



# ETF Industry Highlights

As of end October 2008

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# Current Trends as of end October 2008

- In the first ten months of 2008 we have seen investors move assets into ETFs providing exposure to fixed income and commodity indices while the assets in ETFs tracking equity indices especially Global (ex US) and Emerging Market indices have declined.
- Stocks suffered their worst ever monthly losses in many markets in October. The S&P 500 fell the most in a single month since the crash of 1987. The Nikkei 225 fell 24% - the worst in its 58 year history. Many investors are afraid to take action and are sitting on higher than average cash balances.
- According to the SIX Swiss Exchange, ETF trading reached an all-time high with a turnover of CHF 7.6 billion (+95.42% versus the prior-month reading and +183.65% compared to October 2007) on the SIX Swiss Exchange, SWX Europe and Scoach Switzerland.
- Investors who are expressing concerns over counterparty risk, transparency and liquidity when using structured products, swaps, certificates, and notes are showing a preference for ETFs where the structure is a fund, and often, more specifically for ETFs which invest exclusively in-specie in securities. In Europe the net sales of ETFs in the first eight months of 2008 were USD 47.6 billion. European domiciled mutual funds net sales were USD – 125.1 billion based on data from Lipper/Feri.
- October saw the largest number of ETF managers close their ETFs, with Santander, Bear Stearns and FocusShares closing their ETF businesses. Year to date there have been 53 ETF closures.

# Global ETF Industry 2008

As of end October 2008

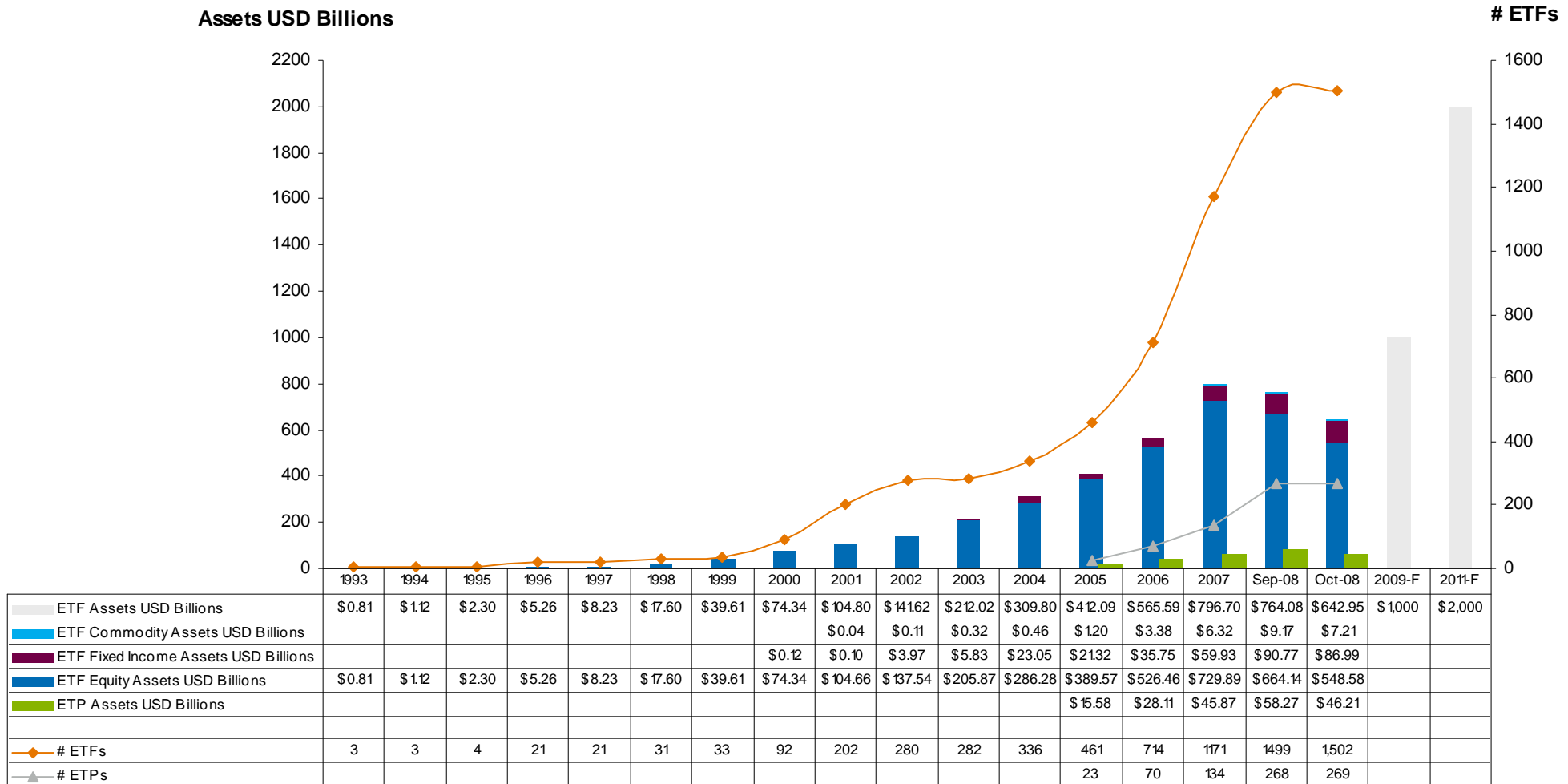
Metric	Global		US		Europe		Japan		Asia ex-Japan	
	Oct-08	YTD Change (%)	Oct-08	YTD Change (%)	Oct-08	YTD Change (%)	Oct-08	YTD Change (%)	Oct-08	YTD Change (%)
<b>AUM (US\$Bn)</b>	642.95	-19.3%	454.38	-21.8%	125.76	-2.1%	23.23	-32.1%	21.02	-22.4%
<b># ETFs</b>	1,502	28.3%	663	10.3%	587	38.8%	61	306.7%	95	37.7%
<b># Managers</b>	85	13.3%	18	5.9%	29	3.6%	5	25.0%	34	25.9%
<b># Exchanges</b>	43	4.9%	4	0.0%	20	11.1%	2	0.0%	13	0.0%
<b>Daily Trading Volume (US\$Mn)</b>	136,157.57	124.8%	131,821.07	127.2%	2,480.90	60.0%	287.04	156.4%	528.55	85.8%

- At the end of October 2008, there were 1,502 ETFs with 2,528 listings, assets of US\$642.95 billion, managed by 85 managers on 43 exchanges around the world.
- Worldwide YTD ETF AUM fell by 19.3%, which is less than the 39.75% fall in the MSCI World index in USD terms.
- Exchanges with official ETF listings increased by two YTD to 43.
- # ETFs increased by 28% with 381 new launches YTD.
- Standard and Poors (S&P) ranks 1st with US\$187.36 Bn in ETF AUM tied to their benchmarks, while MSCI ranks 2nd with US\$122.93 Bn, followed by Russell in 3<sup>rd</sup> with US\$49.50 Bn.
- Year to date, the average daily trading volume in US dollar has increased by 125% to US\$136.16 billion.
- There are currently plans to launch 571 new ETFs.
- Additionally, there were 269 other ETPs (Exchange Traded Products) with assets of US\$46.21 Bn managed by 26 managers on 14 exchanges.

Data as of end October 2008  
Source: Global ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg

# Global ETF and ETP Growth

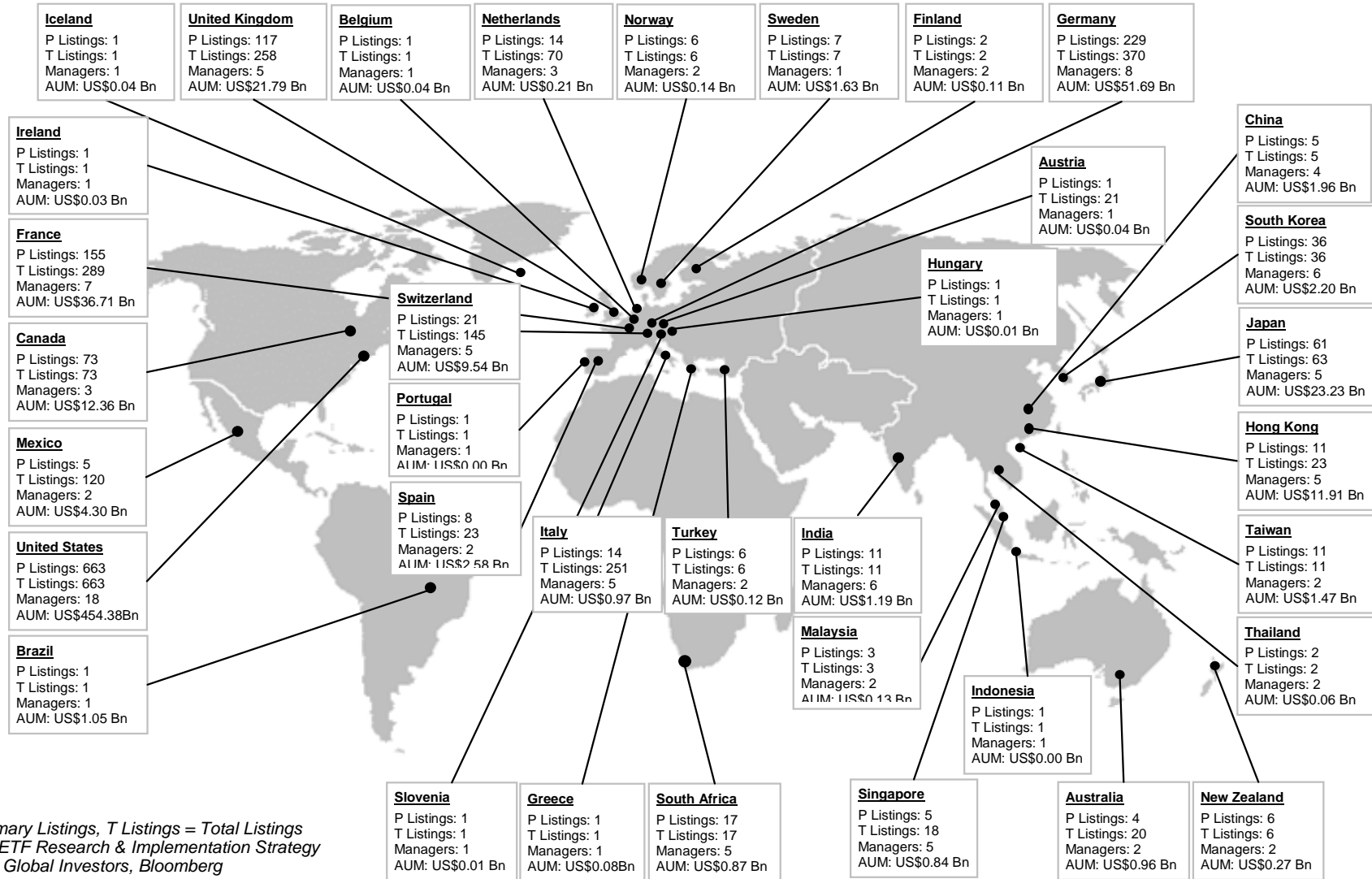
**Our forecast is: ETF AUM will exceed US\$1 trillion in 2009 and US\$2 trillion in 2011.**



Data as of end October 2008  
 Source: Global ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg

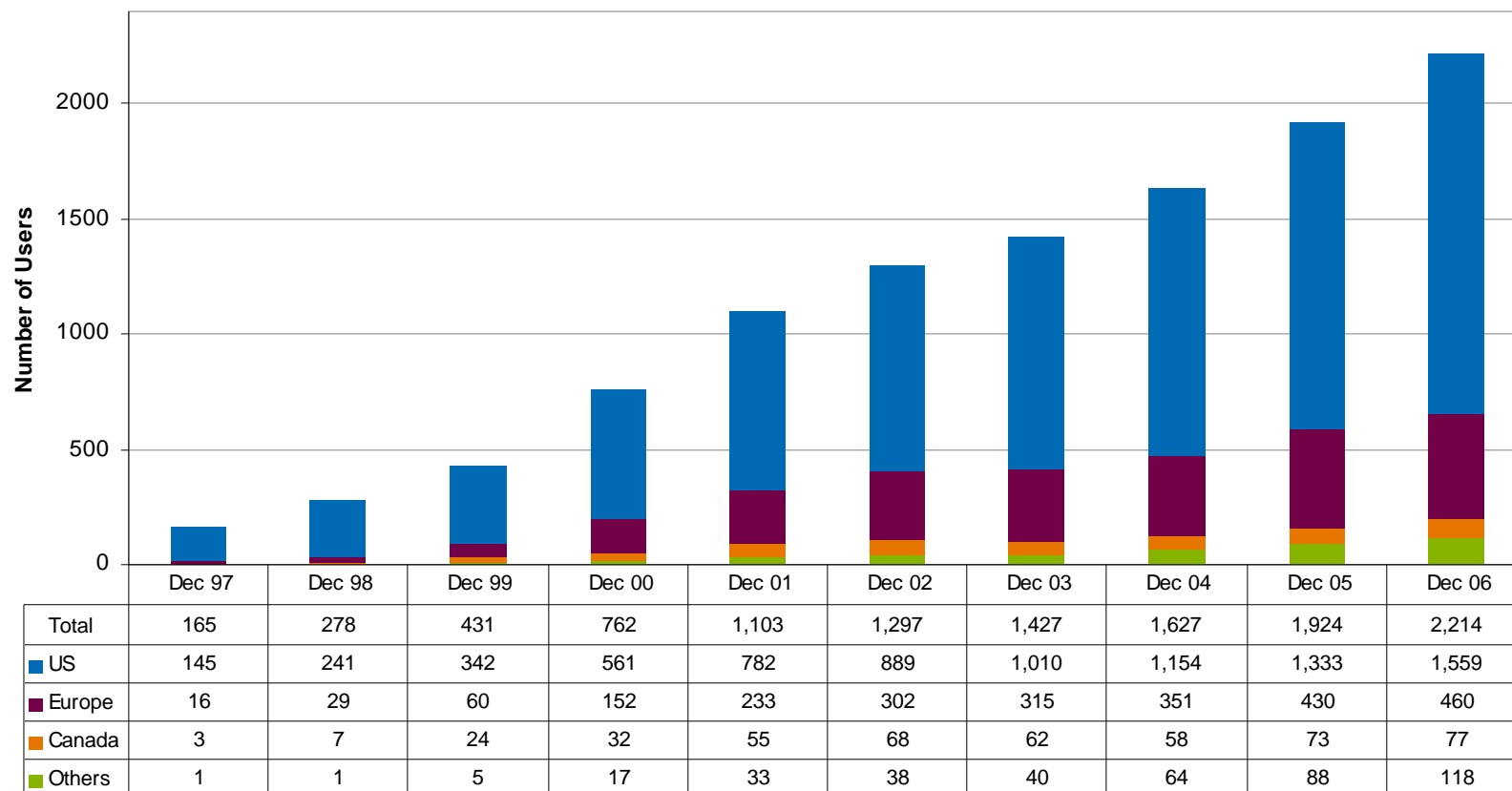
# Global ETF Listings

Data as of end October 2008



P Listings = Primary Listings, T Listings = Total Listings  
 Source: Global ETF Research & Implementation Strategy  
 Team, Barclays Global Investors, Bloomberg

# Growth in Users of ETFs



Source: ETF Research & Implementation Strategy Team, Barclays Global Investors, Thomson Financial

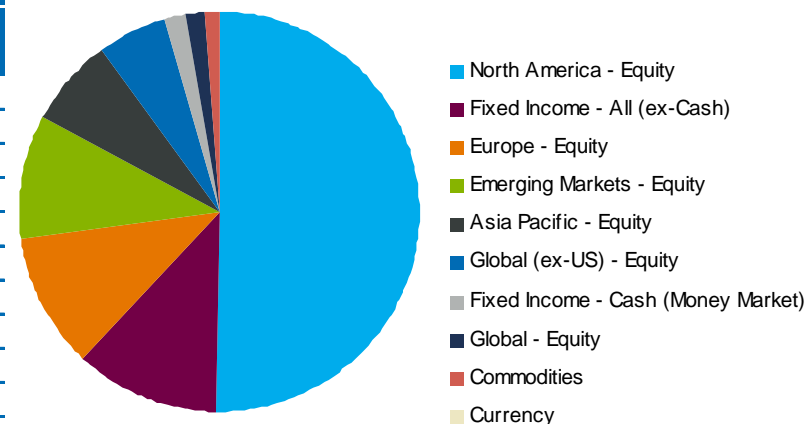
# Types of Users of ETFs

Type of Institution	Dec-97	Dec-98	Dec-99	Dec-00	Dec-01	Dec-02	Dec-03	Dec-04	Dec-05	Dec-06
Investment Advisor	109	200	319	549	802	923	1,023	1,167	1,380	1,564
Hedge Fund	9	20	30	73	114	144	152	180	209	285
Bank and Trust	14	19	30	67	92	109	120	139	161	174
Insurance Company	13	19	27	39	50	60	65	66	74	80
Brokerage Firm	14	11	15	15	16	25	28	31	37	40
Pension Fund	5	8	9	15	22	28	28	33	45	36
Corporation	0	0	0	0	1	1	1	1	4	16
Endowment Fund	1	1	1	3	3	3	5	5	7	8
Holding Company	0	0	0	0	0	1	2	3	3	4
Private Equity	0	0	0	0	0	0	0	0	1	4
Foundation	0	0	0	0	1	0	2	1	2	3
Venture Capital	0	0	0	1	2	3	1	1	1	0
<b>Grand Total</b>	<b>165</b>	<b>278</b>	<b>431</b>	<b>762</b>	<b>1,103</b>	<b>1,297</b>	<b>1,427</b>	<b>1,627</b>	<b>1,924</b>	<b>2,214</b>

Source: ETF Research & Implementation Strategy Team, Barclays Global Investors, Thomson Financial

# Global ETF Assets by Type of Exposure

Region of Exposure	Oct-08				YTD Change		
	# ETFs	Total Listings	AUM (US\$bn)	% TOTAL	# ETFs	AUM Change	AUM %
North America - Equity	462	610	\$322.66	50.2%	4	-\$67.61	-17.3%
Fixed Income - All (ex-Cash)	147	264	\$76.15	11.8%	31	\$19.64	34.7%
Europe - Equity	324	663	\$68.24	10.6%	72	-\$25.65	-27.3%
Emerging Markets - Equity	219	427	\$65.66	10.2%	74	-\$36.54	-35.8%
Asia Pacific - Equity	127	200	\$46.62	7.3%	59	-\$24.87	-34.8%
Global (ex-US) - Equity	57	60	\$35.81	5.6%	13	-\$26.22	-42.3%
Fixed Income - Cash (Money Market)	14	24	\$10.83	1.7%	11	\$7.42	217.4%
Global - Equity	98	197	\$9.59	1.5%	38	-\$0.78	-7.5%
Commodities	48	77	\$7.21	1.1%	23	\$0.70	10.8%
Currency	6	6	\$0.17	0.0%	6	\$0.17	100.0%
<b>Total</b>	<b>1,502</b>	<b>2,528</b>	<b>\$642.95</b>	<b>100.0%</b>	<b>331</b>	<b>-\$153.74</b>	<b>-19.3%</b>

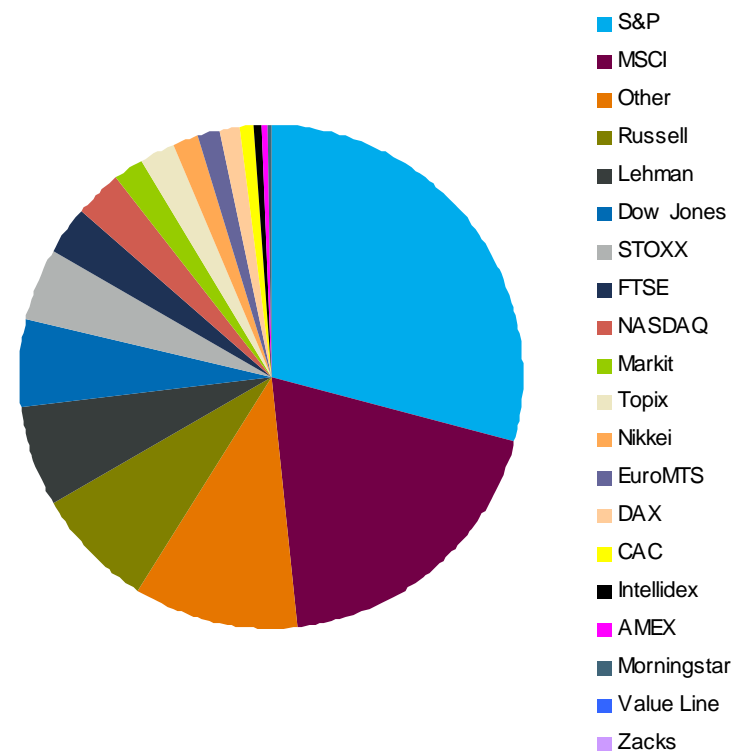


Data as of end October 2008  
 Source: Global ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg

# Index Providers Worldwide

## Ranked by ETF AUM

Index Provider	Oct-08			YTD Change				
	# ETFs	AUM (US\$bn)	% TOTAL	# ETFs	Total Listings	AUM (US\$bn)	AUM %	% TOTAL
S&P	195	\$187.36	29.1%	47	66	-\$45.23	-19.4%	3.2%
MSCI	164	\$122.93	19.1%	34	104	-\$67.13	-35.3%	-4.7%
Other	433	\$68.00	10.6%	93	146	-\$4.10	-5.7%	1.5%
Russell	40	\$49.50	7.7%	5	5	-\$15.49	-23.8%	-0.5%
Lehman	34	\$41.40	6.4%	4	9	\$10.77	35.2%	2.6%
Dow Jones	104	\$35.75	5.6%	12	-109	-\$2.41	-6.3%	0.8%
STOXX	158	\$30.09	4.7%	37	240	-\$8.71	-22.4%	-0.2%
FTSE	120	\$20.28	3.2%	21	42	-\$5.27	-20.6%	-0.1%
NASDAQ	28	\$18.99	3.0%	14	19	-\$7.74	-28.9%	-0.4%
Markit	40	\$13.82	2.1%	9	14	\$4.22	43.9%	0.9%
Topix	51	\$13.17	2.0%	40	41	-\$5.90	-30.9%	-0.3%
Nikkei	7	\$10.54	1.6%	2	2	-\$5.25	-33.3%	-0.3%
EuroMTS	13	\$9.89	1.5%	3	6	\$3.54	55.8%	0.7%
DAX	21	\$8.52	1.3%	4	11	-\$0.54	-6.0%	0.2%
CAC	13	\$6.34	1.0%	5	7	-\$1.35	-17.5%	0.0%
Intellidex	45	\$2.82	0.4%	1	7	-\$1.67	-37.2%	-0.1%
AMEX	4	\$1.45	0.2%	0	9	-\$0.28	-16.0%	-3.3%
Morningstar	13	\$1.43	0.2%	0	0	-\$0.70	-32.7%	0.0%
Value Line	5	\$0.34	0.1%	0	0	-\$0.30	-46.4%	0.0%
Zacks	14	\$0.31	0.0%	0	0	-\$0.18	-36.9%	0.0%
<b>Total</b>	<b>1,502</b>	<b>\$642.95</b>	<b>100.0%</b>	<b>331</b>	<b>619</b>	<b>-\$153.75</b>	<b>-19.3%</b>	



Data as of end October 2008  
 Source: Global ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg

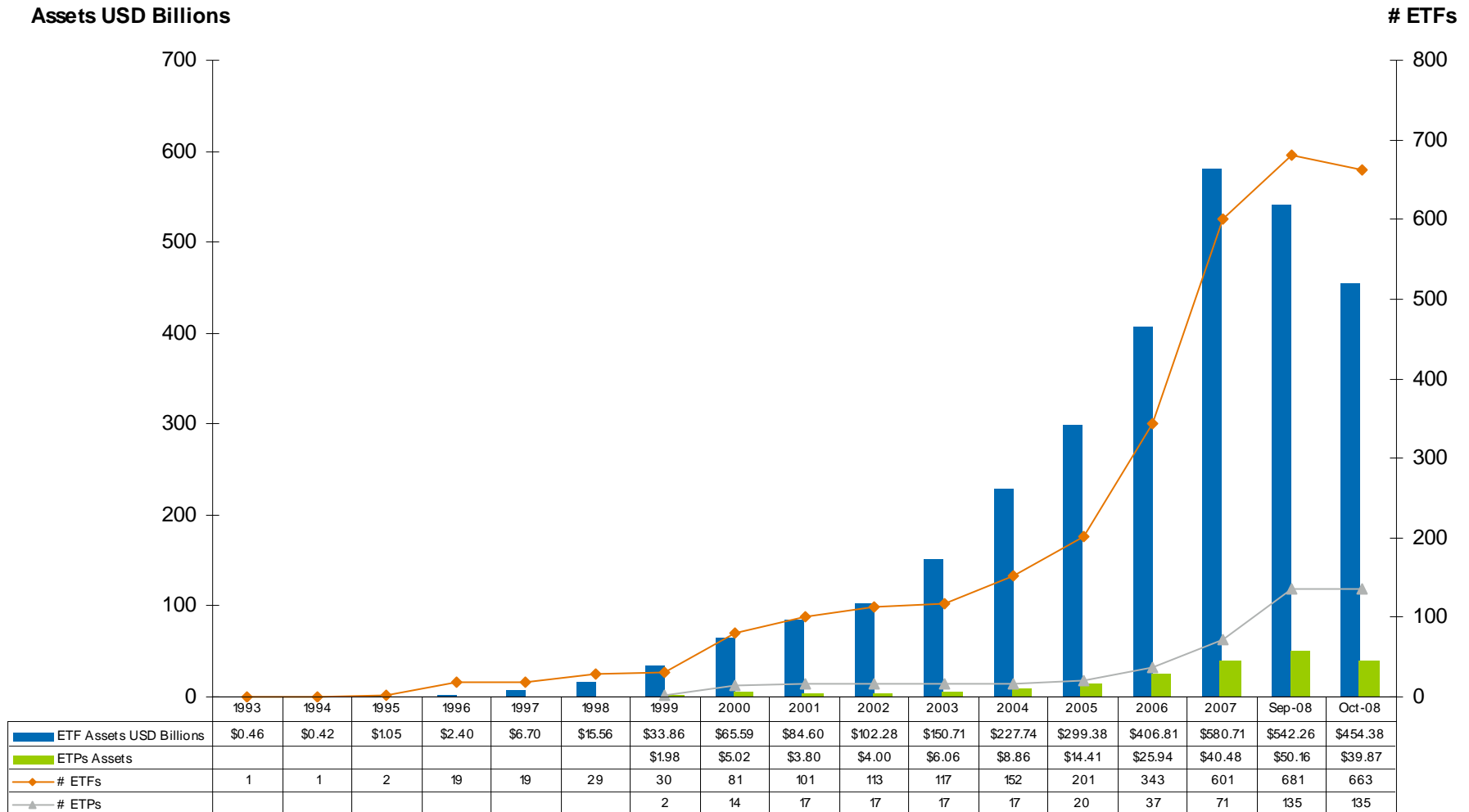
# Top 25 ETF Managers around the World

Ranked by AUM. As of end October 2008

MANAGER	Oct-08				Year to Date Change				
	# ETFs	AUM (USD Bn)	% Total	# Planned	# ETFs	% ETFs	AUM Change (USD Bn)	AUM %	% Market Share
Barclays Global Investors	339	\$291.75	45.4%	24	18	5.6%	-\$110.86	-27.5%	-5.2%
State Street Global Advisors	98	\$132.96	20.7%	33	15	18.1%	-\$19.44	-12.8%	1.6%
Vanguard	38	\$40.60	6.3%	0	1	2.7%	-\$1.37	-3.3%	1.0%
Lyxor Asset Management	112	\$31.54	4.9%	2	25	28.7%	-\$0.52	-1.6%	0.9%
PowerShares	141	\$24.17	3.8%	42	27	23.7%	-\$13.85	-36.4%	-1.0%
ProShares	64	\$19.65	3.1%	90	6	10.3%	\$9.95	102.7%	1.8%
DB X-Trackers	99	\$18.93	2.9%	0	48	94.1%	\$8.11	75.0%	1.6%
Nomura Asset Management	29	\$12.34	1.9%	0	22	314.3%	-\$5.11	-29.3%	-0.3%
Bank of New York	1	\$5.97	0.9%	0	0	0.0%	-\$4.18	-41.2%	-0.3%
Daiwa Asset Management	23	\$5.43	0.8%	1	18	360.0%	-\$2.20	-28.8%	-0.1%
Credit Suisse Asset Management	8	\$5.23	0.8%	0	0	0.0%	\$0.26	5.2%	0.2%
Nikko Asset Management	8	\$5.20	0.8%	0	6	300.0%	-\$3.88	-42.7%	-0.3%
AXA IM / BNP AM	50	\$4.05	0.6%	8	20	66.7%	-\$2.64	-39.4%	-0.2%
Nacional Financiera	1	\$3.55	0.6%	0	0	0.0%	-\$0.19	-5.1%	0.1%
Van Eck Associates Corp	16	\$3.33	0.5%	10	8	100.0%	-\$0.16	-4.6%	0.1%
WisdomTree Investments	42	\$2.92	0.5%	37	3	7.7%	-\$1.60	-35.4%	-0.1%
Zurich Cantonal Bank	4	\$2.60	0.4%	0	0	0.0%	\$1.55	148.6%	0.3%
BBVA Asset Management	7	\$2.52	0.4%	1	0	0.0%	\$1.34	113.2%	0.2%
Hang Seng Investment Management	3	\$2.47	0.4%	0	0	0.0%	-\$2.23	-47.5%	-0.2%
ETFlab Investment	10	\$2.41	0.4%	0	10	100.0%	\$2.41	100.0%	0.4%
Commerzbank	27	\$1.96	0.3%	0	27	100.0%	\$1.96	100.0%	0.3%
Rydex	31	\$1.74	0.3%	82	8	34.8%	-\$0.91	-34.2%	-0.1%
UBS Global Asset Management	8	\$1.71	0.3%	0	-1	-11.1%	-\$0.43	-20.3%	0.0%
XACT Fonder	11	\$1.69	0.3%	0	2	22.2%	-\$0.82	-32.6%	-0.1%
Claymore Securities	54	\$1.67	0.3%	10	4	8.0%	-\$0.79	-31.9%	0.0%
Polaris	7	\$1.40	0.2%	2	1	16.7%	-\$0.04	-3.0%	0.0%
Credit Agricole Structured AM	9	\$1.27	0.2%	5	6	200.0%	-\$1.75	-57.8%	-0.2%
SG Asset Management	18	\$1.22	0.2%	0	4	28.6%	\$0.45	58.1%	0.1%
BetaPro Management	28	\$1.13	0.2%	0	20	250.0%	\$0.62	122.5%	0.1%

Source: Global ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg

# US ETF and ETP Growth



Data as of end October 2008  
 Source: Global ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg

# ETF Managers in the United States

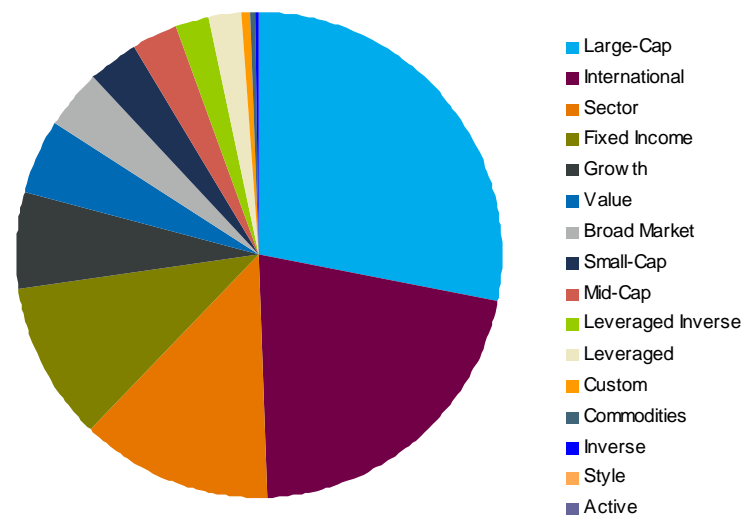
Ranked by AUM as of End October 2008

MANAGER	Oct-08				Year to Date Change				
	# ETFs	AUM (USD Bn)	% Total	# Planned	# ETFs	% ETFs	AUM Change (USD Bn)	AUM %	% Market Share
Barclays Global Investors	161	\$229.19	50.4%	21	10	6.6%	-\$95.70	-29.5%	-5.5%
State Street Global Advisors	79	\$125.25	27.6%	32	15	23.4%	-\$17.71	-12.4%	2.9%
Vanguard	38	\$40.60	8.9%	0	1	2.7%	-\$1.37	-3.3%	1.7%
Powershares	123	\$23.64	5.2%	41	23	23.0%	-\$13.38	-36.1%	-1.2%
ProShares	64	\$19.65	4.3%	90	6	10.3%	\$9.95	102.7%	2.7%
Bank of New York	1	\$5.97	1.3%	0	0	0.0%	-\$4.18	-41.2%	-0.4%
Van Eck Associates Corp	16	\$3.33	0.7%	10	8	100.0%	-\$0.16	-4.6%	0.1%
WisdomTree Investments	42	\$2.92	0.6%	37	3	7.7%	-\$1.60	-35.4%	-0.1%
Rydex	31	\$1.74	0.4%	82	8	34.8%	-\$0.91	-34.2%	-0.1%
Claymore Securities	33	\$0.98	0.2%	6	-3	-8.3%	-\$0.93	-48.8%	-0.1%
First Trust Advisors	38	\$0.78	0.2%	3	2	5.6%	-\$0.22	-22.4%	0.0%
XShares Advisors	9	\$0.16	0.0%	34	-22	-71.0%	-\$0.10	-39.6%	0.0%
Fidelity Management & Research	1	\$0.09	0.0%	0	0	0.0%	-\$0.03	-23.3%	0.0%
RevenueShares	3	\$0.04	0.0%	11	3	100.0%	\$0.04	100.0%	0.0%
Northern Trust	16	\$0.02	0.0%	17	16	100.0%	\$0.02	100.0%	0.0%
SPA ETF International	6	\$0.02	0.0%	7	0	0.0%	\$0.00	7.9%	0.0%
ALPS ETF Trust	1	\$0.00	0.0%	0	1	100.0%	\$0.00	100.0%	0.0%
Ziegler Capital Management	1	\$0.00	0.0%	0	0	0.0%	\$0.00	-55.4%	0.0%
FocusShares	0	\$0.00	0.0%	0	-4	-100.0%	-\$0.02	-100.0%	0.0%
Ameristock	0	\$0.00	0.0%	0	-5	-100.0%	-\$0.01	-100.0%	0.0%
Bear Stearns Asset Management	0	\$0.00	0.0%	0	0	100.0%	\$0.00	100.0%	0.0%
AdvisorShares	-	-	-	2	-	-	-	-	-
Capital West Securities	-	-	-	1	-	-	-	-	-
Direxion Shares ETF Trust	-	-	-	40	-	-	-	-	-
Exchange Traded Spreads Trust	-	-	-	4	-	-	-	-	-
Firsthand Capital	-	-	-	1	-	-	-	-	-
Graif Advisors	-	-	-	1	-	-	-	-	-
IndexIQ	-	-	-	25	-	-	-	-	-
Macro Securities Depositor	-	-	-	4	-	-	-	-	-
Global X Funds				1					
<b>Total</b>	<b>663</b>	<b>\$454.38</b>	<b>100.0%</b>	<b>470</b>	<b>62</b>	<b>10.3%</b>	<b>-\$126.33</b>	<b>-21.8%</b>	<b>0.0%</b>

Source: Global ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg

# Types of ETF Exposure: United States

Exposure	Oct-08			Year to Date Change		
	# ETFs	AUM (US\$Bn)	% TOTAL	# ETFs	AUM (US\$Bn)	AUM %
Large-Cap - Equity	31	\$126.95	27.9%	2	-\$35.46	-21.8%
International - Equity	186	\$97.21	21.4%	55	-\$73.69	-43.1%
Sector - Equity	165	\$58.91	13.0%	-19	-\$7.23	-10.9%
Fixed Income	51	\$47.71	10.5%	2	\$12.97	37.3%
Growth - Equity	27	\$28.79	6.3%	-1	-\$11.61	-28.7%
Value - Equity	25	\$23.18	5.1%	-3	-\$7.95	-25.5%
Broad Market - Equity	12	\$17.55	3.9%	0	-\$5.52	-23.9%
Small-Cap - Equity	17	\$15.11	3.3%	0	-\$2.86	-15.9%
Mid-Cap - Equity	12	\$14.31	3.2%	0	-\$6.00	-29.5%
Leveraged Inverse	37	\$9.81	2.2%	7	\$3.00	44.1%
Leveraged	31	\$9.19	2.0%	5	\$6.76	277.7%
Custom	44	\$3.17	0.7%	-2	\$0.68	27.1%
Commodities	7	\$1.48	0.3%	6	\$0.11	8.2%
Inverse	10	\$0.93	0.2%	2	\$0.40	75.9%
Style - Equity	3	\$0.04	0.0%	3	\$0.04	100.0%
Active	5	\$0.03	0.0%	5	\$0.03	100.0%
<b>Total</b>	<b>663</b>	<b>\$454.38</b>	<b>100.0%</b>	<b>62</b>	<b>-\$126.33</b>	<b>-21.8%</b>



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# Short Interest

## US Listed ETF & HOLDRS Short Interest

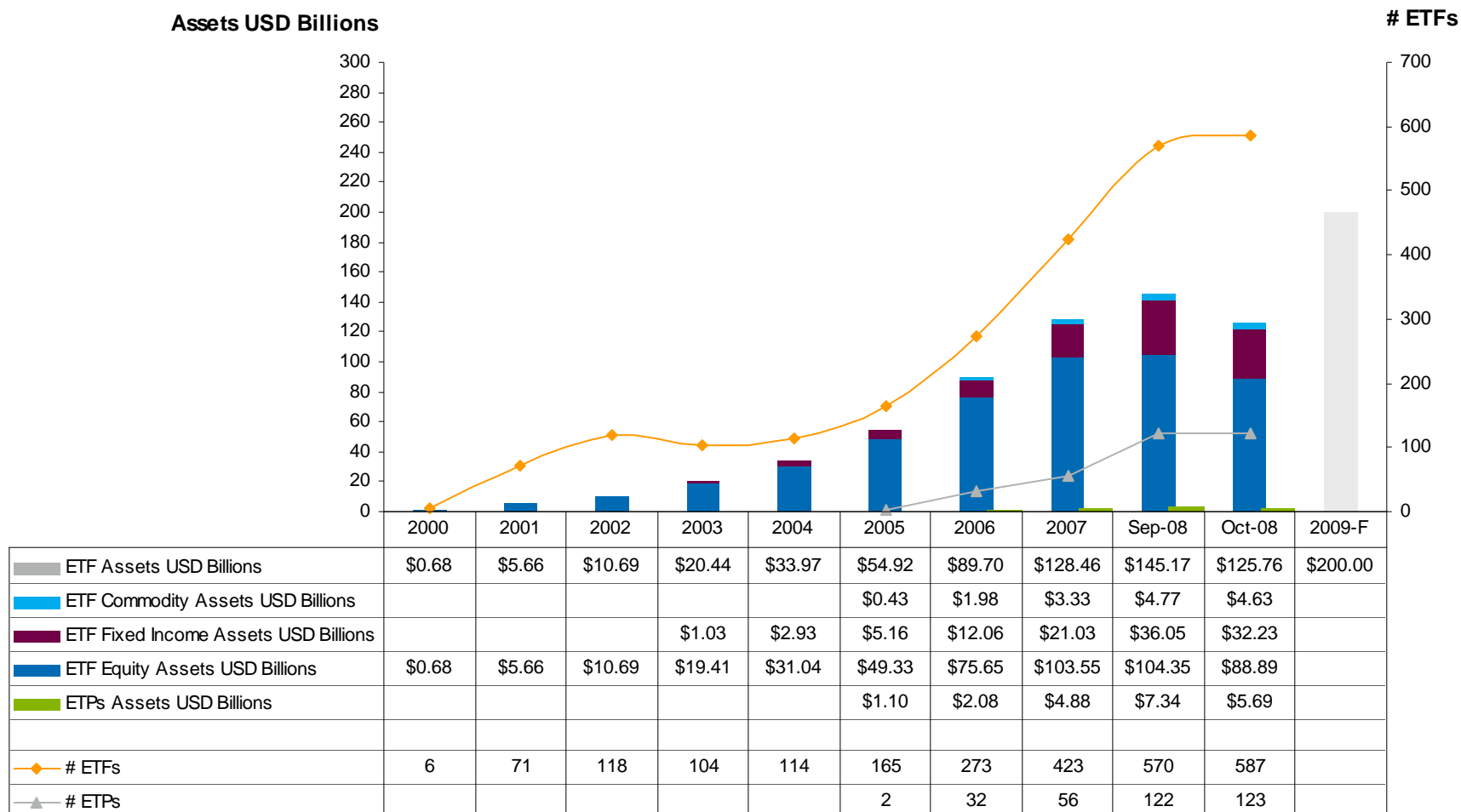
Date	Short Interest (MM Shares)	% of Shares Outstanding	S&P 500 Index Level	Short Interest (# Shares)
2003 Avg	812	27.1%	983	812,125,142
2004 Avg	952	26.3%	1,127	952,219,766
2005 Avg	781	17.2%	1,206	781,047,462
2006 Avg	837	13.5%	1,283	837,003,935
2007 Avg	1,242	16.1%	1,475	1,241,587,124
2008 Avg YTD	1,737	17.9%	1,276	1,737,153,550
Jan-08	1,435	16.3%	1,381	1,434,713,833
Feb-08	1,526	17.5%	1,349	1,526,060,056
Mar-08	1,715	19.2%	1,288	1,714,678,516
Apr-08	1,617	17.9%	1,334	1,617,341,596
May-08	1,829	18.8%	1,424	1,829,293,887
Jun-08	2,085	21.2%	1,360	2,084,675,332
Jul-08	1,918	18.7%	1,228	1,917,965,694
Aug-08	1,891	18.2%	1,298	1,891,010,654
Sep-08	1,802	17.1%	1,193	1,801,781,310
Oct-08	1,554	14.3%	908	1,554,014,625

The rules on shorting ETFs on financial indices and the use of inverse and leveraged inverse ETFs on financial indices in the various markets are continually being updated as regulators react to market conditions and the actions of other regulators so the position is quite fluid.

- **Short Interest in US-listed Exchange Traded Funds (ETFs) have been the highest ever during 2008.**
  - Based on data through October 2008 the average number of ETF shares short during 2008 is 1,737 million shares which is significantly higher than the average of 1,242 million during 2007 and 837 million in 2006. The October 2008 short interest level for US-listed ETFs was 14.3% of shares outstanding or 1,554 million shares, up 11.58% from 1,393 million in December 2007.
- **Investors are using ETFs for long/short and hedging strategies.**
  - At the end of October 2008, there are 663 ETFs listed in the US and 1,502 ETFs worldwide, which provide exposure to equity sectors, styles, countries and regional indices as well as fixed income, commodity indices and currencies.
- **Security lending revenue on ETFs can be attractive.**
  - For investors who own ETF shares, the lending revenue that can be earned on ETFs, may at times and for some ETFs, more than cover the annual total expense ratio (TER).
- **Inverse (short) and leverage inverse ETFs.**
  - Investors can also use inverse (short) and leverage inverse ETFs to implement hedges and short economic exposure. There are currently 47 inverse/inverse leveraged ETFs in the US and 47 inverse/inverse leveraged ETFs listed on exchanges outside the US.
- **Short Interest is often considered an indication of the level of scepticism in the market.**
  - Short interest data is captured for US listed securities on the 15th of each month or the next business day and reflects the number of shares that have yet to be repurchased to give back to lenders. The higher the short interest the more investors are expecting a downturn. Short positions fall in value as stocks rise, and vice versa.

Source: Global ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg. Data as of mid October 2008

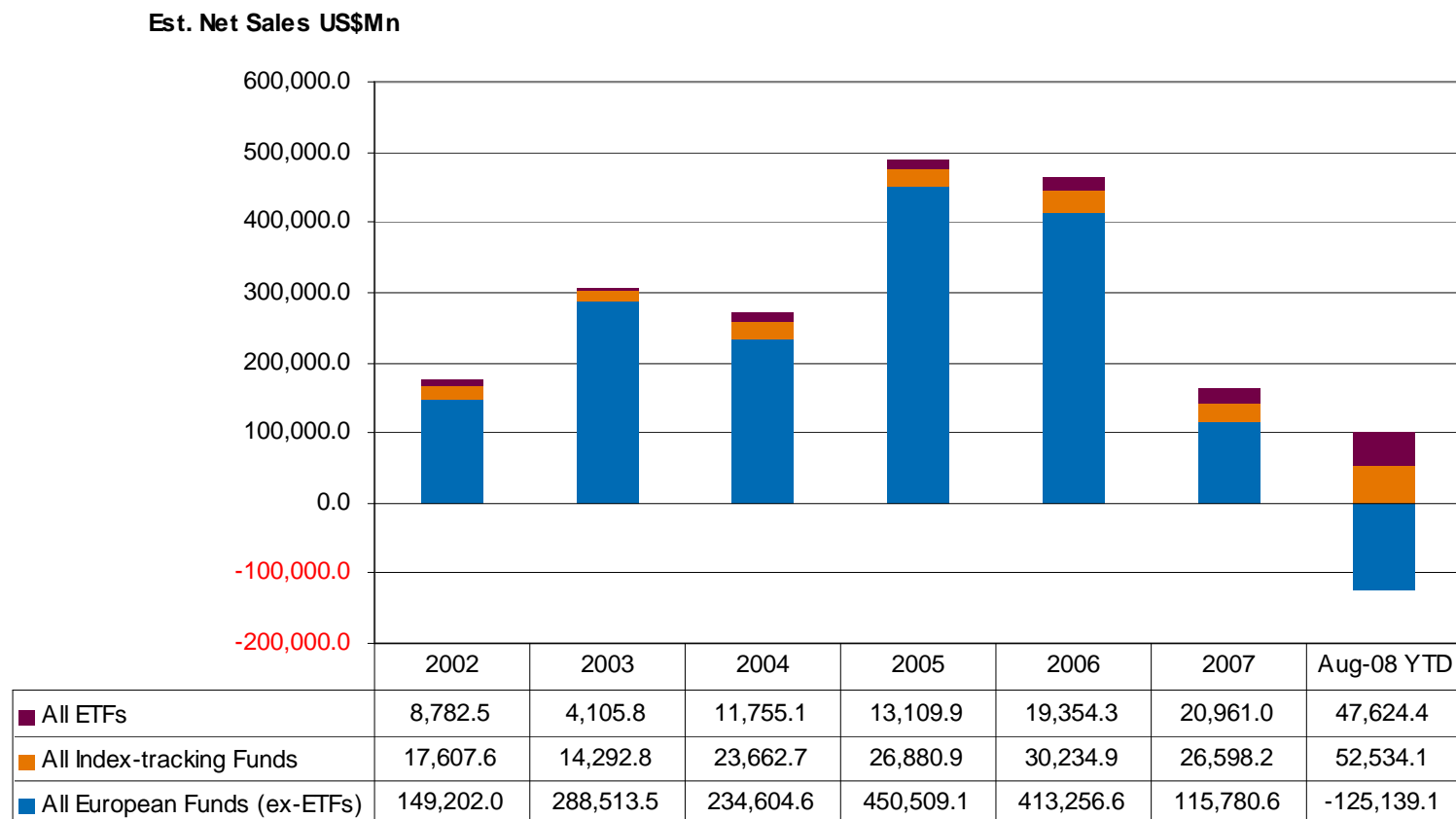
# European ETF and ETP Growth



Source: ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg  
Data as of end October 2008

# European Fund Industry 2008

## Net sales data through August 2008 - Lipper Feri



Source: Lipper FERi

# ETF Managers in Europe

Ranked by AUM as of end October 2008

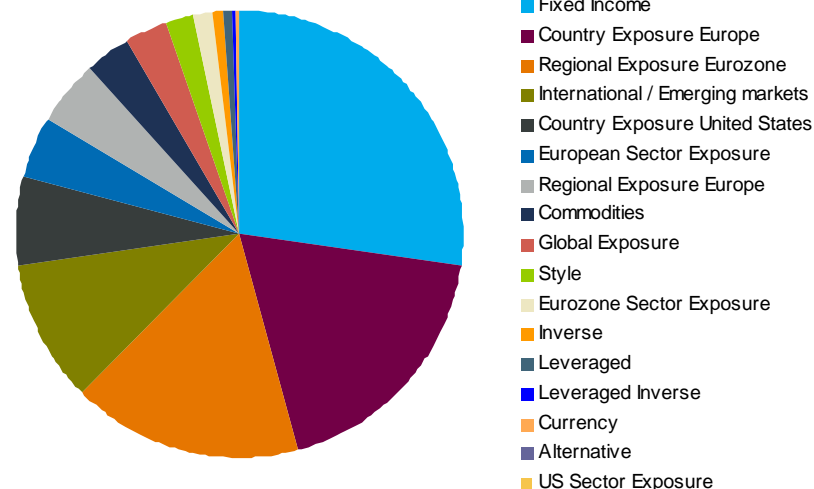
MANAGER	Oct-08				Year to Date Change				
	# ETFs	AUM (USD Bn)	% Total	# Planned	# ETFs	% ETFs	AUM (USD Bn)	AUM %	% Market Share
Barclays Global Investors	145	\$47.90	38.1%	1	8	5.8%	-\$9.75	-16.9%	-6.79%
Lyxor Asset Management	112	\$31.54	25.1%	2	25	28.7%	-\$0.50	-1.6%	0.14%
DB X-Trackers	94	\$18.83	15.0%	0	45	91.8%	\$8.17	76.7%	6.68%
Credit Suisse Asset Management	8	\$5.23	4.2%	0	0	0.0%	\$0.26	5.2%	0.29%
AXA IM / BNP AM	50	\$4.05	3.2%	8	20	66.7%	-\$2.64	-39.4%	-1.98%
Zurich Cantonal Bank	4	\$2.60	2.1%	0	0	0.0%	\$1.55	148.6%	1.25%
BBVA Asset Management	7	\$2.52	2.0%	1	0	0.0%	\$1.34	113.2%	1.08%
ETFlab Investment	10	\$2.41	1.9%	0	10	100.0%	\$2.41	100.0%	1.91%
Commerzbank	27	\$1.96	1.6%	0	27	100.0%	\$1.96	100.0%	1.56%
UBS Global Asset Management	8	\$1.71	1.4%	0	-1	-11.1%	-\$0.43	-20.3%	-0.31%
XACT Fonder	11	\$1.69	1.3%	0	2	22.2%	-\$0.82	-32.6%	-0.61%
Credit Agricole Structured AM	9	\$1.27	1.0%	5	6	200.0%	-\$1.75	-57.8%	-1.34%
SG Asset Management	18	\$1.22	1.0%	0	4	28.6%	\$0.45	58.1%	0.37%
State Street Global Advisors	13	\$1.15	0.9%	0	0	0.0%	-\$1.21	-51.3%	-0.92%
PowerShares	18	\$0.53	0.4%	1	4	28.6%	-\$0.47	-47.1%	-0.36%
JPM Structured Fund Management	6	\$0.31	0.2%	0	5	500.0%	\$0.18	137.3%	0.15%
ABN Amro	10	\$0.25	0.2%	21	0	0.0%	\$0.05	25.3%	0.04%
Finans Portfoy Yonetimi	5	\$0.12	0.1%	0	0	0.0%	-\$0.10	-47.5%	-0.08%
Seligson & Co Fund Management	1	\$0.11	0.1%	0	0	0.0%	-\$0.11	-49.6%	-0.08%
Alpha Asset Management	1	\$0.08	0.1%	0	1	100.0%	\$0.08	100.0%	0.06%
Beta1 ETFund	3	\$0.08	0.1%	0	0	0.0%	-\$0.12	-59.4%	-0.09%
DnB NOR Asset Management	3	\$0.08	0.1%	0	2	200.0%	\$0.03	54.3%	0.02%
Kaupthing Bank Asset Management	1	\$0.04	0.0%	0	0	0.0%	-\$0.09	-70.6%	-0.07%
Bank of Ireland AM	1	\$0.03	0.0%	0	0	0.0%	-\$0.05	-61.4%	-0.04%
SPA ETF International	7	\$0.03	0.0%	0	1	16.7%	-\$0.01	-35.3%	0.02%
OTP Fund Management	1	\$0.01	0.0%	0	0	0.0%	-\$0.02	-59.3%	-0.01%
ETF Securities	12	\$0.01	0.0%	1	12	100.0%	\$0.01	100.0%	0.01%
Medvesek Pusnik AM	1	\$0.01	0.0%	0	0	0.0%	-\$0.01	-40.9%	0.00%
Bizim Menkul Degerler	1	\$0.00	0.0%	0	0	0.0%	\$0.00	36.5%	0.00%
Santander Gestion de Activos	0	\$0.00	0.0%	0	-3	-100.0%	-\$0.11	-100.0%	-0.09%
UNICO Asset Management	0	\$0.00	0.0%	0	-2	-100.0%	-\$0.30	-100.0%	-0.24%
DVG-Deutsche Vermoegensbildung GmbH	0	\$0.00	0.0%	0	-2	-100.0%	-\$0.70	-100.0%	-0.10%
Ak Securities	-	-	-	1	-	-	-	-	-
Amas Bank	-	-	-	1	-	-	-	-	-
<b>Total</b>	<b>587</b>	<b>\$125.76</b>	<b>100.0%</b>	<b>42</b>	<b>164</b>	<b>38.8%</b>	<b>-\$2.70</b>	<b>-2.1%</b>	

Source: Global ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg

# Types of ETF Exposure: Europe

ETFs should be viewed as a tool for both Active and Passive Managers

Type of Exposure	Oct-08			Year to Date Change		
	# ETFs	AUM (US\$Bn)	% TOTAL	# ETFs	AUM (US\$Bn)	AUM %
Fixed Income	85	\$34.34	27.3%	26	\$13.32	63.3%
Country Exposure Europe - Equity	64	\$23.39	18.6%	5	-\$4.73	-16.8%
Regional Exposure Eurozone - Equity	27	\$20.82	16.6%	5	-\$3.82	-15.5%
International / Emerging Markets - Equity	107	\$12.91	10.3%	34	-\$5.11	-28.4%
Country Exposure United States - Equity	30	\$7.95	6.3%	11	\$3.01	60.7%
European Sector Exposure - Equity	96	\$5.82	4.6%	21	-\$1.76	-23.2%
Regional Exposure Europe - Equity	26	\$5.76	4.6%	7	-\$1.37	-19.3%
Commodities	23	\$4.22	3.4%	3	\$0.70	19.9%
Global Exposure - Equity	38	\$3.81	3.0%	17	\$1.02	36.4%
Style - Equity	32	\$2.67	2.1%	8	-\$3.54	-57.0%
Eurozone Sector Exposure - Equity	18	\$1.47	1.2%	0	-\$1.64	-52.8%
Inverse	19	\$1.16	0.9%	15	\$0.70	149.5%
Leveraged	9	\$0.61	0.5%	4	\$0.27	82.6%
Leveraged Inverse	5	\$0.47	0.4%	2	-\$0.06	-11.7%
Currency	6	\$0.35	0.3%	6	\$0.35	100.0%
Alternative	1	\$0.01	0.0%	1	\$0.01	100.0%
US Sector Exposure - Equity	1	\$0.00	0.0%	-1	-\$0.04	-91.4%
<b>Total</b>	<b>587</b>	<b>\$125.76</b>	<b>100.0%</b>	<b>164</b>	<b>-\$2.71</b>	<b>-2.1%</b>



Source: ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg. Data as of end October 2008

# ETFs Product Overview

- Are open-ended index tracking funds<sup>1</sup>
- ETFs are managed by asset managers
- ETFs are bought and sold through brokers
- Trade on the exchange like any other stock
- Settle like any other share on the exchange
- Can be purchased, cleared and held in brokerage or custodial account
- Can go long or short
- Lendable & Marginable
- Transparent underlying portfolios available daily
- Real Time indicative NAV
- ETFs will price around their NAV due to the creation/redemption process

<sup>1</sup> Note a few active funds which disclose their portfolios daily have been approved and listed

# ETFs Product Overview

## **ETFs Are liquid.**

- Liquidity reflects liquidity of underlying basket of shares not the trading volume of the ETF – as long as trading with a broker which is an authorised participant
- Creation/redemption process makes ETFS as liquid as underlying shares
- Unique structure for brokers who enter into legal agreements with the ETF asset managers to be Authorized Participants, Creation - Redemption agents or Liquidity Providers
  - Portfolio of securities can be exchanged for “Creation Units”
  - “Creation Units” can be redeemed for underlying portfolio
- Creation/redemption (“in kind”) feature allows for arbitrage and results in the fund trading near Net Asset Value

# ETF/ETP Tool Box

## Equity

- Global
- Capitalisation (Large, Mid, Small...)
- Sectors
- Broad Markets
- Emerging Markets
- Countries
- Inverse / Leveraged
- Styles
  - Active
  - Dividend
  - Fundamental
  - Infrastructure
  - Real Estate
  - Shariah
  - Thematic
  - Private Equity

## Fixed Income

- Government
- Corporate
- Credit
- Inflation
- High Yield
- Mortgage Backed
- Emerging Markets

## Cash

- EONIA, SONIA
- Fed Funds

## Alternatives

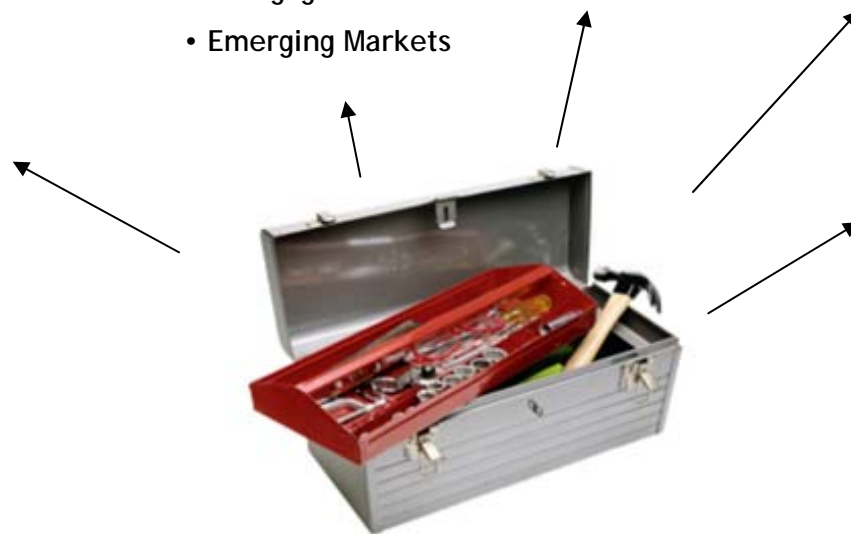
- Hedge Funds
- Carbon

## Currency

- Developed Currencies
- Emerging Market Currencies
- Inverse / Leveraged
- Strategy (Carry, Momentum...)

## Commodities

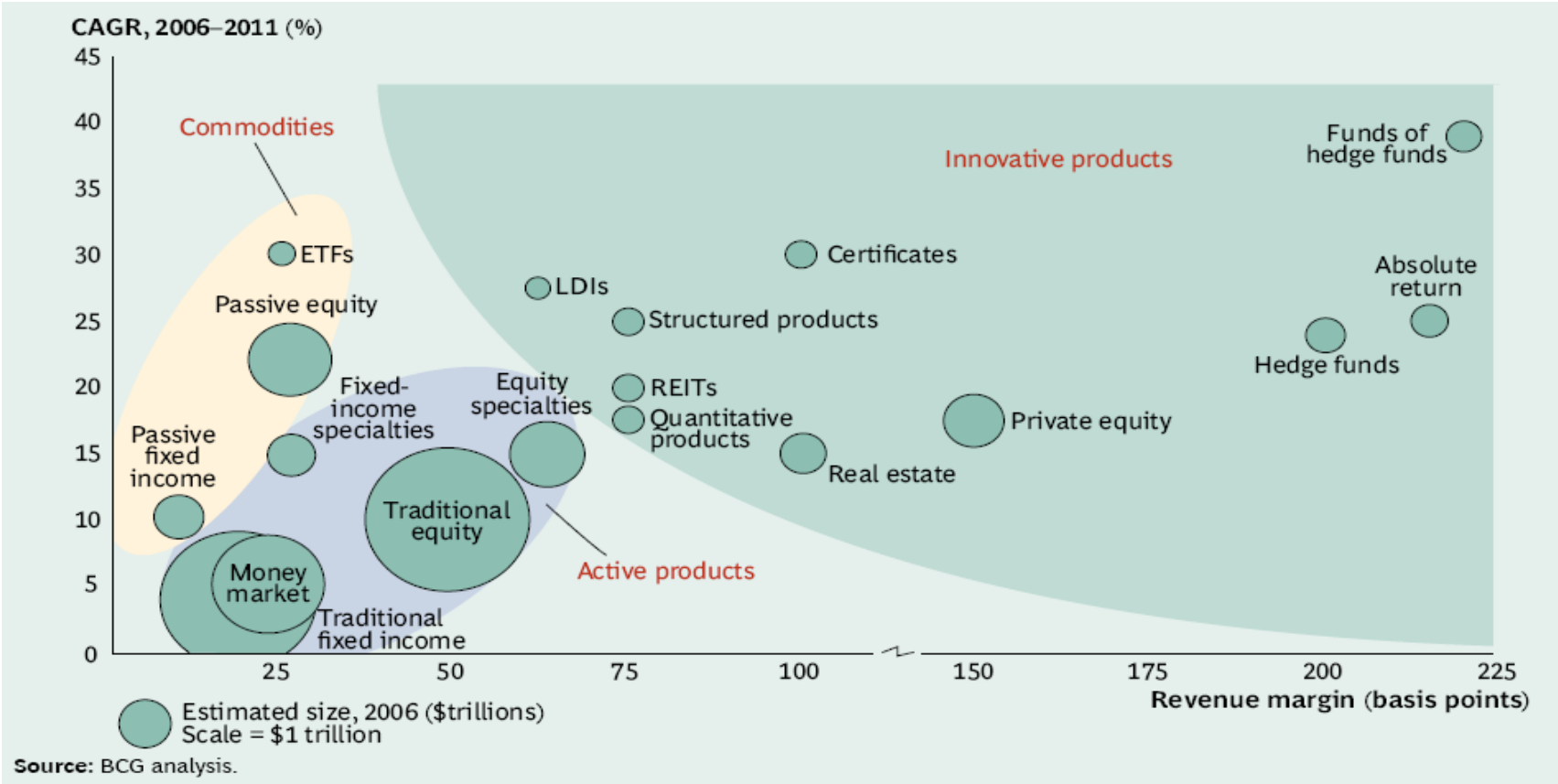
- Broad (S&P GSCI, DJAIG, RICI, CRB...)
- Sub-indices (Energy, Livestock, Precious Metals, Industrial Metals, Agriculture...)
- Individual Commodities
- Based on Physically held Assets (Gold, Silver, Platinum, Palladium...)
- Based on Futures
- Based on Forwards
- Inverse / Leveraged



1,502 ETFs with 2,528 ETF Listings    269 other ETPs\* with 522 ETP Listings    **Total: 1,771 Products with 3,050 Listings**

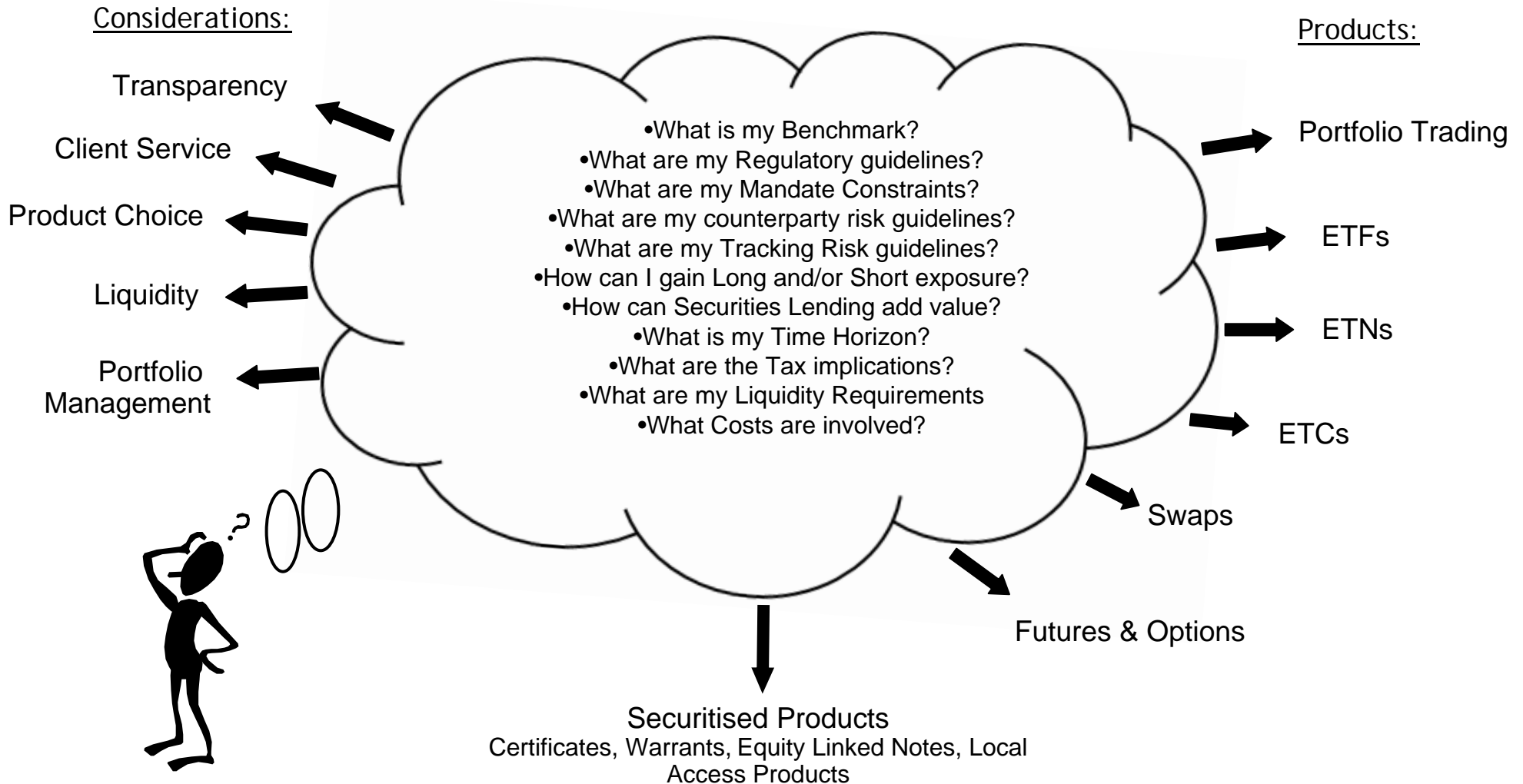
\*Other ETPs (Exchange Traded Products) include HOLDRs (Holding Company Depository Receipts), ETCs (Exchange Traded Commodities), Exchange Traded Currency products, and Exchange Traded Notes. As of end October 2008

# New Asset Classes Will Continue to Squeeze the Traditional Core of Actively Managed Funds



Source : BCG analysis November 2007, Projections 2006-2011

# How Should I Decide Which Product to Use?



# How Are ETFs Used?

## Strategic

- **Market Exposure:** Implement wide variety of investment strategies using a broad range of market exposures
- **Directional Views:** Establish broad directional market position, use long & short trades to implement market view(s)
- **Core Satellite:** Achieve strategic focus
- **Rebalancing:** Correct drift in a portfolio's asset allocation or style
- **Completion:** Add uncorrelated instruments and/or asset classes to strategy

## Tactical

- **Interim Beta :** Maintain exposure to given market while searching for specific market opportunity
- **Cash Management :** Able to invest cash rapidly and cost effectively to gain desired market exposures
- **Derivatives Alternative :** Broad opportunity set of Delta 1 exposures with single line cash based settlement
- **Exposure Management :** Easily shift portfolio emphasis by adjusting exposures (e.g. duration, credit)
- **Thematic :** Implement thematic exposures (e.g. dividends, alternatives)

# Why Are ETFs Used?

<b>Transparency</b>	<ul style="list-style-type: none"><li>▪ Investors know the ETF composition at any given time</li></ul>
<b>Liquidity</b>	<ul style="list-style-type: none"><li>▪ ETFs offer two sources of liquidity<ul style="list-style-type: none"><li>– Traditional liquidity measured by secondary market trading volume</li><li>– The liquidity of the underlying via the creation and redemption process</li></ul></li></ul>
<b>Diversification</b>	<ul style="list-style-type: none"><li>▪ ETFs provide immediate exposure to a basket or group of securities for instant diversification</li><li>▪ Broad range of asset classes including equities, bonds, commodities, Investment Themes etc</li></ul>
<b>Flexibility</b>	<ul style="list-style-type: none"><li>▪ ETFs are listed on exchanges and can be traded at any time the market is open</li><li>▪ Pricing is continuous throughout the day</li></ul>
<b>Cost Effectiveness</b>	<ul style="list-style-type: none"><li>▪ ETFs offer a cost-effective route to diversified market exposure (139 benchmarks)</li><li>▪ The average total expense ratio (TER) for equity ETFs in Europe is 46 bps versus 100 bps (per annum) for the average equity index tracking fund and 191 bps (per annum) for average active equity fund<sup>1</sup></li></ul>
<b>Securities Lending</b>	<ul style="list-style-type: none"><li>▪ ETF units and underlying assets can be lent out to potentially offset holding costs</li></ul>

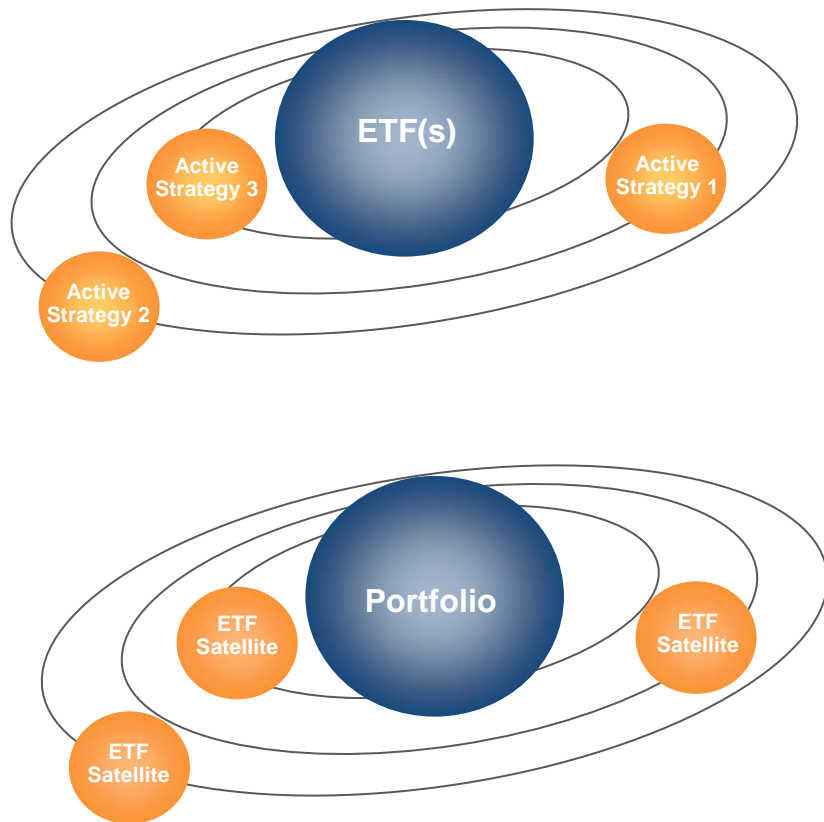
1. Lipper Fitzrovia (December 2006)

# ETFs Offer Solutions for a Range of Portfolio Strategies

<b>Portfolio Construction</b>	<ul style="list-style-type: none"><li>▪ Fill allocations required by investment strategy</li><li>▪ Improve diversification</li><li>▪ Gain exposure to size, style, yield, sector, geography</li></ul>
<b>Portfolio Management</b>	<ul style="list-style-type: none"><li>▪ Implement short-, long- term and/or neutral market views<ul style="list-style-type: none"><li>– Hard to access asset classes, themes, sector, country</li><li>– Tactical Asset Allocations</li></ul></li></ul>
<b>Strategic Asset Allocations</b>	<ul style="list-style-type: none"><li>▪ Establish core holdings</li><li>▪ Establish single country or sector satellites</li></ul>
<b>Risk Control</b>	<ul style="list-style-type: none"><li>▪ Active risk budgeting</li><li>▪ Combine ETFs in managing total portfolio volatility or duration adjustments in fixed income portfolios</li></ul>
<b>Cash Equitization</b>	<ul style="list-style-type: none"><li>▪ Manage inflows, outflows, transitions</li><li>▪ Obtain a wider exposures than offered by other Delta 1 products</li></ul>
<b>Exposure</b>	<ul style="list-style-type: none"><li>▪ Exposures to markets or asset classes where one has no expertise or operational capabilities</li></ul>

1. Lipper Fitzrovia (December 2006)

# Core-Satellite: ETFs Can be Used in the Core Portfolio, As Well As In the Satellite



- ETF(s) in the Core :
  - A broad market index (DJ Euro Stoxx 50, MSCI World, iBoxx Government Bond)
  - Exposure to diversified baskets of securities
  - Optimized Core: sector, style or country indices
- ETF in the Satellite :
  - Concentrated, focused ETFs:
  - Sector and style
  - Individual countries and regions
  - Alternative asset class

# Sector Index Weights

Sector	MSCI World			MSCI Emerging Markets			S&P 500			MSCI Pacific		
	# Stocks	Weight (%)	YTD Return (%)	# Stocks	Weight (%)	YTD Return (%)	# Stocks	Weight (%)	YTD Return (%)	# Stocks	Weight (%)	YTD Return (%)
Energy	120	10.89%	-35.95%	54	16.30%	-59.35%	40	11.57%	-33.47%	80	13.91%	-40.50%
Materials	164	6.35%	-50.12%	114	12.43%	-60.44%	30	3.30%	-39.90%	34	6.32%	-28.57%
Industrials	279	10.73%	-44.24%	126	7.70%	-64.69%	56	11.22%	-37.07%	15	2.10%	-42.76%
Consumer Discretionary	271	9.04%	-39.00%	74	5.07%	-49.98%	80	8.32%	-31.18%	118	28.67%	-46.64%
Consumer Staples	125	10.80%	-24.08%	54	5.10%	-39.99%	42	14.01%	-15.31%	22	5.54%	-21.68%
Healthcare	113	10.93%	-22.72%	12	2.39%	-21.96%	53	13.22%	-23.68%	97	14.52%	-41.95%
Financials	370	21.16%	-49.77%	179	23.23%	-56.36%	84	15.30%	-46.66%	52	9.39%	-44.20%
Information Technology	151	10.56%	-40.04%	77	11.59%	-44.62%	74	16.59%	-37.46%	60	9.78%	-50.17%
Telecommunications	45	4.60%	-41.41%	59	12.70%	-46.49%	9	3.03%	-38.17%	9	3.96%	-28.43%
Utilities	90	4.95%	-33.89%	38	3.48%	-45.88%	32	3.44%	-31.49%	19	5.82%	-3.65%
<b>Total</b>	<b>1728</b>	<b>100.00%</b>	<b>-39.75%</b>	<b>787</b>	<b>100.00%</b>	<b>-54.20%</b>	<b>500</b>	<b>100.00%</b>	<b>-34.03%</b>	<b>506</b>	<b>100.00%</b>	<b>-40.66%</b>

Sector	DJ STOXX 600			DJ Euro STOXX		
	# Stocks	Weight (%)	YTD Return (%)	# Stocks	Weight (%)	YTD Return (%)
Automobiles & Parts	13	2.59%	-31.87%	12	2.59%	-31.33%
Banks	57	17.32%	-58.83%	39	17.32%	-60.46%
Basic Resources	27	4.14%	-58.79%	12	4.14%	-58.91%
Chemicals	21	3.55%	-44.22%	14	3.55%	-46.03%
Construction & Materials	30	2.25%	-53.79%	23	2.25%	-55.05%
Financial Services	35	1.69%	-52.55%	14	1.69%	-54.23%
Food & Beverage	25	6.44%	-32.79%	12	6.44%	-41.88%
Health Care	34	9.34%	-20.15%	14	9.34%	-33.76%
Industrial Goods & Services	90	7.49%	-53.29%	41	7.49%	-57.83%
Insurance	34	6.44%	-54.55%	17	6.44%	-57.70%
Media	25	2.02%	-46.89%	14	2.02%	-45.08%
Oil & Gas	40	10.01%	-39.87%	16	10.01%	-41.43%
Personal & Household Goods	25	4.16%	-43.30%	12	4.16%	-46.59%
Real Estate	20	1.06%	-48.11%	12	1.06%	-51.56%
Retail	24	2.93%	-45.95%	11	2.93%	-45.42%
Technology	24	3.22%	-51.36%	15	3.22%	-53.28%
Telecommunications	19	6.63%	-44.92%	11	6.63%	-39.39%
Travel & Leisure	25	1.26%	-51.11%	9	1.26%	-47.28%
Utilities	32	7.46%	-42.29%	21	7.46%	-45.09%
<b>Total</b>	<b>600</b>	<b>100.00%</b>	<b>-46.86%</b>	<b>319</b>	<b>6.63%</b>	<b>-50.01%</b>

Sector	MSCI Europe		
	# Stocks	Weight (%)	YTD Return (%)
Energy	25	10.48%	-37.12%
Materials	50	7.48%	-55.05%
Industrials	103	9.43%	-55.12%
Consumer Discretionary	82	8.05%	-43.98%
Consumer Staples	39	11.07%	-34.41%
Healthcare	28	10.43%	-21.34%
Financials	120	25.98%	-57.36%
Information Technology	16	2.90%	-51.80%
Telecommunications	20	7.28%	-45.75%
Utilities	30	6.90%	-42.05%
<b>Total</b>	<b>513</b>	<b>100.00%</b>	<b>-46.59%</b>

Source: ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg. YTD returns reflect USD price performance only from 31/12/2007 to 31/10/2008. Index weights captured from Bloomberg on 07/11/2008.

# MSCI EM, MSCI World Index Weights

MSCI Emerging Markets	# Stocks	Weight	YTD Return
ARGENTINA	5	0.52%	-53.21%
BRAZIL	71	13.94%	-53.61%
CHILE	16	1.49%	-36.73%
CHINA	101	15.53%	-58.29%
COLOMBIA	7	0.54%	-36.35%
CZECH REPUBLIC	6	0.89%	-43.40%
EGYPT	12	0.76%	-53.59%
HUNGARY	4	0.63%	-60.13%
INDIA	61	6.91%	-64.32%
INDONESIA	21	1.45%	-61.06%
ISRAEL	22	3.28%	-27.44%
JORDAN	3	0.11%	-43.44%
MALAYSIA	43	3.13%	-45.52%
MEXICO	27	5.09%	-44.43%
MOROCCO	6	0.54%	-10.44%
PAKISTAN	8	0.19%	-51.82%
PERU	6	0.61%	-55.95%
PHILIPPINES	14	0.52%	-52.94%
POLAND	22	1.67%	-52.35%
RUSSIA	29	7.60%	-65.63%
SOUTH AFRICA	42	6.99%	-46.27%
SOUTH KOREA	94	12.99%	-57.49%
TAIWAN	114	11.50%	-45.28%
THAILAND	26	1.53%	-59.34%
TURKEY	27	1.59%	-61.65%
<b>Total</b>	<b>787</b>	<b>100.00%</b>	<b>-54.20%</b>

MSCI World	# Stocks	Weight	YTD Return
AUSTRALIA	75	2.89%	-50.67%
AUSTRIA	13	0.18%	-65.81%
BELGIUM	14	0.35%	-66.98%
CANADA	97	4.20%	-40.40%
DENMARK	17	0.41%	-46.51%
FINLAND	19	0.66%	-55.22%
FRANCE	74	4.82%	-45.61%
GERMANY	56	3.87%	-48.77%
GREECE	11	0.24%	-64.22%
HONG KONG	46	0.94%	-53.97%
IRELAND	8	0.16%	-65.00%
ITALY	38	1.68%	-52.33%
JAPAN	349	11.46%	-34.19%
NETHERLANDS	21	1.12%	-51.08%
NEW ZEALAND	5	0.04%	-54.57%
NORWAY	13	0.33%	-60.85%
PORTUGAL	10	0.13%	-56.31%
SINGAPORE	31	0.49%	-50.95%
SPAIN	31	1.86%	-48.27%
SWEDEN	31	0.93%	-52.54%
SWITZERLAND	36	3.78%	-30.61%
UNITED KINGDOM	121	9.74%	-44.95%
USA	612	49.72%	-34.14%
<b>Total</b>	<b>1728</b>	<b>100.00%</b>	<b>-39.75%</b>

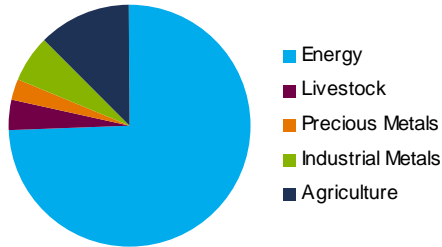
Source: ETF Research & Implementation Strategy Team, Barclays Global Investors, Bloomberg. YTD returns reflect USD price performance only from 31/12/2007 to 31/10/2008. Index weights captured from Bloomberg on 07/11/2008.

# Advantages of Fixed Income Products

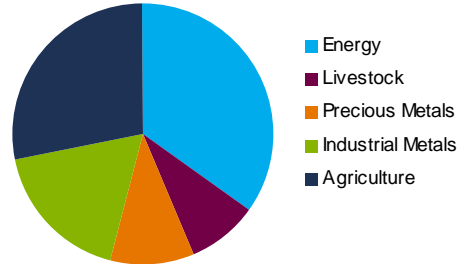
- Government, Corporate, Credit, Inflation, Interest Rate Indices
- **Security:** Government issued fixed income products are usually considered riskless. Corporate debt is also considered less risky than the company's equity. In the event of liquidation, bondholders are ranked above shareholders in the claim on company assets.
- **Return of Capital:** the redemption value of bonds is pre-determined at the time of purchase.
- **Income:** The coupon rate of bonds is known before investing and provides the investor with a reliable income stream.
- **Diversification:** A diversified portfolio contains multiple asset classes and eliminates the concentration risk embedded in a single asset class portfolio.
- **Benefit from falling interest rates:** Interest rates can be locked in for a defined period. The inverse relationship between bond prices and interest rates allows investors to benefit from rising bond prices during falling interest rate environments.
- **Speculation:** Fixed Income products provide investors with additional tools to speculate on future prices of interest rates.

# Commodity Index Comparison

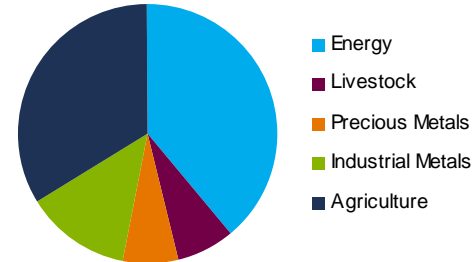
S&P GSCI



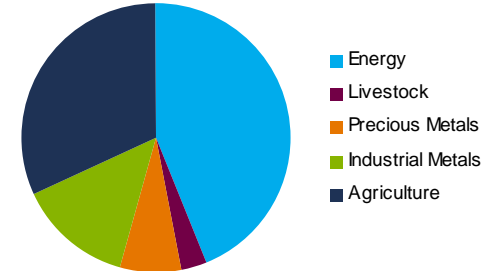
Dow Jones – AIG Commodity Index



Reuters Jefferies CRB Index



Rogers International Commodity Index



Commodity	Measure	S&P GSCI	DJ AIG Commodity Index	Reuters Jefferies CRB	Rogers International Commodity Index (RICI)
<b>Energy</b>		<b>74.28%</b>	<b>35.10%</b>	<b>39.00%</b>	<b>44.00%</b>
WTI Crude Oil	\$/barrel	39.00%	14.60%	23.00%	21.00%
Brent Crude Oil	\$/barrel	14.02%	-	-	14.00%
RBOB Gasoline	\$cents/gallon	4.06%	3.95%	5.00%	3.00%
Heating Oil	\$cents/gallon	5.22%	4.47%	5.00%	1.80%
Gasoil	\$/metric ton	5.34%	-	-	1.20%
Natural Gas	\$/mmBtu	6.64%	12.08%	6.00%	3.00%
<b>Livestock</b>		<b>4.16%</b>	<b>8.50%</b>	<b>7.00%</b>	<b>3.00%</b>
Live Cattle	\$cents/pound	2.49%	5.43%	6.00%	2.00%
Feeder Cattle	\$cents/pound	0.44%	-	-	-
Lean Hogs	\$cents/pound	1.23%	3.07%	1.00%	1.00%
<b>Precious Metals</b>		<b>2.58%</b>	<b>10.20%</b>	<b>7.00%</b>	<b>7.10%</b>
Gold	\$/troy oz	2.36%	7.91%	6.00%	3.00%
Silver	\$/troy oz	0.22%	2.29%	1.00%	2.00%
Palladium	\$/troy oz	-	-	-	0.30%
Platinum	\$/troy oz	-	-	-	1.80%
<b>Industrial Metals</b>		<b>6.39%</b>	<b>17.78%</b>	<b>13.00%</b>	<b>14.00%</b>
Aluminium	\$/metric ton	2.59%	7.27%	6.00%	4.00%
Copper	\$/metric ton	2.50%	6.75%	6.00%	4.00%
Lead	\$/metric ton	0.34%	-	-	2.00%
Nickel	\$/metric ton	0.49%	1.63%	1.00%	1.00%
Tin	\$/metric ton	-	-	-	1.00%
Zinc	\$/metric ton	0.47%	2.13%	-	2.00%

Commodity	Measure	S&P GSCI	DJ AIG Commodity Index	Reuters Jefferies CRB	Rogers International Commodity Index (RICI)
<b>Agriculture</b>		<b>12.58%</b>	<b>28.43%</b>	<b>34.00%</b>	<b>31.90%</b>
Wheat	\$cents/bushels	3.35%	3.71%	1.00%	7.00%
Kansas Wheat	\$cents/bushels	0.82%	-	-	-
Corn	\$cents/bushels	3.45%	6.20%	6.00%	4.75%
Soybeans	\$cents/bushels	2.09%	6.67%	6.00%	3.00%
Soybean Oil	\$cents/pound	-	2.58%	-	2.00%
Soybean Meal	\$/short ton	-	-	-	0.75%
Cotton	\$cents/pound	0.75%	2.15%	5.00%	4.05%
Sugar	\$cents/pound	1.22%	4.00%	5.00%	2.00%
Coffee	\$cents/pound	0.64%	3.12%	5.00%	2.00%
Cocoa	\$/metric ton	0.26%	-	5.00%	1.00%
Orange Juice	\$cents/pound	-	-	1.00%	0.66%
Rubber	JPY/kilogram	-	-	-	1.00%
Lumber	\$/1k board fleet	-	-	-	1.00%
Canola	CAD/metric ton	-	-	-	0.67%
Rice	\$/cwt	-	-	-	0.50%
Oats	\$cents/bushels	-	-	-	0.50%
Azuki Beans	JPY/bag	-	-	-	0.50%
Barley	CAD/metric ton	-	-	-	0.27%
Greasy Wool	AUD/kilogram	-	-	-	0.25%
<b>TOTAL</b>		<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

Data as of: 10-Oct-08 30-Sep-08 31-Aug-08 12-Dec-07

Source: ETF Research & Implementation Strategy Team, Barclays Global Investors, S&P, Dow Jones, Lyxor, RICI Handbook 2008.

# ETFs Product Overview

## Benefits

- ETFs are not a derivative
- Simple
- Flexible
- Transparent
- Liquid
- Small minimum investment
- Ability to trade with multiple counterparties

# Structures of ETFs and ETNs

General **product features** common to ETFs and ETNs are:

- Exchange traded
- Easy accessible investment vehicles for a wide range of asset classes
- Low Tracking Error
- Exposure to market risk of the asset class / index

Specific features of in-specie ETFs are:

- Fund holds underlying securities in a ring-fenced separate account exposing the investor to no counterparty risk of the issuer. In the case of failure of the fund issuer, the investor has recourse directly to the pool of underlying shares or bonds.
- High transparency with regards to the holdings of the fund
- Opportunity for additional income to further reduce costs (i.e. through securities lending inside the ETF) is better than for other ETPs as in-specie ETFs hold index securities
- Multiple market makers can create and redeem new shares with the fund company promoting a highly competitive pricing, both on and off exchange ("multi dealer model")

Specific features of swap-based ETFs are:

- Fund holds a basket of securities (which can be different from the underlying index securities) and an index swap. The swap counterparty risk is limited to a maximum of 10% of the value of the fund under UCITS rules. The investor has recourse to the basket of securities in the case of failure of the fund issuer.
- Structure allows compliance with UCITS rules on more indices than cash-based ETFs (i.e. commodity ETFs)
- Sometimes tax advantages possible (i.e. avoidance of stamp tax)
- While multiple market makers can price swap-based ETFs on and off exchange, every creation and redemption with the fund company generally involves a single swap counterparty

Specific features of ETNs are:

- Investor owns a note, exposing the investor to the counterparty risk of the note issuer which is sometimes mitigated through collateral or guarantees
- More flexibility to issue products, i.e. on single commodities and currencies
- Possible access to structured product type solutions

	Exchange Traded Funds (ETFs)		Exchange Traded Notes (ETNs)
Exchange listed	Yes		Yes
Easy accessible investment vehicles for a wide range of asset classes	Yes		Yes
Low Tracking Error	Yes		Yes
Low costs	Yes		Mostly
Exposure to market risk of the asset class / index	Yes		Yes
Structure	Mutual Fund		Note
UCITS Fund	Yes*		No
Underlying Holdings	Index securities for in-specie ETFs	Index swap plus a basket of non-index securities for swap-based ETFs	NA
Fund/note issuer risk	No, mutual funds hold assets in ring-fenced segregated accounts or ring-fenced fund company		Yes, bears full exposure to credit worthiness of note issuer
Swap counterparty risk	No, for in-specie ETFs	Yes, for swap-based ETFs Limited to 10% under UCITS	NA
Other counterparty risk considerations	Securities lending and dividend enhancement** activity		Some notes are backed by physical assets or guarantees to decrease issuer risk
Transparency	Yes, Full holdings disclosed for in-specie ETFs	Limited for swap-based ETFs	Limited
Competitive Multi Dealer Model to trade on and off exchange	Yes, for in-specie ETFs possible	Limited, for swap-based ETFs	Limited

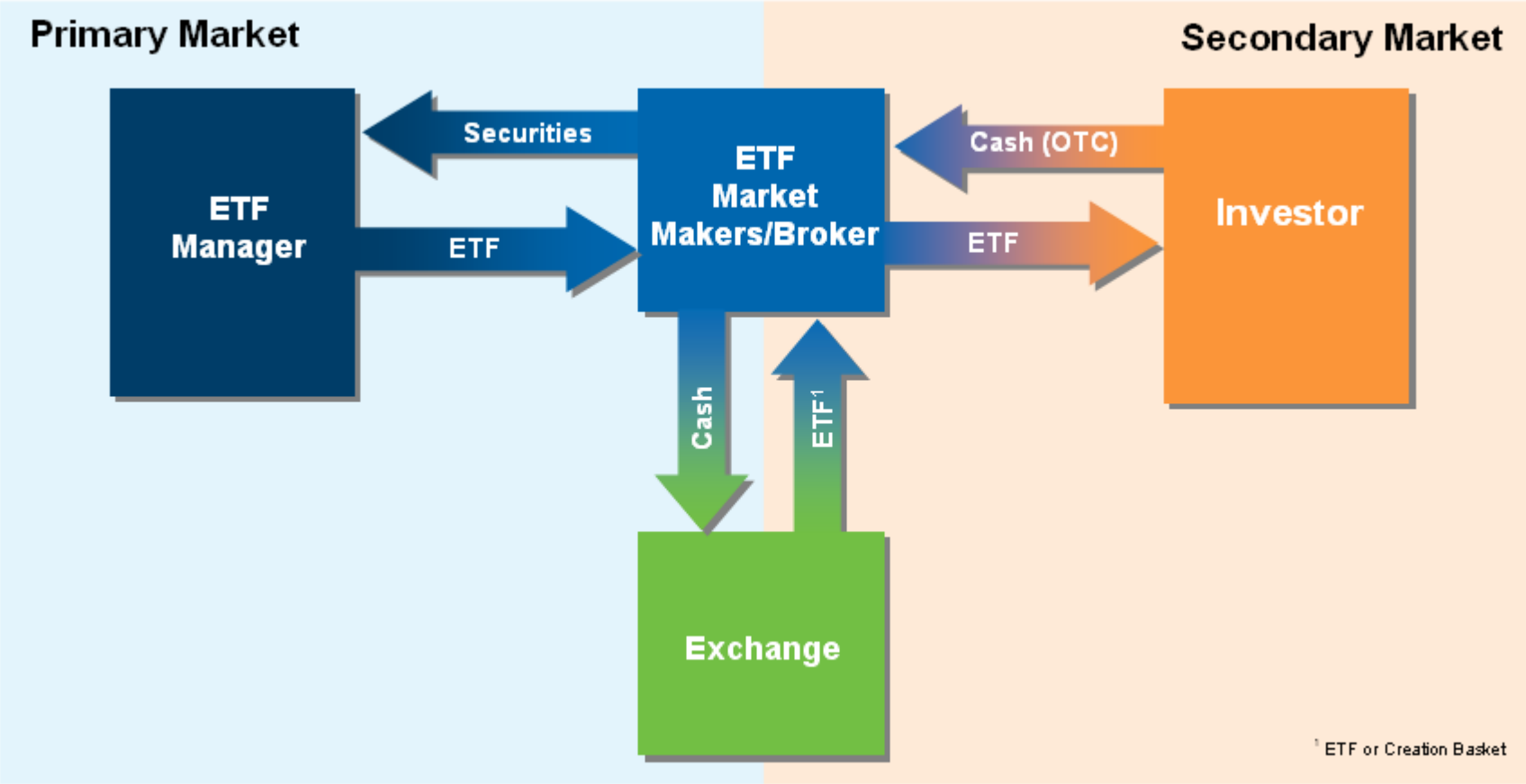
\* with exemptions possible

\*\* In addition to securities lending, the fund can earn extra income through dividend enhancement. Dividend enhancement describes partly recovering withholding taxes through the purchase of listed single stock notes during the period of dividend payments

# Delta 1 Products Comparison

	ETFs	Futures	Swaps
Round trip execution costs	Commission	Commission	None if held to expiry; break fee on notional
Holding cost	Total Expense Ratio	Roll	Financing
Tracking error	Yes	No	No
Minimum trade size	1 share	1 contract	Variable on exposure
Expiry	No	Quarterly	Fixed
Available to lend	Yes	No	No
Legal structure	Fund	Derivative	Derivative
Liquidity provided	Exchange / Multiple dealers	Exchange / Multiple dealers	Single dealer

# Liquidity: The ETF Transaction Process





# Forecasts

- Global ETF Assets to exceed US\$1 trillion in 2009.
- European ETF Assets to exceed US\$200 billion in 2009.
- Global ETF Assets to exceed US\$2 trillion in 2011.

# Upcoming Events

- The future of UCITS global brand, Luxembourg, 13-Nov-08  
[www.mgi-direct.ch](http://www.mgi-direct.ch)
- Wealth Management Forum (A Focus on ETFs), London, 21-Nov-08  
<http://www.londonstockexchange.com/en-gb/products/training/ETF%20Conference>
- Nikkei ETF Event, Tokyo, Japan, 25-Nov-08  
<http://www.adnet.jp/nikkei/veritas/20081125.asp>
- Fund Forum Middle East 2008, Bahrain, 01-Dec-08  
<http://www.icbi-events.com/fundsmiddleeast/>
- 4th Annual US Commodities Investment Conference, New York, 08-Dec-08

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