

HEDGENORDIC

Game Changers in a Changing Game

Deborah Fuhr sees ETFs as cost effective hedging tools for hedge funds

Institutional ETF Demand

AP3 and Blackrock sharing thoughts from both sides of the spectrum

Where ETFs and Hedge Funds Meet

Exploiting hedge fund manager skill through ETFs

Guidling Light

Key issues facing European ETFs highlighted by Northern Trust's Fiona Moore

ETFs and Hedge Funds

Where they meet, where they compete



“your single access point
to the Nordic hedge fund industry”

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Editor's note

Hedge funds and Exchange Traded Funds (ETF) at first sight may appear far apart and impossible to compare or even find common ground in the investment universe. But this prejudice is being challenged.

When talking to hedge fund managers and allocators in the Nordics, it has become increasingly clear to us that ETFs have become a much more accepted way of gaining market exposure. This trend is likely to be enhanced by the proposed retrocession ban on fund distribution in Sweden, and put pricing pressure on both the mutual fund and hedge fund industry. The entire discussion on pricing practice of hedge funds took another dimension in the summer, when California Public Employees' Retirement System (CalPERS), the largest pension fund in the U.S., and one of the first pension funds to invest in hedge funds in 2002, announced that it would pull all US\$4 billion invested in hedge funds, due to high cost.

In addition to that, passively following an index, what most early ETFs did, seemed to be a good idea. There are plenty of studies around suggesting that only a fraction of active fund managers manage to outperform “the market” i.e., the index regularly. As an example, the S&P Dow Jones team looked at 2,862 mutual funds that had been operating at least 12 months as of March 2010. Those funds were all broad, actively managed stock funds.

The team selected the 25 percent of funds with the best performance over the 12 month period through March 2010. Then the analysts asked how many of those funds in the top quarter for the original 12 month period — actually remained in the top quarter for the four

succeeding 12 month periods through March 2014. The answer was a vanishingly small number: Just 0,07 percent, or two of the initial 2,862 funds managed to achieve top-quartile performance for that five successive year period.

“Dividing hedge funds and ETFs in categories as Alpha and Beta, active and passive simply will not work anymore.”

It seemed pretty straight forward then that investors are pouring into tools that can provide market Beta at very low cost. There was also a convincing logic splitting investment pools into Alpha and Beta pots. Beta was achieved through ETFs in portfolios, while hedge funds and other alternative investments were used for excess returns, or Alpha. So, it all made sense: mutual funds will disappear, while hedge funds and ETFs will share the 80 trillion or so Dollars invested globally in investment vehicles. The borders were clearly drawn along lines such as active and passive, Alpha and Beta.

Or are they? There are many areas where hedge funds and ETFs meet. In this paper, we try to identify how hedge funds make use of ETFs and how ETFs in return can actually benefit the active investor and the fact that there is today an increased interest for active ETFs coming out of the US where for example hedge fund strategies are replicated through ETFs.

We invited industry experts like ETFGIs Deborah Fuhr, and PWC for an overview of the global perspective and discussed challenges and opportunities ETFs are facing with Fiona Moore, Northern Trust's Head of ETF Fund Administration Europe, and show on two examples how ETFs make use of „hedge fund“ skill.

We also aimed at getting a Nordic skew into the paper, and had the opportunity to get insightful data and expertise from Nasdaq Stockholm, interviewed Swedish pension fund AP3s Hans Ericsson on how he uses ETF for efficient market exposure, and how the Swedish hedgefund eTurn uses ETF in their tactical asset allocation. With Deutsche Asset& Wealth Managements Erik Rotander and Geir Epeskog of iShares Blackrock we have the Nordic representatives of some of the world's largest ETF providers discussing where hedge funds and ETFs meet and what the key drivers for institutional demand are.

Enjoy the HedgeNordic Industry Report!

Kamran George Ghalitschi
CEO / Publisher HedgeNordic

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USD 13 Trillion

Estimated AuM for Alternative Investments by 2020



169%

Increase in ETF Trading Volume in Stockholm Oct. vs Sept.



5463

Number of ETF/ETP Globally

Alternatives become more mainstream, passives are core and ETFs proliferate

Traditional active management will continue to be the core of the industry as the rising tide of assets lifts all strategies and styles of management. But traditional active management will grow at a less rapid pace than passive and alternative strategies, and the overall proportion of actively managed traditional assets under management will shrink.

Alternative and passive assets will grow considerably faster in the lead-up to 2020, to become more significant components of portfolios. By 2020, both alternatives and passive products will represent 35% of total assets managed by the industry.¹⁾ We consider passive investments to include exchange-traded funds and other index-tracking schemes. Alternative investments primarily include hedge funds and hedge fund-like products, private equity funds and real estate investments.

Passive investments to reach \$22.7 trillion by 2020

The increased share of passive investments will be driven by both institutional and retail investors' demands. The separation between alpha and beta currently observed in the industry will further accelerate as investors increase their investment allocation towards passive products in search of low management fees and broad beta market exposure. An analysis of the top 10 global asset managers over the past five years confirms this trend, with Vanguard showing the most significant growth during the past years with its emphasis on passive products. It is followed by BlackRock, which has derived the dominant part of its growth from iShares.

The increasing use of the core-satellite allocation, bridging active and passive exposures, will provide investors with better transparency for performance attribution through clear isolation of alpha and beta. Arguably, there has been a barrier for the active managers because of the regulation from RDR and MiFID II in Europe; therefore, passive strategies are likely to be boosted as ex-US regions catch up with the US.

Growth in passive will also be driven by bans and cost transparency through regulation and, eventually, investors' desires, along with the trend towards more widely diversified

portfolios, which pursue greater return with reduced volatility. In addition, new uses for ETFs will develop as the level of product sophistication continues to increase. For example, institutions will increasingly use them to achieve specific asset class or geographic exposures, while retail investors will employ ETFs

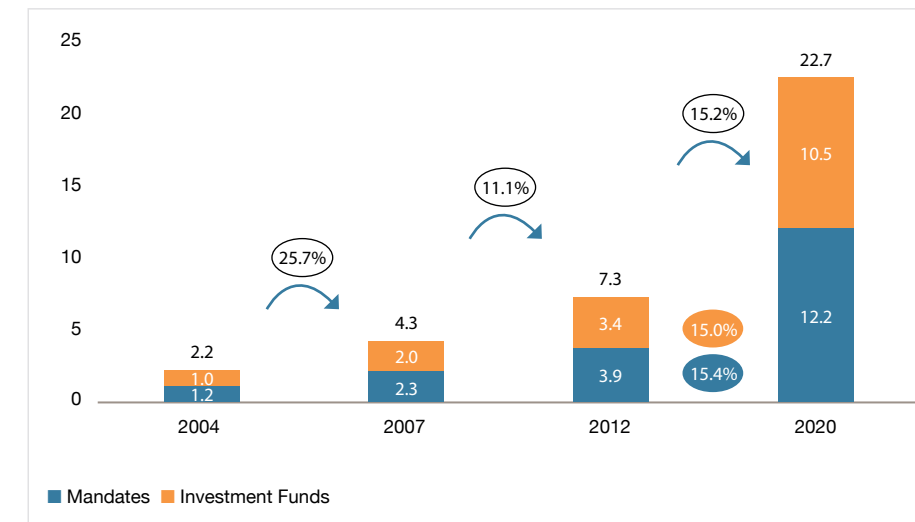
Alternative investments to reach \$13 trillion by 2020

A wider range of investors including retail will be able to access alternatives as regulators allow specific regulated vehicles – such as alternative

SWF markets, while the traditional DB plans, foundations and endowments modestly increase their commitments. The demand for greater alpha will broaden the proportion of alternatives by DC pension funds as well. Uncertainty about the pace and amount of state intervention creates disproportionate opportunities and impacts, and it slows the overall economy and bank activities including lending. When the rules are changing, many investors tend to withdraw, while those with higher risk tolerances place bigger bets. This creates a chasm that separates winners and losers. Institutional investors will exploit the illiquidity premium, many of them enjoy, by increasing allocations to alternatives with illiquid risk-return profiles. Alternative assets are expected to grow by some 9.3% a year between now and 2020, to reach \$13 trillion.

Alternative assets will – with few exceptions – be regulated. No alternative structure, no matter what the distribution channel, will be allowed to operate outside the regulators' purview. In some parts of the world, alternatives will effectively move into the mainstream to the extent that the term 'alternative' may no longer remain in common usage by 2020. Alternatives will become part of the toolset employed in retail products

Global passive investments AuM projection for 2020



Source: PwC analysis. Past data based on ICI and Lipper.

as a lower cost alternative to both active and passive mutual funds and UCITS. The growth of passive strategies will also be fuelled by new innovations in this space, such as factor investing.

UCITS in Europe and alternative mutual funds in the US – to be more widely distributed. Alternative asset classes will feature more prominently in institutional

According to Morgan Stanley Capital International (MSCI), factor investing represents a genuine 'third way' between active and passive, which will continue to grow in popularity. Factor investing will 'cross over' from the realm of active managers, through highly sophisticated institutional passive investors, and into the mass-market retail space.

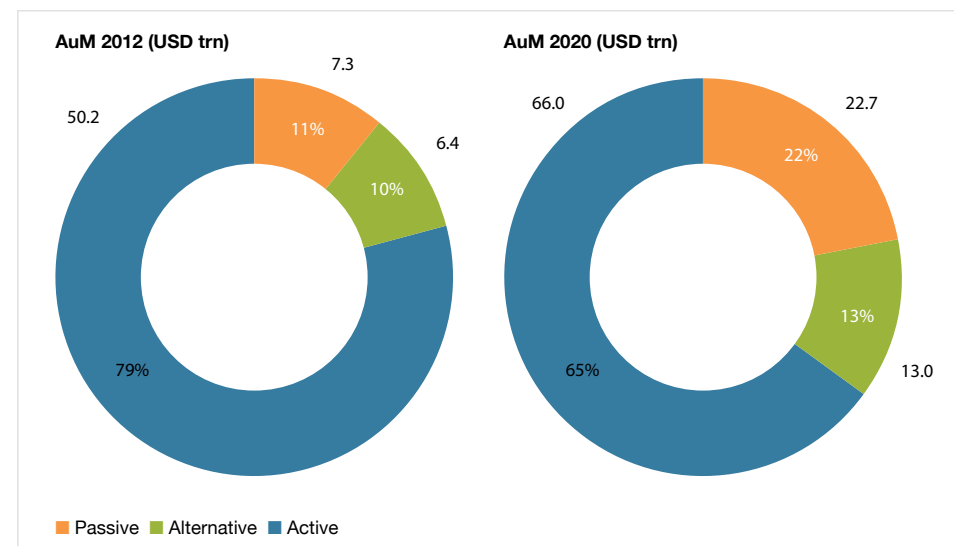
Most global fund managers will have significant ETF offerings by 2020 to service the huge and growing demand. These offerings will encompass both passive and active strategies, and will also service the need for swift market access to alternative strategies. They will likely provide higher margins to firms, given that ETFs have much lower operational costs.

“Most global fund managers will have significant ETF offerings by 2020 to service the huge and growing demand. These offerings will encompass both passive and active strategies, and will also service the need for swift market access to alternative strategies.”

as well as retail portfolios, especially in developed markets. In particular, their growth will be driven by the HNWI and

as investors seek strategies with the prospect of alpha and protection against downside risks. However, a blow-up in

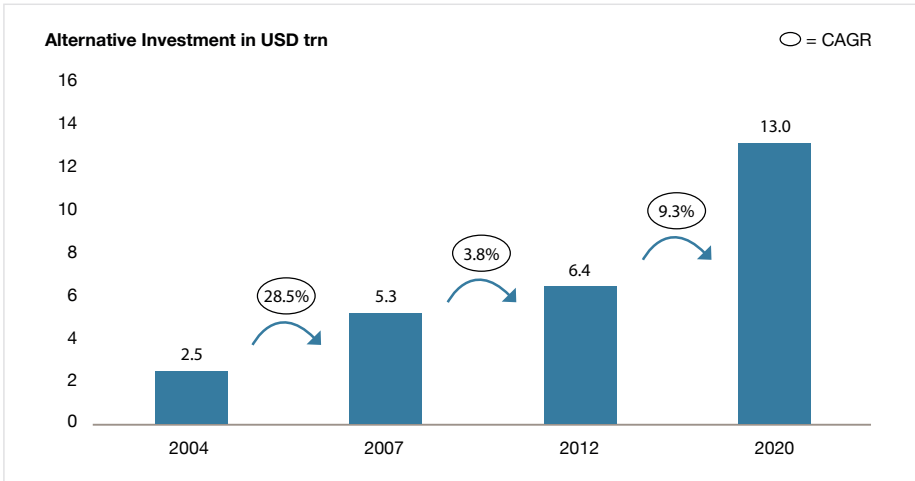
Share of active, alternative and passive within Global AuM



Source: PwC analysis. Past data based on ICI, Lipper, Hedge Fund Research, Preqin, The City UK and Towers Watson.

“Alternative assets will – with few exceptions – be regulated. No alternative structure, no matter what the distribution channel, will be allowed to operate outside the regulators’ purview.”

Global alternative assets projection for 2020



Source: PwC analysis. Past data based on Towers Watson, Preqin, The City UK and Hedge Fund Research.

illiquid assets that affects retail investors could lead to a backlash and a retrenchment of this trend. Regulators in Europe and Asia are already watchful. The industry will provide more education on alternatives to convey the message that the time horizons for such investments are generally long and the natural progression of performance is

sometimes slow and not as visible as traded investments.

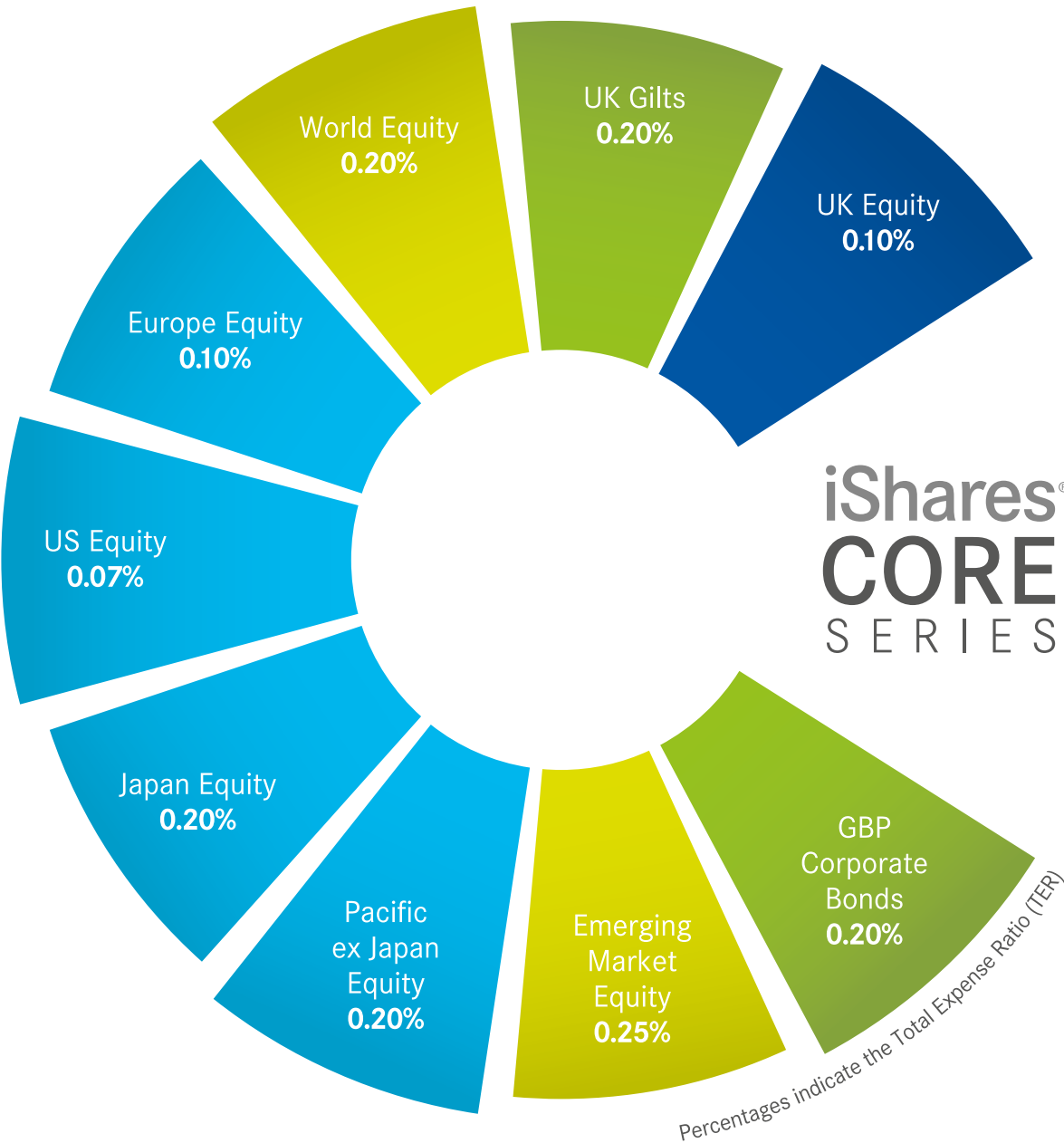
1) Source: PwC analysis based on Hedge Fund Research, Preqin, ICI, Lipper, Towers Watson and The City UK data.

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ETFs: Game Changers in a Changing Game

Investors searching for elusive alpha have for some time focused their attention on issues such as cost and transparency. As a result Exchange Traded Funds, ETFs, have seen a strong growth both in terms of asset inflows but also the types of ETFs available as well as number of users.

In an interview with HedgeNordic Deborah Fuhr, Managing Partner at ETFGI, the global consultancy, said that compared to 25 years ago, when ETFs were only traded on a few developed equity markets, the toolbox has expanded in terms of asset classes, sectors, markets and currencies with a vast range of products now available. “ETFs are now traded in over 50 countries on over 60 exchanges,” she said, adding that investors increasingly use ETFs for alpha-generation, compared to earlier when it was seen as a pure index product.

ETFs, essentially funds traded daily on the equity markets much like single stocks, are generally seen as providing diversification, lower cost, and tax efficiency of index funds. At the same time they still have all trademarks of ordinary stock, such as limit orders, short selling and options. Because of these characteristics, whether index funds or actively managed, ETFs are transparent portfolios, increasing their attractiveness.

Fuhr explained that ETFs are increasingly seen as part of a solution that can be used both tactically in the short-term and more strategically for the longer term. Currently there are 3590 ETF users, compared to 154 in 1997, spread in 52 countries and with over 6400 mutual funds using ETFs. ETFGI’s research shows that ETFs and Exchange Traded Products globally have gathered a record US\$199 billion

in net new assets through the end of Q3 2014, surpassing the previous high of US\$185.8 billion set in the first three quarters of 2012. ETPs are products that have similarities to ETFs in the way they are traded but do not use an open-end fund structure. The Global ETF/ETP industry has 5,463 ETFs/ETPs, with 10,510 listings, assets of US\$2.6 trillion, from 225 providers listed on 61 exchanges, according to preliminary data from ETFGI’s end Q3 2014 Global ETF and ETP industry insights report. YTD NNA flows reached record levels for the ETF/ETP industries in Japan at US\$15 billion, Europe at US\$47.4 billion, and globally at US\$199 billion.

“In September investors invested the majority of net new money into North American equity exposures. Due to the on-going situation in the Ukraine, Scotland’s referendum vote, and the Bank of England Governor’s statement that a rate increase was “getting closer”, investors reduced their exposure to Europe. The unfavourable geopolitical environment caused the S&P 500 to decline 1% in September. Developed markets declined 4% while emerging markets declined 7%.” Fuhr explained.

In September 2014, ETFs/ETPs saw net inflows of US\$13.2 billion. Equity ETFs/ETPs gathered the largest net inflows with US\$14.8 billion, while fixed income ETFs/ETPs saw net outflows of US\$449 million and commodity ETFs/ETPs experienced net outflows of US\$1.5 billion.

SPDR ETFs gathered the largest net ETF/ETP inflows in September with US\$10.5 billion, followed by Vanguard with US\$7 billion, First Trust with US\$939 million, Van Eck with US\$858 million and Wisdom Tree with US\$789 million.

iShares is the largest ETF/ETP provider in terms of assets with US\$980.3 billion, reflecting 37.3% market share; SPDR ETFs is second with US\$431.6 billion and 16.4% market share, followed by Vanguard with US\$406.8 billion and 15.5% market share. The top three ETF/ETP providers, out of 225, account for 69.3% of Global ETF/ETP assets, while the remaining 222 providers each have less than 4% market share.

“Some 285 hedge funds have reported their use of ETFs but the number is likely higher but as they are not required to report it”

Hedge funds are also increasingly using ETFs as a hedging tool as they can be used like derivatives such as options and futures to take long or short positions in investment portfolios. Using ETFs in this way is particularly popular on markets without a liquid futures market or on markets that do not allow shorting such as China and India.



Deborah Fuhr, ETFGI

The attraction of ETFs as a hedging tool for investors, not just hedge funds, is cost effectiveness, as ETFs allow investors of all sizes to take positions with little or no entrance fees. Generally they also have very low holding/management fees compared to the total costs of physical deliver or commissions on futures and options. They also provide access to markets, such as the currency markets, that would not be cost effective for many smaller investors, they also offer better liquidity than futures and options, lower bid/ask spreads and the ability to trade openly in stock exchanges. The creation of increased liquidity by ETF hedging improves transparency and eliminates the counterparty risk associ-

ated with over-the-counter contracts between two parties. Fuhr said that some 285 hedge funds have reported their use of ETFs but the number is likely higher but as they are not required to report it, it is difficult to estimate. Some of the largest ETF users among hedge funds are the likes of Appaloosa, Paulsen, Moore Capital and others. One of the major trends in the past few years has also been the emergence of active ETFs. According to ETFGI, active ETFs account for less than 1% market share but is growing, particularly those trading

on bond markets, because it is harder to mimic the portfolios of over-the-counter bond securities.

One of the most recent entries into this market is Fidelity Investments which is launching three new

active fixed-income ETFs. Commentators have said that although Fidelity may be late in the game, its enormous size could be a market changer. Fidelity has over US\$5 trillion in assets under administration and approximately US\$2 trillion in assets under management. One of the challenges for the ETF industry is the pending approval of non-transparent active ETFs by the US Securities and Exchange Commission, according to Fuhr.

Today’s regulatory regime requires all ETFs, active and passive, to disclose holdings on a daily basis, which is the reason for some active managers not to get into the ETF sector, being forced to reveal their trading secrets. Asset managers such as State Street, BlackRock, Eaton Vance, T. Rowe Price and Precidian Investments have pushed for non-transparent products in order to protect trade executions on day-to-day active management in an ETF wrapper. Fuhr said that should SEC allow these non-transparent structures the ETF industry is likely going to see significant growth. “We may see a wave of products with a lot of assets already in them as asset managers convert existing products into ETFs,” she said, adding that even if the SEC decides not to approve non-transparent ETFs growth will continue.

Fuhr pointed to changes such as the Retail Distribution Review in the UK, and similar changes in countries such as the Netherlands and Sweden expected in the near future, are likely going to benefit the ETF industry as investors become more aware of the impact of fees on performance and the lack of alpha generation. “ETFs are a tool that can be used in many ways but one of the biggest challenges continue to be access to ETFs as funds and not only as shares, as well as educating investors about them,” Fuhr concluded.



The Nordic ETF market set for continued growth

Nasdaq operates the Nordic stock exchanges through its Nasdaq Nordic arm. Since 2002, the company has offered trading in ETFs and remain committed to developing and expanding the ETF offer further. Helena Wedin, Senior Sales Director ETF/ETP Europe at Nasdaq, gives a brief background to the Nordic ETF market, how it has developed over time and what trends she sees driving future growth.

- The Nasdaq ETF platform began trading in 2002 with the first ETF issued in Sweden; Xact OMXS30. Nasdaq later sold the Xact range to Handelsbanken and the Xact ETFs remain the most traded on the Swedish ETF market. Today there are 40 different ETFs listed on the Stockholm Stock Exchange (issued by Alpcot Capital Management, Deutsche Bank, SEB SpotR, Swedbank and Xact). The ETFs traded in Stockholm have a turnover of 10-15 billion SEK per month and the most actively traded asset is the OMXS30 index.

- At the Stockholm Stock Exchange we measure the growth in ETF trading in terms of the turnover of capital which has increased by 19% so far this year compared to the same period last year. The underlying issuers measure growth by looking at capital invested in the funds and this figure is also showing solid growth.

- From a global perspective, the ETF market in Europe is much smaller compared to the market in the US. The Nordic market is relatively immature offering good potential for future growth. In the US, ETFs make out 25% of the total amount of cash equities traded on the exchanges, in Europe the corresponding figure is 8%.

- In terms of the demand for ETFs on our platform we see a clear connection between market volatility and trading activity. When volatility increases we tend to see investors turning to investments carrying lower risk or to leveraged ETFs used for speculative purposes.

- In terms of the pricing of ETFs, we see that costs have come down for the most actively traded ETFs, this is a direct consequence of the increased competition between issuers.

“The discussion around the benefits of passive investing versus active investing has benefited flows to index funds in the Nordics”*

With regards to the number of funds offered on our platform we have seen this number decrease somewhat over time. In Europe, there are today 1360 unique ETFs listed, many of them being cross listed, and the issuers are continuously

reevaluating their offering in order to find the most attractive investment solutions for investors.

With regards to trends driving ETF demand in the Nordics, we see several factors contributing.

- The discussion around the benefits of passive investing versus active investing has benefited flows to index funds in the Nordics as well as globally, this has also worked in favor of ETFs.
- A potential ban on retrocession fees in Sweden is also a possible factor affecting demand for cost efficient funds positively going forward. In countries where we have seen a ban on retrocessions there has been a significant pick-up in demand for cost efficient investment solutions with good risk adjusted returns benefiting ETFs.
- If we see a ban on retrocessions in Sweden we are also likely to see more wrapped solutions such as model portfolios or fund of fund solutions including ETFs offered as a complement to advisory services.



Helena Wedin,
Nasdaq Stockholm

Our assessment is that the ETF market will continue to grow with an increased supply of ETFs and a higher turnover as a result. What we offer today is a market model that is well tested and adapted to international standards. We are well prepared for future growth.

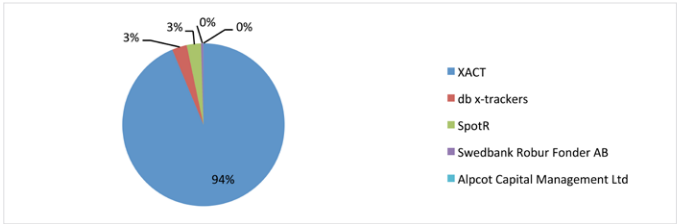
In order to create a more mature market, a better blend of players employing different risk profiles even in ETFs with lower trading volume is required.

An expanded fund offering, for example with the addition of small-cap ETFs, commodity ETFs and interest rate ETFs, would create more choices for investors and contribute to a more complete fund offering. Tailor made solutions such as smart beta funds would also be an exciting addition.

Players in Sweden

Handelsbankens XACT ETFs, largely with their Bull & Bear ETFs on Swedish Equity Index OMX, take the lion share among issuers listed on OMX, accounting for 94% of volumes traded . None of the other issuers listed on Nasdaq Sweden, Db x-trackers, SpotR, Swedbank, Alpcot and UBS, together making up the remaining 6% of volume, has an excess of 3% of market share, statistics provided by Nasdaq reveal.

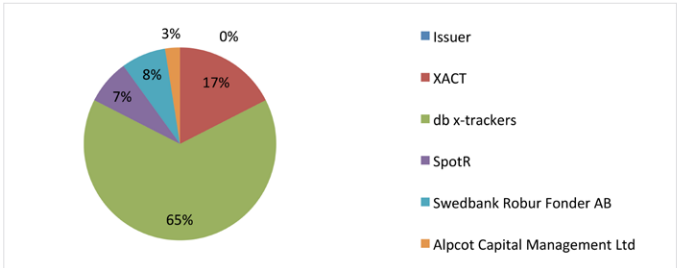
Market Share, Jan-Oct 2014



Source: Nasdaq Stockholm

Looking at the number of listed ETFs on Nasdaq Sweden though shows a very different picture. Deutsche db x-trackers make up almost two thirds of listed products, banning Handelsbankens XACT range to a clear second place with 17%, further distancing Swedbank and SEB SpotR lying head to head with 8% and 7% respectively together account roughly the same number of listed contracts.

Number of Listed ETF (Oct 2014)



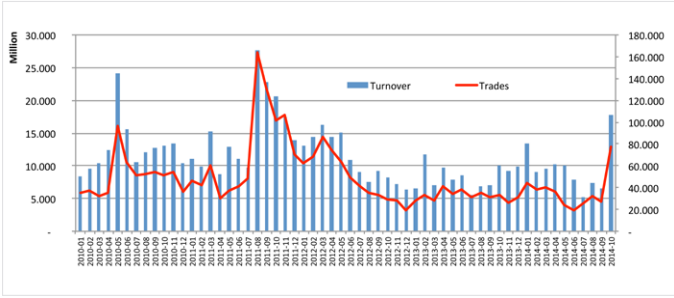
Source: Nasdaq Stockholm

October volatility translates into significant pickup in Nordic ETF activity

Following the wild swings in global equity markets and a significant pickup in market volatility during the month of October, Nasdaq recorded a massive pickup in ETF trading activity on the Stockholm exchange during the month. The total turnover of ETFs traded in Stockholm went from 6 billion

SEK in September to over 17 billion in October, a massive gain of 169%. The level of activity seen in October was the highest in 2 years. In a comment to HedgeNordic, Helena Wedin, says: “In October we had increased volatility in the market, which affected the turnover and number of trades significantly for the ETF-market.”

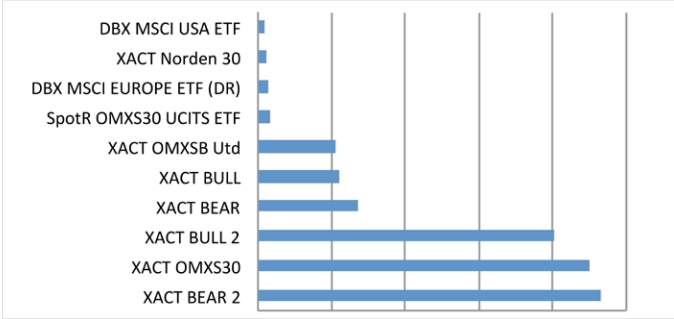
Total turnover Swedish ETF-Market (2 years)



Source: Nasdaq Stockholm

On a contract-by-contract basis, the most widely traded ETF during the month was the XACT Bear 2 (a leveraged version of the XACT Bear instrument), reflecting investors’ interest in speculating for an equity market downturn alternatively hedging out long equity exposures.

Turnover October 2014



Source: Nasdaq Stockholm

Jonathan Furelid



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Where ETFs and Hedge Funds Meet

On the surface it may seem that Exchange Traded Funds, ETFs which are funds traded as stocks in indices, and hedge funds are at the opposite ends of the investment universe never to meet. Looking beyond the first impression of ETFs these two opposites do actually ‘meet’ in several ways.

Firstly, investors have since the crisis become increasingly savvy about fees and transparency, leaving no stone unturned in gleaning every grain of alpha they can from every part of their portfolios, and are increasingly searching for yield in alternative sources such as active and hedge fund ETFs which offer transparency, liquidity and, hopefully, performance at much lower fees than direct investments in hedge funds.

What are these hedge fund ETFs and what strategies do they adopt in order to mimic hedge fund returns and do they pose a threat to the hedge funds themselves? There are several approaches and if it were possible ETFs could simply hold hedge funds in their basket of stocks but they cannot because hedge funds are subject to lock-ups whereas ETFs are traded daily. One approach that has been around for some time is replication. Replication ETFs aim to match hedge fund indexes to their best ability using liquid assets using regressions and other statistical processes, i.e. looking at the past.

Then there is the direct approach where an ETF can act as a hedge fund. Basically, ETFs can use many common hedge fund strategies such as long short, market neutral, currency carry, merger arbitrage as well as macro. These ETFs take direct positions in the underlying securities in order to be able to deliver the strategy as instructed by an index or active management. The ETFs are using the same tools that

hedge funds use, such as take long and short positions in currency forward contracts or offset their long exposure by directly shorting stocks and so on. The direct approach does not work on all strategies because some strategies require capital to be locked in order to have a chance of success.



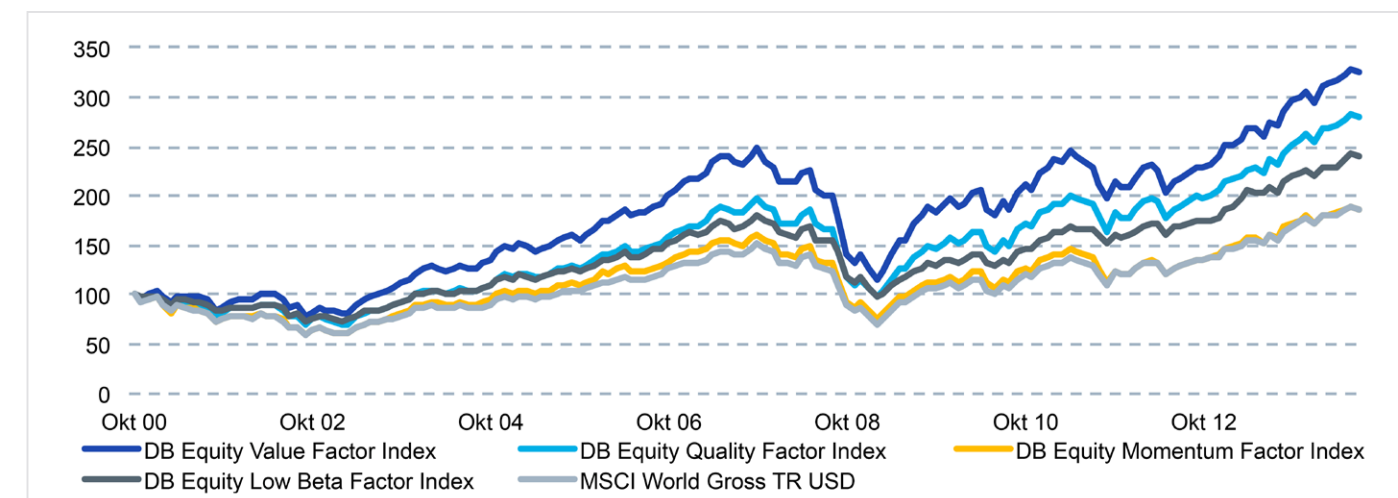
Erik Rotander, Deutsche Asset & Wealth Management

In particular factor-based investing, another direct approach, is gaining popularity and momentum, where the aim is to mimic the methods used by hedge funds rather than replicating an index. Despite the secrecy of hedge funds, they are by law required to disclose their holdings on a quarterly, lagging basis. These types of ETFs gather this public information, then apply various screens to come up with a list of assets that they can hold directly. The obvious benefits of all of these combinations is the comparatively low

transaction and holding costs compared to the costs of futures, options, forwards and other traditional hedging tools. Using short equity ETFs is different than using futures, and matching the hedged positions may not be as exact, but provides easy access as a means to the end. Positions can also be unwound when needed, unlike futures contracts, which expire on a regular basis requiring investors to cash out, take delivery or re-hedge when the contract matures. ETF hedging also creates additional liquidity in markets, increasing transparency and eliminates the counterparty risk associated with over-the-counter contracts between two parties.

Deutsche Asset & Wealth Management is now one of the largest Europe-based ETF providers with a 240-strong ETF supermarket on offer to its clients. Since the initial launch, Deutsche AWM has been able to capitalise on the expertise available at its investment banking arm, Deutsche Bank, to build a comprehensive platform of hedged equity ETFs. Vincent Denoiseux, a director at Deutsche AWM's systematic fund business, said that compared to replication, which aims to replicate the past performance of an index, factor-based investing is instead replicating the method used by hedge funds.

One of the criticisms with any type of copying is that the main asset hedge fund managers have is their skill. Deutsche AWM argue that because



Source: Deutsche Bank, Bloomberg, 31.10.2000–31.07.2014. The performance data in this section is shown for illustrative purposes only. The DB Equity Factors Index have no prior operating history. All performance data is simulated and calculated by means of a retrospective application of the index methodology. Performance is calculated in total return USD and shown gross of dividend withholding tax, rebalancing and index costs. Past performance, actual or simulated, is not a reliable indicator of future results.

their ETFs are based on real managers' performance, the products are able to retain the additional returns generated by the managers' skills, above that of market returns. Denoiseux said the low cost and transparency combined with the focus on equity factors enables Deutsche AWM to offer more tailored solutions to clients. "Our ETFs are like Lego, or building blocks that can be combined in multiple ways to achieve different objectives and a diversified equity factor exposure.

He further explained that using the MSCI World Index is a great starting point because it includes over 1600 stocks, 10 sectors from 23 countries in the world. "A rules-based investment process ensures transparency. Each of the four risk factors – value, quality, low beta and momentum, are derived from Deutsche Bank Equity Strategy Group, again capitalising on the firm's depth and size," he added. Comparing equity factor performance with the MSCI World shows between the periods from October 31, 2000 to July 31, 2014 the four factors all outperformed.

Erik Rotander, head of Nordics-Passive Investment Products at Deutsche AWM, said the evolution of portfolio returns have moved towards explaining the various equity return components which can be

accessed in a transparent, liquid and cost-effective way, using systematic strategies. "Beta allocation means risk and we are providing low-cost tools for investors of all sizes to minimise these risks," he added.

“Basically, ETFs can use many common hedge fund strategies such as long short, market neutral, currency carry, merger arbitrage as well as macro.”

On the question whether Deutsche AWM's hedged ETFs are a direct competitor to hedge funds they are adamant that they are not. Instead they see them as tool providers, also for hedge funds themselves. "Hedge funds need exposure and our building

blocks are a way for hedge funds to access to a large set of sectors," he said, adding that in the US ETFs are now more liquid than futures and can also be more cost efficient and easier to get in and out of.

"This is basically a smarter way of managing money for everyone and hedge funds are doing it themselves as well," Denoiseux, adding that it is about rethinking alpha and analysing how successful managers are doing what they are doing and looking at the ways they are generating alpha. He also said that clients could potentially come direct to Deutsche AWM and build a hedge fund like portfolio but that still requires that client to have the skills and resources to get that far in the allocation and investment process which is not something every CIO can do.

Denoiseux concedes that ETF hedge funds does put pressure on active managers to be truly active in order to justify fees but believes that there is room for everyone as long as invest "For sure, active managers will have to be truly active in order to justify fees but investors will always be willing to pay for skill but whether that will continue to be the usual 2 and 20 is not guaranteed," Denoiseux said.

Pirkko Juntunen



Guiding light

As European ETFs face an intersection of challenges and opportunities, Northern Trust's Fiona Moore reviews these and explains how asset servicing providers can help drive the industry forward.

HedgeNordic: What are the key issues facing European ETFs today?

Fiona Moore: European ETF industry participants are currently dealing with potential wide-ranging changes around everything from market structure, transparency to regulation. While putting the granular details into action will be challenging, the outcome should remove many barriers to growth and help the industry realise its potential.

HedgeNordic: What is the size of the European ETF market?

Fiona Moore: Over the past decade the European ETF market has grown from US\$35 billion to around US\$450* billion representing more than 2000 exchange-traded products. While this growth can be described as meteoric, our industry is still over-shadowed by the US industry which has more than US\$1,860 billion exchange-traded product assets.*

HedgeNordic: Will the new issuance model help?

Fiona Moore: The advent of a new issuance model using International Central Securities Depositories (ICSDs) will potentially help address some of the structural issues impeding growth. As ETFs are issued and settled on the same basis as individual stocks, this creates extra cost for issuers when they have to list on multiple exchanges to reach a pan-European audience. This has resulted in a fragmented market, with issuers having to move their inventory from numerous different settlement systems throughout Europe and issue multiple settlement instructions. The ability to

issue and settle through a single ICSD that covers all EU markets centralises the process. Industry take-up, however, has been sluggish with only newly launched products and no existing conversions as yet.

“The forthcoming Markets in Financial Instruments Directive (MiFID II) proposes significant change for ETF trade reporting.”

HedgeNordic: Could the introduction of Target2 Securities in 2015 be a factor?

Fiona Moore: It is probable that many providers are following developments to Target2-Securities (T2S), the European Central Bank's platform for settling securities as it is aiming to produce similar settlement benefits in terms of reduced settlement time and risk. Northern Trust recently announced a solution for supporting the new centralized delivery-versus-payment settlement in central bank funds across European securities markets, on behalf of our clients. However as the UK, Sweden and a number

of other countries are not included in T2S, an ETF trade moving from Crest to a T2S market will remain cross-border so Northern Trust's ETP Direct solution continues to offer advantages for settlement of such transactions. As Northern Trust acts as the central clearer for our clients' ETF units, ETP Direct allows Northern Trust to mark up the shares in one settlement system and down in another, thereby seamlessly moving stock between CSDs without using the cross-border links.

HedgeNordic: How is the ETF industry impacted by the Markets in Financial Instruments Directive?

Fiona Moore: The forthcoming Markets in Financial Instruments Directive (MiFID II) proposes significant change for ETF trade reporting. Under revisions proposed to take effect from January 2017, the pre and post-trade transparency regime for shares would be extended to cover ETFs. It also envisages that there should be a consolidated tape of trade reports for ETFs. At the same time, a consolidated tape for European ETFs also has been raised by the European Securities Market Authority, receiving a positive response.

HedgeNordic: What will the benefits be?

Fiona Moore: Added insights into market liquidity will be welcomed by investors while issuers should be able to target their products more accurately. In our role as asset servicer we can work with clients to devise a distribution strategy and more trade reporting will help to do that.

HedgeNordic: Will this be easy to implement?

Fiona Moore: This is by no means a 'plug and play' change. A lot of work will be involved in how the trades will be reported and how that reporting data will be interpreted.

HedgeNordic: What are your views on the use of ETFs for securities lending?

Fiona Moore: The use of ETFs for securities lending could also enhance liquidity within the European market. There are, however, many issues that need to be reviewed by the industry such as ETF classification, lending guidelines and collateral eligibility.

HedgeNordic: How are ETF asset servicing providers supporting these developments?

Fiona Moore: We approach the evolving regulatory and market structure changes at both an industry and client-facing level. Through our regular contact with regulators and other industry stakeholders, we contribute to industry consultations and debate where appropriate. This helps to ensure a service provider's perspective is taken into consideration. As an organisation we are committed to enhancing and

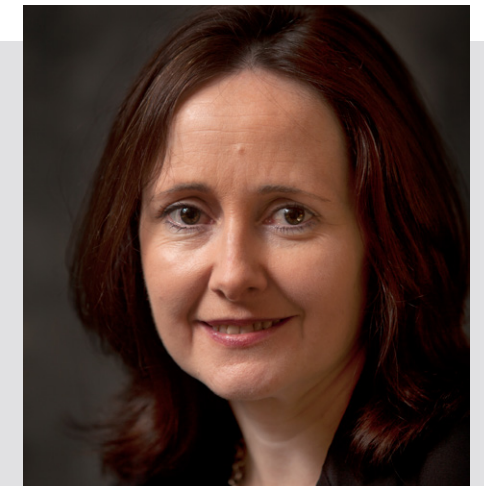
developing our operating infrastructure to give ETF providers a solid foundation from which to grow. For example, our ETF technology solution integrates core processing systems within Northern Trust and monitors the entire ETF deal lifecycle.

HedgeNordic: How would you sum up the future for European ETFs?

Fiona Moore: While the European ETF industry faces challenges to adapt to the latest round of regulatory and market developments, these will ultimately lead to a greater inflow of assets.

**As reported in Blackrock ETP Landscape Report, October 2014.*

Kamran Ghalitschi

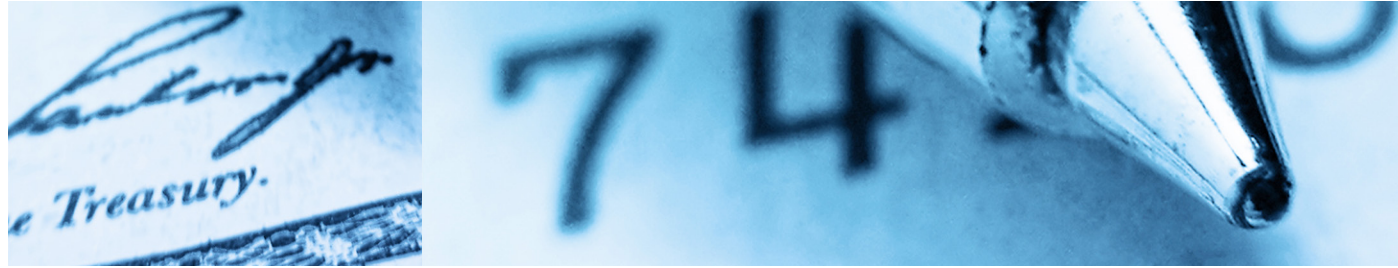


Fiona Moore

Fiona Moore is Northern Trust's Head of ETF Fund Administration Europe.

For more information email fiona_moore@ntrs.com, or visit northerntrust.com/etfs-emea

Northern Trust is a highly experienced provider of asset servicing solutions for ETFs in Europe. Its ETF operations are part of its Global Fund Services business which has over 30 years' experience administering the full spectrum of investment strategies across traditional and alternative asset classes including hedge, private equity, real estate and tax-transparent funds.



Trends Driving Institutional ETF-Demand

Geir Espeskog, Head of iShares Nordics at Blackrock, elaborates on trends that currently drive ETF growth and why ETFs are likely to play an increasingly important role in institutional portfolios going forward.

Industry growth translates into better liquidity and lower costs

- The European ETF market is at a tipping point of accelerated growth. We see new user groups and new uses emerging for ETFs. This year alone the European ETF market has grown by US\$48bn to a total of around US\$460bn across 2,205 Exchange Traded Products (ETPs). This compares to a growth of 19.4bn last year. Globally around US\$2,600bn is now managed in ETPs across 5,266 products, and iShares manages around US\$1,000bn.

- Why is this important for investors? The answer is liquidity. iShares in Europe now has 53 funds with more than US\$1bn in assets, this is up 33% from April 2013. Across all issuers, 90 European ETFs have AUM of more than US\$1bn (20% more than Jan 2013: 75). With the increased fund size comes the direct benefit to investors in the form of greater liquidity, tighter trading spreads and lower transaction costs. This is important to ensure that investors have a low Total Cost of Ownership (TCO). TCO includes all holding costs as well as round trip trading spreads.

ETFs increasingly accepted as core holding

- One trend is the use of ETFs as core positions in portfolios. In response to this trend, we launched CORE in the US in 2012 and in Europe this year and also recently launched "CORE select" (US\$132bn in assets). This was driven by buy-and-hold demand for ETFs – to build a cheap, passive

“In many ways ETFs are now democratizing the fixed income markets in the same way as they did to equity markets 10 years ago”

core using ETFs. CORE is a lower cost range of the main ETF building blocks needed to construct a global equity and fixed income portfolio. This trend is spreading globally. In the Nordics we have also seen institutions take advantage of our Core Series.



Geir Espeskog, iShares Nordics at Blackrock

Product innovation expand opportunity set

- Outside of equities, the fixed income duration rotation was the most significant trend of 2013. Short and ultra-short products are giving investors new opportunities as we enter an environment of tapering. In many ways ETFs are now democratizing the fixed income markets in the same way as they did to equity markets 10 years ago. ETFs are revolutionizing the fixed income market, allowing on-exchange investors cost efficient, liquid, and transparent access to what has traditionally been and an Over the Counter market. In fact fixed income ETFs constitute nearly 40% of the new inflows in Europe this year. Minimum volatility products, ie ETFs providing exposure to equities but with lower volatility, is another area of strong growth and so is alternative beta (also referred to as smart beta) products where alternative non-cap weighted funds are attracting interest.

Regulatory Changes working in favour of ETFs

- In the institutional segment, regulatory change such as Basel III and Dodd Frank are increasingly constraining bank balance sheets and increasing funding costs. This has two key impacts for institutional use of ETFs as financial instruments. Firstly banks have reduced inventories of investment

grade and high yield bonds which again reduces liquidity in the underlying bonds, and at the same time fixed income ETFs are seeing increased liquidity. From 31 December 2007, to 31 December 2013, the Global corporate bond market grew 63% from US\$4.4 trillion to US\$7.2 trillion. Over the same time period, the amount of assets in investment grade and high yield corporate bond ETFs globally jumped from US\$5.4 billion to US\$122.4 billion, more than 20-fold increase. The growth in fixed income ETF assets under management (AUM) has been accompanied by an almost ten-fold increase in exchange trading volumes over the same time period as investors have looked to utilize ETFs as bond liquidity vehicles.

“In the Nordics, around 95% of our ETF investments are from institutional investors”

Secondly increased funding costs are being passed on to investors from banks through other financial instruments such as futures. One really interesting element of where I see significant growth potential, is ETFs being used instead of futures. In the past futures have been seen as the cheapest possible option but in some instances, ETFs are now cheaper. The historical average roll cost for the S&P500 since 1996 has been around 8bps. Average roll costs in the last 1 year are around 48bps. That's a big jump. And we expect this could persist going forward. The futures market is around US\$1trn – we can see a huge growth opportunity here with large institutional clients replacing futures for ETFs. We've already seen over US\$2bn from clients switching from futures to ETFs globally.

Institutions jumping on the ETF bandwagon

- Institutional asset managers are using ETPs more and more to implement investment decisions in active, passive and blended portfolios. According to a recent study made by Greenwich Associates, ETFs have evolved into a standard instrument in the toolboxes of U.S. institutional investors where a growing number of institutions are using ETFs as a means of achieving core portfolio exposures. In the Nordics, around 95% of our ETF investments are from institutional investors such as pension funds, insurers and asset managers. Low cost and liquidity matter for institutions, and ETFs offer these features for many exposures.

Jonathan Furelid



ETFs from a Tactical Asset Allocation Perspective

Swedish hedge fund manager eTurn is managing assets following a systematic tactical allocation approach, this means actively allocating between risk assets and cash instruments depending on the opportunities and threats detected by their computer driven algorithms. ETFs form an integral part of this process, eTurn's CEO, Krister Sjöblom, tells HedgeNordic how.

- We are using both index funds and ETFs when doing shorter term shifts in our allocations. Portfolios are created dynamically depending on the trending characteristics of different markets. We tend to prefer ETFs when there is a market we want to access that is not covered by an index fund or where market access is constrained for other reasons. For longer term exposures we also use futures that are rolled forward, this however means additional administrative work and associated trading costs.

Eturn's systematic trading approach aims at detecting trends in different markets and to allocate accordingly, the idea is to be "risk-on" in environments where risk assets such as equities are trending strongly and to have a more defensive stance in periods of "risk-off" where risky assets are falling.

The idea is to create a return profile that captures the equity market return in bull runs while protecting the downside in less opportune markets. According to Krister, ETFs are used both as a core portfolio building block to capture market beta but also as an alpha source.

- We are looking at ETFs from different angles, both as a "cheap beta" option but also from a more strategic standpoint where the expanding universe of ETFs is giving us

more degrees of freedom in our investment work. Examples include low beta and value products. When selecting which ETFs to trade there are a number of factors playing into the decision according to Krister, both as a result of regulatory constraints but also to make sure to get the required liquidity and to limit unnecessary counter party risks.

- When evaluating ETFs, many different factors feed into the decision-making process ; if the fund is UCITS compliant or not, whether it is physically or synthetically backed, underlying AuM and liquidity, price, issuer and domicile just to mention a few. Typically we prefer UCITS compliant funds that are physically backed. Looking forward, Krister is optimistic that ETFs will play an increasingly important role in their asset allocation work.

- Our use of ETFs have increased over time and we will use ETFs even more going forward. The simple reason being that costs are coming down and the expanding range of products offer us a greater opportunity set.

Jonathan Furelid

Our office isn't down the corridor. It'll just feel that way.

Northern Trust is a leading fund servicer for all asset classes in multiple jurisdictions. We have been voted **Best Service Provider to ETFs in Europe** at the Annual Global ETF Awards for the past seven years and **Best European Hedge Funds Administrator** at Hedgeweek's Global Awards, 2014. With our comprehensive fund expertise, including exchange traded funds and alternatives like hedge funds, private equity and real estate, we're primed to meet your needs as they evolve. We work seamlessly with your business so you can focus on what you do best – managing your funds. To learn more about the breadth and depth of our capabilities, contact Madeleine Senior (EMEA) on +44 (0)20 7982 2239 or Struan Malcolm (Stockholm) on +46 8 5051 6492 or visit northerntrust.com.

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AP3 – Cost Efficient Beta Delivered

Having implemented its alpha-beta separation strategy in 2008, the Third Swedish National Pension Fund (AP3), is dedicated to providing efficient market exposure through its beta asset management unit. Hans Ericsson, head of beta asset management at AP3, explains how ETF’s are used in this context.

In 2008, the Third Swedish National Pension Fund AP3, decided to reorganise. From being an asset management structure based on asset classes, the new organisation was built around the separation of alpha and beta.

The goal of the beta unit is to manage the exposure to global financial markets and aims to secure returns mirroring the performance of the indices in its various investment markets. Today approximately 180 billion SEK out of the total AP3 asset base of 272 billion SEK is managed within beta. The beta exposure is primarily long term in nature, holding highly liquid assets aiming to track a benchmark set out by AP3. However, the book also holds more strategic exposures allowing the beta group to take a predefined level of active risk in order to beat its benchmark, this is where ETFs come into play.

- Historically we have only held a small portion of our exposure in ETFs and that is also the case today. The reason for this is that we believe the cheapest exposure is to be found in the cash market. A majority of the positions in the beta portfolio is supposed to be long term and liquid in nature and there we see no immediate need to change from the cash market, says Hans Ericsson.

- Within the beta portfolio we have however what we call drift where we are allowed to deviate from set benchmarks,

I have also an asset allocation mandate which in tracking error terms is small but in real money terms is quite significant, Hans continues.



Hans Ericsson, AP3

- ETFs are primarily used as a tool to manage the portfolio drift and to take on shorter term, strategic exposures. For example ETFs are used when we seek a very specific allocation where it is too expensive for us to trade the cash market. Another example would be when we under-

allocate a specific market but want to keep exposure to certain sectors, in that case we would trade into sector specific ETFs, Hans says. According to Hans, AP3 is closely monitoring the trends in the ETF space. Of particular interest is the trend towards lower cost of trading.

- We are actively following what is going on in the ETF market and the fact that costs for trading ETFs have come down is of great interest to us, however, in developed markets, given our large trading volumes, we have costs in the cash markets for index type investments, that are very small and hard to compete with.

AP3 have in-house capacities monitoring and evaluating the ETF universe but they also use advisors and independent research firms to assist them in the process.

- To assist us in the evaluation of ETF contracts we have advisors appointed for that specific task, this could be banks as well as independent ETF research firms. This is to make sure to always have a second opinion. When we evaluate ETF exposures, we are analyzing several factors before

ETFs will play a more important role for AP3 in the future.

- Although we have a small portion in ETFs today, only a few percent of the liquid long term beta book, I see a possibility that this might increase in the future, primarily as a result of costs

“ETFs are primarily used as a tool to manage the portfolio drift and to take on shorter term, strategic exposures.”

deciding on which contract to trade, we would look at tracking error, first of all, but of high importance is also the underlying fees and the performance of the active risk if any. Looking ahead, Hans believes that it is very likely that

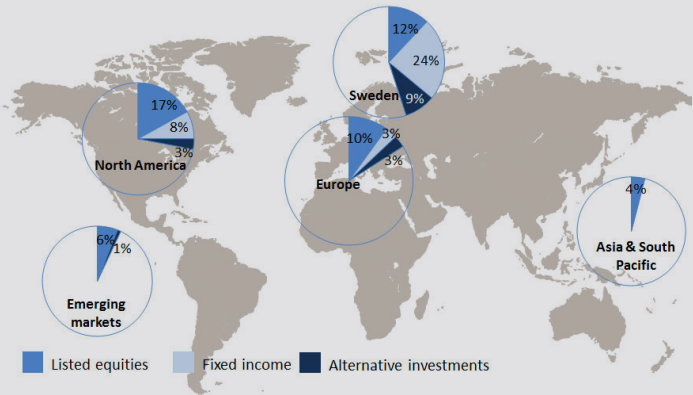
coming down. As for beta, we are always measured in tracking error terms to a benchmark index and the cost of trading is of course a significant part of that.

Jonathan Furelid

AP3 in brief

AP3 is one of five so-called buffer funds within the Swedish national pension system. Together, the buffer funds hold around 10% of total pension system assets. AP3 is tasked by the Swedish Parliament with generating maximum possible benefit for the income pension system by managing our fund capital so as to deliver strong investment returns at a low level of risk.

AP3 has twin roles in the pension system: serving as a buffer when inflows and outflows cause imbalance in the system, and promoting the overall financial stability of the system.



Pension fund with investment freedom

AP3 is a state-owned pension fund with a government-appointed Board of Directors. We are more independent than most government agencies because the Board has sole responsibility for the operations of the Fund and because Sweden’s national pensionfunds are regulated solely by legislation and not by government directives. The Ministry of Finance reviews the national pension funds’ performance on an annual basis.

Investments in a diversified portfolio

AP3 manages a diversified global portfolio of listed equities, fixed income assets and alternative investments. Alternative investments consist of private equity, real estate, timberland, infrastructure assets and new strategies.

The value of AP3’s portfolio stood at SEK 272.6 bn on 30 June 2014.

The fund had 56 employees per 30 June 2014.



When Good Tracking Error Hides a Surprise

S&P 500 is probably one of the most prestigious and recognised index. Representative of one of the largest equity markets, this index is widely used and its components heavily traded. It is not without reason that “SPY”, the dinosaur S&P 500 ETF listed in the US with over US\$175bn under management, is also the most liquid stock in the world. With a deep and liquid market, one would expect ETF competition on this index to be fierce, resulting in very comparable funds. Our study reviewed seven of the largest ETFs tracking the S&P 500 index out of a European universe including 25 funds (including currency hedged versions).

There is one good news. The depth of the market, the opportunities to arbitrage and the liquidity of the underlying stocks allow Europe S&P 500 ETF issuers to deliver extremely well when it comes to tracking error – ranging from 1/10th to 3/10th bps over two years. Needless to say we cannot argue on the efficiency of those investment vehicles. This makes S&P 500 ETFs excellent candidates for investors

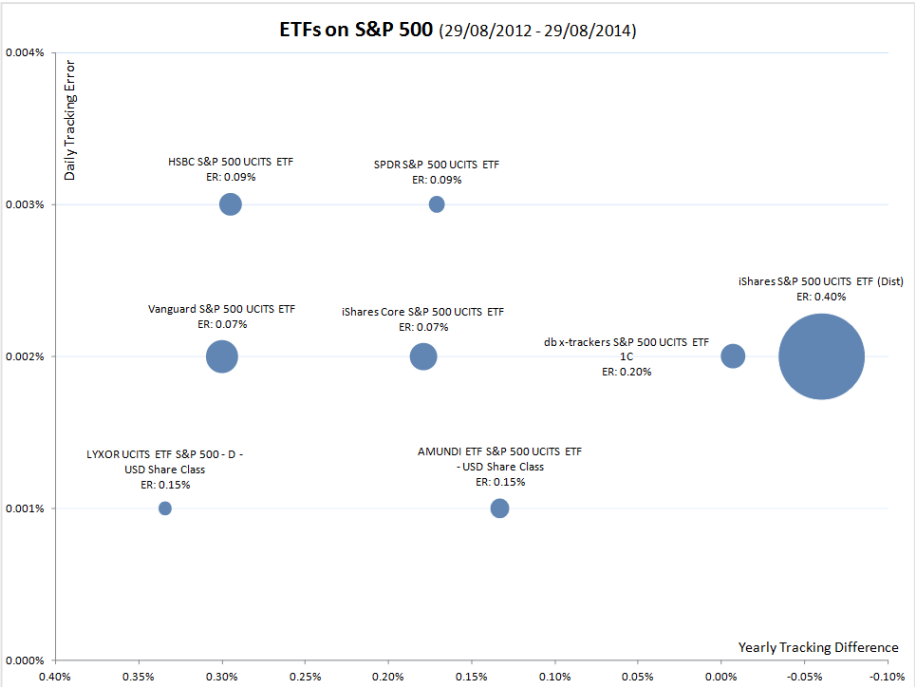
willing to easily access the index without the complexities of trading futures contracts. The risk of the ETF moving away from the index seems perfectly controlled.

Our study does however highlight, once more, very wide discrepancies in terms of tracking difference (i.e. the real total cost of ownership investors bear over the long run). Here the spread between the best and the worst fund we analyse – over 35bps per year – comes to us as a surprise given the commercial competition on those products.

For those two funds exhibiting the best and the worst tracking difference, the expense ratio published by the manager seem to explain most of the lag. So we could just leave it there and assume expense ratio is a good proxy for the total cost of ownership. This is sadly not true for some other funds in our selection that show less appealing tracking differences despite very low published expense ratios. Similarly, neither size (assets under management) nor replication method

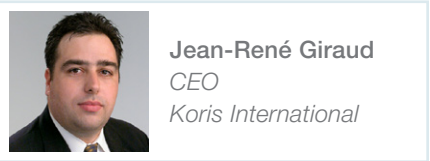
ETFs on S&P 500

| ETF | Average AUM 2011-2014 (\$ '000) | Expense Ratio | Average Yearly Excess Return (Tracking Difference) ⁽¹⁾ | Daily Standard Deviation (Tracking Error) ⁽¹⁾ | Daily Excess Return 95% Value at Risk ⁽¹⁾ | Average Daily Volume 2013 (\$'000) |
|---|---------------------------------------|------------------|---|--|--|--|
| iShares S&P 500 UCITS ETF (Dist) | 11 323 | 0,40% | -0,060% | 0,002% | -0,003% | 21 935 |
| Vanguard S&P 500 UCITS ETF | 1 605 | 0,07% | 0,300% | 0,002% | -0,001% | 6 334 |
| iShares Core S&P 500 UCITS ETF | 1 075 | 0,07% | 0,179% | 0,002% | -0,002% | 1 597 |
| db x-trackers S&P 500 UCITS ETF 1C | 891 | 0,20% | -0,007% | 0,002% | -0,003% | 833 |
| HSBC S&P 500 UCITS ETF | 753 | 0,09% | 0,295% | 0,003% | -0,001% | 4 329 |
| AMUNDI ETF S&P 500 UCITS ETF - USD Share Class | 610 | 0,15% | 0,133% | 0,001% | 0,000% | 798 |
| SPDR S&P 500 UCITS ETF | 427 | 0,09% | 0,171% | 0,003% | -0,003% | 1 761 |
| LYXOR UCITS ETF S&P 500 - D - USD Share Class | 303 | 0,15% | 0,334% | 0,001% | 0,001% | 747 |
| ⁽¹⁾ Over comparison period (29/08/2012 - 29/08/2014) | | | | | | |



(fully physical, sampled or synthetic) provide any clue on whether or not a given setup will prove more efficient for the investor.

As often, only a rigorous analysis of the historical tracking difference and its stability over time can hint the investor on the total cost of holding he might expect when selecting a given investment.



Record inflow for European ETF in Q3/14

Despite suffering outflows of USD 3,1 billion in September Exchange-traded funds and exchange-traded products listed in Europe managed to attract a record USD47.4 billion in net new assets in the third quarter of 2014, according to ETFGI. The record had been standing since the industry had net inflows of USD 28 billion in the first quarter of 2011.

According to preliminary data from ETFGI’s Q3 2014 Global ETF and ETP industry insights report, the European ETF/ETP industry had 2,081 ETFs/ETPs, with 6,233 listings, assets of USD 455.8 billion, from 51 providers listed on 26 exchanges.

Year-to-date net new asset flows reached record levels for the ETF/

ETP industries in Japan at USD 15.0 billion, Europe at USD 47.4 billion, and globally at USD 199.0 billion. Equity ETFs/ETPs experienced the largest net outflows with USD 1.9 billion, followed by commodity ETFs/ETPs with USD808 million, and fixed income ETFs/ETPs with USD 798 million in net outflows in September 2014.

Vanguard gathered the largest net ETF/ETP inflows in September with USD1.1 billion, followed by Amundi with USD771 million, DB x-trackers/ETCs with USD663 million, Lyxor with USD582 million and UBS withUSD439 million.

In terms of assets Blackrocks iShares is the largest ETF/ETP provider with USD 209.8 billion, reflecting 46.0

percent market share. Deutsche Bank db x/db ETC comes second with USD 54.4 billion and 11.9 per cent market share, followed by Lyxor Asset Management with USD47.8 billion and 10.5 per cent market share. The top three ETF/ETP providers, out of 51, account for 68.4 per cent of European ETF/ETP assets, while the remaining 48 providers account for less than five per cent market share, each.

Kamran Ghalitschi

If you can't beat them, replicate them!

In our paper we identify various ways where hedge funds use ETFs, as hedging instruments, to gain access to otherwise illiquid markets, for carrying cheap Beta, or as a shorting instrument when regulation may otherwise prohibit, to mention a few. An example of how ETFs may use the sophistication of hedge fund managers and other successful activist investors is the Global X Guru fund family of ETFs. The idea behind GURU, GURX and GURI is to utilize information on holdings of hedge fund managers in US equities that is publicly available.

American regulator SEC stipulates that all institutions holding over US\$100 million in US equities must report their equity positions on a quarterly basis through a so called 13F filing. There has been much discussion centered on whether these 13F filings contain informational value because they publically reveal the equity positions of major investment funds. Proponents believe that by creating a replication index of a successful manager's investments (as revealed by the 13F filings), one could achieve greater returns than the market. Critics argue that by the time 13F filings become publically available the information is stale and does not reflect the manager's real-time views. Other arguments suggest that the information is taken out of context and may not reflect a fund's full investment strategy.

In their paper "Do Hedge Funds Have Information Advantages? Evidence from Hedge Fund Stock Holdings,"

Jin-Mo Kim, Bok Baik and Kee-Hong Bae collected data from 13F filings and uncovered that hedge fund holdings information has particularly valuable information. The researchers not only determined that a stock's future performance was positively correlated to the level of hedge fund ownership in that stock, but also that the predictive ability of hedge funds was over four times greater than other institutional investors.

"Guru ETFs aim to aggregate the ideas and knowledge of select investment managers into the transparent, cost-efficient, and easily accessible format of an ETF."

The authors found that "all else being constant, a 1% increase in the change in hedge fund ownership leads to a 0.22% increase in one- quarter-ahead stock returns." The authors then compared this with a study conducted by researchers Yan and Zhang which concluded that "a 1% increase in the change in short term institutional ownership is associated with a 0.06% increase in one-quarter-ahead stock returns."

The authors contended that because hedge funds possess an informational advantage, stocks that received an increased allocation from the managers would outperform the stocks that saw a decreased allocation. Consequently, they ranked the stocks based on both the level of hedge fund holdings

and the change in the amount hedge fund holdings. The top 20th percentile consisted of stocks which had seen an increase in fund holdings and had high hedge fund ownership. The bottom 20 percentile consisted of those stocks which had seen a decrease in fund holdings and low hedge fund ownership.

The authors then created two arbitrage portfolios which would go long on the stocks in the top 20th percentile in both

categories and short the stocks in the last 20th percentile. This arbitrage portfolio based on level of holdings gave an average annualized risk adjusted return of 5.2%, while the arbitrage portfolio based on change in holdings gave an average

annualized quarterly risk adjusted return of 6.4%. They concluded that screening hedge fund holdings based on the degree of confidence exhibited by fund managers (as expressed by a large or increasing position) could generate alpha.

Rather than betting on the performance of a single fund, however, research suggests that on the whole, large hedge funds, which tend to have deep resources and proven track records, are particularly adept at picking stocks. Research further revealed that the highest conviction stock selections of hedge fund managers tended to also be their best performers.

Kamran Ghalitschi

db X-trackers Core-ETFs: exposure to major benchmark indices with All-in Fees ranging from 0.07% to 0.19% p.a.



db X-trackers Core-ETFs are direct replication funds that invest in the physical index securities.

| db x-trackers Core-ETFs | Ticker | Income Treatment | All-in Fee p.a. |
|---------------------------------|--------|------------------|-----------------|
| MSCI USA Index UCITS ETF (DR) | XD9U | capitalising | 0.07% |
| FTSE 100 UCITS ETF (DR) | XDUK | capitalising | 0.09% |
| EURO STOXX 50® UCITS ETF (DR) | XESC | capitalising | 0.09% |
| EURO STOXX 50® UCITS ETF (DR) | XESX | distributing | 0.09% |
| DAX® UCITS ETF (DR) | XDAX | capitalising | 0.09% |
| DAX® UCITS ETF (DR) – Income | XDDX | distributing | 0.09% |
| MSCI World Index UCITS ETF (DR) | XDWD | capitalising | 0.19% |

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Passion to Perform

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Picture Index

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A large black swan is shown in profile, swimming in dark water. The swan's feathers are detailed, and its long neck is elegantly curved. The background is a soft, out-of-focus blue.

“Chance favors
the prepared mind.”

Louis Pasteur

A person in a white shirt and tie is shown from the chest up, with their face blurred. The background is a vibrant, out-of-focus green and blue light pattern.

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