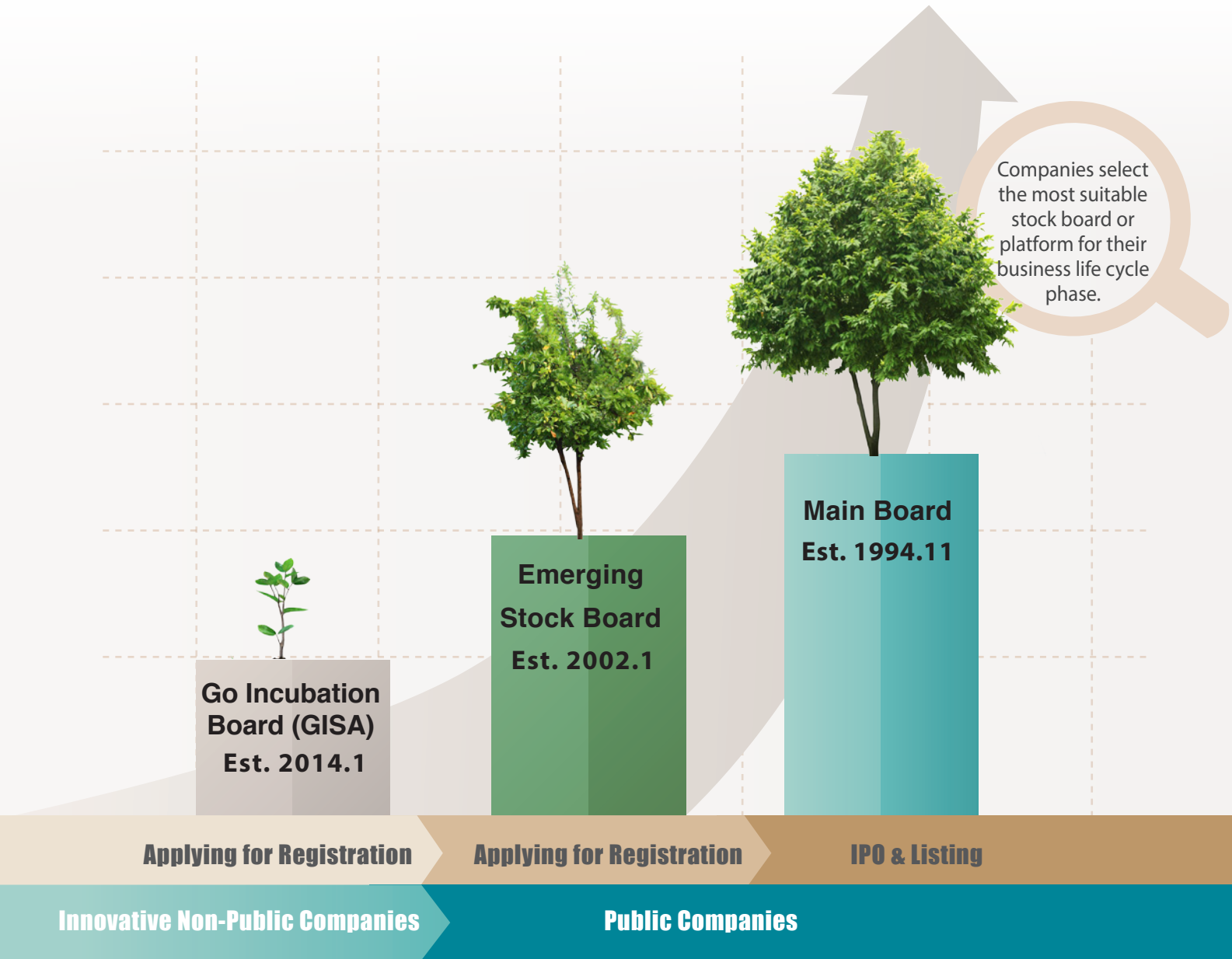
Foreign Exchange Derivatives			
No. of contract securities firm	1	1	
Outstanding value of contracts (NT\$ Billion)	7.104	10.179	-30.21%
Trading value (NT\$ Billion)	166.147	60.909	172.78%

Foreign exchange margin trading			
No. of leverage transaction merchant	4	3	
Trading value (NT\$ Billion)	764.57	5,24.608	45.74%

Commodity CFD			
No. of leverage transaction merchant	2	-	-
Trading value (NT\$ Billion)	361.01	-	-



A Comprehensive Multi-tiered Market



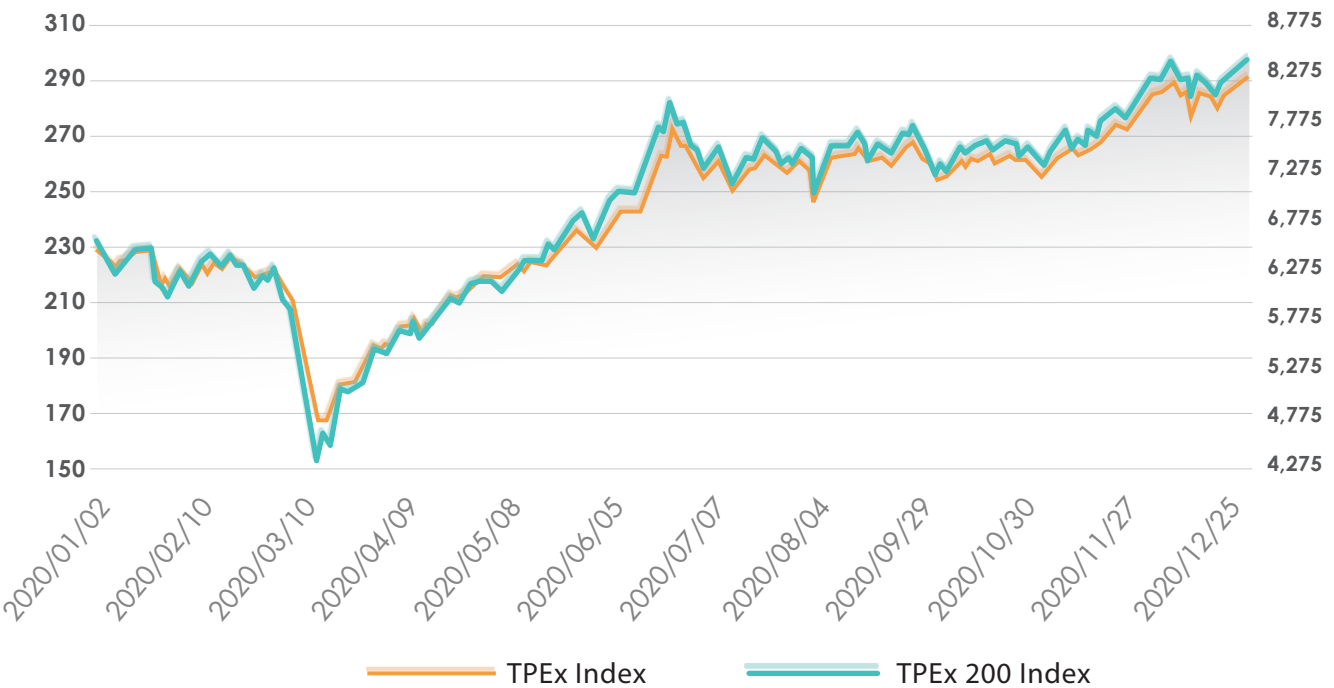
I.

The Total Market Capitalization of TPEX Mainboard Stocks Reached **NT\$4,352 Billion**

TPEX index closed at 184.10 at the end of 2020, up 34.74 in comparison with 149.36 at the end of 2019 and rose by 23.26% for the year. The total market cap of stocks listed on TPEX Mainboard rose from NT\$3,433.5 billion at the beginning of 2020 to NT\$4,352 billion at the end of the year, an increase of NT\$918.5 billion or 26.75% while TPEX market continued to grow.



TPEX Index & TPEX 200 Index



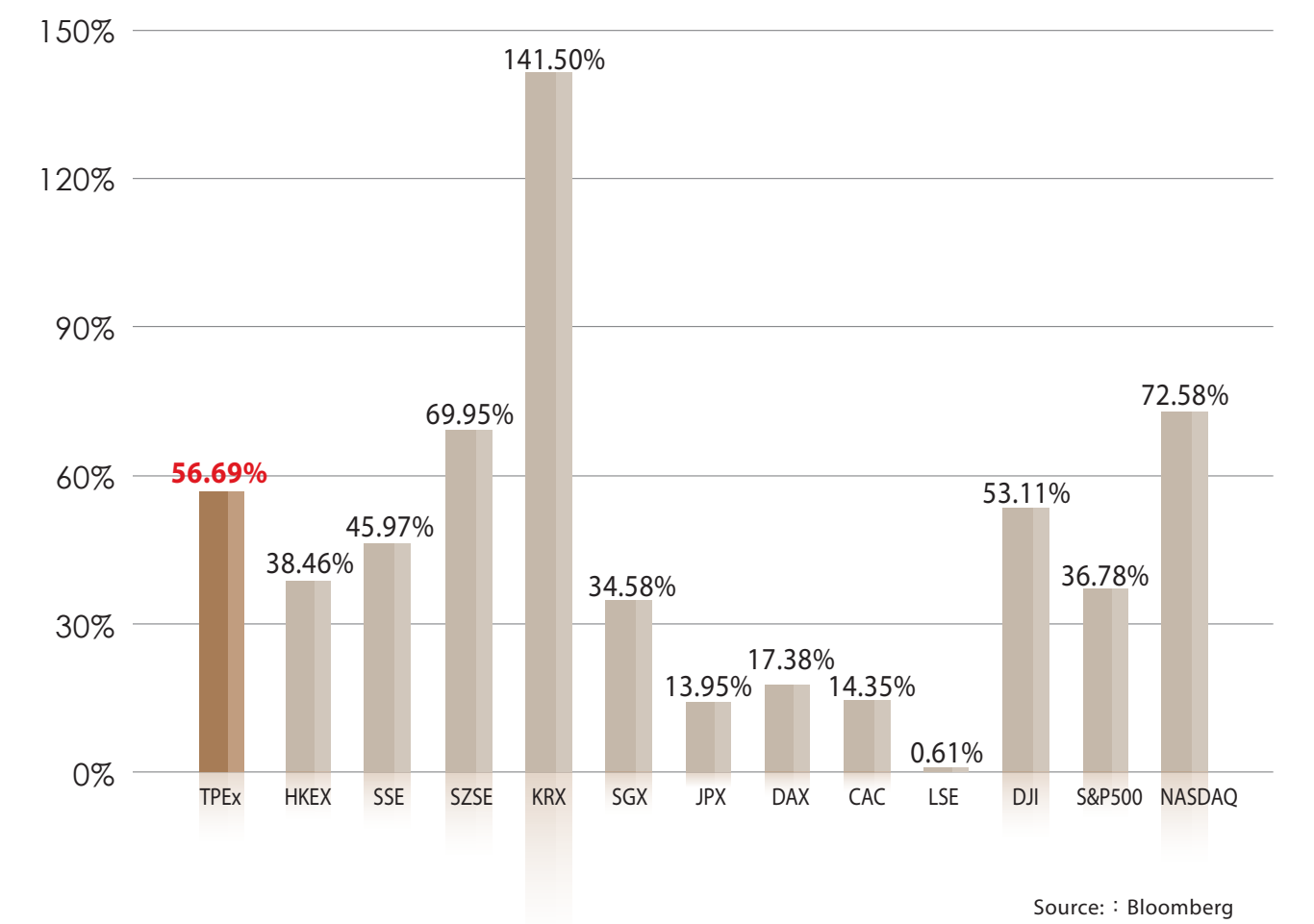
II.

The Average Daily Turnover on TPEX Reached **NT\$52.79 Billion**

The global securities markets experienced significant volatility under the impact of the US-China political situation and COVID-19. However, the 2020 average daily turnover on TPEX (including the trading of stocks, ETFs, warrants, convertible (exchangeable) corporate bonds, and ETN trading value) grew 45.44% from 2019, reaching NT\$ 52.79 billion, indicating its solid fundamentals and strong momentum of TPEX market.

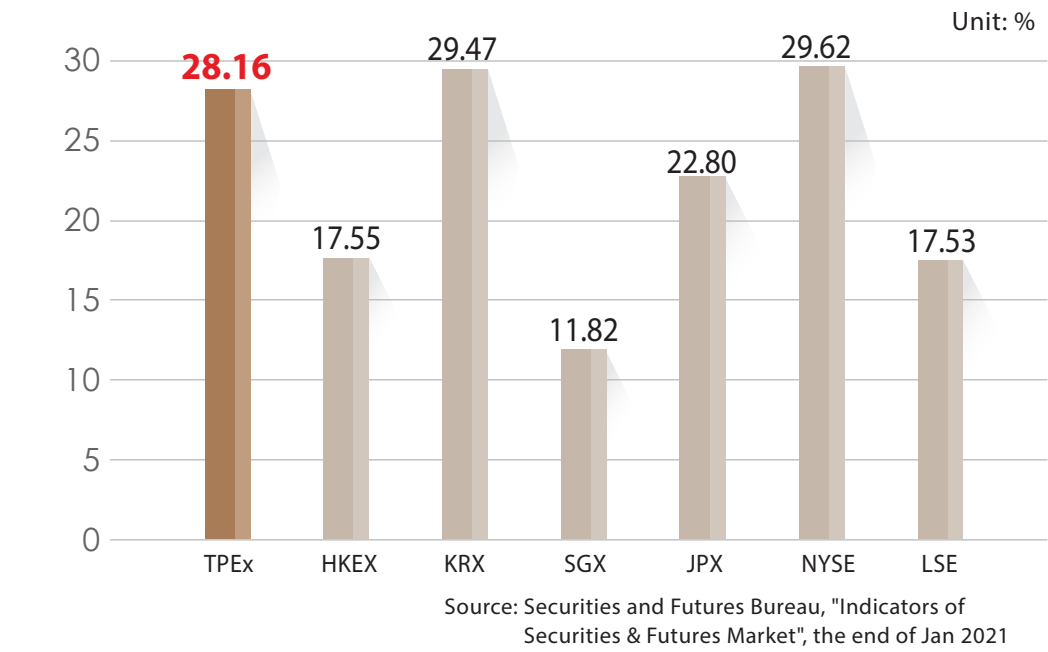
✔

Global Capital Market Stock Daily Turnover
Compare year 2020 to year 2019



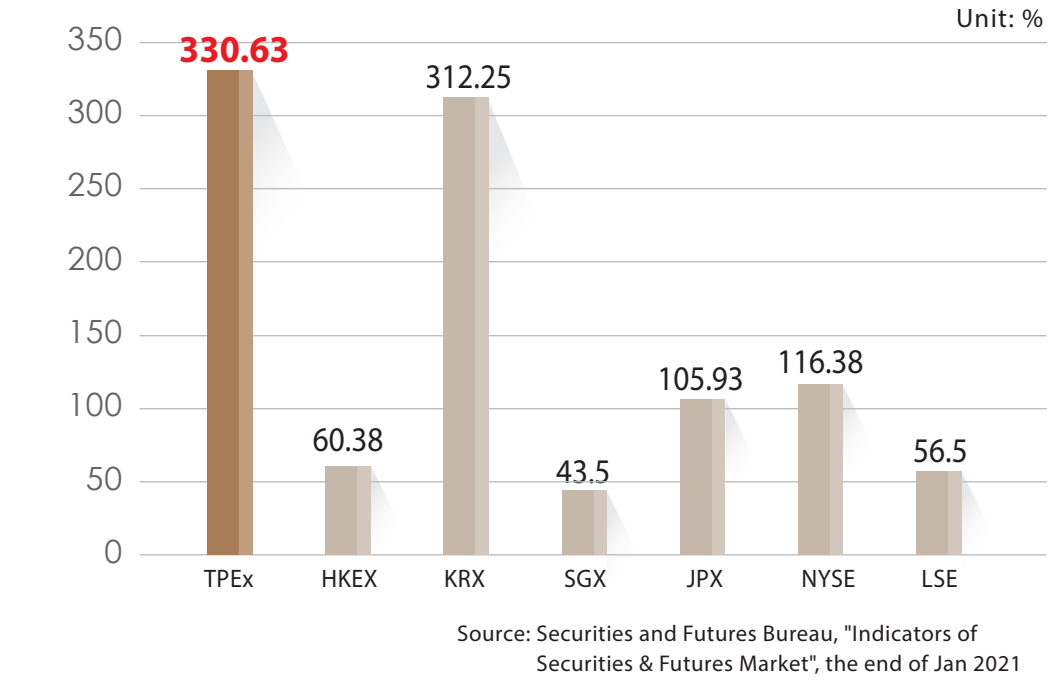
✔

High P/E Ratio in Year 2020



✔

High Turnover Rate in Year 2020



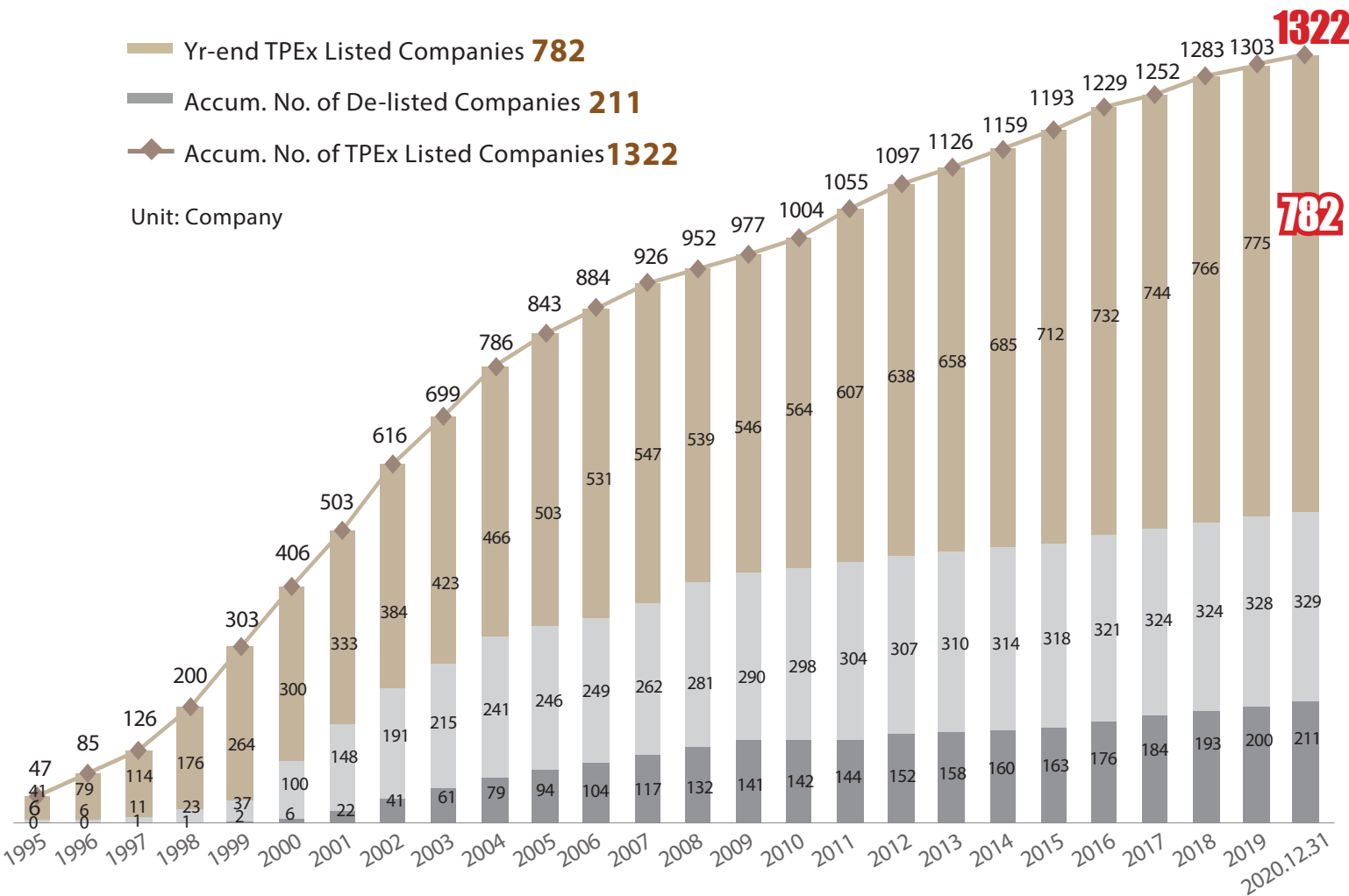
III. The Number of Mainboard and Emerging Stocks Grows Steadily

There were 19 IPO companies on the TPEX Mainboard (including 1 listed company transferring to be a listed investment holding company) and 44 newly registered companies on the Emerging Stocks Board (ESB) in 2020. This took TPEX's total number of equity market companies to more than 1,030, including 782 Mainboard companies and 253 ESB companies at the end of the year.

✓ Accum. No. of TPEX Listed Companies **1322**

- Yr-end TPEX Listed Companies **782**
- Accum. No. of De-listed Companies **211**
- Accum. No. of TPEX Listed Companies **1322**

Unit: Company

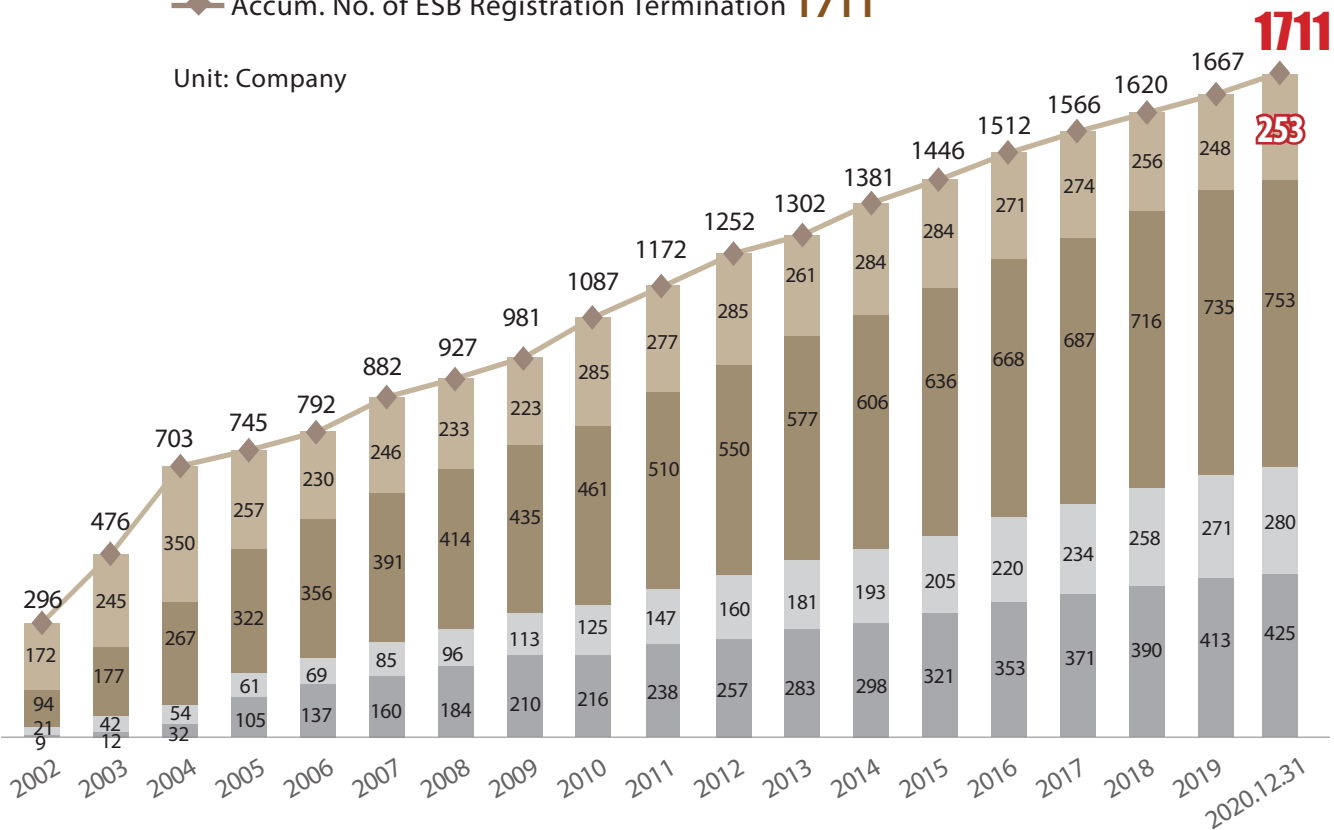


Source: TPEX statistics, 31 December 2020

✓ Accum. No. of Emerging Stock Board Registered Companies **1711**

- Yr-end ESB-registered Companies **253**
- Accum. No. of Transfers to TPEX Main Market **753**
- Accum. No. of ESB Registration Termination **1711**

Unit: Company



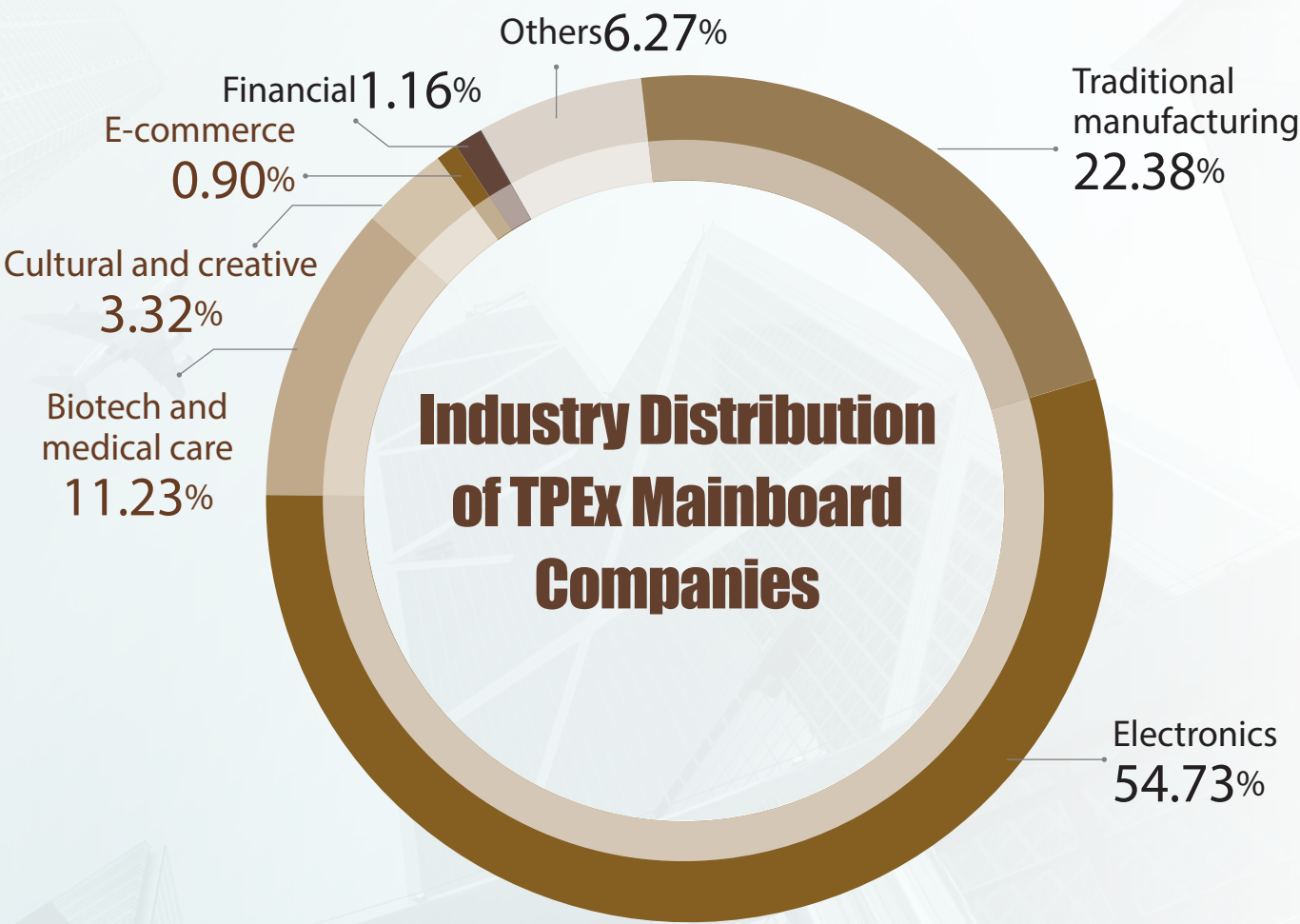
Source: TPEX statistics, 31 December 2020

IV. Successful Promotion of Listing of Companies in Distinctive Industries

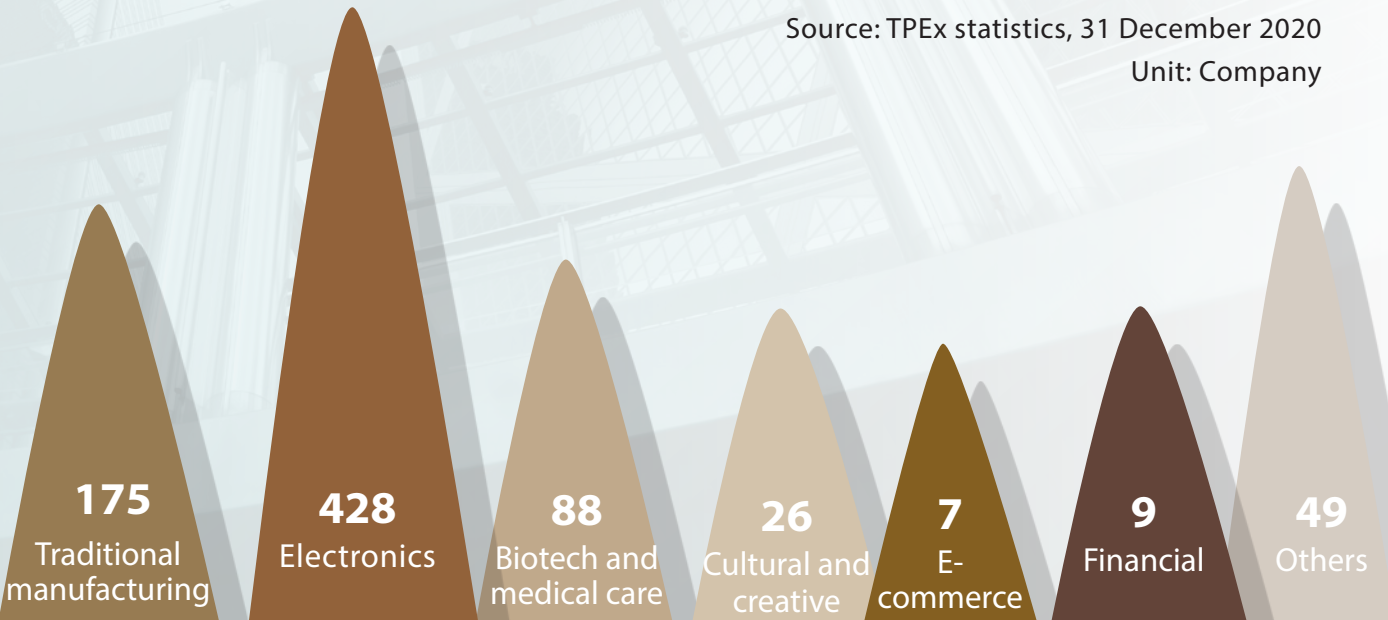
In support of government's 5+2 Industrial Innovation Plan, TPEx actively promotes the entry of companies in biotechnology and medical care, agricultural technology, cultural and creative, smart machinery, green energy technology, Internet of Things, Big Data and national defense aerospace industries into TPEx market. In 2020, 13 companies that applied for listing on TPEx Mainboard and 18 companies that applied for ESB registration were in innovative industries, accounting for more than 60% of TPEx listing and 40% of the ESB registration applications for the year and with altogether 16 applicants from biotech and medical care industry.

V. Innovative Firms Account for 15.47% of Companies Listed on TPEx Mainboard

The percentage of innovative technology firms among companies listed on TPEx Mainboard (782 firms) has been growing steadily every year and reached 15.47% in 2020. Those firms have formed industry clusters, namely biomedical (such as medical devices and distribution, pharmaceuticals R&D, genetics and biotech, etc.), cultural and creative (such as games, combinative business of life and culture, etc.), and e-commerce, all of which are internationally reputed. As the clustering effects gradually appear, more and more domestic or overseas companies in the same cluster would be attracted to participate in the TPEx market. It will help draw the attention of investors at home and abroad and make it easier for listed companies to raise funds so as to achieve optimal financial arrangements, corporate governance, and sustainable development.



Source: TPEx statistics, 31 December 2020
Unit: Company



VI. The Average Dividend Yield of Mainboard Stocks Reached **2.81%**

In 2020, TPEx Mainboard companies paid NT\$115.412 billion cash dividends to their shareholders. In 2020, 528 Mainboard companies (about 70%) distributed cash dividends, and 18 of them paid dividends of more than NT\$10 per share. The average dividend yield of Mainboard stocks reached 2.81%, with which 401 Mainboard companies delivering a yield of more than 2%. These figures showed that many Mainboard companies with good fundamentals were highly competitive, gained stable profit growth, and rewarded investors with a higher return than time deposits.

VII. Outstanding Achievement in the Promotion of Corporate Governance

In the efforts to improve the practices of listed companies in corporate governance and corporate social responsibility (CSR), in 2020 TPEx continued to fortify the measures of corporate governance for companies in Taiwan such as formulating regulations with regard to strengthening the functions of board of directors, amending the templates for streamlining the flow of the Board meetings, and handling corporate governance evaluations. Moreover, TPEx held workshops regularly to help listed companies grasp the content of latest indicators and corporate governance approaches and encourage them to compile their corporate social responsibility (CSR) report. TPEx continued to visit the in charge persons and upper-level management of Mainboard companies to promote awareness of CSR and ethical management among listed companies.

Apart from working closely with the competent authority to promote a new roadmap for corporate governance, TPEx also compiled all the information about the development of corporate governance in Taiwan, the results of the new roadmap, and corporate governance in the financial industry in 2020. Through the case studies, TPEx helped to analyze challenges and consequence of implementing corporate governance and assisted to publish the 2019 corporate governance bilingual report (Chinese and English). Finally, TPEx made some suggestions for the "Corporate Governance 3.0



-Sustainable Development Roadmap" after consulting listed large companies, opinion leaders in corporate governance, and industrial and business groups.

Since the FSC released the Corporate Governance Roadmap 2013, it has been optimizing the measures related to corporate governance. As a result, Taiwan has gained a better score each time in the "CG Watch" issued by the ACGA biennially. According to the latest results of "CG Watch 2020", Taiwan was ranked 4th in corporate governance among 12 Asian countries, only behind Australia, Hong Kong, and Singapore. This record high achievement indicates that our efforts in promoting corporate governance has been highly acclaimed by the international institutions.

VIII. Rising Number of Mainboard Companies Publishing CSR Report

As more and more institutional investors pay attention to non-financial information disclosure, TPEx coordinates with the GRI Standards and assists corporations to raise awareness of the development of sustainability and healthy competition. TPEx encourages Mainboard companies to produce CSR reports in accordance with the said standards and obtain third-party assurance. Hopefully it will increase the comparability and disclosure quality of the non-financial information of Mainboard companies. As of year-end 2020, 124 Mainboard companies had published a 2019 CSR report; 78 of which produced the report voluntarily, while 46 were required to do so. These aforementioned numbers have increased every year. There were also 41 companies that had obtained independent assurance for their CSR report.



IX. The Weight of Foreign Investment on TPEX Market Reached 21.69%

As of year-end 2020, 21.69% of the TPEX mainboard market capitalization was holding by foreign investors. It shows the confidence and recognition of foreign investors in our economic momentum and the high-quality companies listed on TPEX.

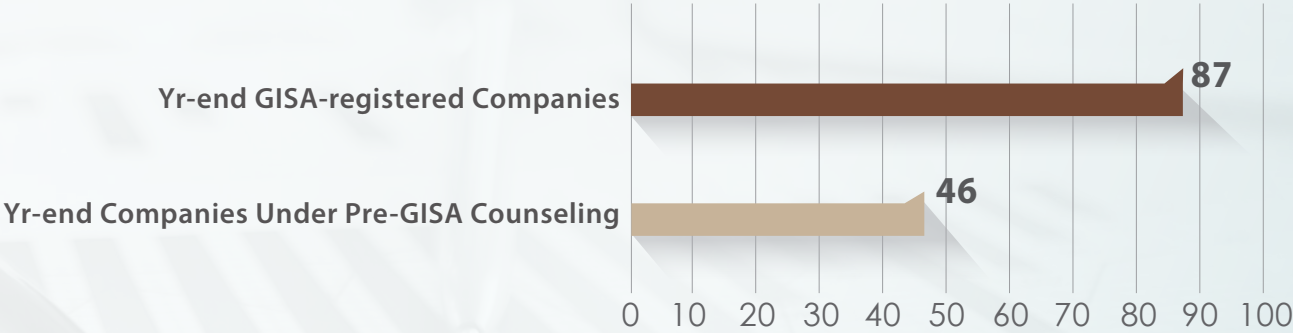
X. A Robust and Comprehensive System at the Emerging Stock Market

The Emerging Stock Market (ESM) is an important and distinctive market among capital markets in Taiwan. The trading systems of the ESM has gone through many updates and have become increasingly robust. Moreover, in 2020, TPEX adjusted the bid/ask spread of emerging stocks to match that of the TPEX mainboard to better meet the market needs and how investors' trading habits. The average daily trading value of emerging stocks in 2020 rose to NT\$2.065 billion, up 179.25% compared to 2019.

XI. Building a Friendly Business Matching Environment for Startups

In 2020, 17 companies registered on the fundraising board GISA (Go Incubation Board for Startup and Acceleration Firms, pre-IPO), 39 companies applied for pre-GISA counseling service, 10 companies went public and 4 were transferred to Emerging Stock Board. At the end of the year 2020, there were a total of 87 GISA companies, 46 were under pre-GISA counseling. TPEX fosters micro and small-sized companies through GISA. In an effort to promote the GISA system and increase the exposure and visibility of GISA companies, TPEX hosted a "GISA Investment Forum" and a "GISA business matching event for social and innovative enterprises", inviting GISA companies with growth potential to demonstrate their products and make presentations to create business opportunities for startups. Additionally, TPEX also held a "Pitch & Match for ESB and GISA Companies", which was a one-to-one matching platform to provide more business opportunities for two companies to work together. TPEX also took GISA companies to attend large exhibitions, such as Meet Taipei, to enhance their visibility while promoting TPEX business. TPEX also set up a booth in those exhibitions to promote TPEX and the GISA mechanism.

✓ GISA in Year 2020



Unit: Company

Source: TPEX statistics, 31 December 2020



An Outstanding Bond Market

I. The Total Issuance of International Bond Markets Surpassed **US\$60 Billion**

A total of 195 international bonds were issued in 2020. The issue amount reached US\$60.156 billion (around NT\$1,793 billion), a significant gain of 136.37% in comparison with that (US\$25.45 billion) in 2019, which hit a record high and surpassed the record of US\$49.373 billion in 2016. The outstanding amount was over NT\$5,500 billion at the end of the year. In 2020, there were 14 first-listed international bonds on TPEX including 1 Islamic fixed-income security, also known as sukuk, worth US\$800 million. The Syrian government also issued sovereign bonds worth US\$5 billion and the government of the Emirate of Sharjah issued municipal bonds worth US\$1 billion, all indicating the fund-raising efficiency and investment capacity of our international bond market has received wide attention from global issuers.

II. The Total Issuance of Domestic Corporate Bonds and Financial Debentures Surpassed **NT\$1 Trillion**

In 2020, the issue markets of corporate bonds and bank debentures flourished. The total issue amount was NT\$1,019 billion, in which the issue amount of corporate bonds accounted for NT\$757.5 billion, a huge increase of 106% in comparison with 2019. 12 companies had issue values of over NT\$20 billion. TSMC's issue amount reached NT\$120 billion after it re-issued corporate bonds 7 years ago, dominating the amount of issuance in domestic companies. The issue amount of convertible corporate bonds was NT\$69.6 billion, up 71% in comparison with 2019. Additionally, the issue amount of bank debentures issued by financial institutions also hit a new 5-year high at NT\$192.04 billion, with 10 banks issuing over NT\$10 billion each. This indicates that companies and financial institutions all actively issue bonds to lower the mid-to-long-term capital cost in a low interest rate environment. Bond market expected to witness continued increase in the volume of issuances in 2021.

III. The Issuance of the Green Bond Market Hit a New High

The green bond market continued to report robust growth in 2020 with 19 green bonds issued in the year with issue amount totaling NT\$56.6 billion, which is over 13% more than that (NT\$50.21 billion) in 2019. It brings the total number of green bonds listed on TPEX to 50 with issuance of NT\$150 billion and outstanding balance reaching NT\$152.267 billion. The issue amount and the outstanding balance both hit an all-time high. Regarding issuers, in addition to the 4 newly added financial institutions of First Commercial Bank, Mega International Commercial Bank, Crédit Agricole CIB Taipei Branch, and HSBC Bank (Taiwan), TSMC, a leading Taiwanese enterprise, also joined the list of issuers to open a new page into the green bond market in Taiwan. As for the scope of green bond products, obtaining Islamic fixed-income securities and relaxing the use of proceeds of green bonds issued by domestic and overseas financial institutions. In doing so, investors can have diverse investment options and the proceeds of green bonds issued by financial institutions can be used in a more flexible way.

IV. Placed **No.1**, the Issuance of Bond ETFs Dominated the Rankings in Asia

In 2020, there were 93 bond ETFs listed on TPEX and the issue amount reached NT\$1,220 billion. The number of listings and issue amount topped the list among the main securities exchanges in Asia and Australia and was placed 7th in the world, only behind the main securities exchanges in Europe and the U.S. TPEX has also been pushing for the diversification of bond ETF investors in recent years. As of year-end 2020, there were 58,266 investors trading TPEX-listed bond ETFs, an increase of 17,383 investors, up over 40% in comparison with that of 2019. Investors trading bond ETFs are streamed into groups based on their identities. There were 59 foreign investors, 357 domestic juristic persons, and 57,850 domestic natural persons in total. The return on investment of bond ETFs averaged 4.7% in 2020. Compared to the returns on NTD time deposits, which was only around 0.84%, bond ETFs were more attractive than NTD time deposits and therefore were popular with the retired group.

✓ Innovative Market Mechanism

I. Launched the Distinctive TPEX Indices and Index-Based Products

The TPEX 200 Index was launched in 2019 for small and medium stocks, TPEX in 2020 rolled out three feature indices tracing TPEX 200, including the "TPEX RGA Quality 50 Index" launched on August 31; "TPEX Semiconductor Leaders Total Return Index" launched on October 5; and "TPEX 200 Total Return Index Daily Return Leveraged 2X Index" launched on October 19.

In support of promoting the trend of sustainable development in the international community, TPEX worked with Taiwan Index Plus corporation and Taiwan Business Council for Sustainable Development and launched the first CSR-themed listed stock index "TIP Taiwan TPEX CSR Index" on June 29, 2020.

II. The Diverse Development of Exchange Traded Note (ETN) Products

In 2020, 7 ETNs were newly listed on TPEX, all of which were feature indicators including world first tracked "President Hang Seng TECH Index ETN", Taiwan first tracked "TPEX Semiconductor Leaders Total Return Index", and the first two ETNs issued by local securities firms "TPEX 200 Total Return Index Daily Return Leveraged 2X Index". As of the end of 2020, there were 13 ETNs listed on TPEX with the total issue amount of NT\$3.9 billion. The trading value reached NT\$1.946 billion, an increase of nearly double the NT\$664 million of the first year. All of these are expected to help the domestic ETN markets flourish.

III. Implementation of Continuous Trading only during Trading Hours

TPEX started allowing continuous trading during trading hours on March 23, 2020. Implementation of this system made TPEX on par with global standards. As the trading rules for different products become more similar, it is easier for investors to execute cross-product and cross-market trading strategies. The improvement generates market momentum. In addition, continuous trading supports an ongoing matching process, and provides real-time transaction data, thereby allowing transactions to be significantly more efficient. Based on a sample of TPEX listed stocks with a larger trading value and more day trading, it was discovered that continuous trading allowed higher information transparency. Up to 80% of stock orders had a higher percentage of being matched. It showed continuous trading enabled investors to invest with greater precision and trading in the market to be more efficient.

In addition, continuous trading offers investors six different ways to place an order, allowing flexibility investing. Data collected since continuous trading was implemented show that the percentage of orders placed on new forms has risen to 5.3% of all orders. It reflects a certain amount of demand for the new ways of placing orders. In addition, the average daily trading value of TPEX listed stocks between March 23, 2020 and December 31, 2020 was NT\$52.37 billion, up substantially by 66.59% compared to the average daily trading value at NT\$31.436 billion in 2019.

IV. Launch of Intraday Odd-lot Trading

To attract small investors to invest in Taiwanese stocks, TPEX provides channels with lower thresholds as a means to mitigate the issue of aging investors faced by Taiwanese stocks. Hence, intraday odd-lot trading was launched on October 26, 2020. In the three months following the launch of intraday odd-lot trading, the average daily odd-lot trading value of TPEX listed stocks was NT\$170 million, up by 215% compared to the pre-launch level at NT\$54 million in 2020. Furthermore, there is a significant improvement in participation in younger groups after the launch in terms of number of traders, transaction value, and trading volume. It shows intraday odd-lot trading is indeed able to attract younger groups to participate in the stock market. Intraday odd-lot trading helps lower the average age of investors as a whole while effectively satisfying the demand for odd-lot trading.

V. Established a Sustainability Bond Market



In alignment with the Corporate Governance 3.0-Sustainable Development Roadmap, Green Finance Action Plan 2.0, and the capital market roadmaps 2021-2023 promoted by the competent authority and the global trend towards sustainable development, "Sustainability Bond Operational Guidelines" was announced on October 6, 2020. TPEX established the trading system for sustainability bonds and thereby providing financing channels for companies' sustainable development and transition. TPEX compiled relevant information of green bonds and sustainability bonds and set up "Sustainable Bond Market" section on its official website on October 23, 2020. After the system was rolled out, two financial institutions (CTBC Bank and Bank SinoPac) and one domestic manufacturer (Far Eastern New Century) joined the list to issue sustainability bonds, with the total issue amount of NT\$5.8 billion in the year.



VI. Encouraged TPEX-listed Companies to Disclosure Material Information Synchronized in Chinese and English

To accelerate the development of bilingual capital markets in Taiwan and enhance our international visibility, TPEX has amended parts of the articles in "Taipei Exchange Procedures for Verification and Disclosure of Material Information of Companies with TPEX Listed Securities", which stipulates that listed companies shall disclose material information synchronized in Chinese and English in four stages based on the paid-in capital of listed companies or shareholding ratio of foreign investment in accordance with the resolution of the meeting at "CG WATCH 2018". The first stage started on July 1, 2020, and was aimed at listed companies with a paid-in capital of NT\$15 billion or more. The second stage starts in 2021, applicable to listed companies with a paid-in capital of NT\$10 billion or more, or over 30% ownership held by foreign and Chinese companies, as recorded in the shareholders' register in the most recent AGM. The third and fourth stages will expand its applicability to listed companies with a respective paid-in capital of at least NT\$2 billion and NT\$600 million, and starting in 2022 and 2024 respectively. This will enhance the international visibility of all TPEX listed companies.

VII. Establishment of a "Pioneer Stock Board (PSB)" under the Emerging Stock Market and Relevant Projects Have Been Approved by the Competent Authority

Startups in early development stage might experience high volatility or focus manpower on products development and business expansion so they aren't familiar with the laws related to the capital market and neither raise funds from it. Therefore, in support of the governments' policies of fostering domestic startups to raise funds from the capital market, TPEX proposed a friendly listing mechanism under the ESM. Therefore, the "Pioneer Stock Board" takes the top 6 strategic core industries as target listed enterprises, with trading methods that are much more convenient. TPEX's PSB project has been approved by the competent authority and it is expected to be launched in the third quarter of 2021. TPEX will proactively push the PSB forward to assist innovative enterprises to enter the capital market.

✓ Obtained International Certificates and Promoting Online Communication

I. Received ISO 22301 Certification for Business Continuity Management

TPEX received the ISO 22301 certification for business continuity management in December of 2020. By establishing a disaster response and recovery mechanism, which conforms to international standards, TPEX can ensure that transaction services will not be interrupted so as to protect the public's investors' rights. The ISO 22301 certification is a standard for business continuity management, helping companies identify various threats (such as natural disasters, damage caused by people, system errors, etc.) that could affect their services and helping them establish a mechanism for emergency response and recovery, thereby quickly restoring services and reducing the impact of an emergency.

TPEX has introduced ISO 22301 systems for business continuity management since January of 2020. It gradually set the rules for the business continuity management manual and relevant procedure guidelines in accordance with each requirement of ISO 22301 including business procedure interviews, analysis of impacts on operations, risk evaluations and others for business continuity. After a year of arduous efforts, TPEX finally received the ISO 22301 certification set by the British Standards Institution in December of 2020 and received the ISO 22301 certificate (2019 version).



II. Promoted Foreign Companies to List their Stocks on TPEX Mainboard or Register on ESB

Due to the impact of COVID-19 in 2020, TPEX adopted online seminars to promote its business overseas and held 2 online seminars for overseas companies listing on TPEX, which introduced the advantages of listing on TPEX and its relevant regulations to assist overseas quality companies to enter the TPEX market. In 2020, 6 new foreign companies received advisory services for listing applications. As of year-end 2020, TPEX had 33 foreign companies listed on its Mainboard and 6 foreign companies registered on the ESB. Those 39 companies are based mainly in China and Southeast Asia, with 17 companies whose primary listing includes China and 13 companies whose primary listing includes Southeast Asia.



III. Held Overseas Institutional Investor Conferences

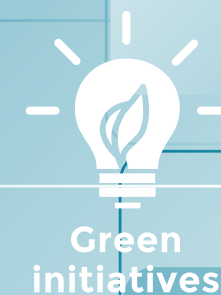
TPEX has been leading Mainboard companies on roadshows abroad since 2007 in its efforts to expand the TPEX market and help enhance the international visibility of listed companies. Due to the impact of COVID-19 in 2020, it was not suitable to make trips abroad to hold relevant events. However, in order to continue promoting its overseas business campaigns, TPEX organized online conferences in May and September, holding overseas institutional investor conferences for foreign legal institutions to have a further understanding of the capital market in Taiwan and raise their willingness to invest in the TPEX market.



IV. Actively Attended International Online Conferences

TPEX continued to deepen two-way interactions with international securities organizations and institutions. Due to the impact of COVID-19 in 2020, TPEX participated in online meetings and courses such as the online conference of the World Federation of Exchange (WFE), IOMA's online Clearing & Derivatives Conference, the AGM and special general meeting of the Global Association of Central Counterparties (CCP12), the AMCC training seminar of the IOSCO, the annual conference and working committee meeting of the AOSEF, "the Economics of the 2020 Election" held by Nasdaq, many online conferences of the ASIFMA, the 20th AGM of the ACGA, the 2020 AGM of the IIA, and online conference co-hosted by the ICMA and the JSDA.

In addition, in support of "Ring the Bell for Financial Literacy" co-hosted by the WEF and the IOSCO during the "World Investor Week 2020 (WIW)", TPEX also held a ceremony for promoting "Ring the Bell for Financial Literacy".



Due to the severe impact of COVID-19 in 2020, TPEX has initiated emergency responses and implemented pandemic prevention measures to continue its business operations. Furthermore, TPEX has been actively planning the measures for participants in different markets to be fully prepared for the pandemic. It is hoped that TPEX can continue its business operations as usual and the uncertainty and impact caused by the pandemic on the markets can be minimized.

Corporate social responsibility (CSR) has become an inextricable part of company development. That's why TPEX holds fast to sustainable development and prosperous coexistence with the environment in alignment with this global trend. TPEX has set up a CSR team consisting of members from different departments. Our CSR team has injected considerable resources to build a comprehensive and high-quality operating mechanism in stages. We started publishing CSR reports in 2018, which were edited and compiled carefully and reviewed by a third party, in accordance with the GRI Standards.

TPEX has become a supporter of the Task Force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board (FSB) since October 2020. TPEX has also formulated many regulations based on the TCFD's principles and goals, which provide that eligible listed companies shall disclose, in their CSR reports, the governance measures they take in response to the risk and opportunities of climate change.

TPEX has been continuing to push the issues of environmental sustainability forward during the pandemic. Also, TPEX sponsored sports and cultural development, promoted eco-friendly farming, and contributed funding to the medical care systems in rural areas, thereby extending its care for to society and fulfilling its corporate social responsibility. While pursuing market growth and operating performance, TPEX aspires to accommodate the interests of all stakeholders, and furthermore, leverage

TCFD Supporters Around the World



Source: TCFD website



TPEX has had a subscription to the organic rice produced by Xingjian Village, Sanxin Township of Ilan County since 2016 and donates the rice to disadvantaged families through social welfare agencies.

its influence on listed companies, the society and the investing public to make a contribution to CSR and sustainable development.

Additionally, to improve the public financial literacy and financial services for investors and companies, TPEX actively organized various financial education promotion events in 2020 in support of the policy of "financial inclusion" proposed by the competent authority. In consideration of the impact of the pandemic and the risk of cluster infections, many of TPEX's business sessions, trading systems, institutional investor conferences, and investor forum courses were changed to an online format. TPEX held no promotion events and sessions across Taiwan until the fourth quarter of 2020, when the pandemic had abated.



Sponsored "Art without Distance" held by the National Theater & Concert Hall for children in rural areas to participate in art and cultural events.

"Investment Training Camp for College Students", which TPEX has organized for 13 years, was changed to an online competition format for the first time owing to the pandemic. The camp has been popular with university and college students and will continue to promote financial literacy on campus. Furthermore, to strengthen young people's investment knowledge and risk awareness, TPEX has been also working with relevant organizations and agencies, providing relevant information about investment and its risk and putting promotional clips online since late October 2020, thereby attracting more young people to engage in the capital market and to help them have a better understanding of the risks so that they can achieve better financial planning and risk management.

CHAPTER 5

FUTURE PROSPECTS

- ✓ **Promoting Entry into the TPEX Multi-tiered Market**
- ✓ **Promoting Important Measures Laid Out in the Government's Governance Roadmap 2021 in Accordance with the Assessment of the ACGA.**
- ✓ **Enhancing the Trading System of the TPEX Market**
- ✓ **Promoting the Sustainable Bond Market**
- ✓ **Developing the International Bond Market**
- ✓ **Promoting the Development of Bond Diversity**
- ✓ **Fortifying Cybersecurity**



Promoting Entry into the TPEX Multi-tiered Market

It is expected that the Pioneer Stock Board (PSB) will be launched in the third quarter of 2021 to establish a full-fledged multi-tiered market structure for TPEX, and to help companies in the top 6 strategic core industries in Taiwan to enter the capital market. TPEX will continue to cooperate with the Industrial Development Bureau under the Ministry of Economic Affairs, Council of Agriculture, and the Ministry of Culture, underwriters, certified public accountants, and other intermediaries, actively encouraging outstanding domestic and foreign companies in key industries to apply for listing or registration on the TPEX Mainboard or the Emerging Stock Board.



Promoting Important Measures Laid Out in the Government's Governance Roadmap 2021 in Accordance with the Assessment of the ACGA.

In alignment with the timetable set out in government's Corporate Governance Roadmap and relevant policies, TPEX will continue to promote various measures according to the Roadmap, expand the range of the third party assurance for sustainability reports, and enhance its operations and the internal control procedures for compiling sustainability reports and verification.

✓ Enhancing the Trading System of the TPEX Market

To enhance the liquidity of the market and the trading mechanism, TPEX will promote the market maker system for listed stocks and carry out other complementary measures. TPEX will also examine the possibility of extending the period of lower trading tax for day-trading in support of the government's policies.

✓ Promoting the Sustainable Bond Market

TPEX will launch the trading system for social bonds and will integrate green bonds with sustainability bonds to build up the Sustainable Bond Market. TPEX will discuss the possibility of expanding the category of sustainable bonds and continue to further the concepts of green and sustainable investments and financing.

✓ Developing the International Bond Market

To promote the diversification and product diversity of the international bond market, TPEX will continue to expand the international bond market and further the listing of sukuk (Islamic fixed-income securities) or other foreign governments' bonds on TPEX.

✓ Promoting the Development of Bond Diversity

In support of a new project of "Wealth Management", TPEX is planning to launch a trading system for foreign currency denominated structured financial debentures. To enhance securities firms' competitiveness and improve our services for high-asset customers, TPEX is planning to establish a trading system for foreign currency denominated structured corporate bonds issued by domestic securities firms.

✓ Fortifying Cybersecurity

In response to the increasing number of new types of cybersecurity threats, TPEX will fortify information protection measures and implement comprehensive backup and recovery mechanisms for key information of the market. Moreover, TPEX will implement cyber attack simulation exercises for securities and futures markets to ensure the security of online transactions and continue to enhance its operations.

CHAPTER 6 INTERNAL CONTROL AND FINANCIALS

- ✓ Internal Control Statement
- ✓ Financials



Internal Control Statement

March 19, 2021

The Taipei Exchange states the following with regard to its internal control system during the year of 2020 based on the results of self-evaluation:

1. TPEX is fully aware that the establishment, implementation, and maintenance of the internal control system are the responsibility of the board of directors and management. TPEX has established such a system with the objective to reasonably ensure the achievement of goals with respect to the effectiveness and efficiency of business operations (including profitability, performance and security of assets), reliability, timeliness, and transparency of financial reporting, and compliance with relevant regulatory requirements.
2. An internal control system has its inherent limitations. No matter how perfect the system is in design, an effective internal control system can only provide reasonable assurance for the attainment of the 3 goals described above. However TPEX internal control system is equipped with the function of self-monitoring, that TPEX will take immediate action once a deficiency is identified.
3. TPEX determines if the design and implementation of its internal control system are effective based on the criteria provided in the Regulations Governing the Establishment of Internal Control System by Service Enterprises in Securities and Future Markets (referred to as the Guidelines hereunder). Said criteria divides internal control into 5 elements based on the process of management control: (1) Control Environment, (2) Risk Assessment, (3) Control

Activities, (4) Information and Communication, and (5) Monitoring Activities. Each element contains several items. Please refer to the Guidelines.

4. TPEX has evaluated the validity of the design and implementation of its internal control system based on the aforesaid criteria.
5. Based on the results of aforementioned evaluation, it is found that the internal control system of TPEX in December 31, 2020 was effective in design and implementation, that it reasonably assures the attainment of aforesaid goals, including the effectiveness and efficiency of business operations, reliability, timeliness, and transparency of financial reporting, and compliance with relevant regulatory requirements.
6. Any false representation or concealment in this Statement shall be subjected to legal consequences as stipulated in Articles 174 of the Securities & Exchange Law.
7. This statement has been passed by the board of directors in the meeting held on March 19, 2021, where 15 attending directors voiced assent view to the content of this statement.

Chairman

A handwritten signature in black ink, appearing to read "Philip Chen", written over a faint circular background.

Managing Director & CEO

A handwritten signature in black ink, appearing to read "Edith Lee", written over a faint circular background.

CHAPTER 6 · INTERNAL CONTROL AND FINANCIALS

BALANCE SHEETS

(In New Taiwan Dollars)

A S S E T S	December 31, 2020		December 31, 2019	
	A m o u n t	%	A m o u n t	%
CURRENT ASSETS				
Cash and cash equivalent	\$592,048,068	4	\$388,209,623	2
Amortised cost of Financial assets at cost	99,907,506	1	199,878,041	1
Notes and accounts receivable	201,292,715	1	124,513,222	1
Other financial assets	4,723,833,333	35	4,399,433,333	25
Other current assets	45,540,276	-	44,709,841	-
Securities settlement debit	5,372,740,606	40	10,694,663,360	59
Total current assets	11,035,362,504	81	15,851,407,420	88
NON-CURRENT ASSETS				
financial asset at fair value through profit or loss	52,259,510	-	90,351,510	1
financial asset at fair value through other comprehensive income	250,797,741	2	118,937,586	1
Amortised cost of Financial assets at cost	1,448,819,199	11	1,148,989,282	6
Special securities settlement fund	400,000,000	3	400,000,000	2
Default damage fund	122,289,797	1	122,289,797	1
Property and equipment	61,704,486	1	58,206,126	-
Right-of-use asset	174,511,778	1	248,452,020	1
Prepayment for equipment	1,316,000	-	4,981,900	-
Refundable deposits	15,088,076	-	15,042,048	-
Other assets	29,024,570	-	26,798,978	-
Total non-current assets	2,555,811,157	19	2,234,049,247	12
TOTAL ASSETS	\$13,591,173,661	100	\$18,085,456,667	100
LIABILITIES AND FUNDS AND NET ASSETS				
CURRENT LIABILITIES				
Accounts payable	\$68,257,482	1	\$39,165,297	-
Lease liabilities	77,820,037	1	77,053,278	-
Other payable	328,648,930	2	344,094,590	2
Current income tax liabilities	188,418,480	1	92,567,387	1
Other current liabilities	138,914,274	1	103,348,780	1
Securities settlement credit	5,372,740,606	40	10,694,663,360	59
Total current liabilities	6,174,799,809	46	11,350,892,692	63
NON-CURRENT LIABILITIES				
Lease liabilities	97,805,756	1	170,952,776	1
Net defined benefit liabilities	176,536,210	1	210,896,287	1
Provisions	6,689,278	-	6,637,505	-
Guarantee deposit received	20,783,147	-	18,150,275	-
Total non-current liabilities	301,814,391	2	406,636,843	2
Total liabilities	6,476,614,200	48	11,757,529,535	65
NET ASSETS				
Funds				
Initial fund	345,450,000	2	345,450,000	2
Donated fund	5,000,000	-	5,000,000	-
Surplus transferred to fund	5,783,369,127	43	5,352,641,999	30
Total funds	6,133,819,127	45	5,703,091,999	32
Accumulated surplus	1,011,224,616	7	634,819,106	3
Unrealized gain or loss on financial asset at fair value through other comprehensive income	(30,484,282)	-	(9,983,973)	-
Total net assets	7,114,559,461	52	6,327,927,132	35
TOTAL LIABILITY AND NET ASSETS	\$13,591,173,661	100	\$18,085,456,667	100

STATEMENTS OF COMPREHENSIVE INCOME

(In New Taiwan Dollars)

	2020		2019	
	A m o u n t	%	A m o u n t	%
OPERATING REVENUES	\$2,744,010,944	100	\$2,116,174,900	100
OPERATING EXPENSES	1,809,056,754	66	1,658,300,580	78
NET OPERATING INCOME	934,954,190	34	457,874,320	22
NON-OPERATING INCOME AND EXPENSE	86,969,920	4	96,866,662	4
SURPLUS BEFORE INCOME TAX	1,021,924,110	38	554,740,982	26
INCOME TAX EXPENSE	188,027,702	7	91,593,533	4
SURPLUS AFTER INCOME TAX	833,896,408	31	463,147,449	22
OTHER COMPREHENSIVE INCOME (NET, AFTER TAX)	(47,264,079)	(2)	(29,552,478)	(2)
TOTAL COMPREHENSIVE SURPLUS	\$786,632,329	29	\$433,594,971	20



TPEX



證券櫃檯買賣中心
Taipei Exchange

台北市羅斯福路二段100號15樓

15F, No. 100, Sec. 2, Roosevelt Rd., Taipei, Taiwan

TEL : 886-2-2369-9555

FAX : 886-2-2369-5517

Service Hot Line : 886-2-2366-6100

<http://www.tpex.org.tw>

E-mail: server@tpex.org.tw



證券刊物編號 11-11008002