History of Exchange Traded Funds
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Robert Tull & Company

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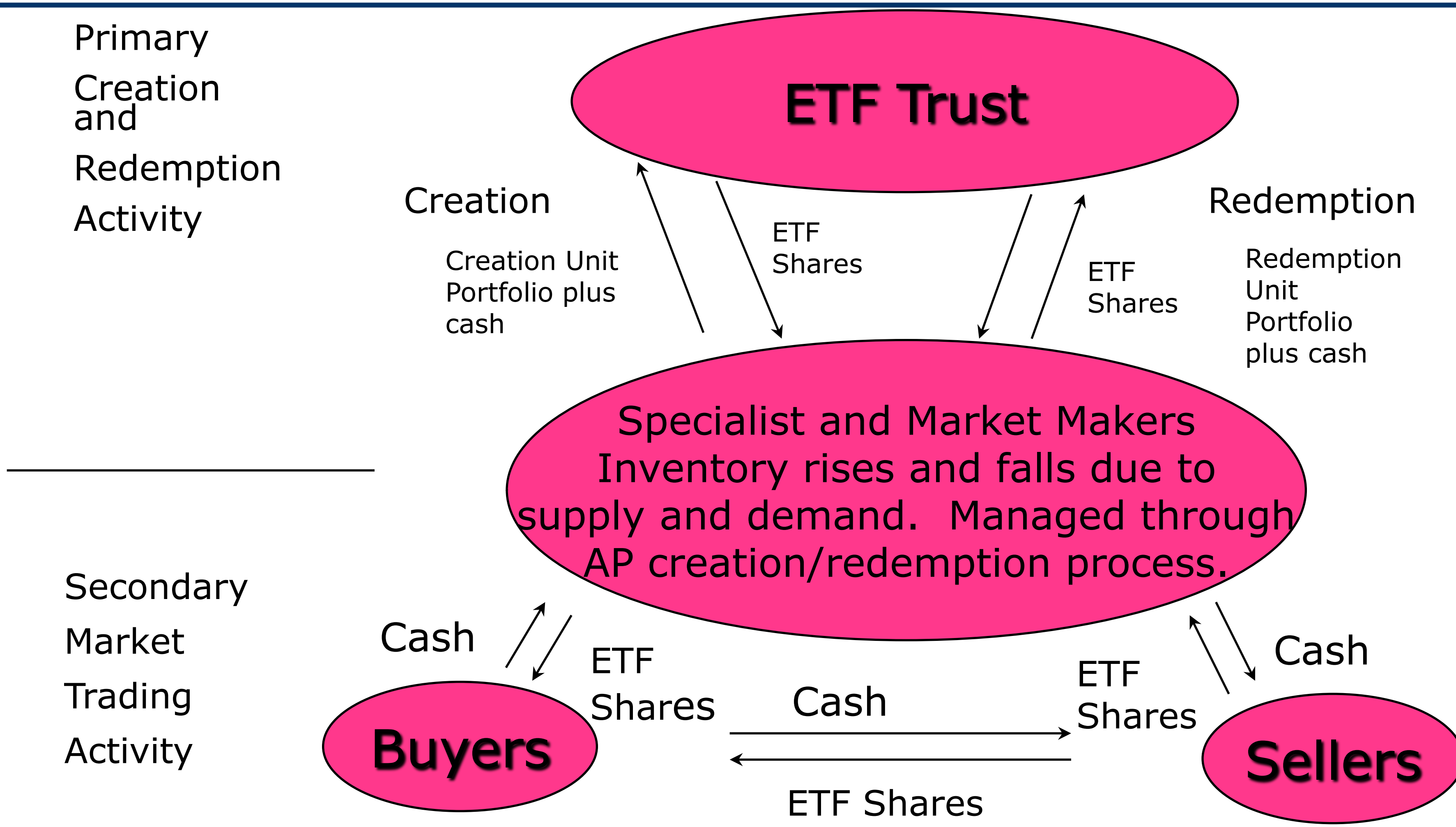
What is an Exchange Traded Fund?

- Exchange Traded Funds or ETFs are funds that trade on public equity exchanges, like stocks
- New shares are issued when securities, cash, or both are deposited into the fund by Authorized Participants against the receipt of a unit of ETF shares (ETF Unit is commonly 50,000 shares in the US market)
- Investors purchase ETF shares in the secondary equity market through their stock broker, like corporate shares, using exchange order types like:
  - Market on open, market on close
  - Limit or stop loss
  - Fill or Kill
  - All or Nothing

How Does the ETF Primary and Secondary Markets Work?



* Occasionally, large institutions (using APs) will conduct creation/redemption activity directly with the Trust.

The History of Exchange Traded Funds in the U.S.

- Exchange Traded Funds or ETFs where a response by brokers to two major events in the U.S. market in 1987:
  - The stock market crash in October 1987 when U.S. retails investors first realized the impact of getting redeemed out of their mutual funds at the 4PM Net Asset Values
  - A competitive response by exchanges and their members to the loss of assets to the growing mutual fund industry and a reduction in their trading volumes
- The first product in the U.S. market to lay the foundation for ETF shares were called SuperShares.
- SuperShares didn't succeed because the product was too complicated for the back office processing staff to settle as it contained four units involving:
  - S&P500 index stocks, and S&P500 index yield
  - T-bills principal and T-bill accrued income

The History of ETFs …continued

- Canada saw the value of the Super Trust structure and they issued the first successful ETF security on the TSE. They were Toronto Index Participation Shares or TIPS
- TIPS creations and redemptions received in-kind baskets of the TSX 60 Index stocks and "topping off cash" to equal the NAV per share in a creation unit
- Nate Most at The American Stock Exchange started working on a similar project in 1989 called the Standard & Poor's Depository Receipts or SPDRs
- Nate started out as a commodities trader in Hong Kong and many of the attributes of SPDRs can be traced to the commodities market:
  - Creation units of S&P500 ETFs ("SPY") in exchange for S&P500 futures (ETPs)
  - Arbitrage of SPYs to S&P500 large and e-mini index futures
  - Short hedging strategies for tactical portfolio allocation
  - Options on the SPY vs. options on the S&P500 futures

The History of ETFs …continued

- While Nate Most was working on the SPY, I was working on a European debt product called OPALS with many of the same attributes of ETFs
- SPYs launched in January of 1993 and OPALS in April of 1993
- The first listed US ETFs were structured as Unit Investment Trusts under the SEC '40 ACT
  - UITs are very limited investment structures
- In early 1994 Nate Most and I joined forces and launched the first full '40 Act ETFs in 1996 with full benchmark index investment portfolio techniques, such as optimization, and stock loan
  - In early March, Morgan Stanley launch WEBS (later renamed iShares when sold to BGI)
  - In late March, Deutsche Bank launched CountryBaskets (funds terminated in year one)
- In 1996 Nate Most left the Amex to become the Chairman of the WEBS fund board and to continue his efforts to expand the ETF offerings in the US market

The History of ETFs …continued

- The first independent creation unit of the SPY was in October 1993 when Morgan Stanley represented the New South Wales Superannuation Fund who bought $500 million dollars in SPYs (5 million shares) at a single price
- The first ten years of ETF growth was slow as the American Stock Exchange educated U.S. investors on the benefits of ETFs.
- The Amex was considered the intellectual leader of ETFs during the '90s with 100 percent of all ETFs listings
- At the end of 1999 there were only $33 billion in U.S. ETF assets
  - In 1999 Nuveen received the first ETF exemptive reliefs for fixed income benchmark indexes ands now ETFs for global equities and debt indexes could be launched
- In August of 2000 I joined the Amex to run New Products and in 2001 Amex launched ETF Consulting Services which helped 17 different countries over the next five years to develop ETFs for their domestic market.
- By the end of 2002 ETF assets in the U.S. exceeded $100 billion USD

The History of ETFs …continued

- As of June 3rd , SPY is the largest US ETF with assets in excess of $139 billion
- GLD or the gold ETF was the first commodity ETF in the U.S. market with approx. $38.4 billion in AUM as of June 30th.
- US ETF assets stood at $1.49 trillion as of the end of April with listed ETF and ETPs of 1,459 on three stock exchanges (NASDAQ, NYSE-Arca, BATS)
- ETFs asset since inception continues to grow at a annual compounded growth rate of 28.9 percent
  - The rate of new asset inflows for ETFs continues to exceed the US mutual fund industry
  - The allocation of new assets into index funds continues to grow annually vs. active funds

The History of ETFs …continued

- From 2002 to 2006 ETFs and ETPs experienced rapid growth in index strategies and assets classes covering:
  – Sectors, Fixed income, Commodities, Currencies, and equity strategies as indexes, such as high dividend stocks and leveraged indexes
  – Exchanged Traded Products ("ETPs") covering commodities, volatility and managed futures
  – Jan. 2006 saw the first acquisition transaction of an ETF issuer by a mutual fund company [PowerShares purchased by Invesco]
- From 2007 to 2010 the growth in U.S. ETFs moved from Cap M indexes to fundamental indexes covering:
  – GDP weighted indexes and equal weighted indexes on well know CAP M indexes
  – 2009 BlackRock acquires iShares from BGI for $13.5 billion [final number in excess of $15.5 billion]
- 2011 saw the first "factor" long/short managed futures listed commodity pool ETP and new asset strategies continue to enter the ETF marketplace

The History of ETFs …continued

- ETPs include Exchange Traded Notes (“ETNs”) that list on equity exchanges to offer index performance with no tracking error
- ETNs are not collective investments but unsecured debt obligations
- The ETN business suffered significant contraction with Lehman Brothers bankruptcy filing cost investors $3.3 billion in ETN obligations in Sept. of 2008
- Since early 2011 the ETN business has seen growth in assets as the balance sheets of the major issuing banks have recovered from the housing and mortgage related financial crisis starting in late 2006 thru 2010
- ETNs are now causing concerns on the part of the issuing banks as they need to improve their balance sheets to meet the Basel III capital requirements

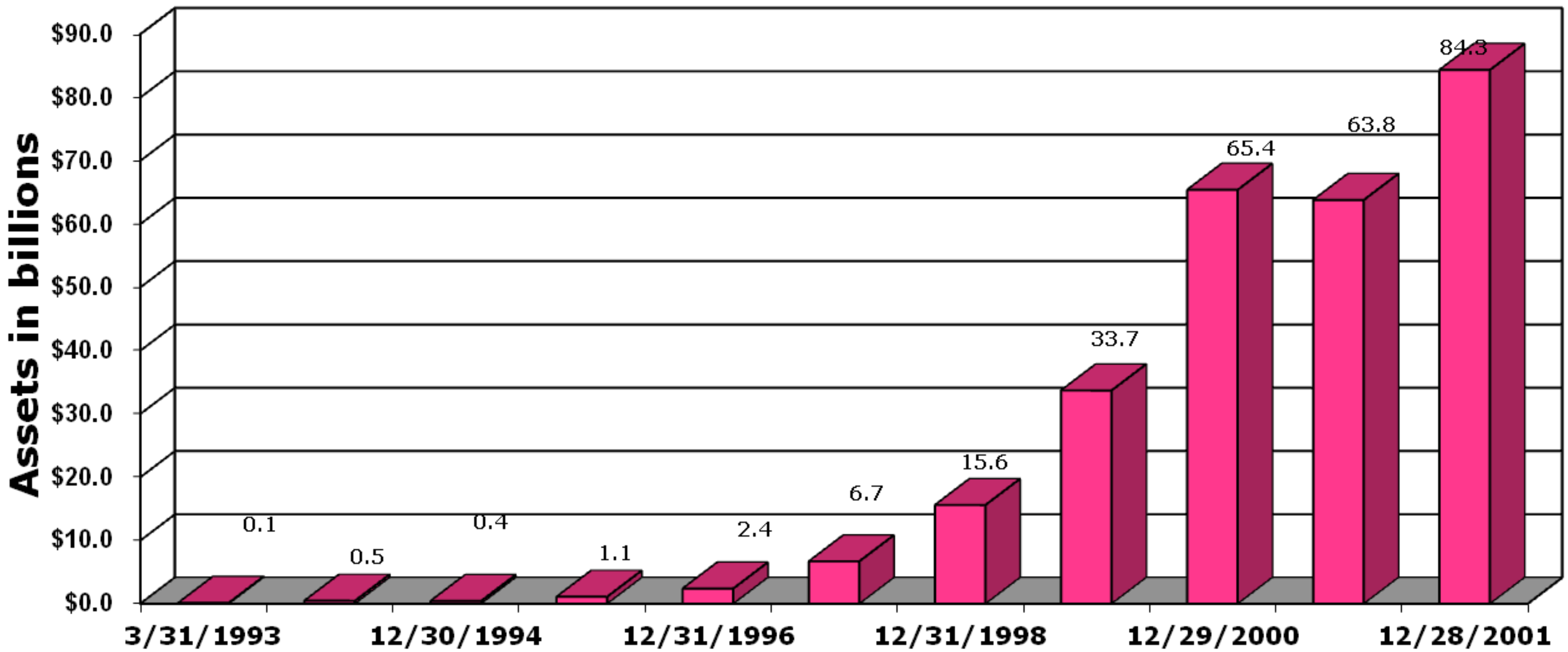
The History of ETFs …continued

- ETFs and ETPs continue to see global growth with roughly 8,900 listing and about $2.14 trillion USD in assets as of the end of May 2013
- ETPs continue to receive regulatory approval in new countries such as the Philippines
- In certain markets ETFs are the only security permitted to be sold short as market makers need to buy the shares of the underlying ordinaries providing support to the local market prices
- In many countries ETFs have attracted international investors as they provide easy entrance and exit strategies for tactical allocations
- Like many other successful ETF markets the PSE and regulators need to encourage the market to adopt the ETF structure as an alternative specific stock picking and mutual funds
- In every country where the exchange and regulators did not work together their ETF market has failed to attract local and international investors

The History of ETFs …continued

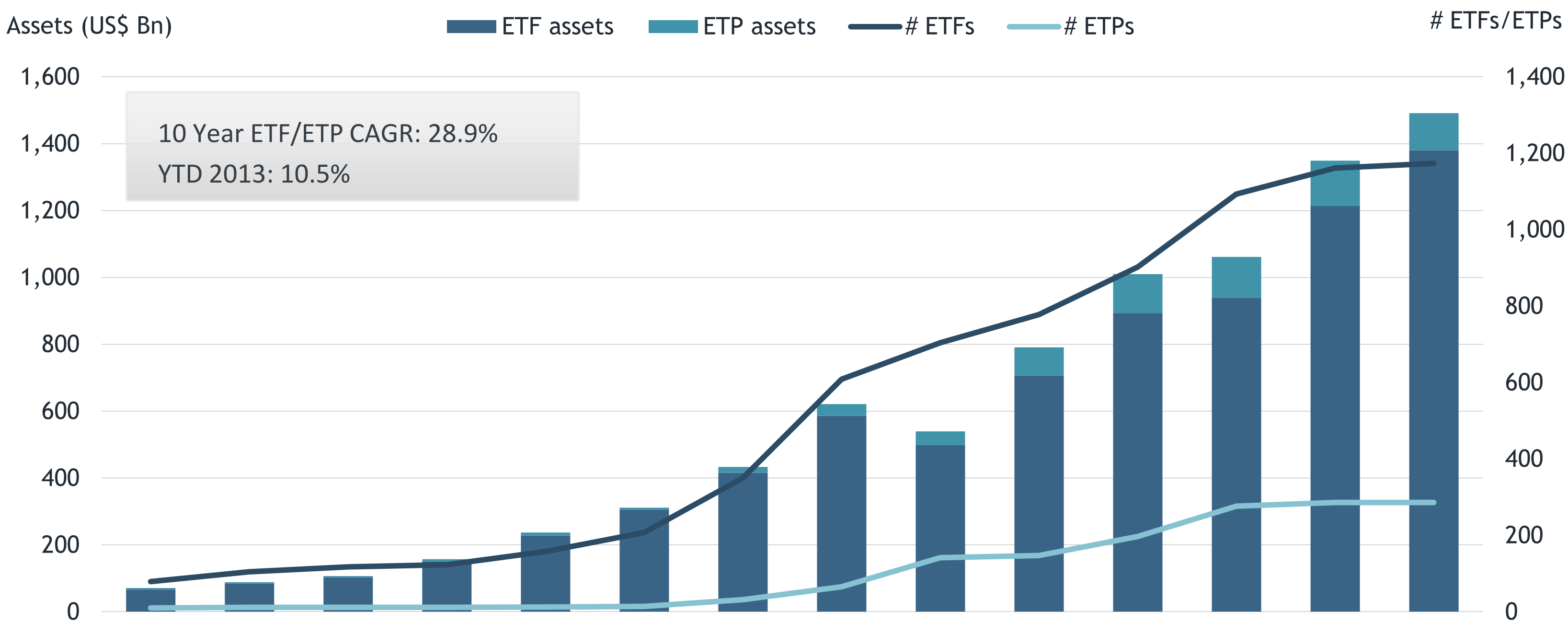
- Market Education is a must:
  - In the US market the Amex dedicated $5 million annually from 1993 to 2008 to educate retail and institutional investors about ETFs
  - Additionally, the Amex contributed $25 million to iShares marketing from 2000 to 2003 to support the growth of ETFs to Registered Investment Advisors and Financial Consultants
  - From 1999 to 2008 iShares management dedicated one eight of their ETF revenue to provide investors with fundamental knowledge in the use of ETFs in portfolio construction and solutions. This was in excess of $110 million U.S. in 2008
  - Since 1999 the ETF issuers and service providers have dedicated $1 billion USD to market education, investor tools, research, media education and investor seminars
  - The SEC, FINRA, CFTC and NFA as regulators continue to welcome market innovation with investor protections
- ETFs have become an overnight success after 20 years of market education and yet it is estimated that less than 30 percent of all US investor know what an ETF is or can name one ETF

The Early Years of U.S. ETF Asset Growth 1993 to 2001



US ETF and ETP asset growth as at end of April 2013

At the end of April 2013, the US ETF industry had 1,173 ETFs, with 1,173 listings, assets of US$1,380 Bn, from 36 providers on 3 exchanges. Including other Exchange Traded Products (ETPs), at the end of April 2013, the US ETF/ETP industry had 1,459 ETFs/ETPs, with 1,459 listings, assets of US$1,491 Bn, from 52 providers on 3 exchanges.



Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Apr-13
# ETFs	79	104	117	123	157	207	350	608	704	778	902	1,093	1,161	1,173
# ETFs/ETPs	89	115	128	134	169	221	381	673	845	925	1,099	1,369	1,447	1,459
ETF assets	66	85	102	151	228	305	416	586	498	706	894	939	1,213	1,380
ETF/ETP assets	71	88	106	157	237	311	433	621	539	790	1,010	1,061	1,349	1,491

Source: ETFGI, ETF/ETP Providers, Bloomberg.

Note: "ETFs" are typically open-end index funds that provide daily portfolio transparency, are listed and traded on exchanges like stocks on a secondary basis as well as utilising a unique creation and redemption process for primary transactions. "ETPs" refers to other products that have similarities to ETFs in the way they trade and settle but they do not use a mutual fund structure. The use of other structures including grantor trusts, partnerships, notes and depositary receipts by ETPs can create different tax and regulatory implications for investors when compared to ETFs which are funds.

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How are ETFs different from mutual funds?

- ETF shares are sold or redeemed at today's ETF Fund's NAV to Authorized Participants (APs) in ETF units of 50,000 or more shares
- The APs and market makers offer their shares on equity exchanges at bid/offer prices throughout the trading day and hedge using various techniques
- ETFs are created and redeemed "in-kind" by the receipt or delivery of a defined basket of shares called a "Creation Basket"
- ETF funds are rebalanced when their benchmark index rebalances
- The cash and security details of each Creation Unit are defined in the PCF file prepared on Trade date-1 and published to the market on Trade date .
- Each ETF issuer is obligated to produce a real time "fair value" of an ETF share during exchange trading hours
- The fair value is called an Indicative Intraday Values ("IIVs")
  - produced every 15 seconds during the trading day
  - Also known as IOPV, INAV or real time NAV
- The IIV value permits investors to make "informed decisions" on the bid/offer exchange prices before they buy or sell ETF shares.

How are the Beneficial Owners of ETF Shares Tracked?

- ETFs are held in the broker's participant account at the central depository
- Beneficial ownership records are held on the broker's internal client account systems
- **ETF issuers do not know the beneficial owners of ETF shares**
- The ETF trust has only one beneficial owner: the nominee name of the central depository.
- Not knowing the beneficial owner of ETF shares complicates the ETF sales and distribution process
  - Discovering the needs and uses of ETF investors is the greatest challenge to ETF issuer's distribution
  - ETFs are used by: financial consultants, registered investment advisors, retail investors and institutional investors
  - In highly liquid ETFs retail and institutional investors are equal users

How are ETF shares delivered to the Investors?

- APs receive their ETF shares creation units using the index receipt process through the central counterparty system at the depository.
- Investors who execute there trades on an exchange receive their stock through the exchange clearance and settlement process like ordinary corporate stocks
- ETF share prices always include a net income and expense component just like other collective investments
- ETF custodians must be a member of the central counterparty and net settlement systems in order to process the creation and redemption of US domestic ETF shares
- The underlying offshore shares of the ETF funds settle free within the local markets at the sub-custodian and the ETF transfer agent ("TA") in the US delivers the ETFs to the AP's account at DTC

ETF Unique Processes

- Dividends, proxies, corporate actions and all other shareholder services are processed through the broker's account at the central depository like corporate stock
- APs pay the custodial fees for the free receive and deliver of ETF basket shares and the shares enter the fund at their closing prices
- On redemptions, the ETF fund delivers the ordinaries to the AP at their historical cost basis and the AP delivers the ETF shares to the ETF fund at the NAV.
- At redemption, APs takes a taxable gain on the redeemed ordinary shares and a taxable loss on the ETFs shares
- ETF shares are often used to service the short side of the market needs for hedging and tactical allocations

ETF Cost Savings to Investors

- How do ETFs and ETPs save money for issuers and investors?
  - The custodial fees for the receive and deliver of ETF basket shares are paid by the AP
    - Result: no custody transaction costs are passed onto the ETF fund to receive or deliver ordinary shares
  - In-kind redemptions and creations are directly with the ETF fund
    - Result: no market impact costs for share transactions , except rebalancings, for shares coming into or out of ETF fund
  - On redemptions, the ETF funds deliver the shares to the AP at their historical cost basis
    - Result: the ETF fund do not realize capital gains from selling shares to generate cash
  - ETF shares trade in the secondary exchange market
    - Result: ETF fund holdings are not impacted by the trading activity, only creations and redemptions affect the ETF fund
  - Corporate actions and dividends are processed by the central depository systems
    - Result: ETF interacts with central depository instead of beneficial owners

How do the APs get the ETF Units from the ETF Trust?

- The ETF trust receives the in-kind deposit of shares and the Fund's global ETF share certificate is marked-up and marked-down with creations and redemptions on T+3
- In the DTC Direct Withdrawal At Custodian system ("DWAC") the global share certificate can be marked up for creations until 6 PM on contractual settlement date to deliver the ETF Unit to the AP
- The AP must have the creation basket in his depository position prior to the close of T+2 in order for the TA to release the ETFs units on the morning of T+3
- For global ETFs the AP can borrow the foreign ordinaries from the ETF fund on contractual settlement date to complete the ETF Creation Unit or:
  - The AP can also post cash collateral with the ETF fund equal to 105% of the failed ordinary shares until the failed shares are received by the fund
  - If an AP is restricted from transacting in any share of a creation, the AP can give the ETF fund cash-in-lieu and the fund will purchase the shares and bill all the transaction costs to the AP

How are the ETFs share baskets processed in the U.S.?

- A special NSCC CUSIP (the "S" CUSIP) is given to each ETF creation unit to support the ETF creation and redemption process at the NSCC
- ETF individual shares all have street-wide CUSIPS to settle investor exchange transactions.
- All in-kind primary market creations and redemptions are free receives and free delivers at the custodians.
- The exchange closing price of each share deposited into the ETF fund, as part of the creation process, drives the capital gains calculations when they are redeemed by APs.
- The fund accounting for the ETF trust must mirror this process in order to drive the tax lot entries for the AP's on redemption.
- The FX rates for foreign shares use the 4:00PM GMT WM Reuters prices for their cost basis
- Any difference between the end of day NAV and the estimated NAV from T-1 is resolved using "topping off cash" as calculated on trade date (T) and included in the final AP settlement calculation on T+1

Why are APs important?

- APs have a direct contractual relationship with the ETF fund to create and redeem shares for market participants in the primary market.
- If the basket shares are difficult to price or the creation fees are too expensive, the AP will trade other ETFs and the lead market maker (LMM) will have very wide bid/offer spreads on the ETF.
- If the value of the ETF's creation basket is significant or it's ETF trading volume is small, the AP will bear significant inventory funding costs prior to inventory liquidation.
- ETF trading volume is a measure of liquidity and liquidity leads to asset growth in the ETF market.
- Total ETF liquidity is the sum of the underlying equities, the listed derivatives of the benchmark index ordinaries and listed options on the ETFs.

Market Makers & ETFs Users

- Market makers in ETFs are important because they:
  - add liquidity to the ETF shares prices and volume
  - service many different investor types
  - employ ETF shares in proprietary derivative strategies and OTC options
- ETF users can be:
  - other ETFs funds
  - mutual funds to securitize uninvested cash
  - basis trades on equity indexes or OTC funds
  - alpha strategies for alternative investments and hedge funds (long/shorts)

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Appendix Information Supplied by Deborah Fuhr of ETFGI

ETFGI US ETF and ETP industry insights April 2013

ETFIG.com

- **According to ETFGI records, net inflows of $107 billion year to date through the end of May 2013 helped to push assets invested globally in ETFs and ETPs to a new all-time high of $2.14 trillion dollars.**
  - Equities ETPs and ETFs saw inflows of $25 billion in May
  - Fixed Income ETFs and ETPs saw $3.1 billion in May
  - Commodity ETFs and ETPs saw outflows of $6.7 billion in May
- Current asset rankings in ETFs and ETPs in USD
  - iShares $820 billion
  - State Street SPDRs $365 billion
  - Vanguard $290 billion
  - Invesco/PowerShares $74 billion and Deutsche Bank $69 billion

US ETF and ETP asset growth as at end of April 2013

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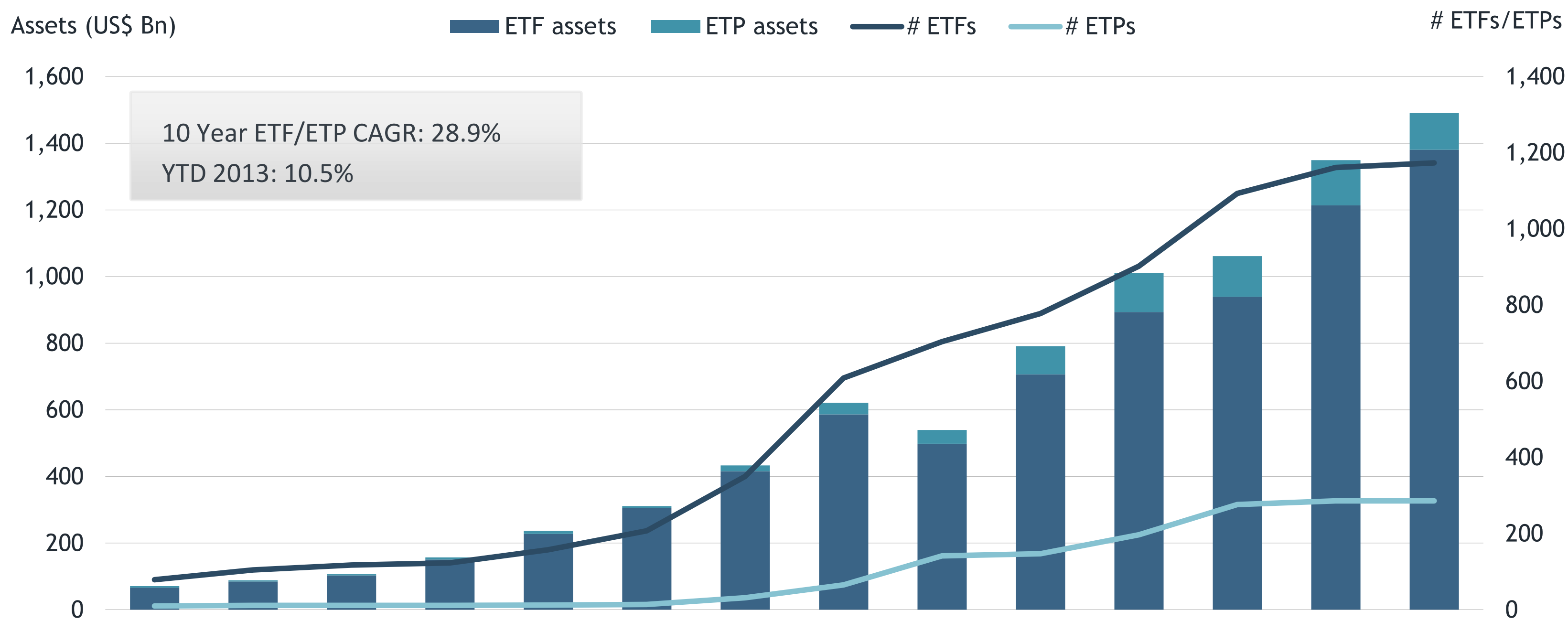

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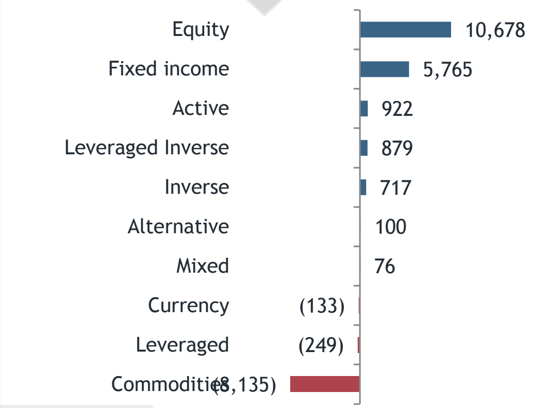
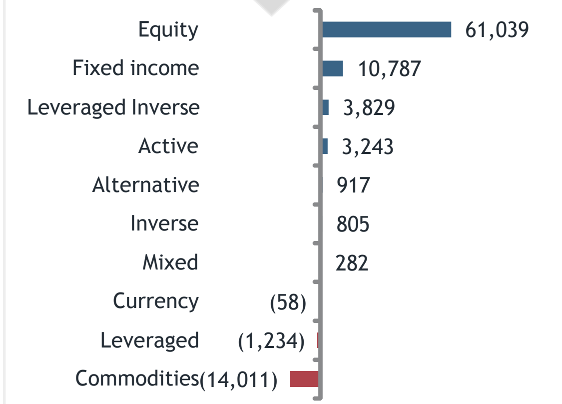
ETFs/ETPs by asset class: United States

April 2013 ETF/ETP net new assets by type of exposure (US$ Mn)



Total: 10,618

YTD ETF/ETP net new assets by type of exposure (US$ Mn)



Total: 64,912

In April 2013, ETFs/ETPs saw net inflows of US$10,618 Mn.

Equity ETFs/ETPs gathered the largest net inflows with US$10,678 Mn, followed by fixed income ETFs/ETPs with US$5,765 Mn, and active ETFs/ETPs with US$922 Mn, while commodity ETFs/ETPs experienced the largest net outflows with US$8,135 Mn.

YTD through end of April 2013, ETFs/ETPs have seen net inflows of US$65,599 Mn.

Equity ETFs/ETPs gathered the largest net inflows YTD with US$61,039 Mn, followed by fixed income ETFs/ETPs with US$10,787 Mn, and leveraged inverse ETFs/ETPs with US$3,829 Mn, while commodity ETFs/ETPs experienced the largest net outflows YTD with US$14,011 Mn.

Exposure	# ETFs/ ETPs	Assets (US$ Mn) Apr-13	% market share	ADV (US$ Mn) Apr-13	NNA (US$ Mn) Apr-13	NNA (US$ Mn) YTD 2013	NNA (US$ Mn) YTD 2012	NNA (US$ Mn) 2012
Equity	754	1,086,318	72.9%	48,733	10,678	61,039	33,204	120,765
Fixed income	173	240,790	16.2%	3,400	5,765	10,787	19,954	46,440
Commodities	149	111,104	7.5%	5,271	(8,135)	(14,011)	3,533	13,666
Active	62	13,942	0.9%	150	922	3,243	708	5,038
Alternative	16	2,242	0.2%	1,187	100	917	2,419	2,958
Currency	21	3,005	0.2%	202	(133)	(58)	(1,436)	(2,366)
Mixed	30	1,776	0.1%	14	76	282	53	312
Leveraged	118	13,250	0.9%	2,659	(249)	(1,234)	(1,757)	(994)
Inverse	48	5,652	0.4%	663	717	805	(533)	(555)
Leveraged Inverse	88	12,805	0.9%	2,697	879	3,829	2,265	1,396
Total	**1,459**	**1,490,882**	**100.0%**	**64,976**	**10,618**	**65,599**	**58,410**	**186,659**

Source: ETFGI, ETF/ETP Providers, Bloomberg.
Note: This report is based on the most recent data available at the time of publication. Asset and flow data may change slightly as additional month-end data becomes available.

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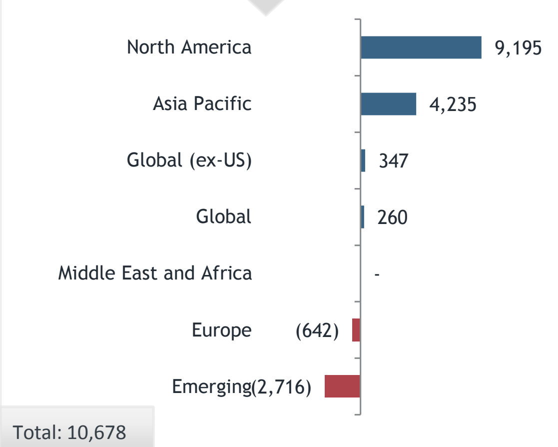
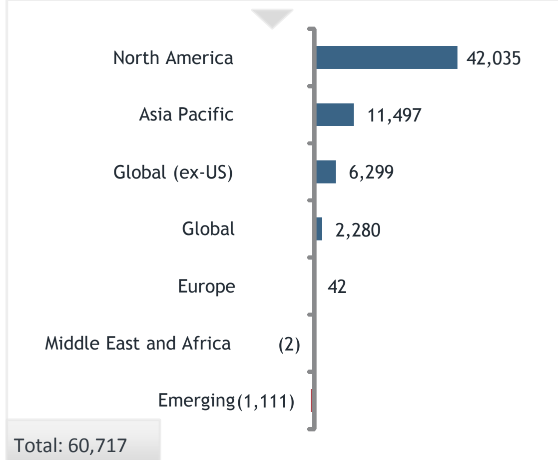
US ETFs/ETPs by asset class: Equity





Exposure	# ETFs/ ETPs	Assets (US$ Mn) Apr-13	% market share	ADV (US$ Mn) Apr-13	NNA (US$ Mn) Apr-13	NNA (US$ Mn) YTD 2013	NNA (US$ Mn) YTD 2012	NNA (US$ Mn) 2012
Asia Pacific	35	37,854	3.5%	1,102	4,235	11,497	(277)	650
Europe	35	19,225	1.8%	428	(642)	42	1,015	6,918
Emerging	142	160,675	14.8%	5,600	(2,716)	(1,111)	10,468	29,944
Middle East and Africa	1	83	0.0%	1	-	(2)	(0)	(1)
North America	409	752,826	69.3%	39,982	9,195	42,035	20,422	72,487
Global (ex-US)	70	96,280	8.9%	1,472	347	6,299	586	8,731
Global	62	19,375	1.8%	148	260	2,280	991	2,034
Total	**754**	**1,086,318**	**100.0%**	**48,733**	**10,678**	**61,039**	**33,204**	**120,765**

In April 2013, equity ETFs/ETPs saw net inflows of US$10,678 Mn.

North American equity ETFs/ETPs gathered the largest net inflows with US$9,195 Mn, followed by ETFs/ETPs providing exposure to developed Asia Pacific equity indices with US$4,235 Mn, and global (ex-US) equity ETFs/ETPs with US$347 Mn, while emerging market equity ETFs/ETPs experienced the largest net outflows with US$2,716 Mn.

YTD through end of April 2013, equity ETFs/ETPs have seen net inflows of US$61,039 Mn.

North American equity ETFs/ETPs gathered the largest net inflows YTD with US$42,035 Mn, followed by developed Asia Pacific equity ETFs/ETPs with US$11,497 Mn, and global (ex-US) equity ETFs/ETPs with US$6,299 Mn, while emerging market equity ETFs/ETPs experienced the largest net outflows YTD with US$1,111 Mn.

Source: ETFGI, ETF/ETP Providers, Bloomberg.
Note: This report is based on the most recent data available at the time of publication. Asset and flow data may change slightly as additional month-end data becomes available. The data displayed above does not include active, leveraged, inverse or leveraged inverse products.

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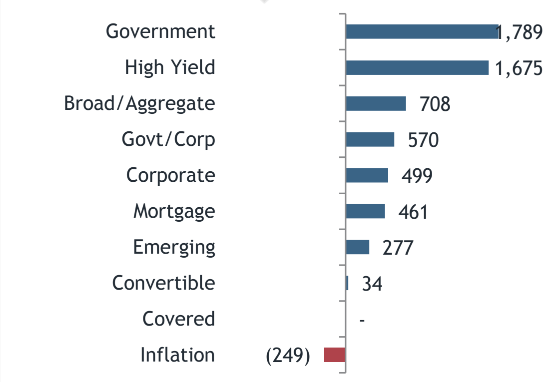
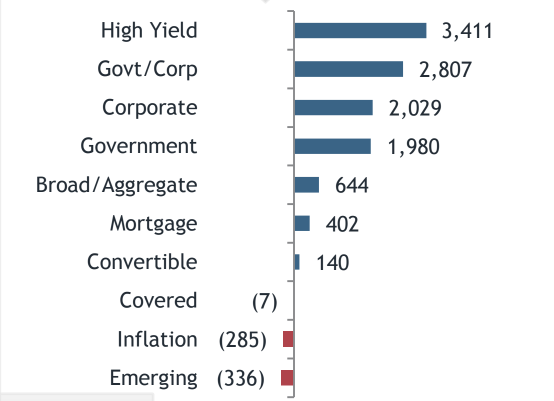
US ETFs/ETPs by asset class: Fixed Income

April 2013 ETF/ETP NNA by fixed income exposure (US$ Mn)



Total: 5,765

YTD ETF/ETP NNA by type of fixed income exposure (US$ Mn)



Total: 10,447

Exposure	# ETFs/ ETPs	Assets (US$ Mn) Apr-13	% market share	ADV (US$ Mn) Apr-13	NNA (US$ Mn) Apr-13	NNA (US$ Mn) YTD 2013	NNA (US$ Mn) YTD 2012	NNA (US$ Mn) 2012
Broad/Aggregate	8	35,143	14.6%	213	708	644	1,986	4,880
Convertible	1	1,137	0.5%	13	34	140	148	165
Corporate	38	57,402	23.8%	606	499	2,029	7,158	16,314
Covered	1	7	0.0%	0	-	(7)	-	13
Emerging	13	11,572	4.8%	163	277	(336)	1,520	5,522
Government	64	43,044	17.9%	1,364	1,789	1,980	(798)	460
Govt/Corp	7	19,114	7.9%	128	570	2,807	670	4,215
High Yield	20	37,788	15.7%	668	1,675	3,411	7,779	11,251
Inflation	15	28,151	11.7%	182	(249)	(285)	457	866
Mortgage	6	7,432	3.1%	64	461	402	1,033	2,752
Total	**173**	**240,790**	**100.0%**	**3,400**	**5,765**	**10,787**	**19,954**	**46,440**

Source: ETFGI, ETF/ETP Providers, Bloomberg.

Note: This report is based on the most recent data available at the time of publication. Asset and flow data may change slightly as additional month-end data becomes available. The data displayed above does not include active, leveraged, inverse or leveraged inverse products.

In April 2013, fixed income ETFs/ETPs saw net inflows of US$5,765 Mn.

Government bond ETFs/ETPs gathered the largest net inflows with US$1,789 Mn, followed by high yield ETFs/ETPs with US$1,675 Mn, and broad/aggregate ETFs/ETPs with US$708 Mn, while inflation ETFs/ETPs experienced the largest net outflows with US$249 Mn.

YTD through end of April 2013, fixed income ETFs/ETPs have seen net inflows of US$10,787 Mn.

High yield ETFs/ETPs gathered the largest net inflows YTD with US$3,411 Mn, followed by govt/corp ETFs/ETPs with US$2,807 Mn, and corporate bond ETFs/ETPs with US$2,029 Mn, while emerging market bond ETFs/ETPs experienced the largest net outflows YTD with US$336 Mn.

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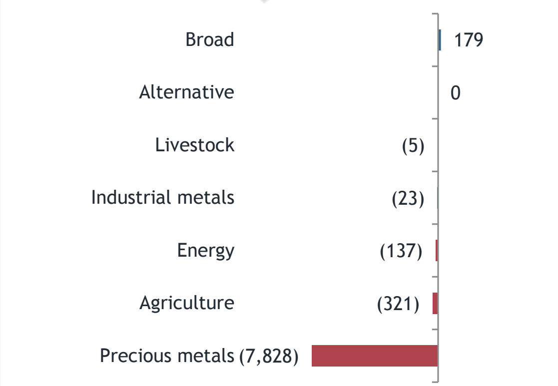
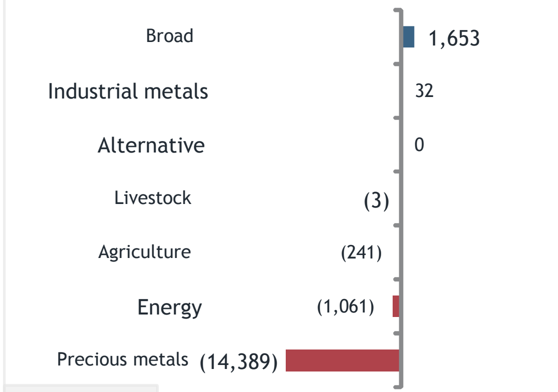
US ETFs/ETPs by asset class: Commodities

April 2013 ETF/ETP NNA by commodity exposure (US$ Mn)



Total: (8,135)

YTD ETF/ETP NNA by type of commodity exposure (US$ Mn)



Total: (14,026)

In April 2013, commodity ETFs/ETPs saw net outflows of US$8,135 Mn.

Precious metals ETFs/ETPs experienced the largest net outflows with US$7,828 Mn, followed by agriculture ETFs/ETPs with US$321 Mn, and energy ETFs/ETPs with US$137 Mn, while broad commodity ETFs/ETPs gathered the largest net inflows with US$179 Mn.

YTD through end of April 2013, commodity ETFs/ETPs have seen net outflows of US$14,011 Mn.

ETFs/ETPs providing exposure to precious metals experienced the largest net outflows YTD with US$14,389 Mn, followed by energy ETFs/ETPs with US$1,061 Mn, and agriculture ETFs/ETPs with US$241 Mn, while broad commodity ETFs/ETPs gathered the largest net inflows YTD with US$1,653 Mn.

Exposure	# ETFs/ ETPs	Assets (US$ Mn) Apr-13	% market share	ADV (US$ Mn) Apr-13	NNA (US$ Mn) Apr-13	NNA (US$ Mn) YTD 2013	NNA (US$ Mn) YTD 2012	NNA (US$ Mn) 2012
Broad	29	17,425	15.7%	337	179	1,653	744	1,990
Alternative	1	1	0.0%	0	0	0	(0)	0
Agriculture	31	8,117	7.3%	69	(321)	(241)	(440)	(1,003)
Energy	30	3,639	3.3%	378	(137)	(1,061)	644	903
Industrial metals	22	974	0.9%	16	(23)	32	11	(145)
Livestock	3	62	0.1%	1	(5)	(3)	(39)	(33)
Precious metals	33	80,886	72.8%	4,471	(7,828)	(14,389)	2,612	11,953
Total	**149**	**111,104**	**100.0%**	**5,271**	**(8,135)**	**(14,011)**	**3,533**	**13,666**

Source: ETFGI, ETF/ETP Providers, Bloomberg.
Note: This report is based on the most recent data available at the time of publication. Asset and flow data may change slightly as additional month-end data becomes available. The data displayed above does not include active, leveraged, inverse or leveraged inverse products.

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ETFS by Global Regions

ETFs/ETPs listed by region/country: Global

ETF/ETP assets have increased by 1.7% from US$2,090,497 Mn in March 2013 to US$2,125,656 Mn in April 2013.

North America	# ETFs/ ETPs	# total listings	Assets (US$ Mn)	NNA Apr-13 (US$ Mn)
Canada	275	391	58,161	(284)
US	1,459	1,459	1,490,882	10,618
Total	1,734	1,850	1,549,043	10,334

Latin America	# ETFs/ ETPs	# total listings	Assets (US$ Mn)	NNA Apr-13 (US$ Mn)
Brazil	15	15	1,755	68
Chile	1	107	14	(1)
Colombia	1	1	1,306	36
Mexico	19	447	10,556	28
Peru	-	3	-	-
Total	36	573	13,630	132

Europe	# ETFs/ ETPs	# total listings	Assets (US$ Mn)	NNA Apr-13 (US$ Mn)
Austria	1	21	93	(14)
Belgium	1	38	39	(2)
Finland	1	1	198	-
France	281	546	50,017	(228)
Germany	600	1,867	133,109	(1,085)
Greece	3	3	33	-
Hungary	1	1	0	-
Ireland	1	3	30	-
Italy	55	850	3,595	138
Netherlands	23	154	791	81
Norway	7	15	548	(4)
Poland	1	3	18	0
Portugal	3	3	85	-
Romania	1	1	0	-
Russia	2	2	9	-
Spain	14	75	791	(0)
Sweden	26	136	3,875	69
Switzerland	279	1,094	52,415	(945)
Turkey	16	16	162	(50)
UK	649	1,393	138,973	1,316
Total	1,965	6,222	384,780	(725)

Middle East and Africa	# ETFs/ ETPs	# total listings	Assets (US$ Mn)	NNA Apr-13 (US$ Mn)
Botswana	-	2	-	N/A
Ghana	-	1	-	N/A
Israel	453	453	23,999	221
Nigeria	-	1	-	N/A
Saudi Arabia	3	3	21	N/A
South Africa	63	63	5,292	N/A
UAE	1	1	9	N/A
Total	520	524	29,321	221

Asia Pacific	# ETFs/ ETPs	# total listings	Assets (US$ Mn)	NNA Apr-13 (US$ Mn)
Australia	64	85	5,891	8
China	56	56	22,952	(131)
Hong Kong	82	110	35,126	(1,058)
India	37	37	1,954	4
Indonesia	2	2	27	1
Japan	121	155	60,182	63
Malaysia	4	5	345	-
New Zealand	5	5	301	(1)
Singapore	30	99	2,803	80
South Korea	137	137	15,088	1,012
Taiwan	20	23	4,582	(50)
Thailand	14	14	230	1
Total	572	728	149,480	(69)

Source: ETFGI, Bloomberg, ETF/ETP providers, Bank of Israel, WIND.

About ETFGI

ETFGI is a wholly independent research and consultancy firm providing services to leading global institutional and professional investors, the global exchange traded fund and exchange traded product industry, its Regulators, and other firms supporting the ETF Eco-system.

ETFGI produces extensive ETF-specific analysis covering over 4,700 ETFs and ETPs, across 9,500 exchange listings from over 200 providers on 50 stock exchanges.

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The founding partners of the firm bring a wealth of ETF implementation and capital markets experience to the venture. Deborah Fuhr, Shane Kelly and Matthew Murray were instrumental in the development of the first ETF global industry research reports and worldwide handbooks while they were at Morgan Stanley and most recently they have been responsible for the development and production of ETF reports and handbooks at BlackRock/Barclays Global Investors.

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