5. Stock Markets

The COVID-19 epidemic broke out in China and quickly spread worldwide in the early months of 2020, taking a heavy toll on the economy and stock markets of many countries. Massive selloffs by foreign investors on the TWSE dragged the TAIEX, Taiwan's benchmark stock index, downwards to a trough in mid-March. The TAIEX bounced back afterwards, bolstered by an improved outlook thanks to international fiscal and monetary stimulus and relief efforts as well as the support from the National Financial Stabilization Fund. In the second half of the year, blue chip technology stocks soared on the back of surging demand for chips as 5G products boosted semiconductor supply chains and pandemic lockdowns spurred remote work-related purchases, as well as strong iPhone sales. As a result, the TAIEX continued its upswing and reached a historical high at the end of the year, rising by 22.8% over the end of the previous year.

By category, the best performer – gaining by 77.2% year on year – belonged to Paper & Pulp, as greater use of protective masks and more packaging demand amid an online shopping boom markedly raised papermakers' profits. Glass & Ceramic stocks came next with a 56.5% rally, thanks to impressive earnings with inventory replenishment for resumed production lines pushing up glass prices. The third top gainer was Shipping & Transportation's 53.1% as a pandemic-triggered container

Major Statistics of the TWSE Market

| | Stock Price | Daily | Turnover | Market | Net Buying Positions (NT\$ Billion) | | |
|------------|-----------------|-----------------------------|----------|----------------|--|---------------------------------|-----------------------|
| Year/Month | Index | Average Trading Value | Rate | Capitalization | Foreign Investors | Securities Investment | Securities Dealers |
| | (end of period) | (NT\$ Billion) | (%) | (NT\$ Billion) | Net Buy/Sell | Trust Companies Net Buy/Sell | Net Buy/Sell |
| 2018 | 9,727.4 | 119.9 | 92.6 | 29,318.5 | -355.1 | -1.5 | -99.4 |
| 2019 | 11,997.1 | 109.4 | 80.4 | 36,413.5 | 244.2 | 11.3 | 52.5 |
| 2020 | 14,732.5 | 186.3 | 123.3 | 44,903.8 | -539.5 | 42.7 | -169.6 |
| 2020/ 1 | 11,495.1 | 144.8 | 6.2 | 34,903.3 | -42.6 | -3.6 | -13.6 |
| 2 | 11,292.2 | 131.8 | 7.3 | 34,302.3 | -130.0 | -6.5 | -16.0 |
| 3 | 9,708.1 | 167.8 | 12.5 | 29,516.7 | -359.1 | 5.2 | -56.3 |
| 4 | 10,992.1 | 150.9 | 9.0 | 33,428.4 | 20.8 | 24.2 | -8.6 |
| 5 | 10,942.2 | 166.8 | 10.0 | 33,289.7 | -151.7 | 9.1 | -8.1 |
| 6 | 11,621.2 | 183.9 | 10.4 | 35,382.7 | 84.1 | 10.4 | 10.4 |
| 7 | 12,664.8 | 214.8 | 12.8 | 38,521.5 | 5.7 | 10.8 | -9.0 |
| 8 | 12,591.5 | 218.5 | 12.0 | 38,308.7 | -62.6 | 2.6 | -17.1 |
| 9 | 12,515.6 | 185.0 | 10.7 | 38,112.9 | -55.1 | -5.5 | -42.5 |
| 10 | 12,546.3 | 166.7 | 8.3 | 38,246.4 | -14.3 | -3.7 | -12.2 |
| 11 | 13,722.9 | 216.3 | 10.9 | 41,811.9 | 109.0 | -4.5 | 21.6 |
| 12 | 14,732.5 | 258.5 | 13.2 | 44,903.8 | 56.4 | 4.1 | -18.3 |

Source: Securities and Futures Bureau, FSC.

shortage and port delays sent international shipping indices and freight chargers higher. Overall, the TAIEX daily average trading value amounted to NT\$186.3 billion in 2020, achieving a record increase of 70.4% over the previous year.

The Taipei Exchange (TPEx) weighted stock price index of the over-the-counter market closed the year of 2020 with a 23.3% gain from 2019; only two categories, Tourism Industry and Textile, posted year-on-year declines. Shipping & Transportation stocks soared by 81.0%, led by the rally of TWSE-listed stocks of the same category. Biotechnology & Medical Care stocks rose by 29.1%, owing to a brighter business outlook given greater demand for pandemic-related tests, vaccines, and treatment. Overall, the TPEx daily average trading value came to NT\$49.3 billion in 2020 with a record increase of 57.0% over 2019.

The TWSE Market

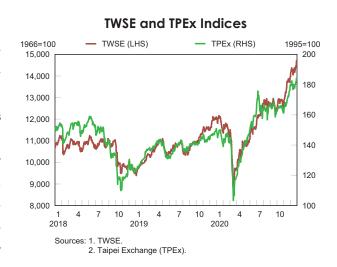
Listings and Capitalization Both Increased to Record Highs

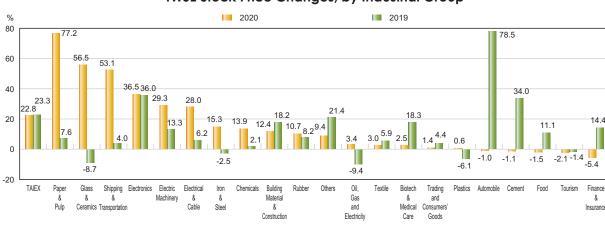
At the end of 2020, the number of TWSE listings increased by 6 to a total of 948. The par value of total shares amounted to NT\$7.2 trillion with a 1.2% year-on-year increase. Total market capitalization expanded by 23.3% to NT\$44.9 trillion. Meanwhile, the total number of Taiwan depository receipts (TDRs) stood at 13 with one delisting during the year.

TAIEX Rebounded to Record High

In January 2020, the coronavirus epidemic arose in China and soon spread out to the world. With cities locked down, operations suspended, and borders nearly closed, output and demand growth both stalled, hurting global economic and trade activity and crushing international stock markets. Against this background, barrages of selloffs by foreign institutional investors led the TAIEX to plunge by 3,419 points, from 12,100 points at the start of the year to an all-year low of 8,681 points on March 19.

Thereafter, major economies adopted expansionary monetary and fiscal policies, the pandemic itself showed signs of easing, and the domestic National Financial Stabilization Fund stepped in to support the market. These factors combined to provide a boost to the TAIEX, which joined US stock indices in rebounding to new highs. Particularly in the second half of the year, vaccine prospects, investor enthusiasm for 5G technology, and robust sales of the latest iPhone model all helped fuel a tech stock rally (notably





TWSE Stock Price Changes, by Industrial Group

Source: TWSE.

led by heavyweight chipmakers). As a result, the TAIEX climbed by 22.8% from 11,997 a year ago to a historical 14,733-point peak.

Broken down by subcategory, most industrial groups recorded year-on-year rises, except for five categories, namely Finance & Insurance, Tourism, Food, Cement, and Automobile. Paper & Pulp stocks posted the largest gain among all categories with a rise of 77.2%, reflecting papermakers' strong earnings as pandemic-related demand (e.g., protective masks, e-shopping goods packaging, etc.) pushed up paper prices. Glass & Ceramic stocks rallied by 56.5%, as earnings were lifted by inventory replenishment for reopened production lines amid an easing pandemic. Shipment & Transportation shares followed closely with a 53.1% rise, as container shortages and port delays pushed up international shipping indices and freight charges. Meanwhile, the emergence of the stay-at-home economy and remote working owing to pandemic lockdowns, as well as promising advancement in artificial intelligence and 5G network technologies, boosted related product (e.g., home gaming consoles) demand and in turn raised semiconductor capacity, leading to a 36.5% year-on-year price gain in the Electronics category.

Among the categories posting declines, Finance & Insurance dropped by 5.4%, owing to underperforming profits in the current low interest rate environment and heavy selloffs by foreign investors. Tourism share prices declined by 2.1%, affected by the pandemic as countries closed borders and cities locked down. Food stocks fell by 1.5%, owing to health risk concerns over planned imports of US pork products containing a controversial feed additive.

Market Turnover Increased Significantly

In 2020, ample liquidity and robust market participation (reflected in the record high numbers of wholesale and retail investors and newly-opened securities trading accounts) helped the TWSE

market turnover expand to a historical record. Measured on a daily average basis, the market turnover reached NT\$186.3 billion on a daily average basis, increasing by 70.4% from the previous year's NT\$109.4 billion. Meanwhile, the turnover rate also soared markedly to a decade high of 123.3% from 80.4% a year ago.

Net Selling by Foreign Investors Hit Record High

Among the three types of institutional investors, foreign investors net sold NT\$539.5 billion on the TWSE in 2020. Local securities investment trust companies and local securities dealers registered net purchases of NT\$42.7 billion and net sales of NT\$169.6 billion, respectively.

Regarding monthly developments, in the first three months of the year, foreign investors increasingly stepped up selloffs as the coronavirus plagued the world, dragging the TAIEX down to an all-year low in March. Though they net bought in April on account of an easing pandemic and major central banks' monetary stimulus, a net sale was recorded in May after the US government broadened its ban on Huawei.⁶ In the following two months, products related to the stay-at-home economy and remote working became in high demand amid pandemic lockdowns, attracting foreign investor net buying of related stocks (in particular, heavyweight tech stocks) and driving the TAIEX higher. Then, an expanded US ban on Huawei⁷ and a renewed surge in coronavirus infections pulled international capital out of the TWSE and foreign investors recorded consecutive net sales during the Aug.-Oct. period. In the last two months of the year, the TAIEX hit a record high as foreign investors, encouraged by solid sales of new iPhones and a bright semiconductor outlook, turned into net buyers.

In 2020, local securities investment trust companies were net sellers in January, February, and in September through November, during which they offloaded shares to take profits in order to meet fund redemption demand, to boost their financial statements, or to adjust portfolios at higher price levels. In the other months, net purchases were recorded.

Local securities dealers, with inclination for short swing trading, net bought in June and November and net sold in the other months of the year as a result of portfolio adjustment or profit taking.

The TPEx Market

Listings and Capitalization Increased

At the end of 2020, the number of TPEx listings increased by 7 to 782. The total par value decreased slightly by 0.6% year on year to NT\$742.2 billion mainly because the par values of new

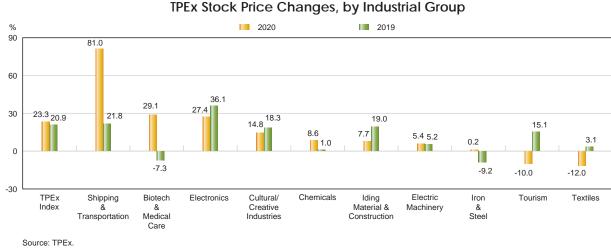
⁶ The US announced on May 15, 2020 that, effective September 15, non-US semiconductor firms need to obtain licenses before supplying US equipment and

Con August 18, 2020, the US banned Huawei and the other 38 affiliates added to the entity list from acquiring foreign and US-made semiconductors produced to August 18, 2020, the US banned Huawei and the other 38 affiliates added to the entity list from acquiring foreign and US-made semiconductors produced to August 18, 2020, the US banned Huawei and the other 38 affiliates added to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from acquiring foreign and US-made semiconductors produced to the entity list from ac MediaTek, Qualcomm, Samsung, and Micron ceased to be Huawei suppliers after the ban took effect on Sept. 15, 2020.

listings were much lower than those of the delisted companies. Meanwhile, the TPEx market capitalization rose by 26.8% over the previous year to NT\$4.35 trillion.

TPEx Index Swung Higher

In 2020, the TPEx shares broadly tracked the TAIEX movements. The index opened the year at 150.9 points, before tumbling to an all-year low of 103.3 points on March 19. Afterwards, accommodative financial conditions, net foreign purchases, and rallies led by heavyweight stocks all combined to support multiple upswings similar to those on the TWSE. As a result, the index closed the year by peaking at 184.1 points, marking a historical high after rising by 23.3% from the previous year-end's 149.4 points.



By category, most industrial groups posted gains in the year, except for Textile and Tourism. The largest increase was Shipping & Transportation's 81.0%, while Electronics shares came in third with a rise of 27.4%, both bolstered by the same favorable factors behind the TAIEX rallies. Biotech & Medical Care shares posted the second largest gain by 29.1% as the pandemic drove up demand for tests, vaccines, and treatments.

By type of institutional investor, foreign investors and local securities investment trust companies net bought TPEx securities worth NT\$96.3 billion and NT\$2.8 billion, respectively, while local dealers posted a net sale of NT\$20.0 billion.

For the year of 2020, the TPEx market benefited from a record increase of active investor accounts to a number of over 2.45 million, sending the daily average turnover in the TPEx market to NT\$49.3 billion after a surge of 57.0% from the previous year's NT\$31.4 billion.

Key Measures for the Stock Markets

Key measures for Taiwan's stock markets in 2020 included the following:

- (1) March 19: The Financial Supervisory Commission (FSC) announced three measures to stabilize the stock markets, effective immediately: (1) banning short sales of stocks at prices lower than the previous session's close if the closing prices mark a one-day fall of no less than 3.5%; (2) lowering the cap on the daily volume of short sales of securities-based lending (SBL); (3) relaxing the scope of collateral posted by investors to cover margin deficiency.
- (2) March 23: To improve efficiency and transparency, and to stay connected with international practices and market trends, the TWSE launched a new stock trading mechanism to allow continuous trading for intraday sessions (9:00 a.m. to 1:25 p.m.), while orders remain to be matched by call auction at the end of the opening sessions and during closing sessions.
- (3) June 9: With financial markets at home and abroad stabilizing and Taiwan's pandemic situation under good control, the FSC removed the three measures introduced on March 9, effective June 10.
- (4) October 12: The National Financial Stabilization Fund ended the second longest streak of supportive market intervention that lasted 207 days from March 20, 2020.
- (5) October 26: The TWSE launched the intraday odd lot trading system for trades between 9:00 a.m. and 1:30 p.m. The first call auction would be executed at 9:10 a.m., followed by periodic call auctions in three-minute intervals. The quote range and price fluctuation limits are the same as regular trading.