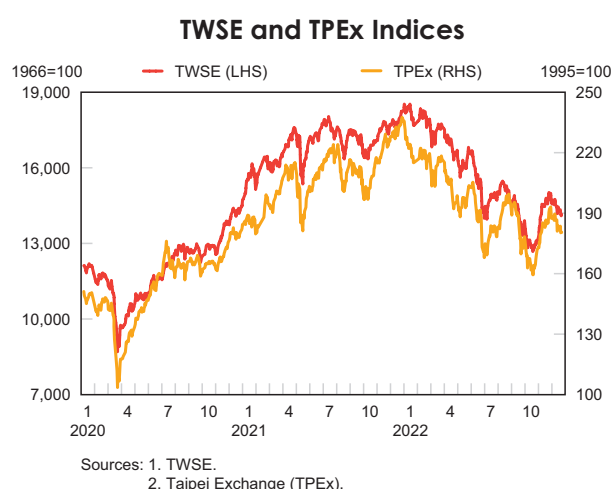


5. Stock Markets

In 2022, Taiwan's stock indices were on a broad downtrend for most of the year amid a succession of headwinds, including the spread of the Omicron variant, the US Fed's faster rate hikes and balance sheet tapering, tech stock downswings, continuous Russia-Ukraine conflict, China's partial pandemic lockdowns, a resurging pandemic wave in Taiwan, enhanced US sanctions on China's semiconductor exports, a slowdown in Taiwan's export growth, and a streak of monthly net sales by foreign institutional investors (FINIs). The resulting slump took the TAIEX – the TWSE Capitalization Weighted Stock Index – to a yearly low during October. Afterwards, the index recovered some of the losses as softer-than-expected US inflation somewhat eased the pressure on the Fed to hike rates, global stock markets also stabilized, and FINIs net bought TWSE shares in November, as well as benefiting from a boost during the holiday season. At the end of the year, the TAIEX was 22.4% lower than a year ago.

On the TWSE, most categories saw their share prices fall except for three groups, namely Electrical & Cable, Tourism, and Biotech & Medical Care. Among the weaker groups, Shipping & Transportation posted the worst fall of 39.9% owing to soft international freight rates and a higher base effect that amplified pressure for a correction. Paper & Pulp share prices suffered from rising costs and sluggish demand, posting a drop of 29.2%. Electronics share prices slid by 26.6% because of soft global final demand, a semiconductor down-cycle, US tech stock corrections, and local net selling by foreign institutional investors. Overall, the daily average trading value on the TWSE decreased by 39.7% from NT\$378 billion in 2021 to NT\$228 billion in 2022.

On the Taipei Exchange (TPEX), its capitalization-weighted stock index fell by 24.1% over the previous year end, with declines across all categories except for Tourism, Biotech & Medical Care, and Iron & Steel. Electronics shares had the worst performance with a 34.6% slump, followed by Shipping & Transportation stocks with a 25.2% decline. For the year 2022, the TPEX market recorded a daily average trading value of NT\$60.5 billion, shrinking by 27.2% year on year.



The TWSE Market

Listings Increased While Capitalization Decreased

At the end of 2022, the number of TWSE listings increased by 12 over the previous year to a total of 971. The par value of total shares rose by 1.6% year on year to NT\$7.5 trillion. However, total market capitalization amounted to NT\$44.3 trillion, shedding 21.3% as a result of share price falls. Meanwhile, the total number of Taiwan depositary receipts (TDRs) decreased to 10 with one delisting during the year.

Major Statistics of the TWSE Market

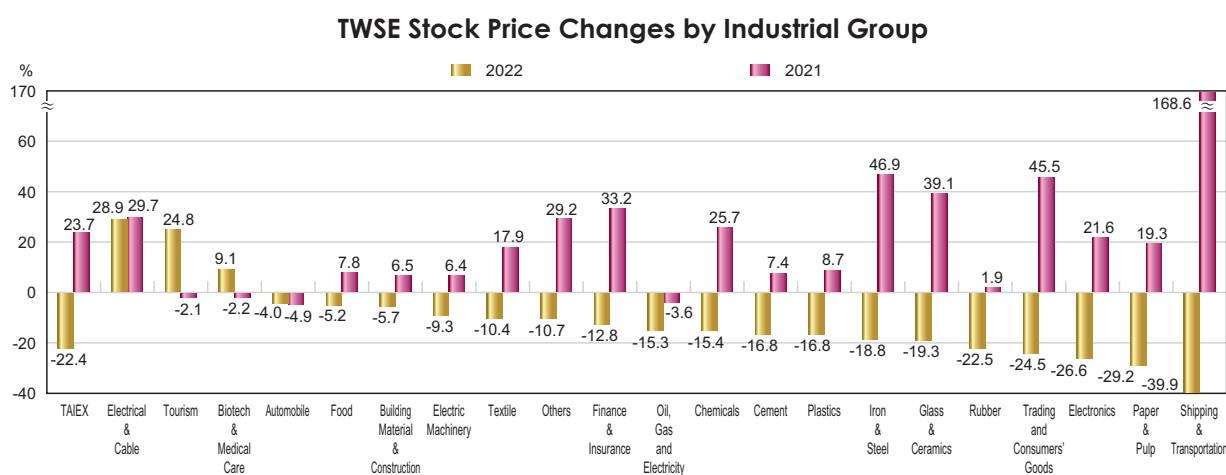
Year/Month	Stock Price Index (end of period)	Daily Average Trading Value (NT\$billion)	Turnover Rate (%)	Market Capitalization (NT\$billion)	Net Buying Positions (NT\$billion)		
					Foreign Investors Net Buy/Sell	Securities Investment Trust Companies Net Buy/Sell	Securities Dealers Net Buy/Sell
2020	14,732.5	186.3	123.3	44,903.8	-539.5	42.7	-169.6
2021	18,218.8	378.2	176.6	56,282.0	-454.1	70.1	-96.4
2022	14,137.7	228.0	115.4	44,266.0	-1,232.7	284.2	-293.8
2022/ 1	17,674.4	277.4	9.1	54,797.5	-37.7	18.0	-62.9
2	17,652.2	293.6	8.1	54,742.7	-157.4	40.2	-31.7
3	17,693.5	309.6	13.0	54,895.5	-264.0	36.6	-24.6
4	16,592.2	255.9	9.4	51,493.1	-259.5	29.3	-51.9
5	16,807.8	225.0	9.1	52,195.9	-3.7	18.0	-15.5
6	14,825.7	228.0	10.4	46,257.8	-219.0	3.3	33.5
7	15,000.1	216.0	9.7	46,821.4	-17.8	26.5	10.1
8	15,095.4	189.7	9.3	47,151.6	-119.0	38.2	-11.7
9	13,424.6	186.4	9.3	41,974.4	-168.6	27.7	-49.0
10	12,949.8	177.7	8.8	40,478.4	-95.0	16.5	8.6
11	14,879.6	210.7	10.0	46,507.6	186.8	15.8	-42.9
12	14,137.7	190.1	9.5	44,266.0	-77.9	14.2	-55.7

Source: Securities and Futures Bureau, FSC.

TAIEX Swung Downwards

In 2022, the TAIEX went through a series of downswings immediately after the start of the year. These were caused by a series of factors, including the Omicron wave, the Fed's rapid rate hikes and asset purchase tapering, the US tech stock downturn, the Russia-Ukraine war (late-Feb. and ongoing), China's partial lockdowns (Apr. to May), Taiwan's pandemic resurgence (Apr. to mid-Jul.), the US stepping up export sanctions on China's semiconductor industry (Oct.), Taiwan reporting export slowdowns, and foreign investor net sales on the TWSE. Faced with these headwinds, the TAIEX swung downwards from the yearly high of 18,526 points on Jan. 4 to the all-year low of 12,666 points on Oct. 25.

Thereafter, US inflation data posted lower than expected results, offering some reprieve from aggressive rate hikes, and global stock markets stabilized; meanwhile, foreign institutional investors turned into net buyers of TWSE shares and many stocks were also boosted by holiday season prospects. As a result, the TAIEX rebounded to 14,138 points at the end of the year, representing a 22.4% decline from the previous year end's 18,219 points.



Broken down by subcategory, most industrial groups witnessed share price declines compared to the previous year, except for Electrical & Cable, Tourism, and Biotech & Medical Care. Among the worst performers, Shipping & Transportation shares took the biggest fall of 39.9%, reflecting a softening in global freight rates and downward pressures induced by high stock price gains the year before. Paper & Pulp stocks gave the second worst performance with a 29.2% fall owing to rising wood pulp costs and sluggish demand amid the economic downturn. Electronics stocks also staggered, as soft global final demand, a semiconductor down-cycle, US tech stock corrections, and local stock selloffs by FINIs combined to pare their share prices by 26.6%. Share prices of the Trading and Consumers' Goods group were down by 24.5% owing to disappointing business amid local pandemic waves, as well as a higher base effect.

Among the gaining groups, Electrical & Cable shares rose by 28.9% as international copper prices were elevated and major stocks in the group posted outstanding earnings. Tourism stocks came in with the second largest gain of 24.8% with the revival of domestic and international tourism amid an easing global pandemic situation and gradual reopening. Biotech & Medical Care shares gained by 9.1%, boosted by still strong demand for medical resources and news of the introduction of new drugs.

Market Turnover Decreased

In 2022, as major economies entered a policy rate hike cycle, market liquidity tightened, and domestic portfolio investors became less zealous purchasers of stocks than the previous year; the daily average trading value on the TWSE dropped by 39.7% from NT\$378.2 billion to NT\$228.0 billion. Consequently, the turnover rate declined from 176.6% to 115.4%.

FINIs Posted Heavy Net Selling

Net selling by FINIs reached an all-time high in 2022 with an amount of NT\$1,232.7 billion, while local securities investment trust companies posted a net purchase of NT\$284.2 billion and local securities dealers registered a net sale of NT\$293.8 billion.

During the first ten months of the year, unrelenting COVID-19 waves, the ongoing Russia-Ukraine conflict, the Fed's hawkish tightening, the chip industry cyclical downturn, and Taiwan's export slowdown led to a succession of net sales by foreign institutional investors. However, FINIs returned as net buyers on the TWSE trading floor in November as softer-than-expected US inflation data bolstered the prospect of a slower rate hike course by the Fed. In December, though, FINIs net sold again taking into consideration US tech stock declines and conservative investor sentiment during the long Christmas weekend.

Local securities investment trust companies were net buyers throughout the year, reflecting their usual strategy of bargain hunting or the need to boost their financial statements.

Local securities dealers, with an inclination for short swing trading, net bought in June, July, and October amid market uptrends, whereas they net sold in the other months of the year for risk-hedging or profit-taking.

The TPEX Market

Listings and Capitalization Both Increased

At the end of 2022, the number of TPEX listings increased by 20 from the previous year to 808. The total par value decreased by 2.5% to NT\$742.0 billion. The TPEX market capitalization shrank by 23.5% to NT\$4.42 trillion as stock valuations fell.

TPEX Index Swung Lower and Turnover Decreased

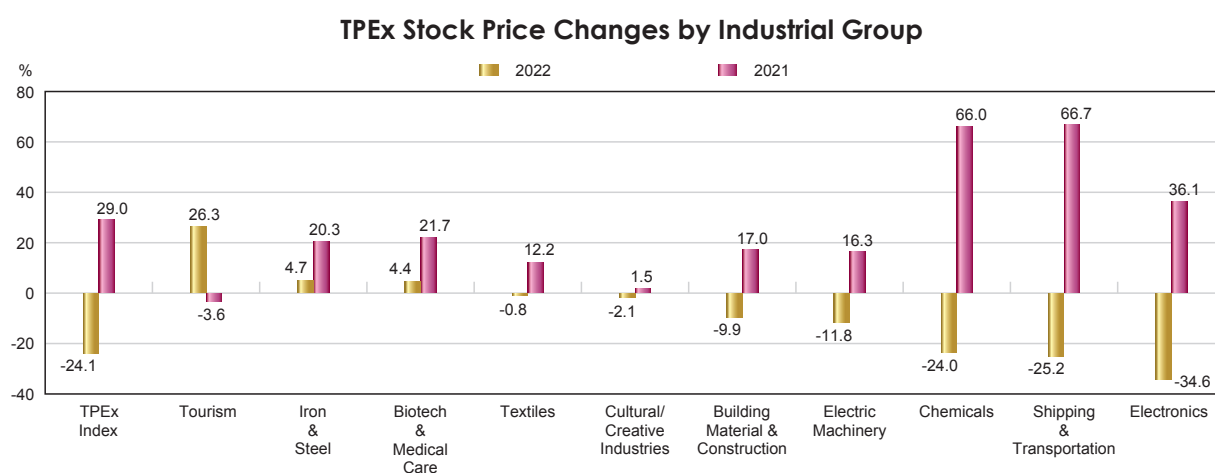
In 2022, the main TPEX index moved on a path similar to the TAIEX, impacted by headwinds including the Fed's aggressive tightening, the Russia-Ukraine military conflict, pandemic resurgence at home, and FINI net sales. As a result, the TPEX index continued to swing lower from the yearly high

of 235.5 points on January 4 to 180.3 points at the end of the year, falling by 24.1% from the previous year-end's 237.6 points.

By category, only three groups recorded year-on-year gains. Among them, Tourism and Biotech & Medical Care shares rose by 26.3% and 4.4%, respectively, benefiting from similar factors driving up share prices of these groups on the TWSE. Iron & Steel shares gained by 4.7% thanks to strong earnings reported by major steel firms. On the other hand, Electronics and Shipping & Transportation posted the largest two declines by 34.6% and 25.2%, respectively, owing to the same reasons as their counterparts on the TWSE (see the section above on the TWSE market).

All three types of institutional investors net sold TPEX shares in 2022, with respective amounts of NT\$56.2 billion for FINIs, NT\$3 billion for local securities investment trust companies, and NT\$36.0 billion for local dealers.

Meanwhile, tighter liquidity conditions and milder domestic investor interest brought the TPEX daily average trading value down by 27.2% from NT\$83.1 billion to NT\$60.5 billion.



Source: TPEX.

Key Measures for the Stock Markets

Key measures for Taiwan's stock markets in 2022 included the following:

- (1) July 13: The National Financial Stabilization Fund stepped in to buttress stock markets, the eighth supportive intervention in history.
- (2) October 1: The Financial Supervisory Commission (FSC) announced the following measures, effective immediately:

- A. Lowering the cap on the volume of intraday SBL (securities-based lending) short sales, from 30% of the daily average volume of the previous 30 sessions to 20%.
 - B. Raising the maintenance margin requirement for short trading of TWSE and TPEX listed securities from 90% to 100%.
- (3) October 12: The FSC announced more adjustments to the aforementioned measures by lowering the cap on intraday SBL short sales from 20% to 10% and raising the maintenance margin for short trading from 100% to 120%.
- (4) October 21: The FSC banned short sales of a stock at prices lower than the previous session's close when that closing price marks a one-day fall of more than 3.5%.
- (5) December 19: To promote the matching efficiency of intraday odd lot trades, the matching interval of intraday odd lot trades would be shortened from three minutes to one minute.