Americas: Brokers & Asset Managers

ETF "distributors" and "manufacturers" converging in quest for asset aggregation

Evolution of ETFs suggests consolidation

We examine the implications of exchange traded fund (ETF) growth on Discount Brokers and Asset Managers on the heels of three recent industry developments: (1) Schwab's launch of a line of ETFs; (2) recently announced "free trades" on select ETFs, and (3) growth of iShares under BlackRock's umbrella. *Our conclusion: strategic alignment and potential consolidation between "distributors" and "manufacturers" is likely to accelerate.* Likely beneficiaries include discount brokers leveraging distribution capabilities (AMTD) and large-scale ETF manufacturers (BLK).

ETF still taking share of AuM and volume

ETF industry assets under management (AuM) is set to grow 20% annually through 2014, a deceleration from a CAGR of 28% from '04-'09, but faster than overall industry AuM growth. ETF trading activity grew by over 100% per annum over the past five years and while likely to slow, could reach up to 20% of total daily average revenue trading by 2014, up from about 14% today due to the product's growing popularity.

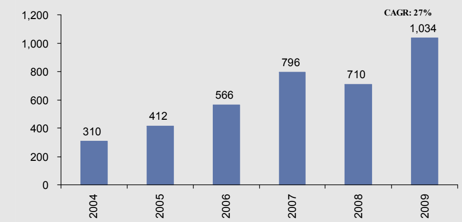
Asset managers: ETFs enable select few

ETF growth enables flow gains for *large* and *niche* firms. Still, ETFs are >50% of passive AuM and 75% of AuM is with 3 "manufacturers," suggesting participants need both product and distribution edge. A battle is now brewing in active management with growth of Active ETFs. However, we continue to view asset managers with defensible business models *(global, asset class diversified and alpha specialists)* as long-term "gainers." **BlackRock is a gainer and the firm's leading institutional ETF position suggests further flow gains over time. Scale also implies a competitive edge to cost-effectively align with retail and gain share**.

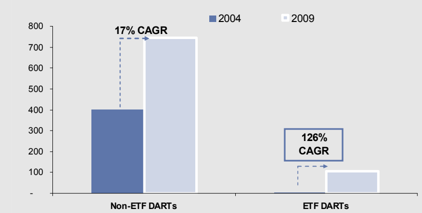
Discount brokers: AMTD likely to move next

We believe TD Ameritrade may be next to move strategically on ETFs, following SCHW and Fidelity's decisions to offer free trades on select ETFs. Owning the manufacturing of ETFs via an acquisition could prove a viable alternative to building the business de novo. E*Trade may also need an ETF partner but is unlikely to buy.

ETF AUM ($ BN) GREW AT 27% CAGR SINCE 2004



ETF TRADING GROWING OVER 100% PER YEAR



Source: ICI, Company accounts, Goldman Sachs Research.

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PM summary: Distributors and manufacturers move strategically closer to one another

Asset managers ("manufacturers") – ETF growth a boon (for a few), but not a bane (for all)

Among asset managers, we believe **Buy-rated BlackRock is the best way to gain exposure to the growth of ETF given its scale** (over $450bn in iShares AuM), a diversified product mix, and access to robust global distribution. Conversely, sub-scale players could partner with a distributor to take advantage of a burgeoning retail opportunity. Our conclusion is this is an opportunity for only a few large-scale players and niche-oriented managers, thus consolidation may follow.

- **Big flows, small fees:** While the ETF industry has experienced explosive growth in AUM over the last several years, management fees associated with the business are small compared to total industry revenues at an estimated $1.6 bn in 2009. To put this in perspective, publicly traded traditional asset managers alone earned over $18 bn in management fees in 2009.
- **Scale and distribution to dictate future share gains:** The ETF business is concentrated with the top three (iShares, SSGA, and Vanguard) controlling nearly 75% of the market. With most of the widely-followed indices successfully replicated, we believe it will become more difficult for newly-launched ETFs for similar strategies to gain meaningful share. This may suggest that ETF managers will compete on cost and access, making scale and distribution arrangements more important for future share gains.
- **ETFs gain share by replacing traditional index products:** Since 1999, passive mutual funds took share from active funds at a steady 100 bp per year. ETFs now comprise over 50% of total passive funds, up from 9% a decade ago, implying ETFs indirectly took share from active by supplanting traditional index products. With passive large scale ETF battles settled, the next battleground is going to be fought by niche players and products (e.g. levered ETFs, fixed income ETFs, and Active ETFs).

Discount brokers…looking for manufacturing to leverage powerful "distribution" networks

Distributors are flexing their networks to promote change in how/where ETFs transact, and we expect two of them: **TD Ameritrade and E*Trade Financial, may leverage their distribution platforms** to reach an agreement with a manufacturer in the near term. We believe there are three options for AMTD or ETFC: Buy a manufacturer, Partner with a major player, or Build their own ETFs.

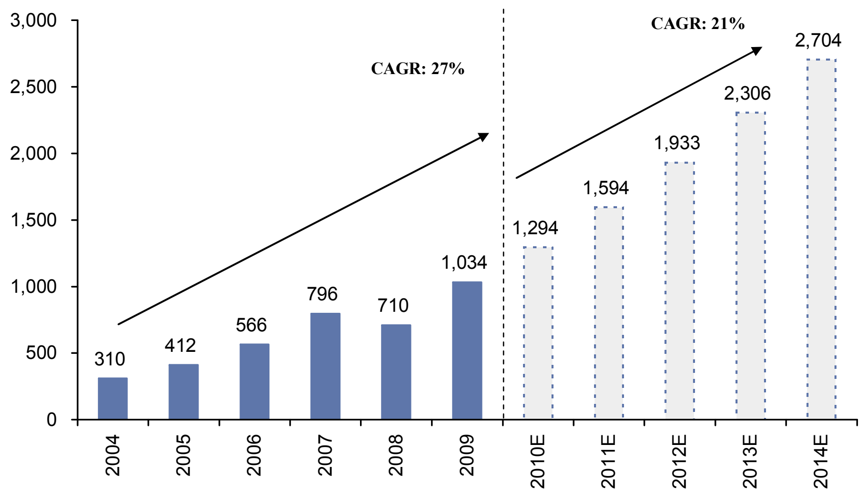
- **Schwab and Fidelity Brokerage announced significant changes to their ETF strategies** over the past few months, and we expect AMTD/ETFC may now consider a 'Buy, Build, or Partner' strategy. For SCHW, they decided to Build their own suite of ETF products, and attracted over $500 mn in assets under management. Fidelity Brokerage has 'Partnered' with BGI to offer free trades on BGI ETFs. ATMD and ETFC may face a strategic disadvantage if they do not broaden their capabilities.
- **Pricing is now a strategic differentiator**: Charles Schwab now offers $0-priced trades on its own branded ETFs, which we believe accounts for less than 1% of its current DARTS. Fidelity Brokerage now offers free trading on 25 BGI iShares ETFs, suggesting free trades have become a battleground to help brokers secure a stickier stream of cash management fees and spread-based income, as well as differentiating their offerings.
- **ETFs are 12-20% of trades at the Discounters**: Five years ago, ETF trades accounted for less than 1% of total ETF trades at SCHW, AMTD, ETFC, and Fidelity Brokerage. Today, that number is above 10% and could approach 20% over the next five years at certain firms. While the pace of ETF trading growth relative to equities is likely to decelerate, it will likely remain a large/growing part of the trading and investing strategy for many educated investors.

ETF implications for manufacturers: A boon for a few, but less of a bane than many think

We forecast that today's $1 trillion ETF market in global AUM will grow to $2.7 trillion by 2014, or a 21% CAGR over the next five years. This rapid growth of ETFs offers a compelling opportunity for the "manufacturers" (i.e. asset managers) to become bigger and to gain share of flows. Our estimates assume a gradual decline in the organic growth rate from the current 26% average over the last five years to mid-teens over the next five years, which still compares favorably to our forecasted 6% organic growth for the public managers in 2010 and 2011 (see Exhibits 1 and 2). That said, while ETFs are likely to be a boon for some asset managers, in our view they are less of a bane for most than conventional wisdom would suggest, considering:

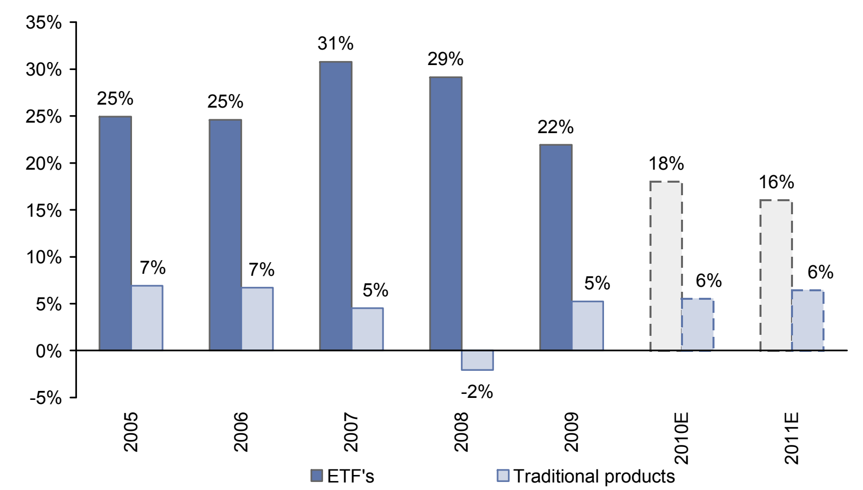
- **Management fees from ETFs are relatively small in the context of the overall industry.**
- **ETFs are taking share within traditional passive, less so from active.**
- **Scale and distribution will be key differentiating factors for future market share opportunities.**

Exhibit 1: ETF market should continue to grow at a robust 20%+ CAGR
Global ETF AUM ($ bn)



Source: BlackRock, Goldman Sachs Research estimates.

Exhibit 2: ETF growth to slow, but still remain above traditional products
Estimated ETF organic growth vs. publicly traded organic growth (long-dated only)



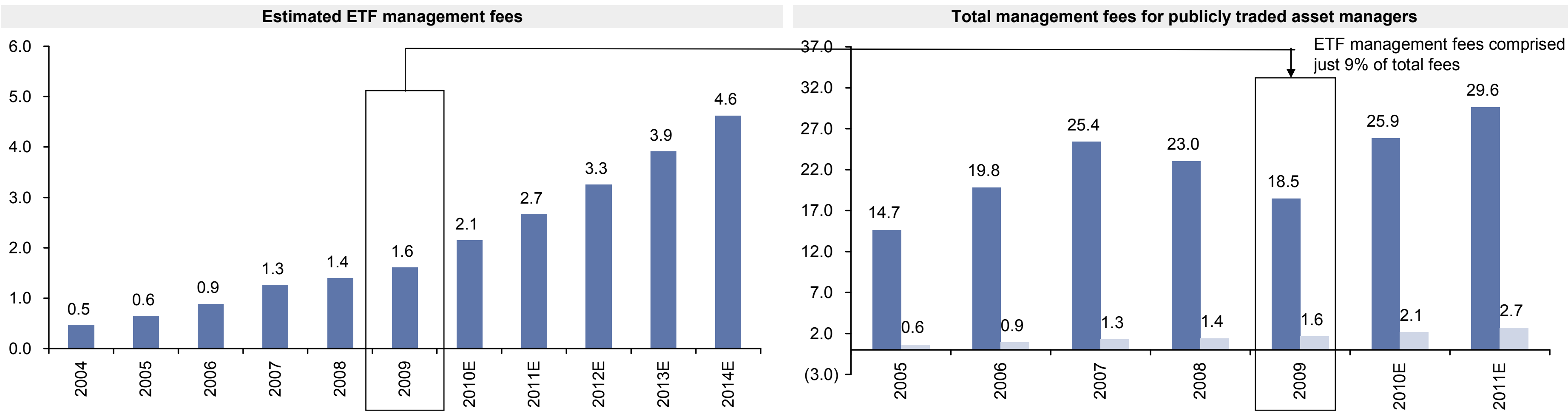
Source: BlackRock, Company data, Goldman Sachs Research estimates.

(1) Big flows, small fees:

While the ETF space is a large (and growing) AuM opportunity, the incremental fee impact is quite small relative to overall industry revenues. Based on our ETF growth projections, we see a cumulative $16-$17 billion revenue opportunity from ETFs over the next five years in the U.S. market, or an average of about $3.0 billion per year – a relatively insignificant amount compared to the overall asset management space.

In 2009, we estimate the ETF space saw approximately $1.6 billion in management fees – just a fraction of the $18.5 billion in management fees reported by the publicly traded traditional asset managers, and even smaller in comparison to the entire traditional asset management universe (see Exhibit 3). In addition, scale players (such as BlackRock) are likely to pressure fees even further, suggesting ETF revenues could head even lower over the coming years, making the economics even tougher for less well-capitalized new entrants to break into the business. Consequently, other areas of growth including broadening distribution globally and better penetration of the U.S. retirement market broadly may be more compelling strategic priorities.

Exhibit 3: While meaningful in AUM, ETF management fees comprise a fraction of total management fees earned by the publicly traded asset managers
Management fee data in $ bn



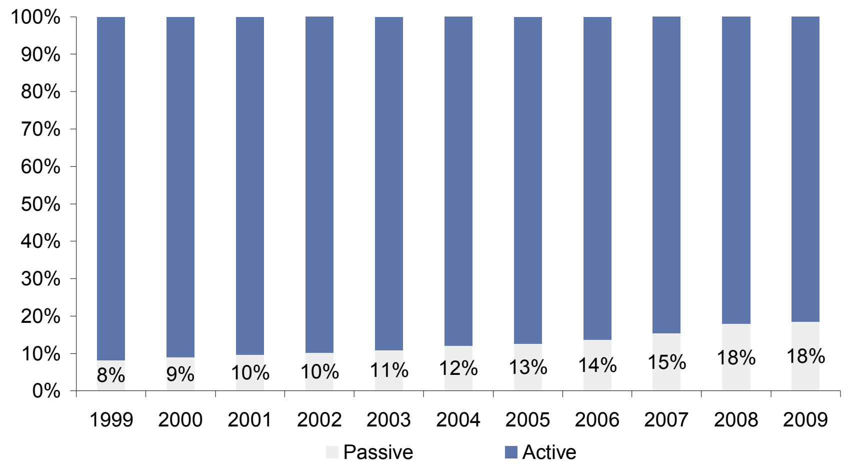
Source: Company data, Goldman Sachs research estimates..

(2) ETFs are taking share within traditional passive, less so from active:

The investor shift into passive strategies is real, but not new, as a move toward lower cost investing has been underway for the last decade. While disappointing performance results from many active equity managers over the last two years suggests acceleration in the “passive from active” movement, the pace of passive share gains has actually been relatively steady over the last ten years, at about 100 bps per year, with a slowdown in 2009. Moreover, ETFs seem to replacing traditional passive strategies (index mutual funds) and not necessarily active – although the next battleground appears to be active ETFs.

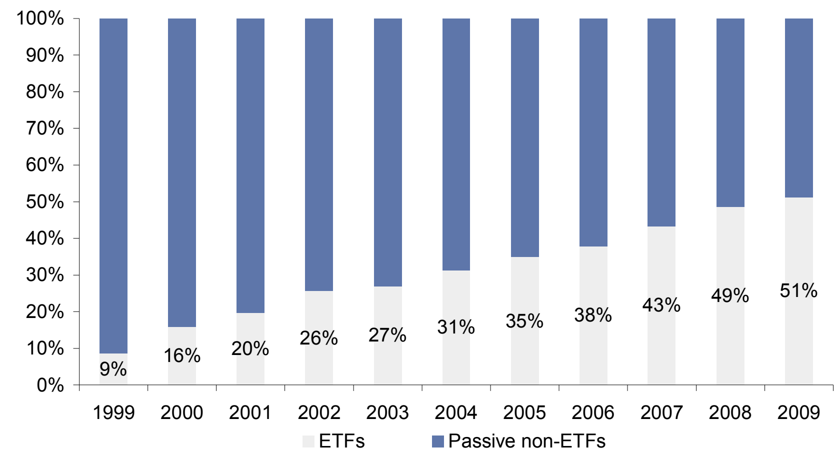
Specifically, passive management grew from 8% of long-dated mutual AuM to about 18% of assets over the past decade. Over the same time period, ETFs as a percentage of passive AuM grew from 9% to 51%. However, while ETFs' share of passive grew 800 bp from 2007 to 2009, overall passive AuM share has been flat (see Exhibits 4 and 5). However, we see this trend marginally shifting back, as investors "re-activate," highlighted by rising searches for alpha managers. Further, managers and strategies that are "defensible" from beta are likely to withstand passive growth: for example, global equities and less efficient overseas markets.

Exhibit 4: Passive taking share ~100 bps per year, but at a lesser rate in 2009
Mutual funds market share – passive vs. active strategies



Source: Simfund, Goldman Sachs Research

Exhibit 5: ETFs are taking share of Passive AuM
Passive market share – ETF vs. non-ETF products % ETF



Source: Simfund, Goldman Sachs Research

(3) Scale will become even more critical in the ETF market:

While the ETF proliferation has been hard to ignore, not every asset manager stands to reap the benefits of the rapid asset growth. Ultimately, we believe the asset managers that can deliver entire portfolio solutions, including ETFs as a broader beta offering, are poised to gain market share over the long-term. This is a scale business, in our view, where the big are likely to get bigger and push management fees even lower. A less well-understood reason for this is the securities lending opportunities inherent in index and ETF provision. As AuM grows, so does the opportunity to generate incremental management fee revenue, which ETF managers can share with fund investors (via lower tracking error and lower fees) and with firm investors (via higher overall revenues).

Scale and distribution to dictate future market share opportunities in a concentrated space.

The ETF business is dominated by just a few players, with the top 10 managers accounting for nearly 90% of AUM, including publicly traded BlackRock (iShares), State Street (SSgA), and Invesco (PowerShares), which rank as the first, second and sixth largest ETF providers. We believe that **scale and distribution capabilities will increasingly become a more critical factor in penetrating the ETF business** beyond current levels.

With most of the widely-followed indices already being successfully replicated by current ETF products, we believe it will become more difficult for newly launched offerings to gain traction with investors. Active ETFs (which attempt to outperform rather than track an index) have recently become an increasing focus for several managers in an attempt to gain share. While active ETFs still have some of the favorable characteristics of traditional ETFs (such as liquidity and transparency), **the category is still very small** (we estimate total AUM at less than $400 mn, with a heavy emphasis currently on fixed income and alternatives)**, the need for product education among investors is high**, **and these funds have so far eliminated the cost advantage of ETFs, as they tend to be considerably more expensive** (with an average expense ratio of about 75 bps vs <30 bps for passive ETFs**) and harder to benchmark – key features that made ETFs so appealing in the first place.**

Among asset managers, we believe that Buy-rated **BlackRock (BLK) is the best way to participate in the ETF theme** given the firm's scale (over $450 billion in AuM from iShares), a diversified mix of beta and alpha asset classes, and access to a robust global distribution across retail and institutional clients. Conversely, we believe **sub-scale players should use the opportunity to partner with a distributor** (most likely a discount broker) to take advantage of the retail penetration opportunity.

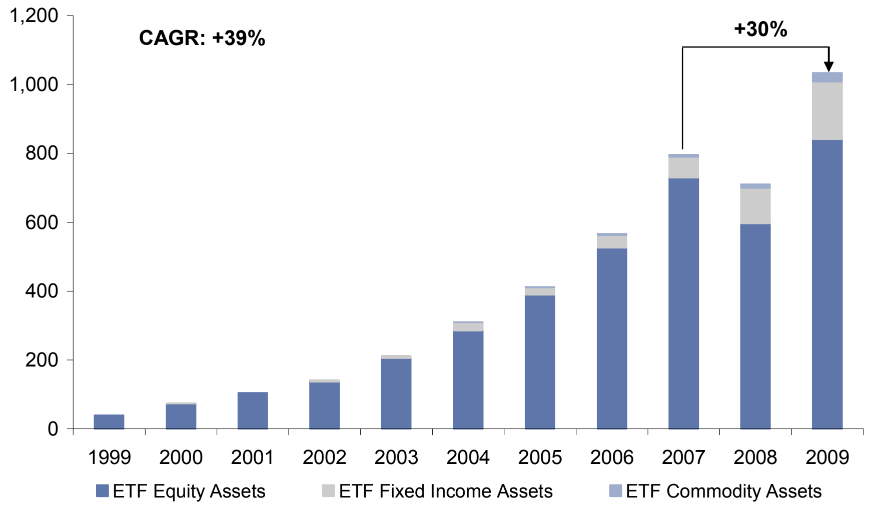
A deeper dive into the ETF world: The market is over $1 trillion globally and still growing

ETF market growth is outpacing traditional mutual funds by a wide margin

ETFs are among the fastest growing financial investment products with favorable growth tailwinds likely to continue. Over the last 10 years, the industry has grown at a 39% CAGR, surpassing $1 trillion in global assets under management as of the end of 2009. In contrast to the challenging dynamics experienced in the traditional mutual fund channel, ETF assets grew through the downturn (up 30% from 2007), which arguably accelerated their widespread use given the products' transparency, liquidity and cost efficiency. Notably, as total global ETF assets increased 30% from 2007, traditional global long-dated mutual fund assets remain 17% below their 2007 peak (see Exhibits 6 and 7).

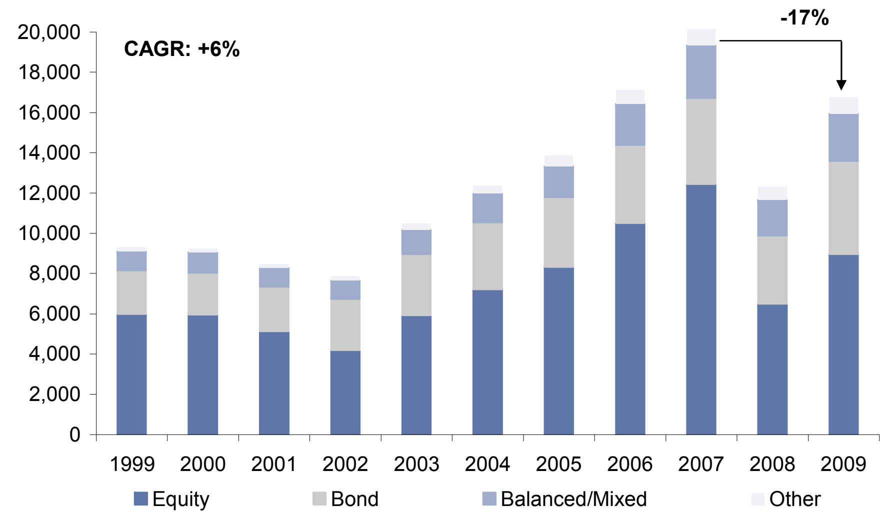
From an organic growth perspective, ETF flows have been accelerating through 2008, slowing down in 2009, but still delivering 20%+ organic growth. From 2002, ETF organic growth has averaged 30% per year. Conversely, traditional mutual funds flows have been averaging 3% annual organic growth for the last eight years (see Exhibits 8 and 9).

Exhibit 6: ETFs gained share through the downturn, up 30% from 2007…
$ in bn



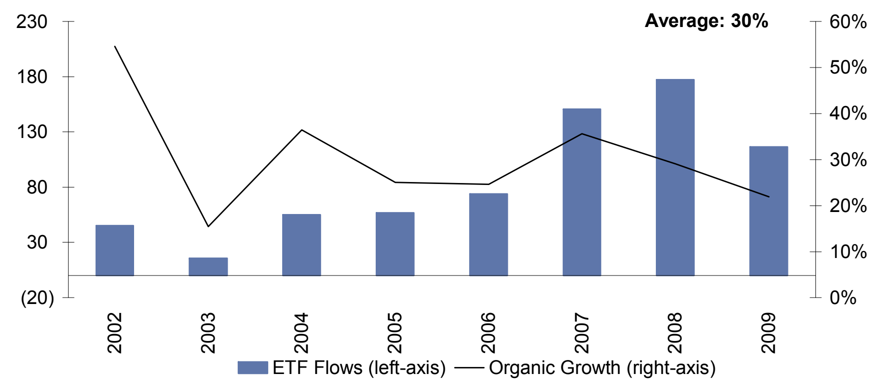
Source: BlackRock, Goldman Sachs Research.

Exhibit 7: …while traditional mutual funds AUM is still 17% below 2007 peak
Traditional global long-dated mutual fund assets ($ bn)



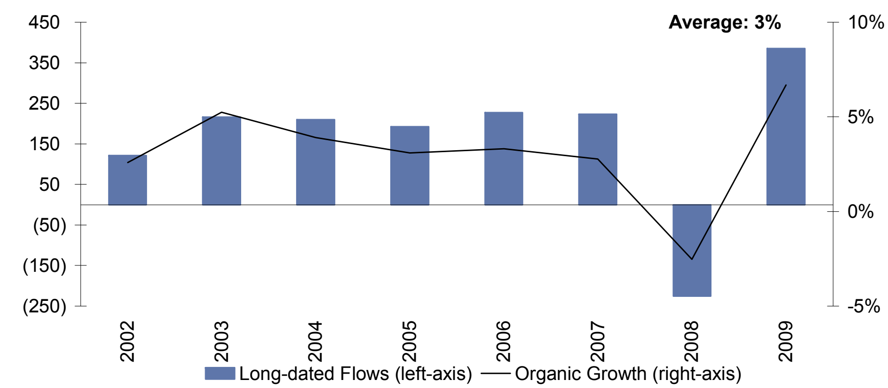
Source: Investment Company Institute, Goldman Sachs Research.

Exhibit 8: ETFs averaged 30% organic growth over the last 8 years…
ETF flows ($ bn) and organic growth; US only



Source: Investment Company Institute, Goldman Sachs Research.

Exhibit 9: …vs. 3% organic growth for traditional long-dated mutual funds
Open-end long-dated mutual fund flows ($ bn) and organic growth; US only



Source: Investment Company Institute, Goldman Sachs Research.

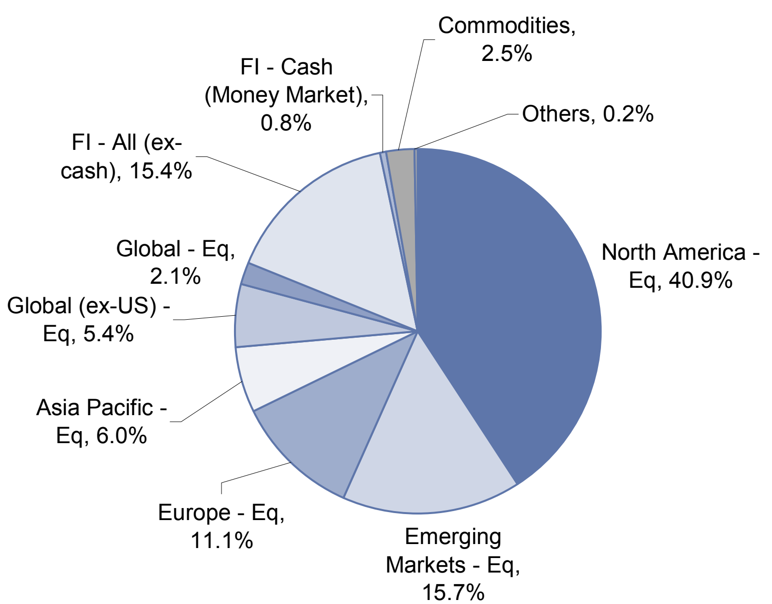
Customization evolves, fees stay low

Equity-linked products still comprise the majority of the ETF business at 80% of total assets under management. However, the ETF space continues to evolve with products becoming more tailored to meet specific investor objectives, including emerging markets, fixed income, and commodities (see Exhibit 10). That said, the fee advantage of ETFs remains significant compared to the traditional open-ended mutual funds. On an asset-weighted basis, equity ETFs charge a 29 bps "all-in" fee versus 99 bps for traditional funds. The gap is similarly large for fixed income funds, with 26 bps for ETFs vs. 84 bps for mutual funds (see Exhibit 11).

New industry with some mature characteristics; first mover advantage is key

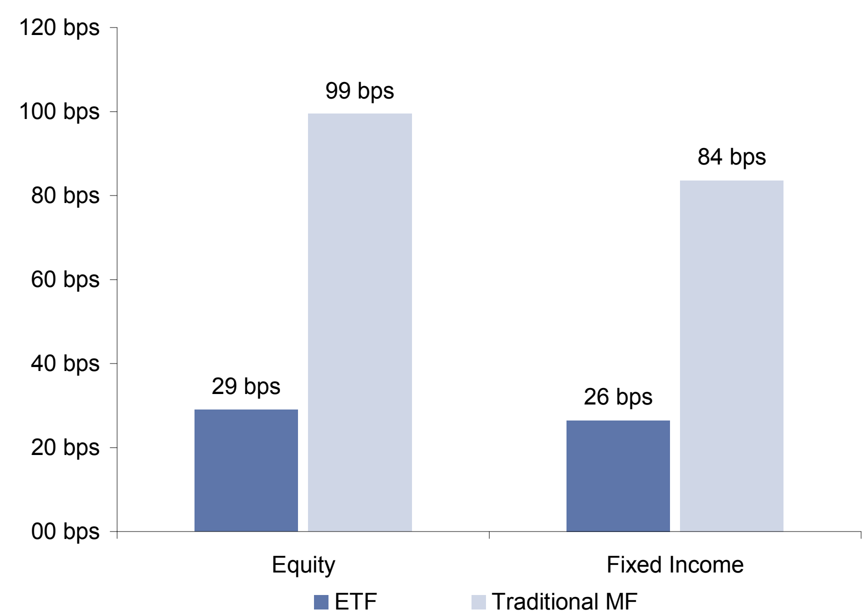
The ETF industry is still arguably in its early stages with considerable growth profile characteristics. That said, the space is fairly concentrated with the top three players (iShares, SSGA, and Vanguard) controlling 72% of the market (see Exhibit 12). From a product perspective, the industry is also relatively concentrated as the top 20 ETFs control 36% of ETF AuM (see Exhibit 13).

Exhibit 10: ETFs evolve in order to meet more narrowly defined client needs
ETF industry composition by strategy



Source: BlackRock, Goldman Sachs Research

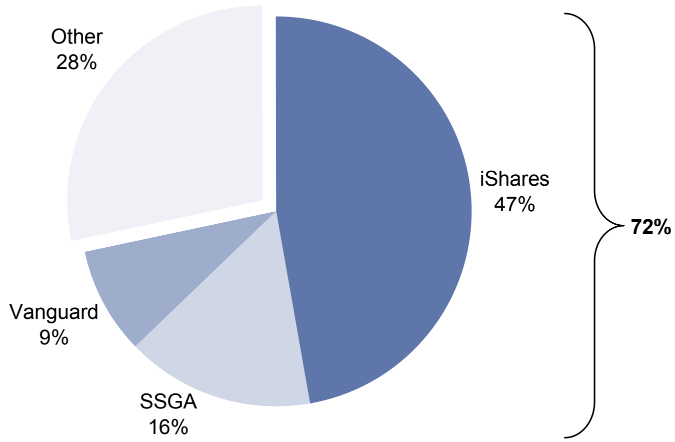
Exhibit 11: ETF offer a significant fee advantage versus traditional funds
All-in fees for ETFs versus traditional open-end mutual funds



Fee rate includes mgmt fees, 12b-1, other, net of fee waivers

Source: Simfund, Goldman Sachs research]

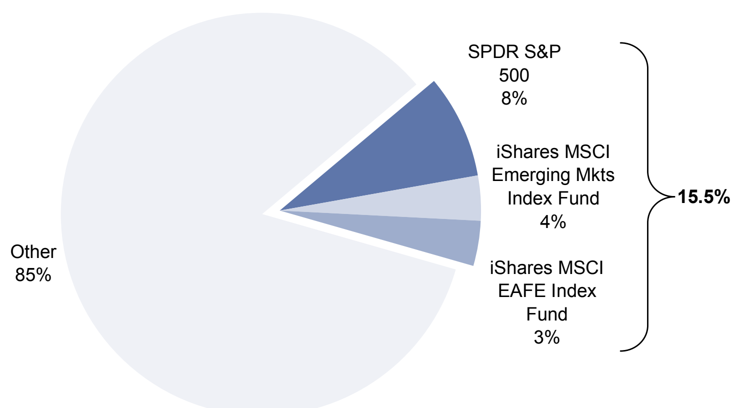
Exhibit 12: Top three ETF providers account for 72% of total market share
Top ETF managers ($ bn)



Provider	# ETF's	AuM ($ bn)	% Total
iShares	413	489	47.2%
State Street Global Advisors	107	161	15.5%
Vanguard	47	92	8.9%
Lyxor Asset Management	125	46	4.5%
db x-trackers	121	37	3.6%
PowerShares	125	35	3.3%
ProShares	78	23	2.2%
Nomura Asset Management	30	13	1.3%
Van Eck Associates Corp	23	13	1.2%
Bank of New York	1	9	0.8%
Credit Suisse Asset Management	27	10	0.9%
ETFlab Investment	31	7	0.7%
Zurich Cantonal Bank	4	7	0.6%
WisdomTree Investments	52	7	0.6%
Commerzbank	62	6	0.6%
Other	--	82	7.9%
Total		**1,036**	

Source: BlackRock, Goldman Sachs Research.

Exhibit 13: Top twenty funds account for 36% of market share, with top three funds accounting for 16% of total market share
Top ETF Funds ($ bn)



Top 20 ETF's	AuM ($ bn)	% Total
SPDR S&P 500	86	8.3%
iShares MSCI Emerging Markets Index Fund	39	3.8%
iShares MSCI EAFE Index Fund	35	3.4%
iShares S&P 500 Index Fund	22	2.1%
Vanguard Emerging Markets	19	1.9%
PowerShares QQQ Trust	19	1.8%
iShares Barclays Tips Bond Fund	19	1.8%
Vanguard Total Stock Market ETF	14	1.3%
iShares Russell 2000 Index Fund	13	1.3%
iShares iBoxx $ Investment GRADE Corporate Bond Fund	13	1.2%
iShares Russell 1000 Growth Index Fund	11	1.1%
iShares Barclays Aggregate Bond Fund	11	1.1%
iShares MSCI Brazil Index Fund	11	1.1%
iShares CDN LargeCap 60 Index Fund	10	1.0%
iShares FTSE/Xinhua China 25 Index Fund	10	1.0%
Others	42	4.1%
Sub-Total	**374**	**36.1%**
Total Industry	**1,036**	**100%**

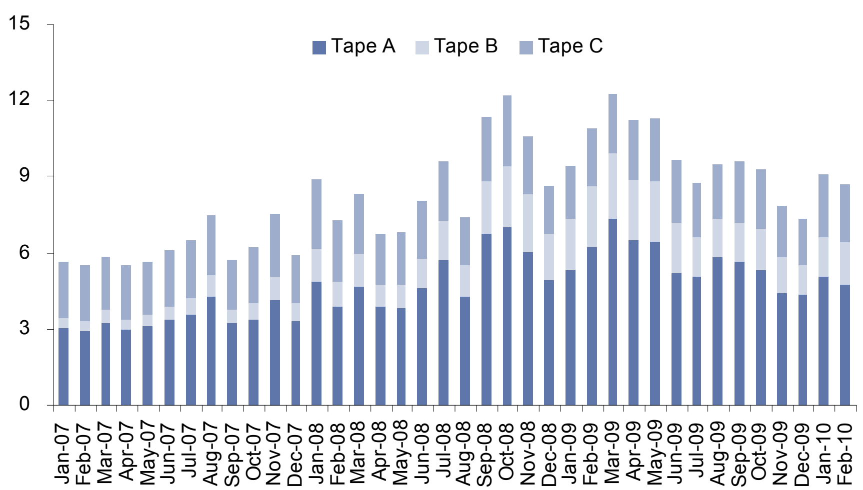
Source: BlackRock, Goldman Sachs Research.

Velocity: ETF volumes have demonstrated torrid growth over the past few years

While ETF assets have nearly doubled since early 2007, ETF trading volumes have quadrupled during this span due to increased trading velocity (led by the popularization of leveraged ETFs). ETFs have found favor among both retail and institutional traders as a means of expressing short-term views in addition to offering investors an investment vehicle with a low fee structure and potential tax efficiency advantages. In the past three years, ETF volumes have grown at a 60% CAGR, compared to 17% annualized growth for U.S. cash equities more broadly (or 12% for Tape A/C). ETFs now account for roughly 15-20% of total industry volumes, a percentage that has actually declined slightly from the 21-22% level observed from November 2008 through June 2009 (see Exhibits 14 and 15).

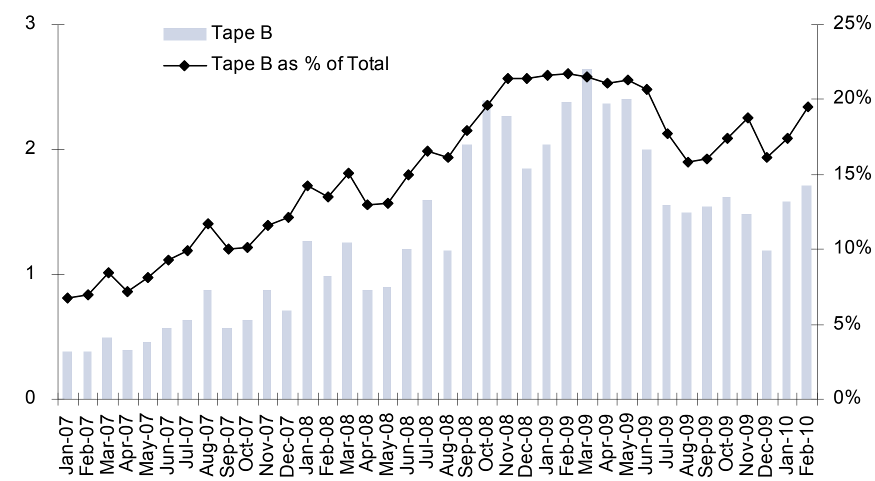
Thus far in 2010, Tape B-listed ETFs have generated average daily volumes (adv) of 1.5 bn, and February adv of 1.6 bn shares was up 1% M/M vs. a 7% decline for broader industry volumes, as ETF market share has increased from 17% to 19%, the highest level since June 2009. While there are roughly 850 ETFs traded on Tape B, the top 50 account for 84% of volumes YTD and the top seven most active ETFs account for nearly half of the total. The SPY (S&P 500) is the most active, with 14% of total volumes, followed by the financials-oriented XLF at 8% and the QQQQ (Nasdaq 100) with 7% of total volume. EEM (emerging market equities) accounts for the next 5%, followed by FAZ (levered short financials) with 4% and IWM (Russell 2000), also with 4%. SDS (short S&P 500) has garnered 3% of volumes YTD, and no other ETF has captured more than 2% of YTD volumes.

Exhibit 14: Overall U.S. cash equity volumes have grown 17% annualized since 2007…
adv in bn



Source: BATS, Goldman Sachs Research.

Exhibit 15: …while ETF volumes have grown at a 60% CAGR since 2007 and now represent nearly 20% of total industry volumes
adv in bn



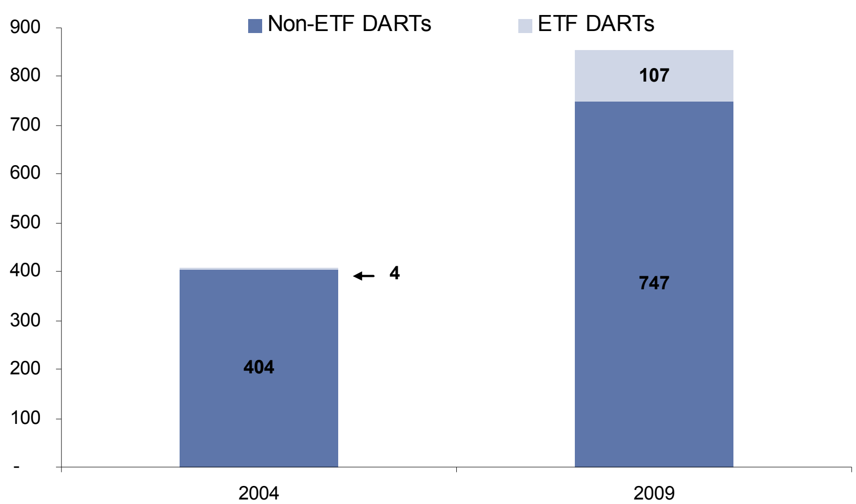
Source BATS, Goldman Sachs Research.

Up to 20% of Discount Brokerage DARTs arise from ETF trades, growing at more than 100% CAGR

ETFs remain a retail-driven product, aimed at investors who wish to express a market opinion without the difficulty of single stock research, manager selection, or timing. Given these traits, it's apparent why retail investors have been attracted to this model. **In fact, over the past five years, we estimate ETFs have gone from roughly 1% of DARTs at the Discount Brokers to 10-15% of total trades today,** with some reports of up to 20% of total trades (see Exhibit 16).

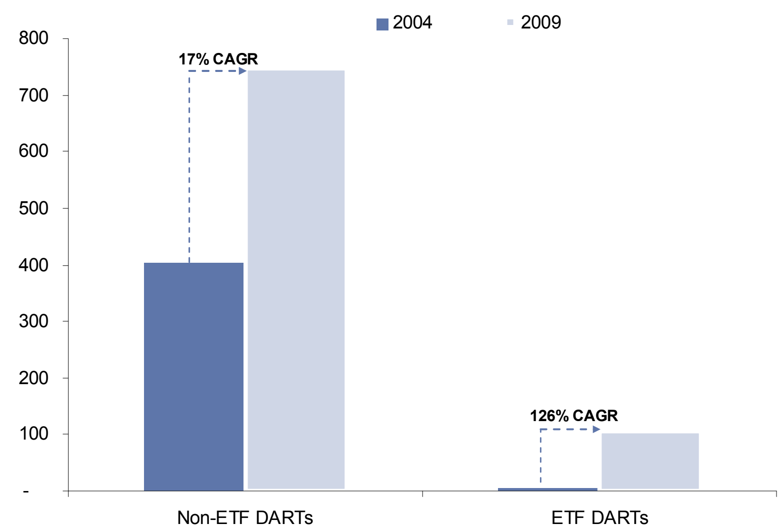
Over the past five years, retail DARTs have grown at a 20% CAGR. If we assume ETF trades now account for 13% of total trades at SCHW, AMTD, and ETFC, we estimate their growth has been at a CAGR of 126% over the past five years, compared to 17% for all DARTs, excluding ETF trades (see Exhibit 17).

Exhibit 16: Five years ago, ETFs were only 1% of industry DARTs
industry DARTs in '000s, ETF and non-ETF trades (industry includes AMTD, ETFC, SCHW)



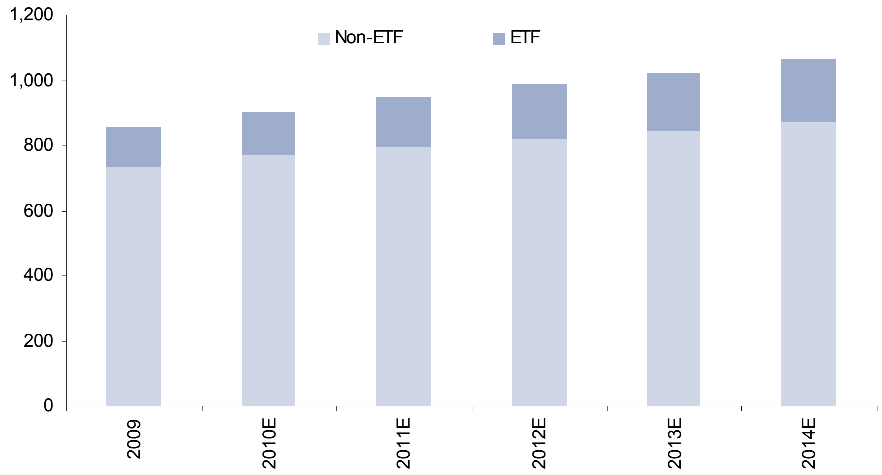
Source: Goldman Sachs Research.

Exhibit 17: ...but they account for 10-15% today
industry DARTs in '000s, ETF and non-ETF trades (industry includes AMTD, ETFC, SCHW)



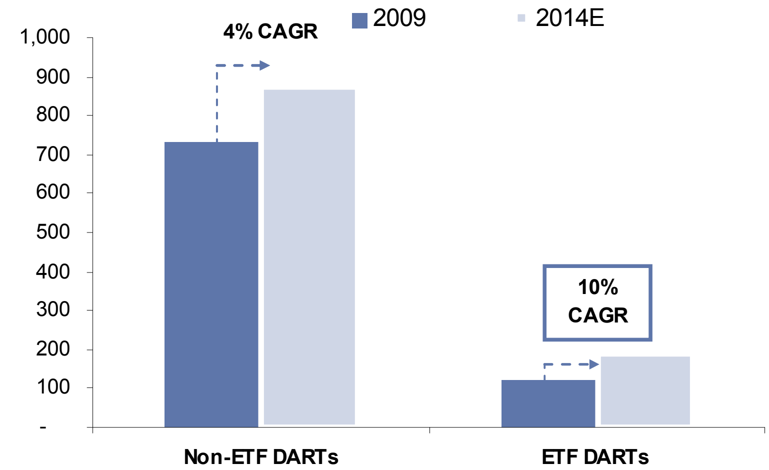
Source: Company data, Goldman Sachs Research.

Exhibit 18: ETF volumes could reach 20% of total volumes over the next five years…
Total DARTs (in '000s) at the largest publicly traded Discount Brokers



Source: Company reports, Goldman Sachs Research estimates.

Exhibit 19: …due to continued outperformance in ETF trading volumes
Total DARTs (in '000s) at the largest publicly traded Discount Brokers



Source: Company reports, Goldman Sachs Research estimates.

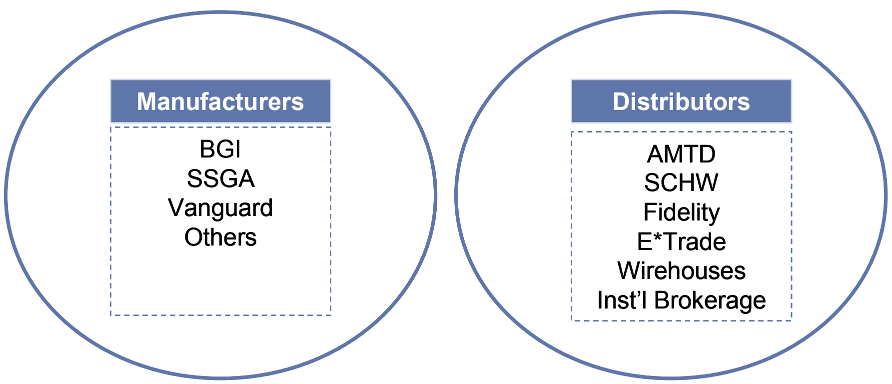
We note that Tape B ETF volumes have grown by 45% annualized over the past five years (vs. 25% for NYSE-listed and 5% for Nasdaq-listed cash equities), and we believe that the discount brokers have attracted a disproportionate share of these volumes. E*Trade recently noted that ETF volumes comprised 14% of total 2009 volumes, and we believe major peers are at a similar level. Assuming that ETF volume growth continues to outpace non-ETF volumes over the next five years, which seems likely, we believe that ETF volumes will eventually account for roughly 20% of total industry volumes, thus warranting significant strategic decisions to ensure market share is retained to help drive asset aggregation. Moreover, as overall U.S. equity volumes have been soft in recent weeks (February cash equities were down 23% Y/Y and down 7% sequentially), we expect the Discounters to take steps to maximize their share of trading activity where possible. Overall, we expect total U.S. equity volumes to decline 11% in 2010.

Blurring the lines between Distribution and Manufacturing

We break down the ETF fee generation landscape into two main groups: the Manufacturers and Distributors. Prior to last November's announcement by Schwab (see our section on the firm's offering later in this document), the creation, marketing, and packaging of ETFs had been done by the likes of State Street Global Advisors, BGI (now part of BlackRock), and Vanguard. To get ETFs in the hands of asset owners, Manufacturers depended upon retail Distributors such as TD Ameritrade, Schwab, and Fidelity Brokerage, institutional brokerage trading floors, and full service wire-houses. There was historically minimal overlap.

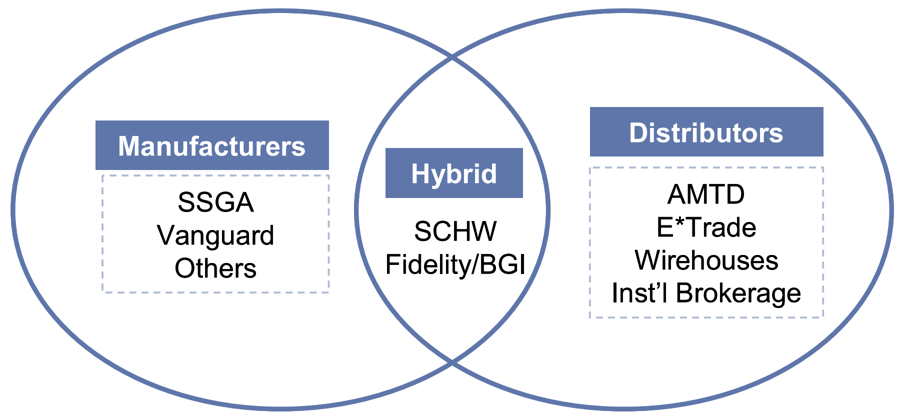
The past six months has brought about significant change in this relatively immature industry. In November 2009, Charles Schwab announced it would begin to offer trading on its own suite of manufactured ETFs, with zero dollar commission trades in those ETFs, while still offering trading opportunities for other ETF families at its current rate (now $8.95/trade). Just a few weeks ago, Fidelity Brokerage announced it would offer zero commission trades for a select group of 25 BGI iShares ETFs (encompassing U.S. and international equities in addition to fixed income products), while also providing its own branded ETF offering. The firm will allow customers to trade other ETFs for $7.95/trade. As discussed below, the lines between manufacturing and distribution appear to be blurring, a trend we anticipate will persist. As distributors of the ETF products flex their distribution capabilities and the owners of large scale manufacturing strive to capture assets, the drive to achieve the largest share of the ETF wallet appears to be well underway. See Exhibits 20 and 21 below.

Exhibit 20: There historically had been a division between manufacturing ETFs and distributing them…



Source: Goldman Sachs Research.

Exhibit 21: …until SCHW announced it would launch its own ETFs and Fidelity Brokerage reached an agreement to distribute BGI iShares ETFs



Source: Goldman Sachs Research.

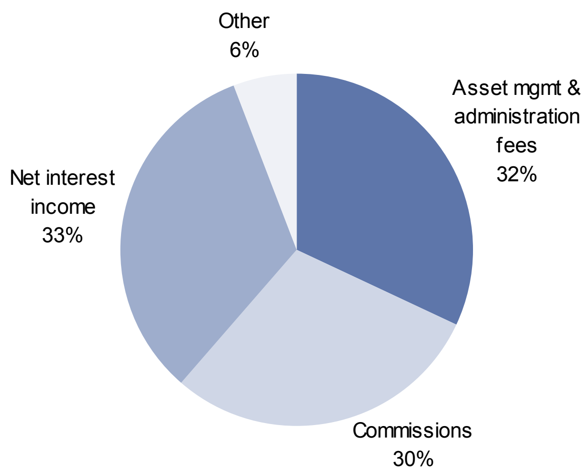
Understanding the rationale behind free ETF trades: cash and margins

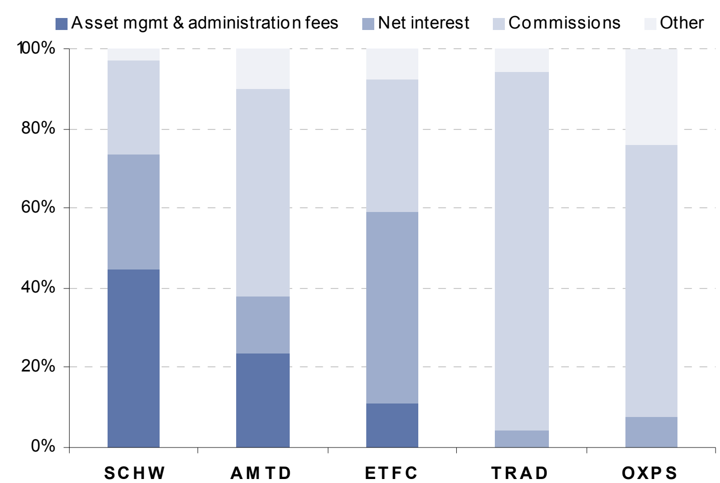
We believe both Charles Schwab and Fidelity Brokerage pursued their strategies to strengthen their asset gathering capabilities. Schwab already has one of the best, if not the best, asset aggregation models in brokerage, growing client assets at roughly 8% organically over the past five years. While Fidelity Brokerage is privately managed, it likely has similar characteristics. Both firms offer their clients a full suite of products to manage their current requirements as well as retirement planning.

As we've noted, there appears to be a secular trend to more passive management within investment management and to some extent, retail investor preferences. We attribute the shift to lower relative fees, easier and more flexible trading of ETFs versus mutual funds, and technological advances that allow real-time pricing and portfolio composition. The Discount Brokers offer attractive pricing to manage trading accounts, including the impacts of recent price changes which have driven per trade pricing below $10/trade for all major players. With lower fees alongside low or zero dollar trades, investors can express their investment strategies quickly and at a low fee relative to asset size and other asset types.

Owning a higher share of client's wallet is the strategic focus. Along with stock and bond trades comes cash management and margin lending, two lucrative areas for Discount Brokers. While the near-zero interest rate policy employed by the Federal Reserve has kept net interest margins low, in more normal environments the rates Discount Brokers can earn on brokerage cash can exceed 300 bps, while the rate earned on margin loans can exceed 600 bps. Over the past four years, roughly two thirds of Discount Broker earnings are tied to net interest margin (33%) and asset management (32%), with less than a third from commissions. We believe most fundamental strategies at the larger firms are based on their ability to gather assets and generate a return on investor cash and cash-like instruments, in addition to fees for managing assets and transaction-based revenues (see Exhibit 22 below).

Exhibit 22: The three largest public Discount Brokers generate 35% of their revenues from cash management and margin loans
chart on left is 2006-9 in aggregate, chart on right is 2009 by specific broker





Source: Company data, Goldman Sachs Research estimates.

We see three options for ETF development at the Discount Brokers: Build, Buy, or Partner

There appear to be three primary ways for the Discount Brokers to gain exposure to both the manufacturing side of ETF products as well as the distribution of these products: (1) Build a new set of ETF products to trade on their platform, (2) Buy an already launched provider of ETF products, or (3) Partner with an experienced manufacturer. Specifically:

Exhibit 23: ETF Growth initiatives announced to-date by the Discount brokers: AMTD and ETFC have yet to roll out an updated ETF trading or manufacturing strategy but may feel pressure to do so

Strategy	Rationale	AMTD	ETFC	Fidelity	SCHW
BUY	**Pro:** Immediate scale, leverage band name and first mover advantage **Con:** Expensive, potential conflict in open architecture platform				
BUILD	**Pro:** Drive growth in direction firm has been oriented, less expensive **Con:** Difficulty gathering assets, lack of first mover advantage, 'me too' offering			✓	✓
PARTNER	**Pro:** Instant brand name, co-marketing budgets, offer full suite at lowest cost **Con:** Limited control, less economics to Discount Broker, potential channel conflict			✓	

Source: Company reports, Goldman Sachs Research.

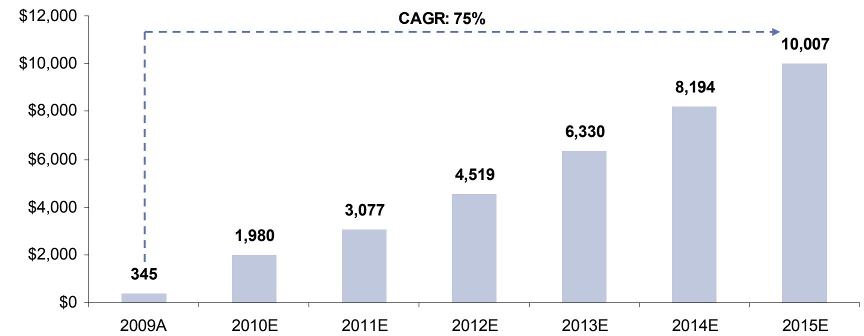
(1) Build: Discount Brokers can choose to build an ETF product suite, with the goal of trading those ETFs through its own platform, collecting a management fee on the assets as well as (potentially) a trading fee. This is the strategy Schwab is following in its ETF strategy, though while it builds out its own platform it remains one of the most active traders of ETFs for other manufacturers. The advantage here is a lower cost than buying and the ability to customize the business from scratch, including index providers, areas to target, and implementing their strategic vision of pricing for management and distribution of the ETFs (see Exhibits 24 and 25 below).

Exhibit 24: Schwab's build-out of a new suite of ETFs carried a blended average fee rate of just 13 bps, below the industry average of 29 bps
% of total based on current assets under management

SCHW proprietary ETFs			
	Fee Rate	Est % of Total	Weighted Rate
U.S. Broad Market (SCHB)	0.08%	25%	0.02%
U.S. Large Cap (SCHX)	0.08%	17%	0.01%
U.S. Small Cap (SCHA)	0.15%	15%	0.02%
International Equity (SCHF)	0.15%	23%	0.03%
U.S. Large Cap Growth (SCHG)	0.15%	9%	0.01%
U.S. Large Cap Value (SCHV)	0.15%	5%	0.01%
International Small Cap Equity (SCHC)	0.35%	2%	0.01%
Emerging Market (SCHE)	0.35%	4%	0.01%
Blended Fee Rate (estimate)		**100%**	**0.13%**

Source: Company data, Goldman Sachs Research.

Exhibit 25: We estimate SCHW branded ETFs could reach $10 bn in assets under management by 2015
in $ mn



Source: Goldman Sachs Research.

(2) Buy: Buying an ETF provider may be the most effective way to gather assets. The first-mover advantage in ETFs appears very strong, with the 'first' launch of a given product tending to have a high degree of success owning the assets in that category assuming proper ETF construction and pricing. Buying an established player provides that first mover advantage to the Discount Broker, limiting the speed necessary to achieve scale. The advantage is speed and acquisition of first mover advantage, the negative is the cost of the acquisition. We have three data points on public pricing of ETF assets and deal costs, which we estimate average 2.1% of AUM and range between 130 to 320 bps on AUM (see Exhibit 26).

As of yet, there has not been a successful acquisition of an ETF provider by a Discount Brokerage firm, though we believe this may change as AMTD and ETFC consider their near term opportunities for growth.

Exhibit 26: Three ETF data points indicate ETF-derived assets price at 1-3% of AUM
$ in mn, except where noted

	EV	AUM	Multiples		
	($ mn)	($ mn)	P/AUM	EV/EBITDA (LMT)	EV/Revenue (LTM)
WSDT	217	6,668	3.2%	--	10.1X
iShares	4,400	331,000	1.3%	10.1X	4.6X
PowerShares	60	3,500	1.7%		
Average			**2.1%**		**7.3X**

Notes:
WSDT's EV is the firm's market cap
iShares EV is CVC's offer from Apr-09
PowerShares's EV is IVZ's purchase price from Jan-06

Source: Goldman Sachs Research estimates.

(3) Partner: The cost to acquire and length of time to generate assets are both strong arguments in favor of partnering with an ETF manufacturer to get some of the immediate benefits of a purchase or creation. This is the strategy Fidelity Brokerage appears to have followed in its recent agreement with BGI. The positive are a relationship with an established ETF provider, which may cast a positive shadow over the platform as well as immediate brand recognition. The downside is the likelihood the economics will remain shared at best, depending on how the structure is created. In the Fidelity Brokerage/BGI agreement, BGI retains all of its management fees and provides to Fidelity Brokerage a co-marketing budget to offset marketing and other costs. In Fidelity Brokerage's case, it is also giving up the transaction fees it earned on trading BGI iShares ETFs (for the 25 included in the agreement). However, gaining more share of wallet with its current investors and potentially adding a higher market share of new clients should be viewed as a material differentiator.

In early February 2010, Fidelity Brokerage signed a co-marketing agreement with BlackRock to offer free trades for 25 iShares ETFs. Fidelity Brokerage also announced it would offer commission-free trading in ONEQ, Fidelity Brokerage's NASDAQ Composite Index ETF with $127 mn in AUM (as of January 31, 2010) and a management fee rate of 30 bps. The Fidelity Brokerage agreement applies to 25 of BlackRock's 200 ETF products (and 20 of the top 50 by AUM), including domestic and international equities, as well as domestic and international fixed income funds (see Exhibit 27).

The co-marketing agreement offers free trading on 25 of the largest and most liquid ETFs and poses a significant competitive threat to Schwab in particular given the deep liquidity and significant first-mover advantage associated with many of these products. Fidelity Brokerage's head of retail brokerage recently noted that while ETFs account for only 3% of customer assets, they now represent 20% of trading volumes, double the 2007 level.

Exhibit 27: BlackRock iShares ETFs included in the co-marketing partnership with Fidelity Brokerage (top 50 by AUM shown in bold)

$ in mn, except where noted

Ticker	US Equity	AUM	Fee rate (%)
IVV	**S&P 500**	**20,861**	**0.09**
IWM	**Russell 2000**	**11,778**	**0.24**
IWF	**Russell 1000 Growth**	**10,657**	**0.20**
IWD	**Russell 1000 Value**	**8,483**	**0.20**
IJH	**S&P Mid Cap 400**	**6,390**	**0.21**
IVW	**S&P 500 Growth**	**5,390**	**0.18**
IJR	**S&P Small Cap 600**	**5,179**	**0.20**
IWB	**Russell 1000**	**4,879**	**0.15**
IVE	**S&P 500 Value**	**3,632**	**0.18**
IWN	**Russell 2000 Value**	**3,379**	**0.33**
IWO	**Russell 2000 Growth**	**3,038**	**0.25**
IWV	**Russell 3000**	**2,823**	**0.21**
IJK	**S&P Mid Cap 400 Growth**	**1,849**	**0.25**
IJJ	**S&P Mid Cap 400 Value**	**1,843**	**0.28**
IJS	S&P Small Cap 600 Value	1,505	0.25
IJT	S&P Small Cap 600 Growth	1,423	0.25
Sub-Total		**93,109**	**0.22**

Ticker	International Equity	AUM	Fee rate
EEM	**MSCI Emerging Markets**	**36,022**	**0.72**
EFA	**MSCI EAFE**	**33,640**	**0.35**
ACWI	MSCI ACWI	788	0.35
SCZ	MSCI EAFE Small Cap	767	0.40
Sub-Total		**71,217**	**0.46**

Ticker	Fixed Income	AUM	Fee rate
TIP	**Barclays TIPS Fund**	**19,456**	**0.20**
LQD	**iBoxx $ Investment Grade Corporate**	**12,549**	**0.15**
AGG	**Barclays Aggregate Bond Fund**	**11,341**	**0.24**
MUB	**S&P National AMT-Free Municipal**	**1,636**	**0.25**
EMB	JP Morgan USD Emerging Markets	1,226	0.60
Sub-Total		**46,209**	**0.29**
	Total 25 iShares Funds	**210,534**	**0.32**

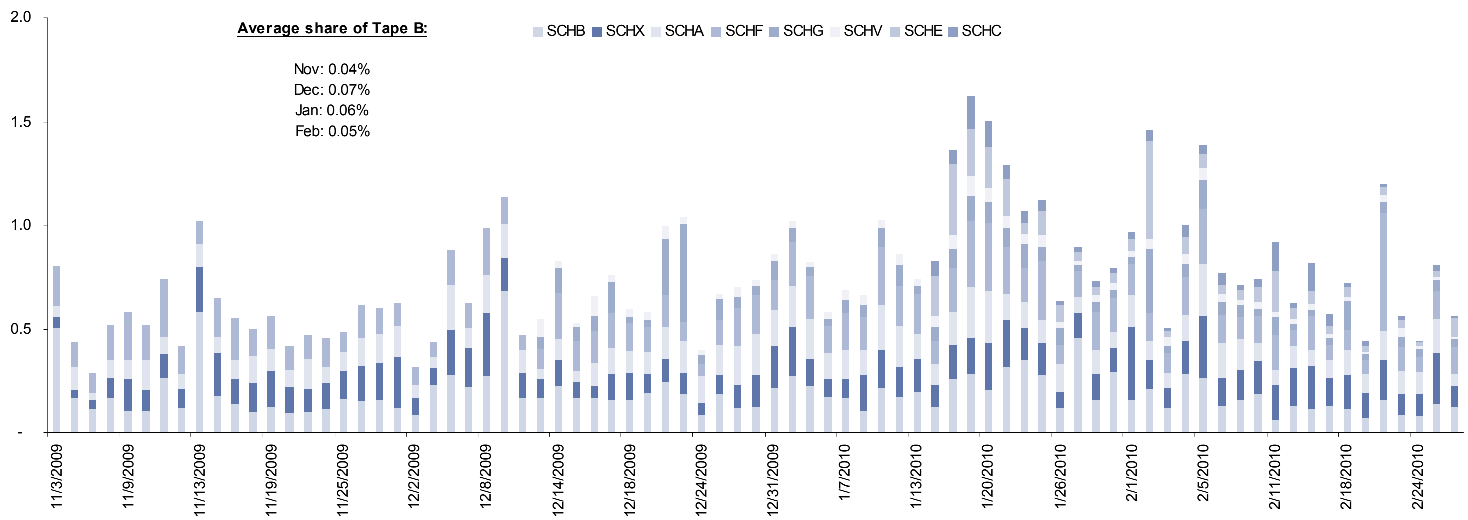
Source: Company reports, Investment Company Institute, Goldman Sachs Research.

Digging into Schwab ETFs: Gaining traction but at the expense of trading commissions

In November 2009, Schwab announced the launch of eight ETFs (five domestic equities and three international equities) to take advantage of the popularity of ETF trading. Four of these funds (SCHB, SCHX, SCHA, and SCHF) launched immediately, two (SCHG and SCHV) launched in mid-December, and the final two international ETFs (SCHE and SCHC) launched in mid-January. At the SCHW investor day in November 2009, the firm indicated its ETF assets have grown 50%, versus a 7% decline in S&P 500 levels and a 44% increase in overall ETF industry assets. SCHW had roughly $80 bn in client ETFs as of November 2009.

Within two months, Schwab-branded ETF AUM grew to $345 mn and ADV (not trades, this is units of the ETFs traded) grew to 634K (shares, not trades), suggesting this effort is finding some degree of acceptance. In January 2010, net inflows into Schwab's family of ETFs were $171 mn, leading to $516 mn of total AUM in Schwab ETFs as of 1/31/2010 and an additional $151 mn of net inflows since then has resulted in $667 mn as of 3/11/2010. While this initiative is still in its infancy (with total market share of less than 0.1% of the industry total of over $1 tn), the rate of growth over the past several months has been impressive, and we estimate Schwab could finish 2010 with over $2 bn in AUM if the January 2010 rate of growth is sustained (see Exhibit 30).

Exhibit 28: Schwab ETF volumes have nearly doubled since the early November launch
adv in mn



Source: FactSet, Goldman Sachs Research.

We estimate the weighted average size of an ETF trade is roughly $40K, which is more than 5X the average size of an equity trade. We ascertain the average ETF trade size through a weighted analysis of both iShares and SSGA trade sizes, by product, weighted to the products with the most assets and trading volume. The overall industry equity trading data point is based on NITE's monthly data metrics (see Exhibit 29).

Exhibit 29: Average ETF trade size is roughly $40K, roughly 5X the industry average equity trade
as noted

State Street Global Advisors SPDRs			
Unweighted Trade Size	Avg Daily Volume ($ mn)	Wghted Trade Size	Weighted Trade Size
14,701	30,341	100%	37,450

BGI iShares			
Unweighted Trade Size	AUM ($ bn)	Wghted Trade Size	Weighted Trade Size
26,783	248,317	99%	42,603

Industry Average		
ETF Family	Unweighted Trade Size	Weighted Trade Size
SSGA	14,701	37,450
iShares	26,783	42,603
Industry	**20,742**	**40,026**

Source: Company data, Goldman Sachs Research estimates.

Using this as a base level of assets per trade implies SCHW has generated roughly 700 trades per day among its own ETFs in 1Q10, which could otherwise have been transacted in other fee-paying ETF trades. With the rollout of additional SCHW ETFs over the past few months and projecting out a turnover rate similar to what has been witnessed over the past four months, we estimate SCHW will book roughly 250K-300K trades in SCHW-branded ETFs for full year 2010, or roughly 1,500 trades per day by year-end, versus a total DART level at Schwab of approximately 350K trades per day today. This equates to less than one-half of 1% of SCHW's daily trading volume going to SCHW-branded ETFs.

Assuming a blended fee rate of 13 bps, based on the most recent distribution of AUM across the funds (fees vary between 8 bps and 35 bps), we estimate incremental management fees in 2010 of about $1.5-$2.0 mn, with this benefit offset by the foregone commission revenues from trading non-Schwab ETFs – we estimate roughly $2.5 mn in foregone commissions on SCHW branded ETFs. Additionally, while Schwab initially planned to charge a 12b-1 distribution fee for its ETFs, this fee was eliminated in mid-January 2010. When we factor in the forgone commissions from trading non-Schwab ETFs, the bottom line impact on SCHW appears minimal, but begins to be a positive impact in 2011, reaching $5 mn in additional revenue by 2015. This result underscores the rationale behind the strategy – SCHW is attempting to 'lock in' sticky client assets to generate revenues from other areas, including net interest income on cash, cash management fund management fees, and potentially other trading revenues outside the ETF offering in stocks, options, and bonds. Asset management revenues seem unlikely to be robust. See Exhibits 30 and 31.

Exhibit 30: We estimate the Schwab ETF products will generate $1.5 mn in 2010 management fees, increasing at a 40% CAGR to $12 mn over the next five years as SCHW achieves greater scale in the ETF management business….
$ in mn

SCHW ETF Fund AUM analysis	4Q09	1Q10E	2Q10E	3Q10E	4Q10E	2010E	2011E	2012E	2013E	2014E	2015E
	Quarterly					Annual					
AUM estimate ($ mn)											
U.S. Broad Market (SCHB)	88	191	286	429	644	644	1,127	1,803	2,705	3,652	4,564
U.S. Large Cap (SCHX)	71	114	142	171	205	205	266	333	399	479	551
U.S. Small Cap (SCHA)	46	112	156	203	264	264	343	429	537	644	740
International Equity (SCHF)	88	153	199	258	323	323	452	588	764	956	1,195
U.S. Large Cap Growth (SCHG)	35	65	94	136	197	197	336	537	779	1,012	1,215
U.S. Large Cap Value (SCHV)	18	39	57	82	120	120	203	325	472	613	736
International Small Cap Equity (SCHC)	-	23	41	61	86	86	137	206	288	375	449
Emerging Market (SCHE)	-	41	73	109	142	142	212	297	387	464	557
Total	**345**	**738**	**1,048**	**1,450**	**1,980**	**1,980**	**3,077**	**4,519**	**6,330**	**8,194**	**10,007**
% Change (sequential)		43%	42%	38%	37%	473%	55%	47%	40%	29%	22%
Management Fees ($ mn)											
U.S. Broad Market (SCHB)		0.0	0.0	0.1	0.1	0.3	0.7	1.2	1.8	2.5	3.3
U.S. Large Cap (SCHX)		0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.4
U.S. Small Cap (SCHA)		0.0	0.1	0.1	0.1	0.2	0.5	0.6	0.7	0.9	1.0
International Equity (SCHF)		0.0	0.1	0.1	0.1	0.3	0.6	0.8	1.0	1.3	1.6
U.S. Large Cap Growth (SCHG)		0.0	0.0	0.0	0.1	0.2	0.4	0.7	1.0	1.3	1.7
U.S. Large Cap Value (SCHV)		0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.6	0.8	1.0
International Small Cap Equity (SCHC)		0.0	0.0	0.0	0.1	0.1	0.4	0.6	0.9	1.2	1.4
Emerging Market (SCHE)		0.0	0.0	0.1	0.1	0.3	0.6	0.9	1.2	1.5	1.8
Management Fees ($ mn)		**0.2**	**0.3**	**0.4**	**0.6**	**1.6**	**3.6**	**5.3**	**7.5**	**9.9**	**12.3**
Avg Fee Rate (bps)		13.2	14.1	14.4	14.4	14.0	14.2	14.0	13.8	13.6	13.5

Source: Goldman Sachs Research estimates.

Exhibit 31: After adjusting for forgone revenues from trading non-SCHW ETFs, we estimate the impact from the ETF strategy may be limited but positive beginning in 2011
$ in mn, except where noted

SCHW ETF Fund trading and profit analysis	4Q09	1Q10E	2Q10E	3Q10E	4Q10E	2010E	2011E	2012E	2013E	2014E	2015E
	Quarterly					Annual					
Total SCHW Based ETF AUM ($ mn)	345	738	1,048	1,450	1,980	1,980	3,077	4,519	6,330	8,194	10,007
Annualized Velocity	10.4x	9.5x	9.0x	8.5x	8.0x	6.5x	5.0x	3.5x	3.5x	3.5x	3.5x
Total value traded ($ mn)	898	1,754	2,360	3,086	3,965	11,165	12,668	13,329	19,037	25,486	31,937
Average trade size ($/trade)	40,026	40,026	40,026	40,026	40,026	40,026	40,026	40,026	40,026	40,026	40,026
Average trades/period	22,435	43,831	58,960	77,089	99,069	278,949	316,501	333,008	475,602	636,722	797,911
Days/Period	63	61	64	64	63	252	252	252	252	252	252
Trades/Day	356	719	921	1,205	1,573	1,107	1,256	1,321	1,887	2,527	3,166
Foregone ETF trading revenue @ $8.95/trade, $ mn	0.2	0.4	0.5	0.7	0.9	2.5	2.8	3.0	4.3	5.7	7.1
Additional/(lower) revenues from ETF strategy		**(0.2)**	**(0.2)**	**(0.2)**	**(0.3)**	**(0.9)**	**0.8**	**2.3**	**3.2**	**4.2**	**5.1**

Source: FactSet, Company data, Goldman Sachs Research.

We expect AMTD and ETFC to respond, given the growing importance of ETFs

With Fidelity Brokerage and Schwab offering a significantly more competitive commission rates on certain ETFs, it seems likely that AMTD and ETFC will be forced to respond. Despite AMTD's comfort with its $9.99 overall equity commission rate, we expect an ETF initiative may be forthcoming to protect the long-term value of its franchise from the risk of lower net new asset growth versus peers due to the allure of free ETF trading at major peers. We acknowledge ETFs are only one part of the overall competitive dynamic, but it stands to reason that given the growth in ETF assets and increased investor attention, AMTD and ETFC are currently assessing the new offerings from peers and recalibrating their own strategies. AMTD appears better positioned to respond given greater leadership stability and a healthier balance sheet, but with ETFC's exposure to ETFs at 14% of DARTs, it is likely considering its options as well.

We believe AMTD will likely partner or buy additional ETF capabilities, rather than start its own ETF platform. Our rationale is as follows:

Partner: there are two remaining 'scale' players – SSGA and Vanguard – who would likely be open to discussion on increasing their distribution following the BGI iShares announcement of a strategic partnership with Fidelity Brokerage. While each firm is strong on a standalone basis, they would become even more formidable with the distribution strength of AMTD or ETFC. STT has expressed optimism about the secular growth profile of ETFs and has noted that the business enjoys higher barriers to entry than many realize because of the first-mover advantage associated with branding and liquidity.

Buy an ETF manufacturer: The only three that appear too large to acquire are BGI iShares, SSGA, and Vanguard ETFs, and we note among the top fifteen ETF manufactures, five are not part of large banks or brokers.

Investment considerations

TD Ameritrade has underperformed the S&P this year (down 2% compared to a 3% increase in the S&P 500), owing to concerns over price competition and 'lower for longer' short-term rates. In fact, prior to Friday's 5% surge, AMTD had been underperforming the S&P 500 by nearly 1000 bps year-to-date.

However, while retail DARTs may not be a positive catalyst in the next few weeks, given soft equity and option volumes in February and thus far in March, we think volume softness is already reflected in current valuation. Should AMTD purchase an ETF manufacturer, or partner with a major ETF manufacturer, we believe it would have a positive impact on AMTD's valuation relative to peers and could actually be a positive contributor to longer term earnings and asset growth.

We do not expect E*Trade to announce any major purchases, but the firm could reach an agreement with a manufacturer. However, given the lack of a permanent CEO at the company, it may wait to change its ETF strategy until there is more clarity around the leadership of the company. Furthermore, a large-scale ETF provider may be unwilling to reach an agreement with ETFC until the firm's internal strategy has been crystallized. Bob Druskin, the Company's interim CEO, recently stated that the preferred candidate for the permanent CEO position is no longer under consideration and that the firm's search committee remains focused on identifying the best person to lead the firm. Mr. Druskin also stated that he is actively involved in the business and remains fully committed to serving as interim CEO until a permanent CEO is in place.

Reg AC

We, Marc Irizarry, Daniel Harris, CFA, Alexander Blostein, CFA, Jason Harbes, CFA, Jessica Binder, CFA and Neha Killa, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Investment Profile

The Goldman Sachs Investment Profile provides investment context for a security by comparing key attributes of that security to its peer group and market. The four key attributes depicted are: growth, returns, multiple and volatility. Growth, returns and multiple are indexed based on composites of several methodologies to determine the stocks percentile ranking within the region's coverage universe.

The precise calculation of each metric may vary depending on the fiscal year, industry and region but the standard approach is as follows:

Growth is a composite of next year's estimate over current year's estimate, e.g. EPS, EBITDA, Revenue. **Return** is a year one prospective aggregate of various return on capital measures, e.g. CROCI, ROACE, and ROE. **Multiple** is a composite of one-year forward valuation ratios, e.g. P/E, dividend yield, EV/FCF, EV/EBITDA, EV/DACF, Price/Book. **Volatility** is measured as trailing twelve-month volatility adjusted for dividends.

Quantum

Quantum is Goldman Sachs' proprietary database providing access to detailed financial statement histories, forecasts and ratios. It can be used for in-depth analysis of a single company, or to make comparisons between companies in different sectors and markets.

Disclosures

Coverage group(s) of stocks by primary analyst(s)

Marc Irizarry: America - Asset Managers. Daniel Harris, CFA: America-Brokers, America-Discount Brokers, America-Market Structure. Alexander Blostein, CFA: America - Asset Managers.

America - Asset Managers: Affiliated Managers Group, Inc., AllianceBernstein Holding L.P., Artio Global Investors Inc., BlackRock, Inc., Calamos Asset Management, Inc., Cohen & Steers, Inc., Eaton Vance Corp., Federated Investors, Inc., Fortress Investment Group LLC, Franklin Resources, Inc., Gamco Investors Inc., INVESCO Ltd., Janus Capital Group Inc., KKR & Co. (Guernsey) L.P., Legg Mason, Inc., Och-Ziff Capital Management Group LLC, T. Rowe Price Group, Inc., Pzena Investment Management, Inc., The Blackstone Group L.P., Waddell & Reed Financial, Inc..

America-Brokers: Duff & Phelps Corporation, Evercore Partners Inc., Greenhill & Co., Inc., Jefferies Group Inc., Lazard Ltd., Piper Jaffray Companies Inc., Raymond James Financial, Inc., Stifel Financial Corp..

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America-Market Structure: BGC Partners, Inc., CME Group Inc., GFI Group Inc., IntercontinentalExchange, Inc., Investment Technology Group, Inc., Knight Capital Group, Inc., MarketAxess Holdings Inc., NASDAQ OMX Group Inc., NYSE Euronext, Inc., TMX Group, Inc..

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Goldman Sachs Investment Research global coverage universe

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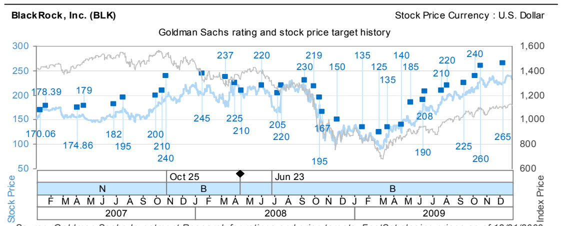
Price target and rating history chart(s)



Source: Goldman Sachs Investment Research for ratings and price targets; FactSet closing prices as of 12/31/2009.

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