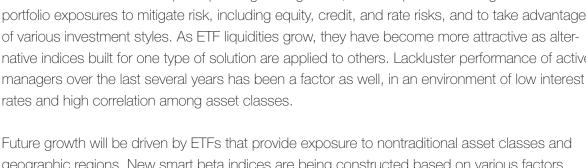
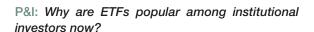
Exchange Traded Funds

ver the past several years, institutional demand for ETFs has increased dramatically. Growth has accelerated after the 2008 financial crisis at a rate of 17% and institutional investors now hold more than 50% of U.S. ETF shares. With more than 1,500 ETFs currently, there is more liquidity in the market than ever, which is one reason for their popularity. While they represent one-third of all U.S. equity trading volume on any given day, ETFs still represent only about 10% of the U.S. mutual fund sector overall.

The ETF value proposition is significant and includes a wide range of exposures, intraday liquidity, full transparency and low cost across the board. Put to work for a number of uses, they are gaining share from traditional actively managed mutual funds and hedging mechanisms. Unlike many financial instruments that require operating management, ETFs let portfolio managers fine-tune portfolio exposures to mitigate risk, including equity, credit, and rate risks, and to take advantage of various investment styles. As ETF liquidities grow, they have become more attractive as alternative indices built for one type of solution are applied to others. Lackluster performance of active managers over the last several years has been a factor as well, in an environment of low interest

geographic regions. New smart beta indices are being constructed based on various factors, such as dividend yields, stock-price volatility levels and equity quality ratings. ETFs designed to hedge risks are becoming viable alternatives to swaps, futures and other instruments. Additionally, ETFs provide unprecedented opportunities for effective cash management strategies. We interviewed three prominent people in the ETF space: two purveyors of funds and an index provider to discuss these and other trends in the market.





Jennifer Bender: To understand the popularity of ETFs today, we have to understand what passive investing is all about. Looking back 20 or 30 years, institutions had strong convictions in the value of active management, and they believed that they could get access to good active managers. But over these same decades, empirical research has shown that many active managers haven't outperformed market cap weighted indexes. If you examine the median returns of U.S. institutional active managers over the last four years, for example, they've actually underperformed. So one could argue that active management doesn't necessarily add value in broad, well researched and transparent markets, like the U.S. However, it may still work in more specific categories, like small caps and emerging markets. However, we actually did a study showing that even in the small cap and emerging markets categories you don't find substantial outperformance from active managers. There is a growing recognition that unless you're highly skilled at picking the very best active managers on a consistent basis, you're better off going with a passive index in an ETF which can provide similar returns more

Dan Draper: Twenty years ago, institutions were the earliest adopters of ETFs, mainly for tactical and cash equitization purposes. As large, liquid, market-capweighted ETFs became more popular, they pulled up alongside of broader Delta One products like swaps and futures and got on that radar screen for those uses. In the last decade, the huge growth of ETFs in the adviser retail market has been obvious. But among institutions, there's been a huge shift since the 2008 credit crisis, and the major global theme here is capital requirements for banks rising globally. As their capital requirements rise, banks are reducing their Risk Weighted Assets (RWAs). Therefore, the use of those traditional banking products that create additional liabilities for banks—like swaps, structured products, etc.—has shifted. Lower bank RWA levels combined with various lower counterparty tolerance levels means that institutions are increasingly willing to consider a cash-based solution like an ETF.



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One of the things to emphasize in ETF product development is that everything has to be grounded in research.

~Jennifer Bender

Robert Trumbull: ETFs are market access tools that provide institutional investors with a significant value proposition of flexibility, low cost, transparency and liquidity. As the range of exposures and overall ETF liquidity have grown, institutions have found more and more applications for these tools. For instance, fixed income ETFs have been the fastest growing segment for the past several years. This growth has been driven by a wider range of exposures but also structural changes in the markets such as a reduction in market making capital on bank balance sheets. As a result, spreads on individual fixed income securities have widened and institutional investors are more interested in allocating to a basket of bonds rather than trying to add value through individual issues. This has been particularly evident in the insurance market as insurers seek to enhance the efficiency through which they manage their portfolios in this low rate environment. There are several other dynamics such as this, but ultimately ETFs are a tool that offer institutional investors

a proven value proposition to address a wide range of challenges.

P&I: How are institutional investors using ETFs to seek yield in equity and fixed income?

Jennifer Bender: Obviously smart beta is a big trend that we're seeing across the institutional community. We have launched a number of factor indexes that seek to capture different flavors of factors that deliver a premium over long periods such as volatility, momentum and value, and also dividend yield. One key trend that we have seen over the past four or five years is the demand for high dividend yield indexes as institutional investors are interested in having a significant yieldboosting component in their equity portfolios.

Robert Trumbull: Institutions, like many investors, have been searching for yield in the current low rate environment, however it is critical to remain focused on

total return. We've observed three trends in this space: The first is in the utilization of active ETFs. A good example is INKM which is 50% fixed income, 50% equity and focused on income opportunities across a range of asset classes. The second is in fixed income ETFs. Due to interest rate uncertainty, we're seeing a tremendous amount of interest in senior loans and SRLN in particular which is actively managed by Blackstone / GSO, SRLN provides liquid, transparent exposure to senior loans which are senior in the capital structure to high yield and which are floating rate to protect against rising interest rates. The third is in equity ETFs, and in particular the wide array of dividend weighted products such as SDY (U.S.), DWX (Non-U.S.) and EDIV (Emerging Markets).

Dan Draper: We also see interest in those areas broadly defined as smart beta. You have ETF products based on different factors, whether it be income, low volatility or a combination of the two, which offer

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Client solutions are becoming more holistically focused now. ETFs are helping advisers fine-tune their risk budgeting process and deliver better long-term wealth solutions to their clients.

~ Dan Draper

the more sophisticated institutions a different way to have access to those strategies. Gaining access to new asset classes or geographies still falls under the smart beta definition, at least until it becomes more commoditized. These risk premiums, or factors, that are available in the marketplace are used as building blocks. Institutional managers can combine them on their own to create more efficient portfolios, or Index providers can combine them for sponsors like us into multi-factor solutions, which might be the next step in smart beta. The field is pretty rich right now in terms of idea generation. Invesco PowerShares believes that the industry is still in the early stages of smart beta ETF growth.

P&I: How do ETFs enhance a 401(k) plan?

Robert Trumbull: ETFs play a relatively small part in the DC (defined contribution) landscape right now, but there's a significant move towards passive and target-date funds in that space. From an operational stand-point, ETFs have not fit easily into DC plans because they aggregate all of the transactions into one specific time at the end of the day. However, ETF usage will grow over time, and we'll see more packaged solutions that will open the door for new ETF assets.

Jennifer Bender: ETFs aren't widely used in the DC structure, but we are seeing increasing interest in them because individual investors are looking for institutional quality in their portfolios. Individual investors are starting to recognize the value of an industrial-strength, low cost portfolio. But there's another issue: the proliferation of choice. There are so many funds and ETFs today, and it's challenging for many individual investors without the time and perhaps the experience to research products.

One of the things that has resonated on the institutional side is the idea of "all-in-one" global equity investing. For example, the MSCI ACWI IMI index is a comprehensive global index, covering developed and emerging markets across large, mid and small cap segments. The index basically captures the investable global opportunity set, and eliminates small, illiquid names. We expect to see these "all-in-one" types of products grow in 401(k) plans.

Dan Draper: The opportunity is enormous, and whoever can solve the operational constraints around 401(k)s regarding ETFs will see a significant business opportunity. This topic remains on everyone's radar screen.

P&I: A core-satellite strategy is becoming more common. How do ETFs play a role?

Jennifer Bender: ETFs can be used for both the core part and the satellite part—the part most people consider value-added. Ultimately, the core part should encompass the broadest equity opportunity set available: just one ETF or one index allocation to capture the en-

tire global universe. The core should be highly streamlined, without unnecessary complexity, which usually adds to costs. Outside of the core, there is a wide range of different building blocks for constructing a satellite portfolio. And ideally these building blocks, such as sector, country, or style portfolios should be consistent with the core portfolio in the sense that there is full transparency around both sets, so that your target exposures are precisely calibrated.

Dan Draper: A number of years ago there was more focus on traditional asset classes and less risk budget which was allocated to smart beta and more nuanced strategies. Client solutions are becoming more holistically focused now. ETFs are helping advisers fine-tune their risk budgeting process and deliver better long-term wealth solutions to their clients. Gaining access to certain international markets through an ETF was a big theme 10 years ago. That was once considered a satellite-type strategy, but now it would be core. Some of the evolving smart beta areas, such as factor-based or non-traditional asset classes, are now considered core as well, and investors are taking advantage of allocating around a dynamic rebalancing strategy.

Robert Trumbull: The concept of core-satellite is all about risk budgeting: creating a core and then adding alpha around the outside. We see institutions use ETFs for both. Historically, the broad beta ETFs have been core building blocks, but most new product development is focused on niche, targeted satellite exposures. Products such as our emerging market small cap ETF, EWX, are a good example of a tool that can be used either to augment a core emerging markets exposure or tactically overweight this segment of the market as a satellite position.

P&I: What else is new in product development?

Robert Trumbull: There are currently over 1,500 ETFs in the U.S. however the number of new product launches has slowed in each of the last three years. As the market has become more saturated with traditional products, the newest innovations are coming in areas outside of core beta. For instance, active ETFs are now picking up momentum. Our actively managed senior loan ETF, SRLN is the fastest growing new ETF in 2013 and we recently launched an actively managed short duration fixed income ETF, ULST. These tools provide clients with precise exposures to meet specific needs within their portfolio whether it is interest rate protection or a means to put their cash to work.

Jennifer Bender: One of the things to emphasize in product development is that everything has to be grounded in research. You can invent a million different smart betas through data mining alone. That's just statistical sampling at work. What you really want is to understand the theoretical or academic principles behind why certain asset characteristics behave the way they do. Why does something earn excess returns over time, or why is it priced the way it is, for example.



As the range of exposures and overall ETF liquidity have grown, institutions have found more and more applications for these tools.



~Robert Trumbull

When you go to find an index or an ETF to capture that particular investment characteristic, which we call a factor, you start with the premise that you want that pure academic stock behavior first. You try to find a vehicle that captures that in an intelligent, cost effective and transparent way, if possible. Investment objectives become a little clearer from that standpoint, and we see a lot of investors embrace the idea of starting first with the pure factors and then moving to the different product alternatives.

Dan Draper: Product development has been a rich space recently for Invesco PowerShares. We've had good success with low volatility, especially Power-Shares S&P 500 Low Volatility Portfolio (SPLV) and bank loan products, namely PowerShares Senior Loan Portfolio (BKLN), which are both passive. Other new efficient access vehicles are factor based. In considering the strong consumption story that is evolving, we

recently launched PowerShares China A-Share Portfolio (CHNA), a new ETF on the China A share market that invests primarily in SGX FTSE China50 index futures. The FTSE A50 Index provides better representation of the actual Chinese economy compared to the Hong Kong H-Share market, with higher weightings in the consumer goods sectors. Another interesting factor exposure is the PowerShares S&P 500 Downside Hedge Portfolio (PHDG). It represents another alternative to futures that seeks to hedge against low-probability, high-severity events.

Jennifer Bender: It's important to differentiate between factor products and access vehicles, and we definitely have seen increasing interest in new access products. We just launched our Beyond BRIC index. There has been a demand for an emerging markets index that was everything except Brazil, Russia, India, and China. I would also add hedged currency products—anything

that captures currency risks or currency returns—as well as commodities.

Robert Trumbull: New cash alternatives are also an area where we're seeing a lot of product development interest and market growth. There are a number of different products on the market, but as we look at money market rates today there's a tremendous demand from institutional investors to put their cash to work and find a low-risk, slightly higher yield alternative. ETFs offer a compelling solution because they have intraday liquidity. You also have the transparency of the portfolio. It gives corporate treasurers, insurance companies, asset managers a tool that they really haven't had in the past.

P&I: What about educational efforts in the ETF space?



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Dan Draper: We have established education resources through PowerShares University (PSU), which has been growing every year. For the retail and adviser market, it's an education in individual products and talking about asset allocation. But for the institutional market in particular, it's important to get the client segmentation right. As you get into the institutional client segments, you then start to consider ETF alternatives to swaps, futures, structured products and other cashbased instruments. Overall, we're moving to a higher level and we're really starting to become partners in the investment portfolio implementation phase. Outside of specific products, the value add that we provide to institutions, advisers, and others is about lower risk and lower correlation. The question is, how can we advise not only on individual products, but the collection of those products? How can we give investors an entire toolkit that allows them to assemble a collection of these ETFs together to improve efficiency?

Robert Trumbull: It's incumbent upon the ETF industry to provide the necessary education to all investors. SPDR University is designed to help our clients better understand ETFs through a variety of interactive resources. We also launched etffactorfiction.com to provide clients with factual information to address many of the myths about ETFs.

When we meet with our clients, one of the consistent themes is that there's more to ETFs than meets the eye. There are a lot of dynamics in the ETF market-place such as trading and liquidity, differences in index exposures and total cost of ownership. ETF providers have the resources to answer these questions and I would encourage all clients to lean on the providers to help them most efficiently utilize ETFs.

Jennifer Bender: We have conducted in-depth quantitative and qualitative market research on the perceptions of advisers and individual investors on ETFs and their underlying indexes. Our findings show that most retail investors do not distinguish between the ETF provider and the index provider. We have worked with several of our ETF partners to educate investors on the underlying indexes that are at the core of the ETF structure.

P&I: With ETF products becoming more sophisticated, what about fees?

Robert Trumbull: Fees continue to be commensurate with the value proposition that ETFs provide investors. There continues to be downward fee pressure on core beta ETFs. For instance, we recently launched TWOK, the lowest cost Russell 2000 ETF at 12 bps, which is competitive with most institutional means of allocating to this segment of the market. It is critical however that institutional investors focus on the total cost of ownership and not simply the headline expense ratio. This includes ETF spreads, commission costs and potential offsetting factors such as securities lending revenue. It is this complete ETF ecosystem which should be evaluated when considering the most appropriate exposure at the lowest possible cost.

Dan Draper: So many of our products have been first to market or among the first few to market, so pric-

ing really hasn't been a factor thus far in our history. Invesco PowerShares believes that the future of investing is about innovation, the smart beta revolution and staying focused on cost. For example, we use futures contracts in some of our products, which lowers the cost at minimal counterparty risk versus swaps and other products. That's reflected in the expense ratio and passed onto the clients.

P&I: What index characteristics and criteria are most important for the ETF provider, and how do index providers and ETF providers work together?

Jennifer Bender: It's important to understand that indexes were originally created as measurement tools, not as the basis for passive investment products. Initially indexes like the Dow Jones Industrial Average and S&P 500, were just trying to gauge the performance of a particular broad market. In the 70's and 80's, when index funds first emerged, and when active management really took off, indexes were used as benchmarks to assess active manager performance, and we saw a heyday in index construction methodologies. It's been only in the last decade or two, with the growth of ETEs. that the role of indexes has been spotlighted, emphasizing new characteristics. With the focus on passive replication methods and the weight of the assets under management on the underlying indexes, we think that liquidity is now more important than ever. A lot of the research we do today is focused on liquidity and investability issues. For example, we screen on metrics like traded value relative to market cap. We look at the percentage of free float availablility market by market. We look at the number of shares available for purchase by foreign investors. There are a host of nitty-gritty details in the formation of these indexes.

In terms of index providers and ETF providers working together, we typically have a strong, symbiotic relationship. The ETF providers really understand the market and the market demand, and we often have very lively discussions about whether or not certain market segments, or factors, are actually able to be captured in an investable index. There are many different ways to capture a certain investment element, and there's a lot of back and forth. Ultimately the index providers take full accountability for their methodologies, and it's a fully third-party relationship where we license indexes to ETF providers.

On a day-to-day basis, we have massive amounts of data that have to be processed, cleaned and insured for accuracy. ETF providers ask us for accuracy rates greater than 99.5 percent on thousands of corporate events, reinvested dividends, fundamental data updates, and security identifiers. If we should pass erroneous information on to the ETF provider, it could trigger costs that ultimately go to the end user, the client and consumer.

Dan Draper: Those transparency elements are absolutely crucial to us. Our index providers are strong partners, and we make an extra effort to include their strategies in our business model. You need to see clients together quarter after quarter to explain performance attribution and how the different characteristics in a particular type of product are holding up. There are

also the nuts and bolts of the relationship with an index provider to make sure that they're proactive during rebalance periods and responding to corporate actions on a timely basis, for example.

Robert Trumbull: It all comes down to collaboration. The index provider and the ETF provider are partners in the success of a product. The index is the backbone of the ETF in terms of the tracking. When we go to launch a new product we are seeking to provide clients with the most precise exposure to that market, and a lot of that comes down to selecting the right index.

This collaboration is very healthy for investors as it leads to well crafted, precise exposures for consumers.

P&I: How important is investability and the liquidity of the underlying assets in an index as well as the index itself?

Robert Trumbull: When we walk clients through creation-redemption, the mechanism that keeps ETF share prices in line with their underlying assets, the liquidity of the underlying securities is critical to ETF liquidity. Keeping tight spreads allows for efficient utilization by clients.

Dan Draper: If a fund is exchange traded, it needs to

live up to its name. On the other hand, we've looked at certain asset classes like bank loans. It was perceived as a less-liquid asset class and the right mechanism was needed for investors to gain access. An ETF provides that access and brings liquidity.

P&I: How has institutional ETF utilization changed over the past three to five years and how do you see it evolving?

Jennifer Bender: We have a recent case study of a pension fund that adopted ETFs based on our factor indexes. They wanted to allocate different factors tactically across different business cycles, and they actually went on record to say that ETFs were the most efficient vehicles because it would be too costly to deploy and rebalance capital among managers. This is an extremely interesting case that points to the future of ETFs and why there's such a compelling value behind them

Robert Trumbull: Institutional investors have gravitated to ETFs, in particular post crisis, because of their liquidity and ease of access. As Dan mentioned earlier, the market in many ways has come full circle since SSgA launched SPY 20 years ago for institutional investors. The growing ETF market will continue to attract institutional investors, such as insurance companies,

which are now finding ways to incorporate NAIC rated ETFs into their general accounts. In addition, investment consultants are investigating ETFs for use with their clients for transitions, tactical overlay or to build fiduciary portfolios. We continue to see new and innovative ways that ETFs are helping clients overcome challenges and we expect this to only accelerate moving forward.

Dan Draper: Dynamic investors who use swaps, futures and structured products will increasingly add ETFs, as more liquidity comes in. In the pension space, those who have traditionally used index mandates or separately managed accounts are increasingly adding ETFs to the menu of options, looking at them from an annual expense and conversion standpoint to improve overall portfolio liquidity and risk management characteristics.



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