恒生投資
HANG SENG INVESTMENT

Understanding Hong Kong's ETF Market Landscape

Ch.2 – Key observations within Asia-Pacific's ETF markets

March 2024

Contents

1. Executive Summary

In this chapter, an analysis has been conducted to examine market liquidity, ownership distribution, product mix, and ETF policy support in the 7 individual Asia-Pacific ETF markets, namely Hong Kong, Australia, Taiwan, South Korea ("Korea"), mainland China, Japan, and India. The purpose of this analysis is to gain an understanding of the unique characteristics, strengths, and challenges of these markets. Based on the analysis, the following key findings have been identified:

In Taiwan, the ETF market has the highest retail investor participation rate in the Asia Pacific region, with approximately 70% of ETF assets held by retail investors. Additionally, bond ETFs account for around 53% of the total ETF assets in Taiwan and are highly favored by investors.

In South Korea, the trading culture among investors is more widespread, with an average daily ETF trading volume reaching KRW 2.9 trillion, second only to China. Korean investors tend to prefer trading leveraged and inverse Products, possibly due to a lack of other structured investment products and a preference for short-term returns. Furthermore, Korean fund companies issue new ETFs at a fast pace, and their product offerings are comprehensive, covering different countries, stock market indices, asset classes, and themes.

The Bank of Japan has implemented an ultra-loose monetary policy and continues to increase its holdings of ETFs to boost market confidence, with ETFs accounting for over 70% of domestic ETF assets in Japan. Another noteworthy aspect is the well-developed distribution network among institutional investors in Japan, while retail investor participation is relatively lower. However, with the government's reform of tax-free investment plans, it is expected that the retail ETF market in Japan will have greater growth potential.

In China, retail investor participation in the ETF market continues to rise, with retail investors holding nearly 50% of ETF assets. Additionally, the ETF market in China demonstrates higher liquidity, with a daily average turnover exceeding RMB 100 billion, and offers a variety of ETF products. Furthermore, the domestic ETF market in mainland China also receives support from the central government, which has intervened to increase holdings of A-share ETFs to boost investor confidence.

In general, a commonality among these markets is the support of government policies and the promotion of investor education. Understanding the characteristics of each ETF market in the Asia Pacific region will provide valuable insights for the future development of Hong Kong's ETF market.

In the next chapter, further exploration of these factors will be undertaken, and potential strategies and solutions aimed at enhancing Hong Kong's ETF market will be proposed.

2. Introduction – Overview of the Asia-Pacific ETFs Market Landscape

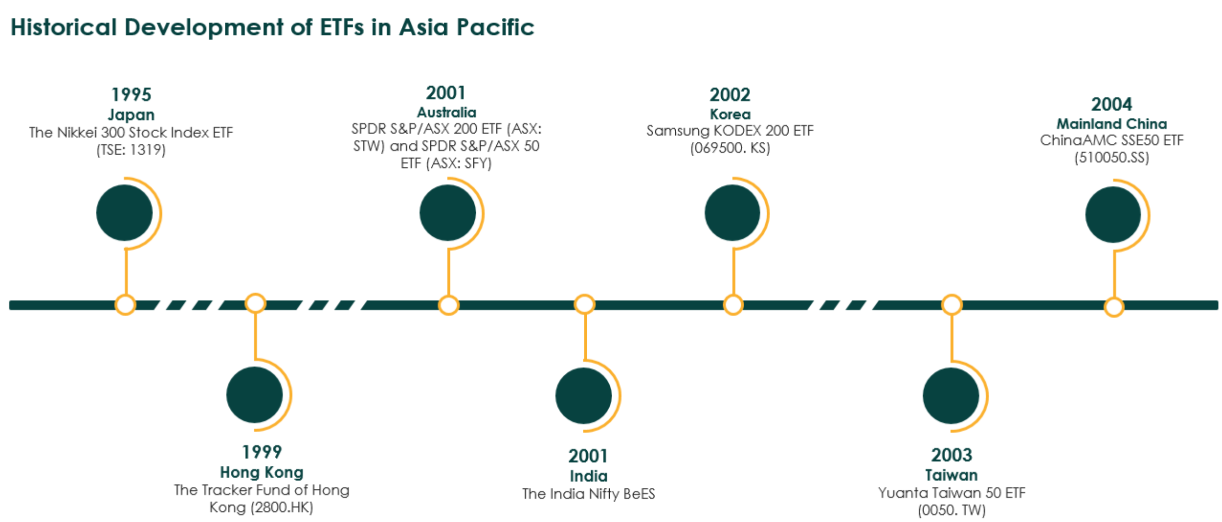
As one of the fastest-growing ETF markets globally - growing at a 10-year average Compound Annual Growth Rate (CAGR) of 22.8%[1], significantly higher than the global 10-year average CAGR of 16.4% - the Asia-Pacific ETFs market warrants greater attention. As of November 2023, the Asia-Pacific ETFs market boasts US $1.28 trillion[2] in Assets Under Management (AUM), accounting for 11.4% of global ETF assets.

Continuing from Chapter 1, this chapter provides a more in-depth analysis of market dynamics of the 7 individual Asia-Pacific ETF markets, namely Hong Kong, Australia, Taiwan, South Korea ("Korea"), mainland China, Japan, and India. In particular, the research focuses on four aspects: **1) market liquidity; 2) ownership structure; 3) product mix; and 4) ETF policy support**. These insights shed light on the successes of each market and serve as valuable references for recommending approaches to enhance Hong Kong's prominence in the Asia-Pacific arena.

As background, to provide a comprehensive overview, the following summarizes the historical development and the size of each Asia-Pacific ETF market.

Japan & Hong Kong: The first two ETF debuts in Asia-Pacific

Figure 1: First ETFs in Individual Markets within Asia-Pacific



Japan and Hong Kong were the first two Asian markets to introduce ETFs. A commonality between their initial launches was the use of ETFs as a tool to stabilize market sentiment. The debut of the first Asia-Pacific ETF, the Nikkei 300 Stock Index ETF (TSE: 1319), took place during a period of ongoing market chaos. The Nikkei stock average experienced a significant decline, plummeting by 60% from its peak of JPY 38,915 in 1989 to a low of JPY 15,000 in 1992.

[1] Source: ETFGI, as of November 2023
[2] Source: ETFGI, as of November 2023

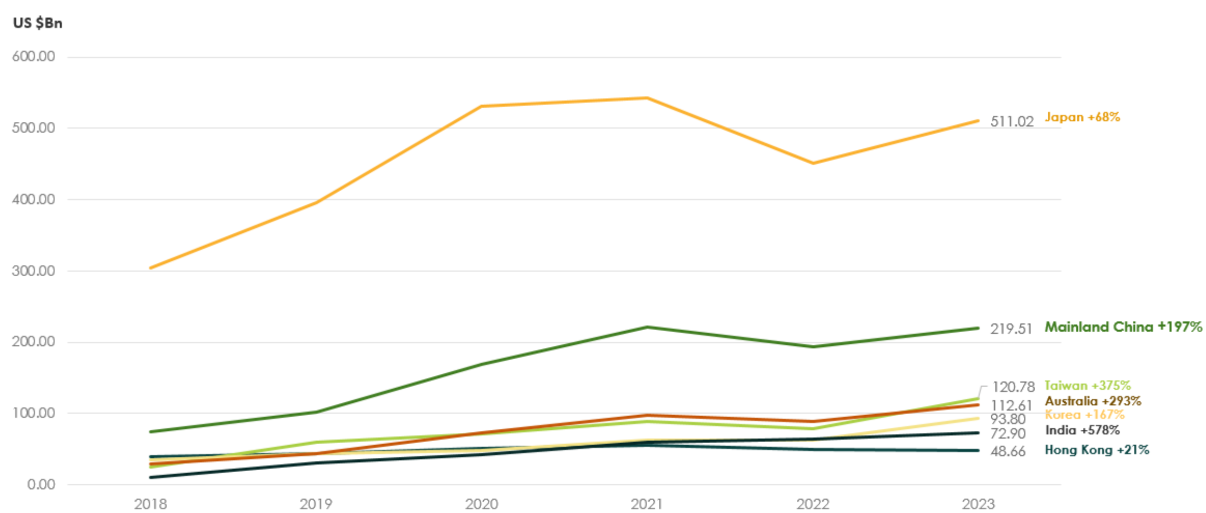
Consequently, the introduction of ETF back in 1995 was used to stabilize market sentiment and revitalize the subdued Japanese stock market.

Similarly, the Tracker Fund of Hong Kong (2800.HK) was launched in 1999 in response to the Asian Financial Crisis. Its purpose was to restore market confidence and stabilize the performance of the Hang Seng Index.

The successful introduction of ETFs in Japan and Hong Kong paved the way for their widespread adoption across other Asia-Pacific regions. Subsequently, ETFs were quickly launched in Australia (2001), India (2001), Korea (2002), Taiwan (2003) and mainland China (2004) respectively. This marked the beginning of the robust growth in ETF assets across the Asia-Pacific region for the following two decades.

Japan is the largest ETF market in Asia-Pacific

Figure 2: Assets Under Management across APAC ETF Markets



Over the past 5 years, Japan has consistently held the position as the largest ETF market in Asia-Pacific, with an AUM of US $511.0 billion in 2023. It was followed by mainland China (US $219.5 billion), Taiwan (US $120.8 billion), Australia (US $112.6 billion), Korea (US $93.8 billion), India (US $72.9 billion) and Hong Kong (US $48.7 billion).

Between 2018 and 2023, India experienced the highest growth rate among the Asia-Pacific markets, with a remarkable CAGR of 46.6% over the past 5 years. Taiwan closely followed with a CAGR of 36.6%, while Australia grew at 31.5%, mainland China at 24.3%, Korea at 21.7% and Japan at 10.9%. Meanwhile, Hong Kong's ETF market remained flat 4% growth rate over the past 5 years, underperforming the Asia-Pacific average.

3. Key observations within Asia-Pacific ETF markets

3.1. Market Liquidity

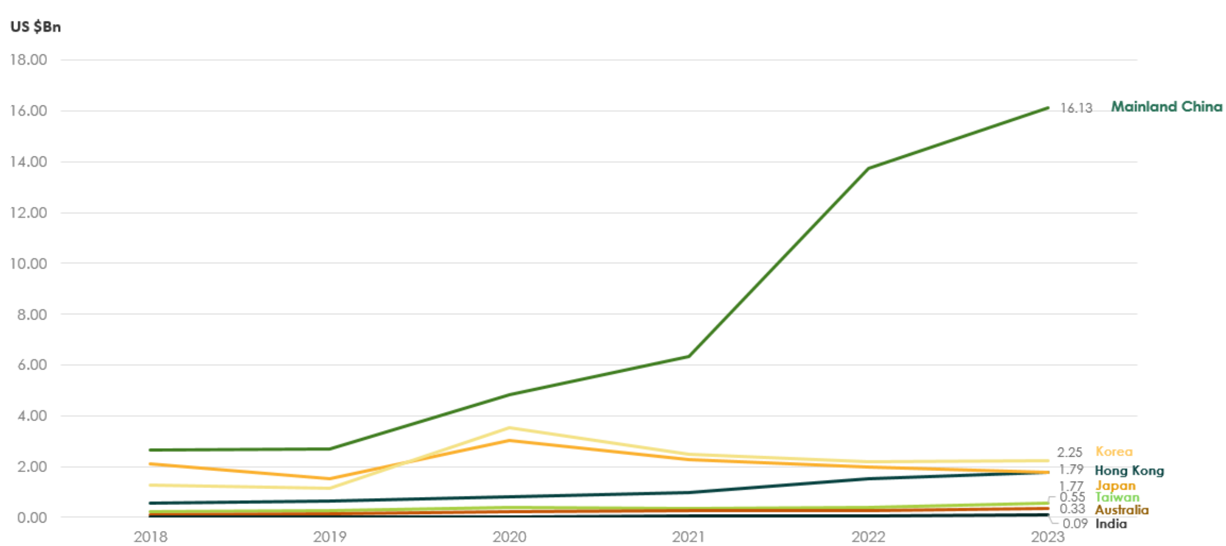
Mainland China stands out as the most liquid market in the Asia-Pacific region, particularly since 2021. Investors from mainland China, Hong Kong, and Korea generally showed a stronger preference for trading ETFs with a focus on short-term profits, rather than adopting a long-term capital appreciation investment strategy. On the other hand, investors from Japan, Taiwan, and Australia tended to adopt a buy-and-hold approach.

Market liquidity serves as a crucial indicator for assessing the depth and efficiency of a market, as well as the level of trading activity and investor participation. High market liquidity generally indicates a more liquid and active market, allowing investors to easily enter or exit positions. On the other hand, low market liquidity may imply a higher risk of price volatility and difficulties in executing trades.

In general, the market liquidity of each ETF market could be determined by ETF trading volumes, trading turnovers and average tightness of bid-ask spreads for ETFs, which constitutes a part of the cost of ownership among investors.

Average Daily Turnover (ADT)

Figure 3: Average Daily Turnover across Asia-Pacific ETF Markets



Mainland China has consistently ranked as the most liquid ETF market in the Asia-Pacific region since 2018. Its average daily turnover has experienced a six-fold increase from US $2.67 billion in 2018 to US $16.13 billion as of 2023. Following mainland China, Korea recorded an average daily turnover of US $2.25 billion, Hong Kong with US $1.78 billion, Japan with US

$1.72 billion, Taiwan with US $0.55 billion, Australia with US $0.33 billion, and India with US $0.09 billion. These figures indicate the divergence of investing culture across Asia-Pacific ETF markets.

The notable spike in mainland China's ETF market liquidity in 2021 can be largely attributed to the active issuance of Chinese ETFs. The number of issued ETFs has tripled from 349 in 2020 to 897 as of 2023[3]. Additionally, the robust development of High-Frequency Traders (HFT) in mainland China, which are mainly Hedge Funds, Quant Funds, and Algorithmic Trading, has led to frequent ETF trading on the secondary market. Chinese investors, in particular, have capitalized on the continuous market volatility in Chinese A-Shares markets by utilizing ETFs to trade around market movements. This dynamic has significantly contributed to the enhancement of liquidity in mainland China's ETF.

In India, market liquidity remains consistently low. For instance, the most liquid ETF in India, Nifty Bees, has a daily turnover that is less than 1/100th of Reliance Industries, a large and highly liquid stock in India. The median daily bid-ask spread on the largest ETF is as high as 17 basis points, while individual large-cap stocks have a bid-ask spread of less than 5 basis points[4]. In Japan, its average daily turnover has remained stagnant over the past few years, primarily as a result of foreign exchange effects and a decline in ETF purchase activities by the Bank of Japan (BOJ), when BOJ became a "Net Seller" of ETFs in 2023[5].

Turnover Velocity

Turnover Velocity is calculated by dividing the Annual Turnover by the Assets Under Management (AUM) of an ETF. It provides an estimation of how frequently ETFs are traded relative to their assets. For instance, an annualized turnover velocity of 10 indicates that each unit of the ETF is traded approximately 10 times per year. The significant differences in turnover velocity between regions can be attributed to variations in investment styles among investors.

Figure 4: Turnover Velocity across Asia-Pacific ETF Markets

	Hong Kong	Mainland China	Taiwan	Japan	Korea	Australia	India
2018	3.5	8.8	2.8	1.3	8.7	0.9	0.5
2019	3.6	6.4	1.6	0.7	6.3	0.8	0.2
2020	4.0	7.0	1.6	1.0	18.3	1.0	0.2
2021	4.4	7.0	1.1	0.8	9.9	0.7	0.2
2022	7.7	14.4	1.3	1.0	8.7	0.9	0.2
2023	8.2	15.1	1.4	0.9	9.6	1.2	0.3

Source: Hang Seng Investment, Bloomberg, ETFGI, HKEX, SZSE, KRX, ASX, JPX

[3] Source: SSE, 中國 ETF 市場發展白皮書, 2023
[4] Source: CFA Society India Research, A Report on the Indian Exchange Traded Funds (ETF) Industry, 2020
[5] Source: Nikkei Asia, as of January 2024

In Taiwan, Japan, Australia, and India, the turnover velocity figures are relatively lower, indicating that investors in those markets tend to follow a “buy-and-hold” investment strategy. On the other hand, mainland China, Korea, and Hong Kong tend to have higher turnover velocity figures, suggesting that investors in these markets have a stronger preference for trading ETFs to seek short-term profits rather than pursuing long-term capital appreciation.

Additionally, the turnover velocity of HK-listed ETFs has increased from 3.5 times in 2018 to 8.2 times in 2023, indicating a notable enhancement in market liquidity. However, Hong Kong still lags mainland China (15.1 times) and Korea (9.6 times) in terms of turnover velocity.

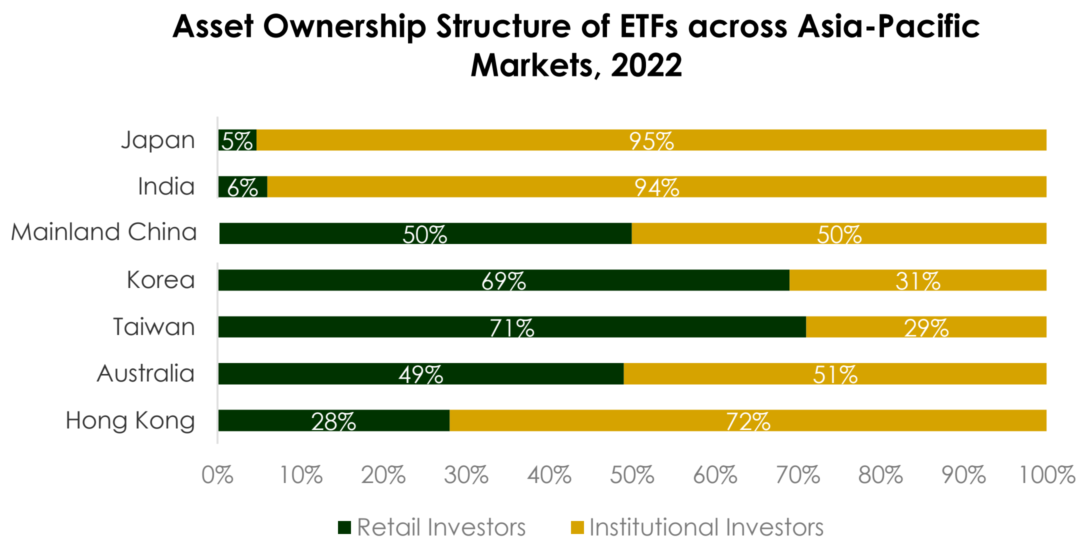
3.2. Ownership structure

In the ETF markets of Taiwan and Korea, retail investors account for more than half of the asset ownership. This can be attributed to the growing influence of online financial influencers[6] and the increasing popularity of thematic ETFs in these markets. On the other hand, in Hong Kong, Japan, and India, institutional investors play a dominant role, primarily supported by their national or regional pension schemes.

By analyzing the ownership structure of ETF assets, market participants, regulators, and issuers can gain insights into investor preferences, market dynamics, and stability, as well as the overall health of the ETF market. Significant differentials in terms of ownership structures of ETFs have been observed across Asia-Pacific regions. Retail adoption of ETFs has been particularly pervasive in Taiwan, Korea, Australia, and mainland China. This can be attributed to factors such as the wide retail distribution network and strong investor education. In these markets, ETFs have been actively promoted among independent online financial influencers, as there is a pervasive distribution network for ETFs. For instance, in Australia, investors have the option to purchase ETFs directly through public retirement pensions such as self-managed super funds (SMSF), retail banks, online brokerages, and independent financial advisors.

[6] Source: Bloomberg Intelligence, Financial Times, 2023

Figure 5: Retail vs Institutional Investor Distribution across Asia-Pacific ETF Markets



Source: SFC, SZSE, TWSE, JPX, KRX, ASX, AMFI

Taiwan, Korea, Australia, and mainland China dominated by retail investors

In Taiwan, the number of ETF investors has reached 6.5 million as of 2023, suggesting that more than one in four Taiwanese include ETFs in their portfolios[7]. This significant adoption can be attributed to the rise of online financial influencers, who have been recommending ETFs as suitable vehicles for long-term investing and wealth accumulation.

In Korea, the diverse range of ETFs has attracted retail investors to trade and speculate in the market. This includes various thematic ETFs such as K-Pop, electronic vehicles (EV), semiconductors, as well as Leveraged & Inverse Products. The availability of these options has contributed to the appeal and participation of retail investors in the Korean ETF market.

In Australia and mainland China, there has been a noticeable increase in retail adoption of ETFs. In mainland China alone, the share of retail investors in ETF assets has risen to nearly 51% in 2023, up from 34% in 2018. This shift indicates the changing preference of retail investors towards ETFs[8]. This trend can be attributed to several factors, including the continuous underperformance of actively managed mutual funds and the attractive low-cost value proposition offered by ETFs. Reports from S&P Global indicate that over 80% of actively managed mutual funds in Australia have underperformed the S&P/ASX 200 index[9].

Hong Kong, Japan, and India mostly led by institutional investors

In Hong Kong, institutional investors dominate the ETF market. In India, insurance companies and public retirement saving schemes such as Employees Provident Fund Organization (EPFO), hold the majority of ETF assets. In Japan, the Japanese Central Bank (BoJ) and government public

[7] Source: TWSE, as of August 2023
[8] Source: SSE, 中國 ETF 市場發展白皮書, 2022-2023
[9] Source: S&P Global, SPIVA Australia Mid-Year 2023

pensions, referred to as Government Public Investment Funds (GPIF) have played a significant role in supporting the growth of ETF assets over the past decade.

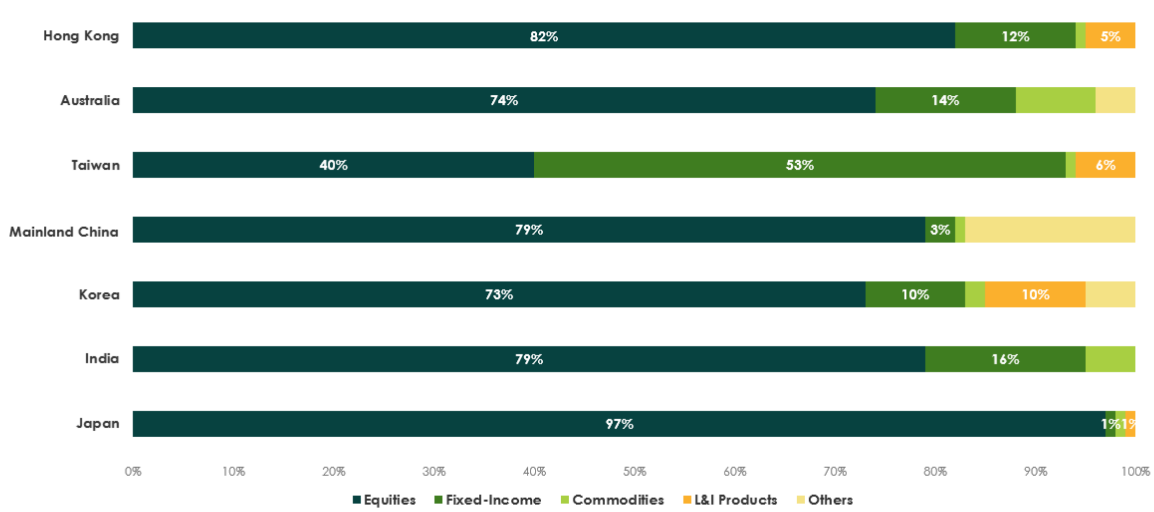
However, one issue in these markets is the lack of awareness and education among investors, particularly retail investors. In Hong Kong, ETFs are not widely considered a popular investment instrument among retail investors. Research conducted by IFEC in 2023 shows that only 2% of retail investors in Hong Kong have experience investing in an ETF. This ownership rate falls significantly behind stocks (99%), mutual funds (24%) and bonds (18%). These figures indicate the limited knowledge and awareness about ETFs.[10]

This problem is further compounded by limited retail distribution channels. Addressing these challenges and improving investor education and access to ETFs will be crucial for the continued development of these markets.

3.3. Product Mix

Asia-Pacific ETF markets are primarily dominated by equity ETFs, except for Taiwan

Figure 6: Asset Classes distribution across Asia-Pacific ETF Markets



Source: ETFGI, HKEX, SFC, ASX, TWSE, SSE, KRX, JPX

Equity ETFs are the predominant type of ETF in most Asia-Pacific markets. These equity ETFs typically track local indices of their respective markets. In Hong Kong, equity ETFs make up 82% of all ETFs, indicating their significant presence in the market. More than half (54%)[11] of ETF assets are invested in equities listed on the Hong Kong Stock Exchange, such as the Hang Seng Index, Hang Seng China Enterprises Index, and the Hang Seng Tech Index. Additionally, 14% of ETF assets in Hong Kong are invested in mainland China A-Shares, particularly tracking

[10] Source: IFEC 2023 Retail Investors Study, 2023
[11] Source: HKEX, as of 31 December 2023

the CSI 300 Index under the RMB Qualified Foreign Institutional Investor (RQFII) and Stock Connect schemes. In mainland China, equity ETFs that track broad-based local indices, cross-border indices, and narrow-based themes account for 79% of assets[12].

In Japan, equity ETFs that track the Nikkei 225 and TOPIX 500 have accounted for a significant majority (97%) of total ETF assets. This high concentration on equity ETFs can be attributed to the extensive purchase of domestic ETFs by the Bank of Japan (BOJ) since 2011. Currently, the BOJ holds approximately more than half of Japan's ETF market assets[13]. This situation highlights the lack of product diversification in the Japanese ETF market. In Australia, both equity domestic ETFs and foreign equity ETFs are equally prevalent among Australian investors. Combined, these two categories represent almost 74% of ETF assets in Australia.

Unlike other Asia-Pacific markets, Taiwan stands out as an exceptional case where more than half (53%)[14] of its ETF assets are held in fixed income. In other words, **Taiwan is the largest bond ETF market in Asia-Pacific**. Regulatory authorities in Taiwan have allowed insurance companies to invest up to 10% of their portfolios in ETFs. This policy has attracted significant interest from Taiwanese pension funds, insurance companies, and banks to invest their excessive cash in bond ETFs.

Leveraged & Inverse (L&I) products are still considered a niche asset class in the Asia-Pacific region. These products utilize derivative instruments such as futures and swaps to amplify returns or provide inverse exposure to index performance. Korea stands out as the largest market for L&I products in the region, with 10% of total ETF assets and a significant portion (51%)[15] of average daily turnovers attributed to them. Notably, the Samsung KODEX 200 Futures Inverse ETF (252670.KS) and Samsung KODEX Leverage ETF (122630.KS) contribute to approximately 30% of daily trading volumes on the Korea Exchange (KRX), underscoring their popularity in Korea.

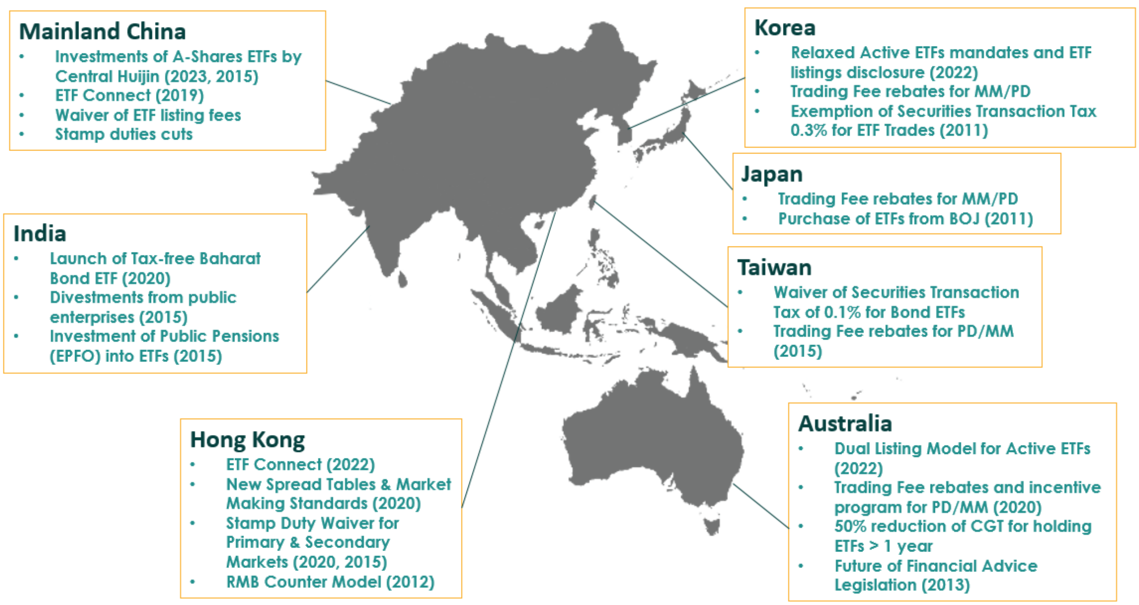
In Hong Kong, L&I products account for 5% of total ETF assets. However, in markets like mainland China, India, and Australia, L&I products have not gained as much traction due to stringent regulations that limit their availability and usage in these markets. Consequently, the popularity of L&I products remains relatively subdued in these markets compared to Korea and Hong Kong.

[12] Source: SSE, 中國 ETF 市場發展白皮書, 2022-2023
[13] Source: JPX ETF/ETN Factsheet 2023
[14] Source: ETFGI, as of November 2023
[15] Source: KRX ETF/ETN Monthly Factsheet, as of November 2023

3.4. ETF Policies & Recent Developments

Over the past 10 years, there have been several favourable policies introduced to encourage ETF investments. One common trend has been the reduction of waiver of ETF-related fees.

Figure 7: Overview of Asia-Pacific ETF Market Policies



An array of favorable policies from various stock exchanges and local governments in the Asia-Pacific region have been observed to support the development of ETFs in their respective markets.

Hong Kong

ETF Connect. In Hong Kong, the inception of ETF Connect in 2022 enabled mainland investors to conveniently trade HK-listed ETFs using their mainland brokerage accounts, via the Southbound Trading scheme[16]. The share of ETFs traded has seen significant expansion, rising from less than 1% in November 2022 to over 10.4% of Southbound turnovers as of September 2023. Meanwhile, Southbound turnover has grown from less than HK $1 billion to over HK$13.6 billion[17] during the same period. These figures reflect the ongoing efforts to deepen mutual market access and the growing interest from onshore mainland investors to diversify their asset exposure offshore.

The successful inclusion of ETFs into the Stock Connect Scheme, referred to as ETF Connect, has played a significant role in promoting cross-border fund flows by broadening investment options for both global and mainland investors. This increased access to mainland capital and a larger investor base from mainland China has incentivized more ETF issuances among ETF managers in Hong Kong. As a result, the use of ETFs as an investment vehicle has been encouraged among investors, aligning with the diversification needs of mainland investors for offshore assets. This,

[16] Source: HKEX
[17] Source: Hang Seng Investment, as of 30 September 2023

in turn, deepens the mutual market access effort and promotes financial integration from ETF markets of both regions.

New spread tables and the waiver of stamp duties. The introduction of new spread tables and the waiver of stamp duties for market makers in the ETF creation and redemption process has significantly reduced the minimum achievable spreads (tick size) of HK-listed ETFs by at least 50%. This has encouraged market makers to provide greater market liquidity, leading to estimated cost savings of up to HK $825 million for investors[18]. These changes have improved the price efficiency of ETFs and enhanced the overall trading experience for investors in Hong Kong.

The launch of dual-counter model ETFs with HKD and RMB counters in Hong Kong has played a significant role in promoting the internationalization of RMB and strengthening connectivity with China. This model allows foreign and mainland investors to invest in securities using RMB, thus encouraging the use of RMB as a transaction medium and facilitating the external circulation of offshore RMB. These developments further solidify Hong Kong's position as an offshore RMB hub and reinforce its unique role as a "Super Connector" that facilitates connections between mainland China and the rest of the world.

Australia

Trading fee rebates to market makers. The Australian Securities Exchange (ASX) has implemented interesting policies that aim to incentivize market makers and improve liquidity for ETFs. One notable policy is the offering of **trading fee rebates to market makers** who meet certain requirements, such as providing sufficient depth of quotes and maintaining tight trading spreads on a monthly basis. To qualify for ETF fee rebates, which cover expenses such as securities transaction tax and the cost of futures/swaps hedging, market makers are required to support orders of at least AUD50,000 orders within a maximum spread of 40 basis points (bps) on 80% of trading days[19]. In return for fulfilling these obligations, participants receive incentives equivalent to the trading fees they would typically pay to ASX. This incentivizes market makers to provide more liquidity and tighter spreads for ETFs listed on ASX.

Dual Access Model was introduced to facilitate the transition of actively managed mutual funds to active ETFs listed on ASX in 2022, providing investors with a new investment option. Additionally, the Australian Government's legislation on financial advice in 2013 played a significant role in promoting ETFs to retail investors. The legislation banned volume-based commissions for financial advisors and mandated them to act in the best interest of their clients. This regulatory change encouraged financial advisors to recommend ETFs as a transparent and cost-effective investment option to retail investors.

[18] Source: HKEX, ETF Spotlight – Assessing the Impact of HKEX's ETF Liquidity Enhancement, as of December 2020
[19] Source: ASX Market Maker Arrangement

India

Divestments from public enterprises through ETFs in 2015 and the introduction of the issuance of Sovereign Bond ETFs, the Bharat Bond ETF, in 2019 are considered important milestones in India[20]. Additionally, in 2015, the Employee Provident Fund Organization, India's largest public retirement saving scheme, decided to invest in the stock market through ETFs. These measures taken by the Indian Government have played a significant role in driving the growth of the Indian ETF market.

Japan

The **Bank of Japan (BOJ)'s ETF purchases** have had a significant impact on the growth of Japanese ETF assets. Since 2011, the total amount of ETF purchases by the BOJ reached JPY 37 trillion (US $250 billion) as of **2022.** [21] This purchase program was implemented as a tool to inject liquidity into the market, revitalize market confidence, and stimulate the valuation expansion of Japanese stocks. Nevertheless, in 2023, BOJ has transitioned into a "net seller" of ETFs, with its sales of ETFs exceeding its purchases.

Mainland China

The ETF markets in mainland China have received **significant government support**. In mainland China, the Central Huijin Investment, a state-owned investment entity, purchased ETFs in 2023 and 2015 to stabilize market sentiment amidst uncertain macroeconomic headwinds and continued market volatility.

ETFs in mainland China are considered crucial for directing investors' capital towards high-quality companies that align with mainland China's strategic economic direction, which is vital to national security interests. These industries include Electric Vehicles, Aerospace & Military, Artificial Intelligence, Renewable Energy, and Carbon Storage, among others, as outlined in the 13th and 14th 5-year Plans. Investing in ETFs is seen as an effective and transparent investment vehicle for Chinese investors to contribute to the acceleration of national transformation and economic development[22].

Taiwan and Korea

Taxation benefits. Korean investors can benefit from a securities transaction tax exemption of 0.3% when trading ETFs listed on the Korea Exchange (KRX). In Taiwan, investors who purchase bond ETFs can enjoy receiving a transaction tax waiver of 0.1%, reducing the trading cost associated with owning bond ETFs. To promote greater active issuance of ETFs from Korean asset managers, KRX has streamlined and eliminated certain listing disclosures and requirements for ETFs in 2022. Additionally, there are plans to further relax regulation for active ETFs in Korea. This includes allowing active ETFs to have a 50% index tracking and 50% discretionary stock-picking approach[23], fostering the development of active ETFs in Korea, and providing asset managers with more flexibility in creating innovative investment strategies.

[20] Source: CFA Society India Research, A Report on the Indian Exchange Traded Funds (ETF) Industry, 2020
[21] Source: Investment Trust association of Japan, Bank of Japan, 2022
[22] Source: SSE, 中國 ETF 市場發展白皮書, 2022
[23] Source: Korea Capital Market Institute, as of March 2023

What’s next?

In this chapter, an examination of market liquidity, ownership distribution, product mix, and ETF policy support for each Asia Pacific market has been conducted in order to understand their unique characteristics, strengths, and limitations. In the next chapter, the study will delve deeper into these factors and propose potential strategies and solutions aimed at enhancing Hong Kong’s ETFs market.

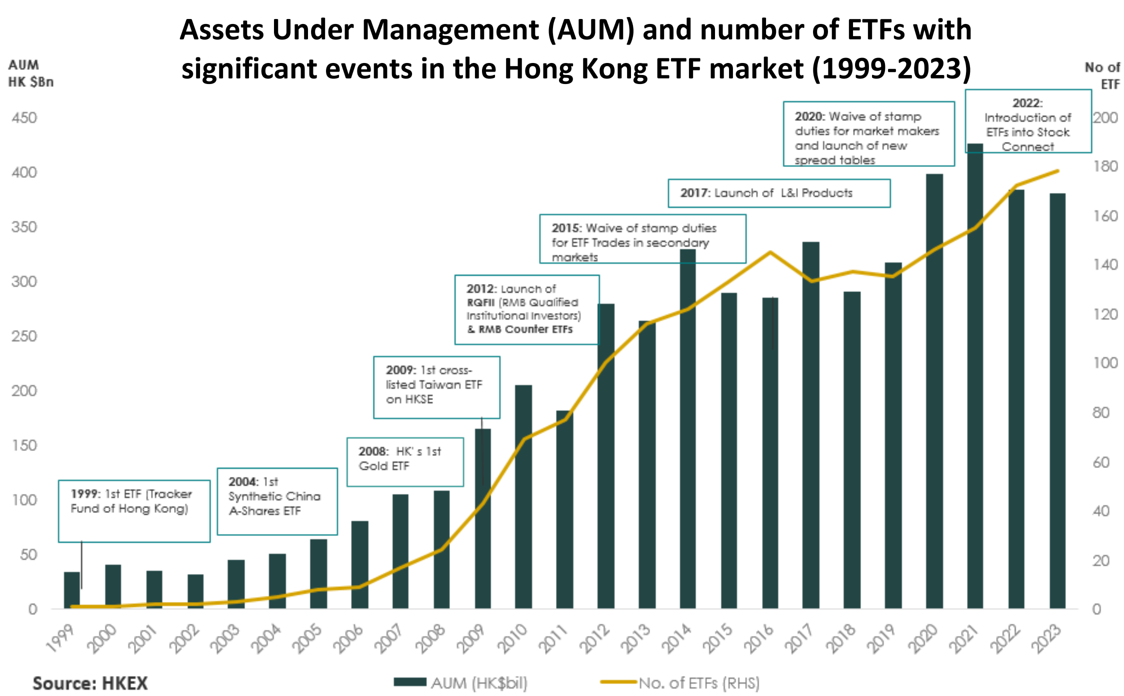
4. Appendices - Analysis of Individual ETF Markets

4.1. Hong Kong

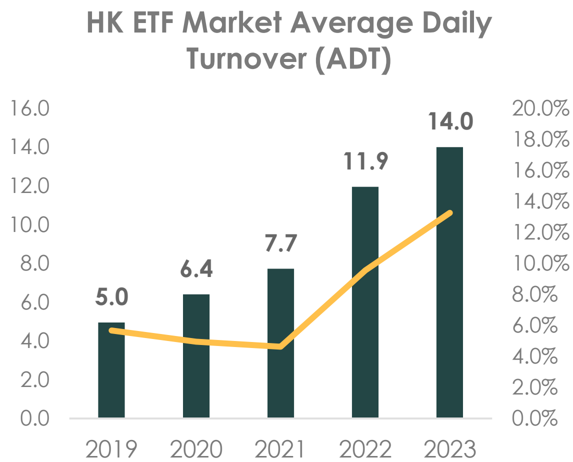
Executive Summary of Hong Kong's ETF Market

- Despite challenging market and economic circumstances, Hong Kong's ETF market has shown resilience over the past two decades. Total Assets Under Management (AUM) have grown ten-fold since the inception of the Tracker Fund of Hong Kong in 1999, reaching HK $379.51 billion.
- Hong Kong is recognized for its robust market liquidity, with Average Daily Turnover (ADT) reaching historically high levels in 2023 at HK $14 billion. The launch of the ETF Connect Scheme and market-making standard overhauls by HKEX in 2020 have contributed to this achievement.
- Recent notable developments include the launch of the ETF Connect Scheme with mainland China, changes in new spread tables, the debut of crypto futures, and the introduction of Saudi Arabia ETFs.
- However, low retail participation rates and a high concentration of AUM and ADT in a few ETFs remain as structural problems for Hong Kong's ETF market.
- Future catalysts for the development of Hong Kong's ETF market include further inclusion of ETFs into the Stock Connect Scheme, the introduction of cryptocurrency spot ETFs, the growth of Active and Factor-based ETFs, and the expansion of RMB-denominated ETFs.

Historical Events of Hong Kong's ETF Market

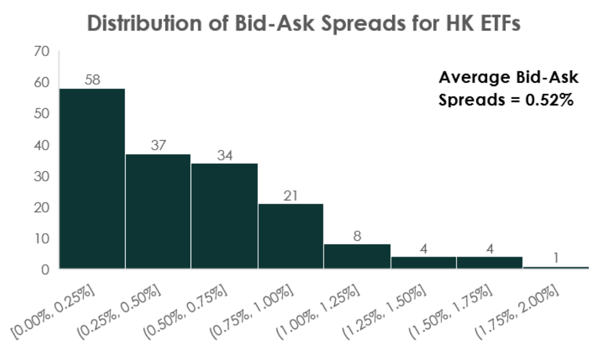


Market Liquidity Hong Kong's ETF Market



Source: HKEX

The Average Daily Turnover in 2023 reached a peak of HK $14 billion, marking a 17.6% year-on-year increase compared to HK $11.9 billion in 2022. This represents more than a 2.8-fold increase since 2018 when it was HK $5 billion. The current level of turnover accounts for 13.3% of overall market turnovers, indicating significantly improved market liquidity. This can be attributed to the successful launch of the ETF Connect platform and the implementation of new market-making regulations. These developments have allowed mainland investors to actively participate in trading ETFs, even during market downturns. Market makers have also benefited from these changes.



Source: Bloomberg

In 2023, the Average Bid-Ask spread for HK-listed ETFs was 0.52%. Among the 168 listed ETPs, 58 of them (34.7%) had bid-ask spreads below 25 basis points (bps). Additionally, 37 ETPs (22.2%) had spreads ranging between 25bps and 50bps.

Positive Attributes & Limitations of Hong Kong's ETF Market

Positive Attributes	Description
ETF Connect	• Stimulate SB Fund inflows and market turnovers. • Expansion of investor bases
Dual Counter Model	• HKD & RMB/USD Counter Model (RMB Counter) • Promotes HK's offshore RMB Hub role
Product Diversity	• Cryptocurrencies Futures ETF • ESG ETFs/Active ETFs
Tax Efficiency	• No Capital Gain Tax (CGT), Dividend Tax, and Stamp Duties for ETF Trading

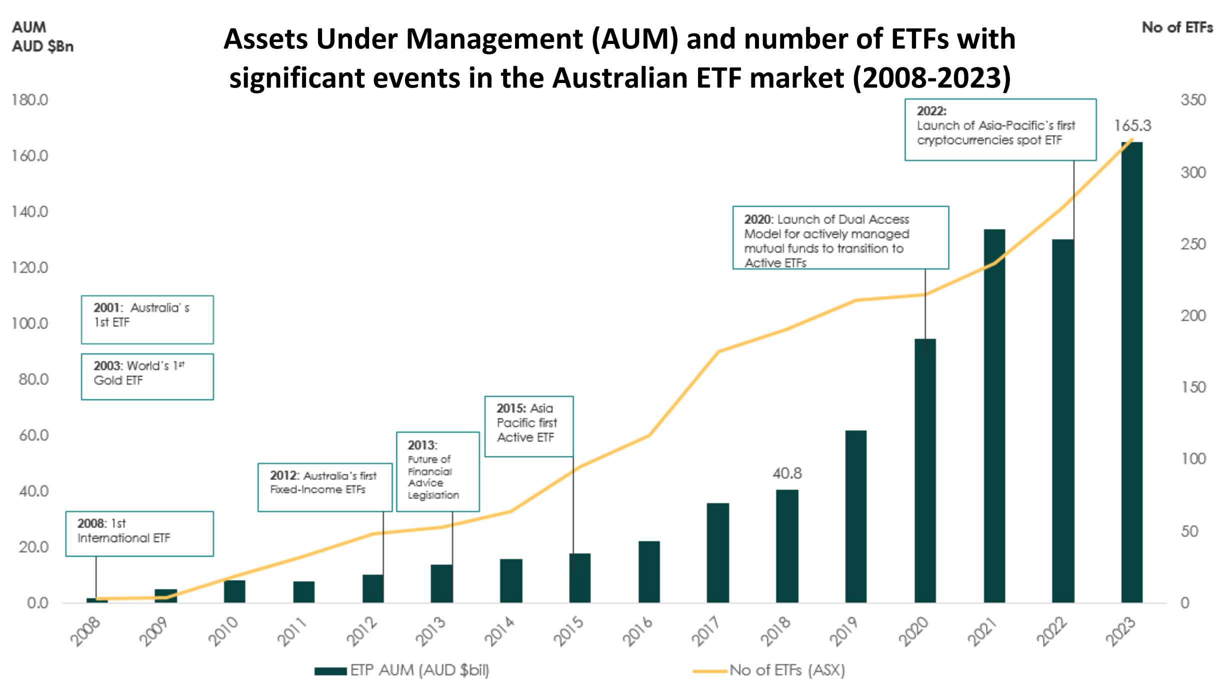
Limitations	Description
Low Retail Adoption	• Low retail participation rates • Limited retail distribution channels
Overconcentration of large ETFs	• Top 5 ETFs account for more than 67% of market AUM and • 85% of market turnovers
Low liquidity for small ETFs	• Less popular ETFs have high trading spreads, low turnovers and often get delisted

4.2. Australia

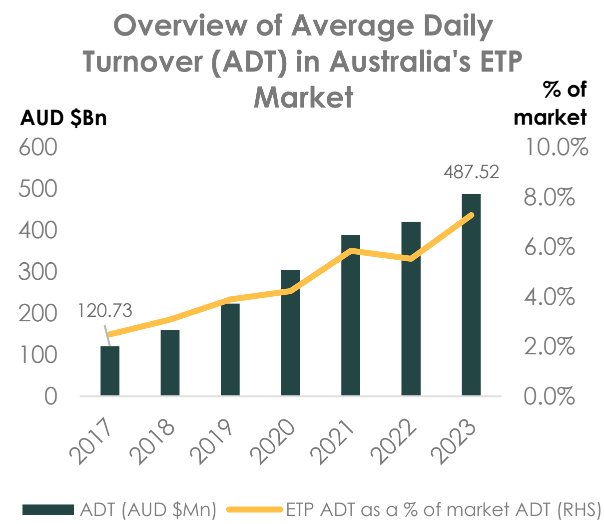
Executive Summary of Australia’s Exchange-Traded Funds Market

- Australia's ETF market has experienced significant growth, with Total Assets Under Management (AUM) quadrupling from AUD 40.8 billion in 2018 to AUD 165.3 billion in 2023, highlighting the rapid advancement of ETFs in the country.
- Compared to its Asian counterparts, market liquidity in Australia remains relatively low, with Average Daily Turnover (ADT) reaching AUD 487.5 million and warrants accounting for 7% of stock market turnovers. This is attributed to the prevalent "Buy-and-Hold" strategy among Australian investors, driven by high capital gains tax rates.
- Australia's ETF market boasts high retail participation rates, with over 1.5 million investors (20% of Australian investors) choosing to invest in ETFs. This is attributed to the wide distribution channels provided by independent financial advisors.
- The introduction of the Dual Access Model by the Australian Stock Exchange (ASX) has facilitated the transition of actively managed mutual funds to Active ETFs, which has contributed to the growth of ETF listings in Australia.
- Australia's ETF market is recognized as one of the most internationalized in the Asia-Pacific region, attracting global asset managers such as JP Morgan Asset Management, State Street, BlackRock iShares, Fidelity, and Vanguard to list their ETFs on the ASX.

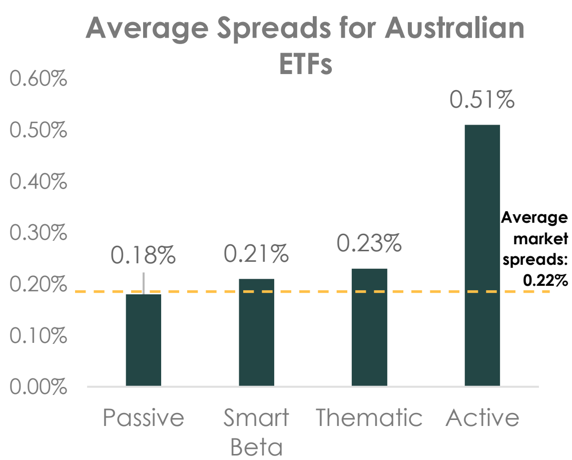
Historical Events of Australia’s ETF Market



Market Liquidity Australia's ETF Market



Source: ASX



Source: Firstlinks, MorningStar, 2022

Exchange-Traded Products (ETP) turnovers in Australia have recently averaged around AUD 487.52 million per day in 2023, accounting for 7.3% of total ASX turnover, reaching historically high levels.

This increase in trading activity can be attributed to the growing popularity of ETPs among investors, as well as the market-making incentive scheme proposed by ASX. Under this scheme, market makers receive incentives (Trading Fees) if they meet minimum quoting benchmarks and achieve certain trading volumes. This promotes tighter spreads and increased liquidity in the Australian ETP market.

It is worth noting that the average bid-ask spreads in Australia, at 0.22%, remain tighter than those of HK-listed ETFs.

However, daily turnovers in the Australian market remain relatively low compared to their Asian counterparts, such as mainland China, Korea, and Hong Kong. This can be attributed to the fact that many Australian investors prefer a "Buy and Hold" strategy, focusing on long-term wealth compounding rather than actively trading around ETFs for quick profits. This approach is influenced by the high capital gains taxes in Australia.

Positive Attributes & Limitations of Australia's ETF Market

Positive Attributes	Description
Robust Retail Adoptions	• More than 1.5 million Australian ETF investors • Wide retail distribution channels
Strong Financial Infrastructure	• Market Makers trading incentives. • Dual Access Model for Active ETFs
Product Diversity	• Cryptocurrencies Spot ETF • Thematic ETFs/Active ETFs
Internationalized Marketplace	• Strong footprint from large ETF Managers like BlackRock, State Street, Vanguard, JP Morgan

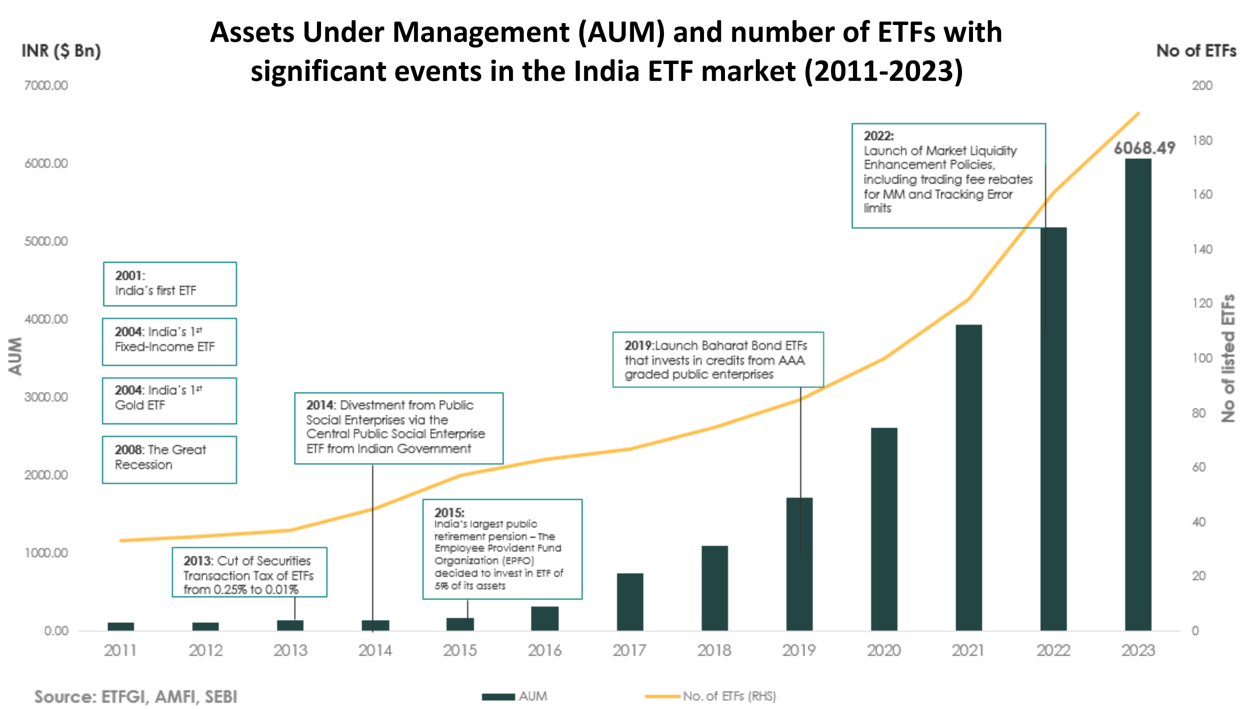
Limitations	Description
Sector Concentrations	• Most Australian ETFs are concentrated in gold, mining, and financial sectors.
Lower Market Liquidity	• "Buy-and-Hold" strategy remains mainstream, less speculative & trading activities
High Taxation Burden	• High Capital Gain Tax, Securities Transaction Taxes for ETF Trading

4.3. India

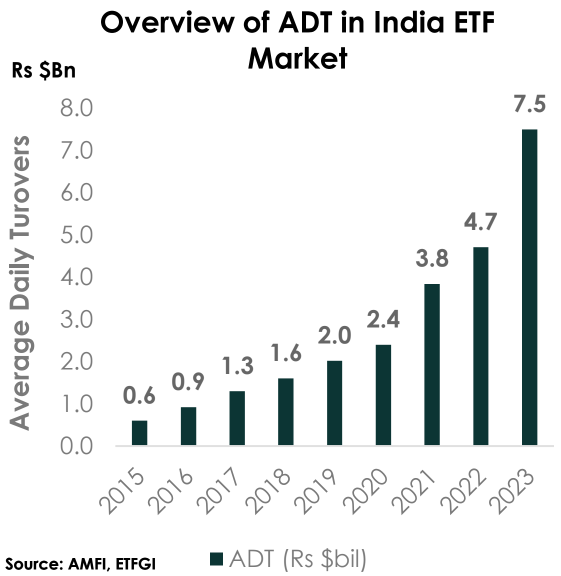
Executive Summary of India’s ETF Market

- India’s ETF Market has skyrocketed over the past few years. Total Assets Under Management (AUM) reached INR 6 Tn (US $73 Bn), which has grown ten-fold from INR 583 Bn (US $7 Bn) in 2017.
- India was notorious for its low market liquidity, with Average Daily Turnover (ADT) reaching historically high levels in 2023, to INR 7.5 Bn (US $90 Mn), and ranks among the lowest compared to their Asian counterparts.
- ETFs were regarded as an instrument by the Indian Government to divest from national public enterprises and issuance of public enterprises bonds (Baharat Bonds ETFs)
- The Indian ETF market remains institutional-dominated, most investors were either insurance companies, public retirement pensions such as Employee’s Provident Fund Organization (EPFO), and corporates, whereas retail participation remained low, but has been gradually increasing.
- Limited product diversification, limited retail distribution channels, and lack of investors’ education remain to be significant hindrances to India’s ETF market development.

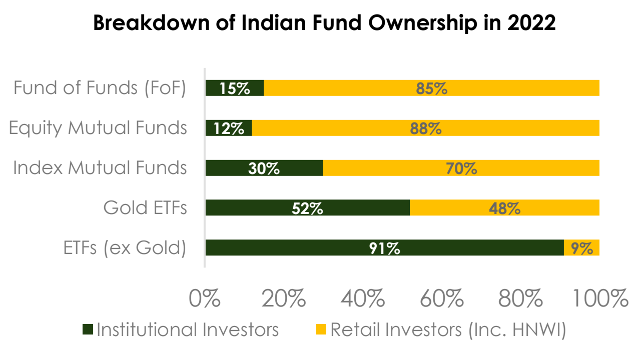
Historical Events of India’s ETF Market



Market Liquidity India's ETF Market



Source: AMFI, ETFGI



Source: AMFI, SEBI

The trading turnovers of Indian ETFs on the exchange have increased steadily over the past 7 years since 2015, with Average Daily Turnovers (ADT) surging from Rs $600 million (US $9 million) in 2015 and peaked Rs $7.5 billion (US $90 million) per day in 2023, reaching historical-high levels.

Nevertheless, despite its continuous increase in Average Daily Turnovers (ADT) YoY, India's ETF market remained illiquid compared to its Asian counterparts while spreads remained wide.

For example, the most liquid ETF in India, NiftyBees had less than 1/100 of the daily turnover value of Reliance Industries, a large liquid stock in India. In contrast, the most traded US ETF, SPDR S&P 500 ETF (SPY) had 3.5 times the daily trading volume of Apple. Furthermore, The Median of the daily Bid-Ask Spread on the largest ETF is as high as 17 bps, while that of individual large-cap stocks is less than 5 bps (CFA India, 2020), for other less liquid ETFs, spreads could be as high as 50 bps. This manifests the illiquid market problem facing India's ETF market.

While it is noteworthy that institutional investors, including insurance companies, EPFO and private pension funds completely dominated the ETF market, accounting for 91% of all of India's market AUM, whereas retail adoption of ETFs in India remains surprisingly low, with only 9% of AUM.

Positive Attributes & Limitations of India's ETF Market

Positive Attributes	Description
Favorable Government Support	• Use of ETFs to divest from Public Enterprises. • Launch of Baharat Bond ETFs • Investment in ETFs from EPFO
Robust Institutional Network	• Insurance Companies, Public Pensions, and Corporate Pensions are major investors of Indian ETFs • Growing interest from Private Banks and Family Offices in ETFs
Favorable Policies	• Lowering of ETF Transaction expenses (lower stamp duties) • Capital Gain Tax (CGT) reduction for ETF investments. • Trading fee rebates to MM/ Tracking Error Limits for ETF managers

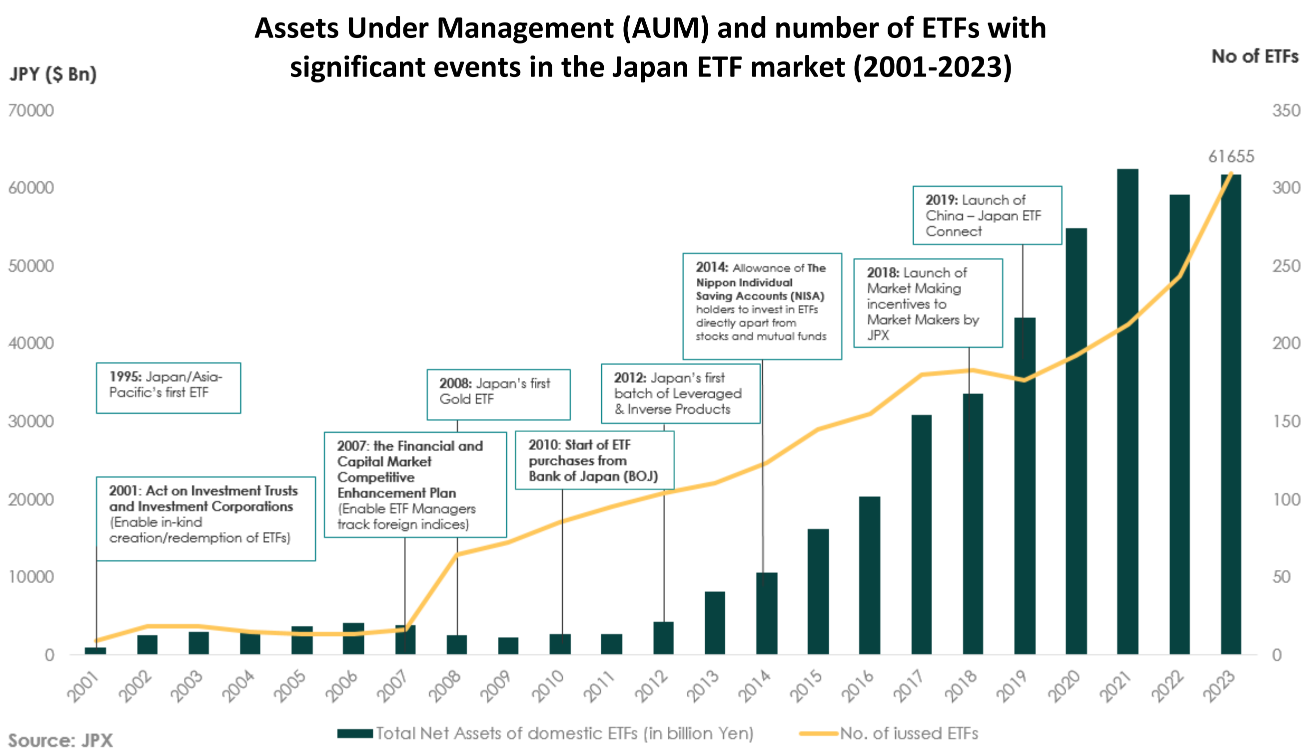
Limitations	Description
Low Market Liquidity	• Most institutional investors perform off-exchange creation/redemption of ETFs. • Low turnovers and trading spreads as a result
Limited Product Diversification	• Most ETFs are concentrated on Gold and local equity indices ETFs. • Leveraged & Inverse Products, Cryptocurrencies ETFs, and Foreign ETFs remain relatively unsung and less popular
Limited Retail Participation	• Lack of internet and online brokerage access to purchase ETFs over the past decade • Limited retail distribution network from banks and financial advisers disincentivized to pitch ETFs to retail investors

4.4 Japan

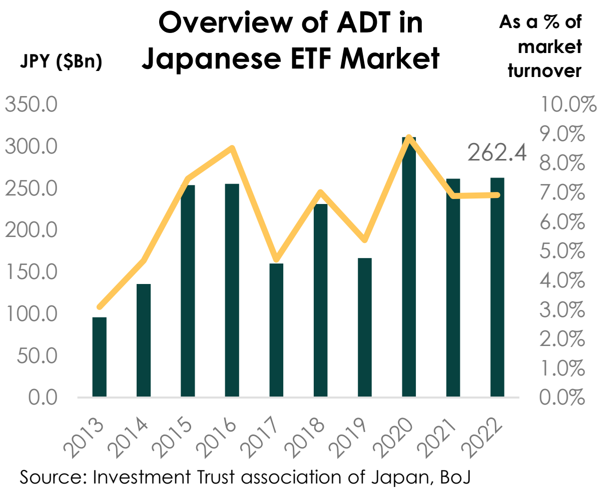
Executive Summary of Japan’s ETF Market

- Japan was the first Asian-Pacific region to launch an ETF back in 1995 with the Nikkei 300 Stock Index ETF (TSE: 1319). Total Assets Under Management (AUM) reached JPY 59.2 trillion as of 2022, making Japan the largest ETF market in Asia-Pacific.
- A significant proportion of Japanese ETF assets comes from the Japanese Central Bank (BoJ), which has implemented ultra-loose monetary policy and supported stock market valuations. BoJ ETF purchases have amounted to a total of JPY 37 trillion since their inception in 2010.
- Japan has a robust institutional distribution network, with the Government Pension Investment Fund (GPIF) being the second-largest ETF investor, following the BoJ.
- The majority (96%) of ETF assets in Japan are concentrated in Japanese domestic equity indices, specifically the Nikkei 225 and TOPIX 500. The lack of product diversification in Japan remains a challenge for long-term growth.
- The potential termination of ETF purchases by the Bank of Japan (BoJ) poses a significant concern for the future growth of Japan's ETF market.

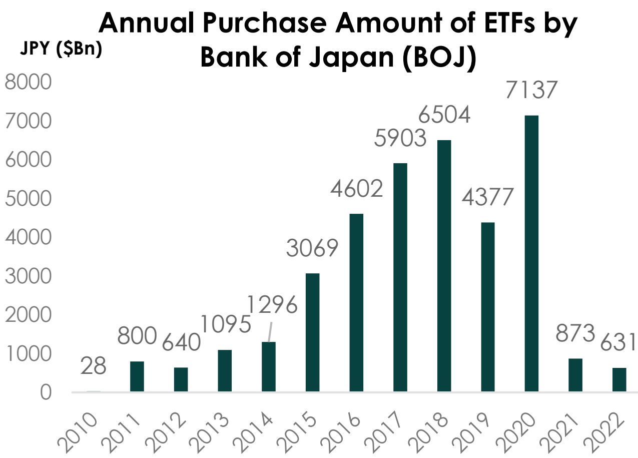
Historical Events of Japan’s ETF Market



Market Liquidity Japan's ETF Market



Source: Investment Trust association of Japan, BoJ



Source: Investment Trust association of Japan, BoJ

ETF turnovers in Japan have averaged JPY 262.4 billion per day in 2022, representing approximately 6.8% of stock market turnovers. Over the past decade, daily ETF turnovers have nearly doubled from JPY 95.8 billion in 2013 to JPY 262.4 billion in 2022, reflecting gradual improvements in market liquidity.

This enhancement can be attributed to several factors. Firstly, market-making incentives, such as trading fee rebates and business service fee waivers, were introduced gradually by the Tokyo Stock Exchange in 2018. These incentives aim to stimulate the creation and redemption of ETFs and provide tighter spreads for ETFs through market makers, thus boosting market liquidity. Secondly, the expansion of the investor base from 740,000 in 2018 to 1.2 million in 2022 (JPX, 2023) has also contributed to the increased market liquidity and turnover in the ETF market.

Since the 2010s, the Japanese ETF market has experienced accelerated growth in Assets Under Management (AUM), largely due to ETF purchases by the Japanese Central Bank. As a tool for its ultra-loose quantitative easing monetary policy, the Bank of Japan used ETFs to purchase assets worth JPY 37 trillion since 2010, aiming to increase money supply and stimulate inflation. These purchases have also played a role in boosting the market valuations of Japanese companies.

Positive Attributes & Limitations of Japan's ETF Market:

Positive Attributes	Description
BOJ Purchases of ETFs	• BOJ purchased **JPY 37 trillion** worth of ETF since 2010 • Currently holds up to **60%** of ETF assets in Japan.
Robust Institutional Network	• Insurance Companies, Public Pensions like **GPIF and NISA** invest in ETFs. • GPIF became the 2nd largest owner of ETFs in Japan only behind BOJ
Favourable Policies	• **Market Makers can receive incentives from JPX** if they can fulfill the number of ETFs for quoting, Quoting Time and Spreads, and the Minimum Quantity of Orders

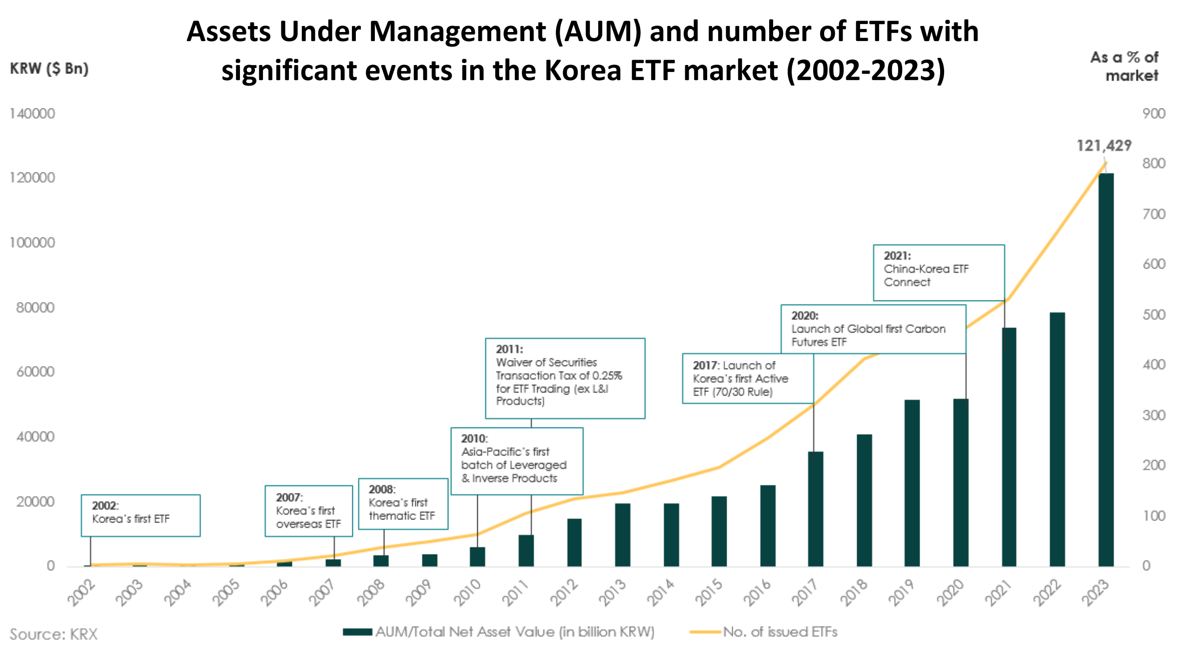
Limitations	Description
Lack of Organic Growth	• Growth in AUM over the past decade was largely driven by **ETF purchases from BOJ**. • Termination of ETF purchases from BOJ would be a **major headwind** going forward.
Lack of Product Diversification	• **97%** of ETF assets in Japan are tied to Japanese Local Indices ETFs despite only accounting for 47% of listed ETFs. • Lack of thematic ETFs, Active ETFs, and virtual assets ETFs in Japan

4.5. Korea

Executive Summary of Korea's ETF Market

- Korea's ETF Market has experienced rapid growth in the Asia-Pacific region over the past two decades, with Total Assets Under Management (AUM) reaching KRW 121.4 trillion (US $93 billion) in 2023. This represents a significant increase since the introduction of its first ETF in Korea in 2002, with an AUM of KRW 344 billion (US $290 million).
- Korea boasts robust market liquidity and is recognized as the third most liquid ETF market globally, following the US and mainland China. The Average Daily Turnover (ADT) stands at KRW 2.9 trillion (US $2.2 billion), representing approximately 35% of stock market turnovers.
- Korean investors have demonstrated a preference for short-term trading over long-term investments. Leveraged & Inverse Products remain highly popular among Korean investors and frequently rank as the most traded ETPs listed on the Korea Exchange (KRX).
- The active issuance of ETF products by Korean Asset Managers has played a crucial role in Korea's successful development in the ETF market. In 2023 alone, 137 new ETFs were added to the KRX, contributing to the market's growth.
- Korea possesses one of the most comprehensive product ecosystems in the Asia-Pacific region, covering various asset classes, geographical regions, and themes. This includes ETFs focused on areas such as K-pop, semiconductors, and AI, which have gained significant popularity among Korean retail investors and facilitated retail adoption of ETFs.

Historical Events of Korea's ETF Market



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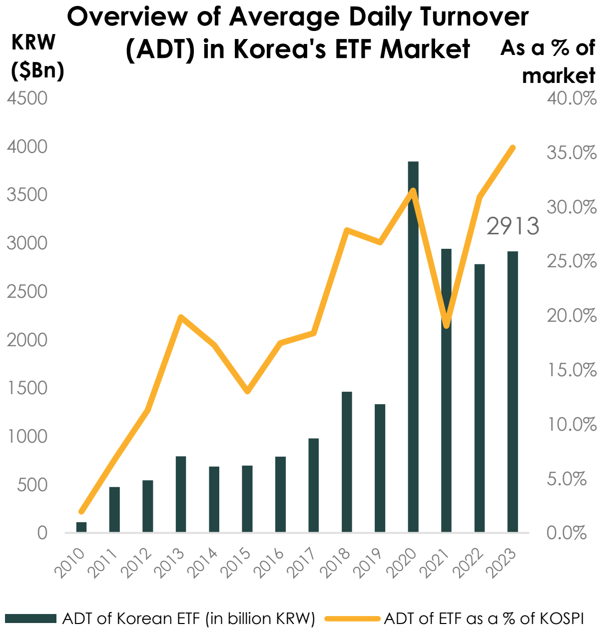
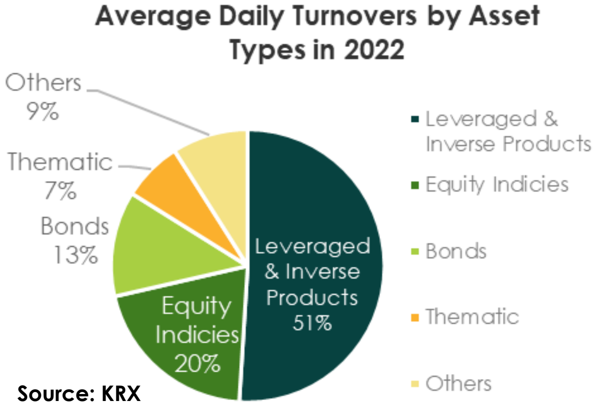
Market Liquidity Korea's ETF Market



Source: KRX



Source: KRX

ETF trading has long been popular among investors in Korea, with a preference for pursuing short-term profits rather than long-term capital appreciation. As a result, Korea ranks 3rd globally in terms of average daily turnovers in the ETF market, behind only the US and mainland China (FT, 2023). The average daily turnover has recently averaged around KRW 2.9 trillion (US $2.21 billion) in 2023 (KRX, 2023), representing approximately 35% of total market turnovers and reaching historically high levels. This figure remains significantly higher than its Asia-Pacific counterparts, including Australia, Taiwan, India, and Hong Kong.

The high turnover in Korea can be attributed to two factors. Firstly, there is wide retail adoption of ETFs in Korea. Since many Korean retail investors lack the ability to select individual stocks, they often engage in high-volume trades and speculation on ETFs, particularly 2x and 3x Leverage & Inverse ETFs. As a result, L&I products account for half (51%) of the ETF market's turnover, reaching over KRW 1 trillion per day.

Secondly, ETF trading activities have been propelled by the introduction of a lower Securities Transaction Tax and Capital Gains Tax for ETFs, both set at 0.25%. This has effectively reduced the trading costs associated with Korean ETFs and further incentivized trading activities.

Positive Attributes & Limitations of Korea's ETF Market

Positive Attributes	Description
Strong Market Liquidity	• Prevalent trading culture & the use of L&I Product • 2nd most liquid ETF market in APAC only behind mainland China
Pervasive Product Diversity	• Leveraged & Inverse (L&I) Products & Futures based products. • Concentrated Hybrid ETF • Thematic ETF
Favorable Policies	• Government deregulations for ETF listings, disclosure, • Exemption of securities transaction tax of ETF trading

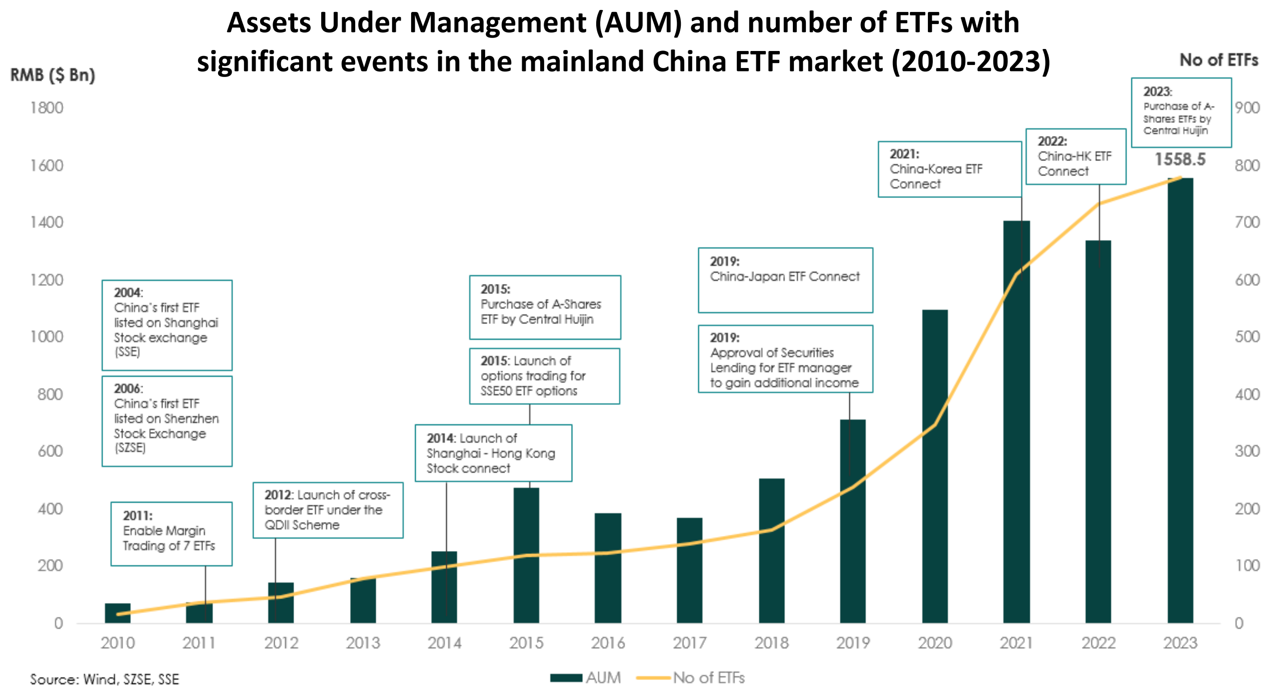
Limitations	Description
Lack of Long-term investment horizons	• Use of ETFs as a speculative instrument rather than an investment vehicle • Extensive use of L&I Products creates a systematic market risk

4.6. Mainland China

Executive Summary of Mainland China's ETF Market

- Mainland China's ETF market remains the largest in the Asia ex-Japan region, second only to the US. The Total Assets Under Management (AUM) reached RMB 1.56 trillion as of 2023, marking a tenfold growth in just a decade from RMB 144 billion in 2012.
- Mainland China boasts robust market liquidity, ranking first in the Asia-Pacific region and second globally, only behind the US. The market registers an annual turnover of RMB 25.3 trillion, with both retail and institutional investors actively trading ETFs.
- ETFs have received significant government support in mainland China, often viewed as instruments to channel capital towards national strategic industries under the 13th and 14th 5-year Plans.
- The issuance of ETFs has been active in mainland China, as numerous asset managers compete for market share. Since 2018, over 575 new ETFs have been launched, with a majority being thematic and smart beta ETFs.
- There has been a growing participation of retail investors in mainland China, driven by dissatisfaction with the consistent underperformance of actively managed mutual funds. The number of Chinese non-Money Market ETF holders has reached 21.46 million, an 80% increase compared to 2018.
- However, the lack of product diversity, such as Cryptocurrencies ETFs and Leveraged & Inverse Products, along with limited long-term investment horizons, remains a pressing issue in mainland China's ETF market.

Historical Events of Mainland China's ETF Market



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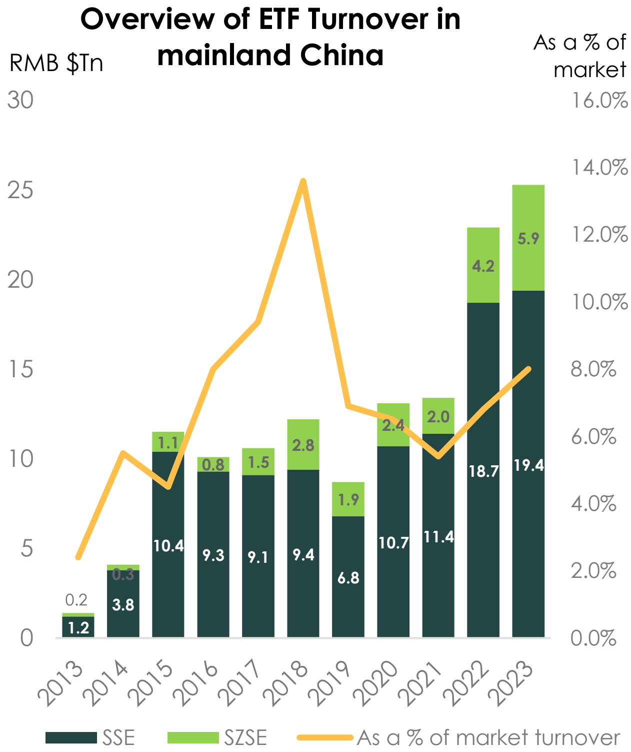
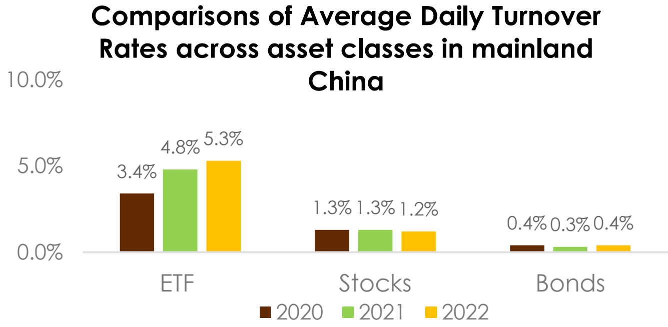
Market Liquidity of Mainland China’s ETF Market



Source: Wind, SZSE, SSE



Source: SZSE ETF Development Blueprint 2020-2022

ETF turnover has been trending up over the past five years. The annual turnover value in mainland China’s ETF market has increased from RMB 1.4 trillion in 2013 to more than RMB 25.3 trillion in 2023, reaching historical highs. ETF turnovers in the SSE have soared from 1.2 trillion to 19.4 trillion in 2023 (SSE, 2023), while turnovers in the SZSE surged from 0.2 trillion to 5.9 trillion in 2023. As a result, mainland China ranks second globally in terms of turnovers in the ETF market, only behind the US. This makes mainland China the most liquid ETF marketplace in APAC, far ahead of Korea, Taiwan, and Japan.

The liquidity enhancement in mainland China can be attributed to two factors. Firstly, the prevalent short-term trading culture among Chinese investors contributes to this liquidity. In general, they prefer trading ETFs for short-term profit rather than adopting a "Buy and Hold" strategy for long-term capital appreciation. The median holding period for Chinese investors is 11 days, with an average trade executed on an ETF every 14 days. This indicates that ETFs have higher turnover rates than A-Shares and Bonds. Since most retail investors lack the ability to individually select stocks, they trade and speculate on ETFs instead. Secondly, ETF trading activities have been further propelled by the enforcement of the market-making system for ETFs in 2012. This system has encouraged traders and market makers to create and redeem ETF units in primary markets and trade ETFs on the secondary market. Combined, these factors have enhanced mainland China's ETF market liquidity.

Positive Attributes & Limitations of Mainland China’s ETF Market

Positive Attributes	Description
Favorable Government Support	• Use of ETFs to support national strategic economic industries. • Purchase of A-Shares ETFs from Central Huijin Investment Ltd
Robust Market Liquidity	• Most liquid ETF Market in Asia-Pacific • Wide retail and institutional investors’ market participation
Favorable Listing Policies	• ETF Listing fee waiver • Efficient regulatory approval speed (2 weeks vs HK 3 months) • Active product issuance from Chinese asset managers

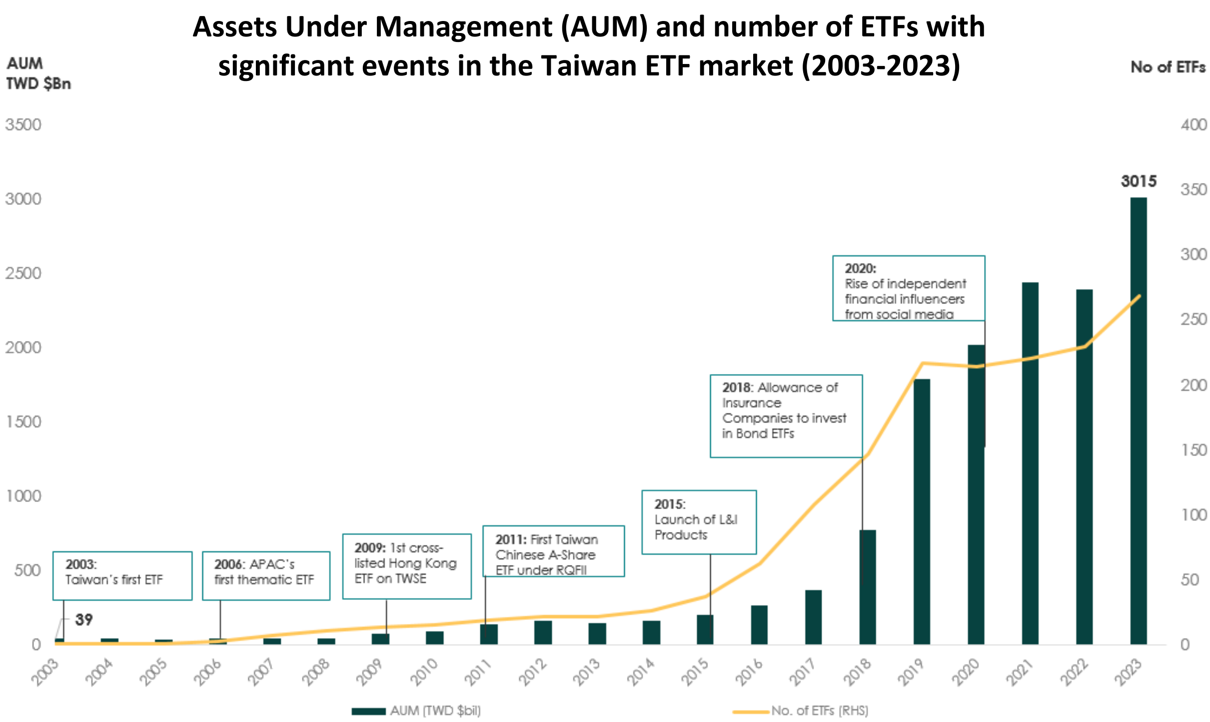
Limitations	Description
Lack of Long-term investment horizons	• Use of ETFs as a speculative instrument rather than an investment vehicle • Lack of “Patient Capital” • More investors’ education required
Limited Product Diversification	• Most ETFs are concentrated on money market funds and equity ETFs. • Leveraged & Inverse Products, Cryptocurrencies ETFs, and even Bond ETFs remain relatively unsung due to regulations

4.7. Taiwan

Executive Summary of Taiwan's Exchange-Traded Funds Market

- Taiwan's ETF market has experienced significant growth over the past two decades, with Total Assets Under Management (AUM) reaching NT $3 trillion. This represents a seventy-five-fold increase since the introduction of the Yuanta Taiwan 50 ETF with an AUM of NT $40 billion in 2003.
- Taiwan stands as the largest fixed-income ETF market in the Asia-Pacific region, with an estimated AUM of over NT $1.3 trillion. This growth can be attributed to insurance companies parking their cash in Bond ETFs and increased interest from retail investors seeking high-yield products.
- Robust retail participation rates are evident in the Taiwanese ETF market, with an estimated 6.5 million Taiwanese investors engaging in ETF investments. Additionally, more than one in four Taiwanese investors include ETFs in their investment portfolios.
- The rise of independent financial online influencers has played a role in driving high retail participation rates, as they frequently promote the use of ETFs as investment vehicles.
- Taiwanese ETF market liquidity remains relatively low compared to its Asian counterparts. This can be attributed to the preference of Taiwanese investors for a "Regular Investing and Hold" strategy, rather than actively trading in the market.
- Taiwan boasts a comprehensive product ecosystem, encompassing thematic ETFs, factor-based ETFs, and ETFs covering various asset classes and geographical regions. This diverse range of options provides investors with ample choices to suit their investment preferences.

Historical Events of Taiwan's ETF Market



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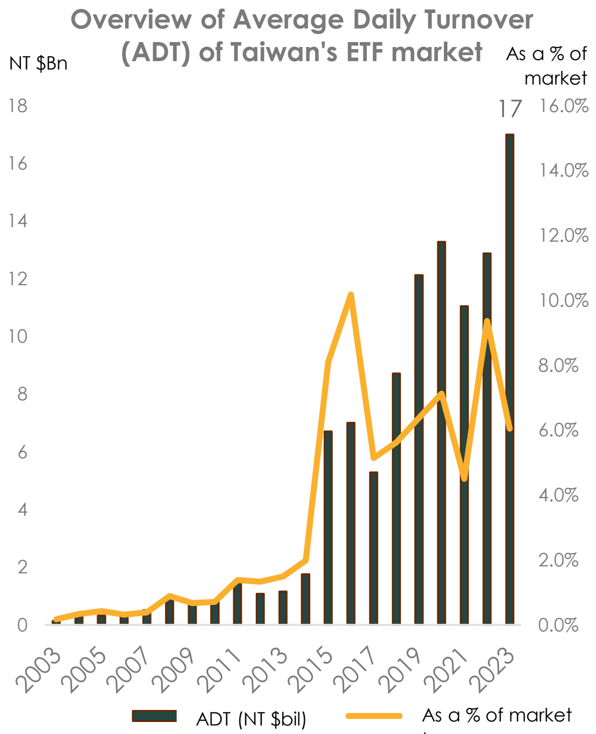
Market Liquidity Taiwan's ETF Market



Source: TWSE, TPEX, ETFGI

ETF turnovers in Taiwan have recently averaged NT $17 billion per day in 2023, which is equivalent to 6% of total market turnovers.

Remarkably, the surge in turnovers during 2015-16 in Taiwan can be attributed to the launch of L&I products in 2014. Furthermore, market-making incentives, including trading fee rebates and business service fee waivers, were introduced in 2015 to encourage market makers to offer liquidity for ETFs, fostering ETF trading in Taiwan.

The expansion of the investor base during COVID in 2020 has also enhanced market participation rates from retail investors. Nevertheless, Taiwan's ETF market liquidity remains relatively low compared to its APAC counterparts, as most investors adopt a "Buy-and-hold" strategy instead of actively trading and speculating around ETFs to gain speedy profits.

Positive Attributes & Limitations of Taiwan's ETF Market

Positive Attributes	Description
Robust Retail Adoptions	• More than 6.5 million Taiwanese ETF investors • Independent Financial Advisors promoting ETFs for asset allocation
Largest Bond ETF Markets	• AUM from insurance companies and income investors • Sitting at an estimated AUM of NT $1.5 trillion (US $50 Bn)
Product Diversity	• Leveraged & Inverse Products • Thematic ETFs/Smart Beta ETFs
Favorable Regulations	• Lower securities transaction tax than stocks • Trading fees rebate for MM

Limitations	Description
Lower Market Liquidity	• Lower market turnovers than Korea, Hong Kong, and mainland China • Investors tend to adopt a Buy-and-hold strategy instead of high-volume trading
Tight Capital and Remittance Control	• Control over the free flow of capital and approval are required for large sums of money outflows

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