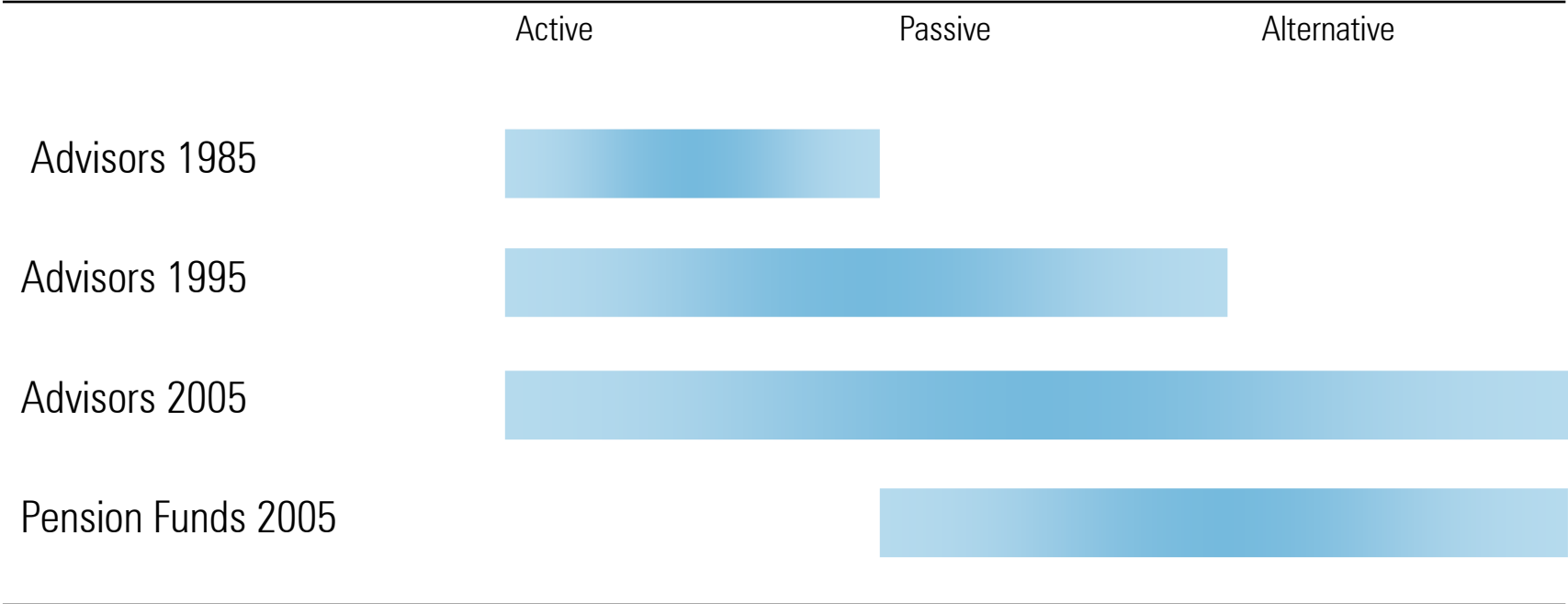
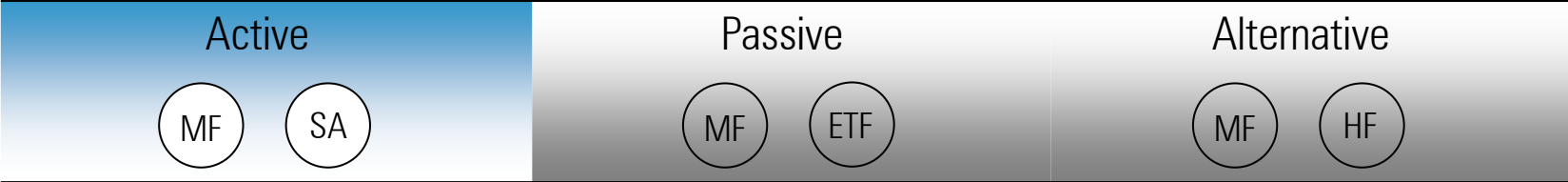

Portfolio Construction Approaches: Active, Passive, and Alternative

- ▶ **Presenter;**
- ▶ **Christopher Traulsen, Director of Fund Research, Morningstar**

Active, Passive and Alternative



Active Investments (Traditional Long Only)



Perception Old fashioned, overpriced

Reality Improving, especially in the US

Total Returns May Not Equal Investor Returns

Total Return

- ▶ Time-weighted calculation
- ▶ Assumes investor buys and holds for entire period with no additional investments

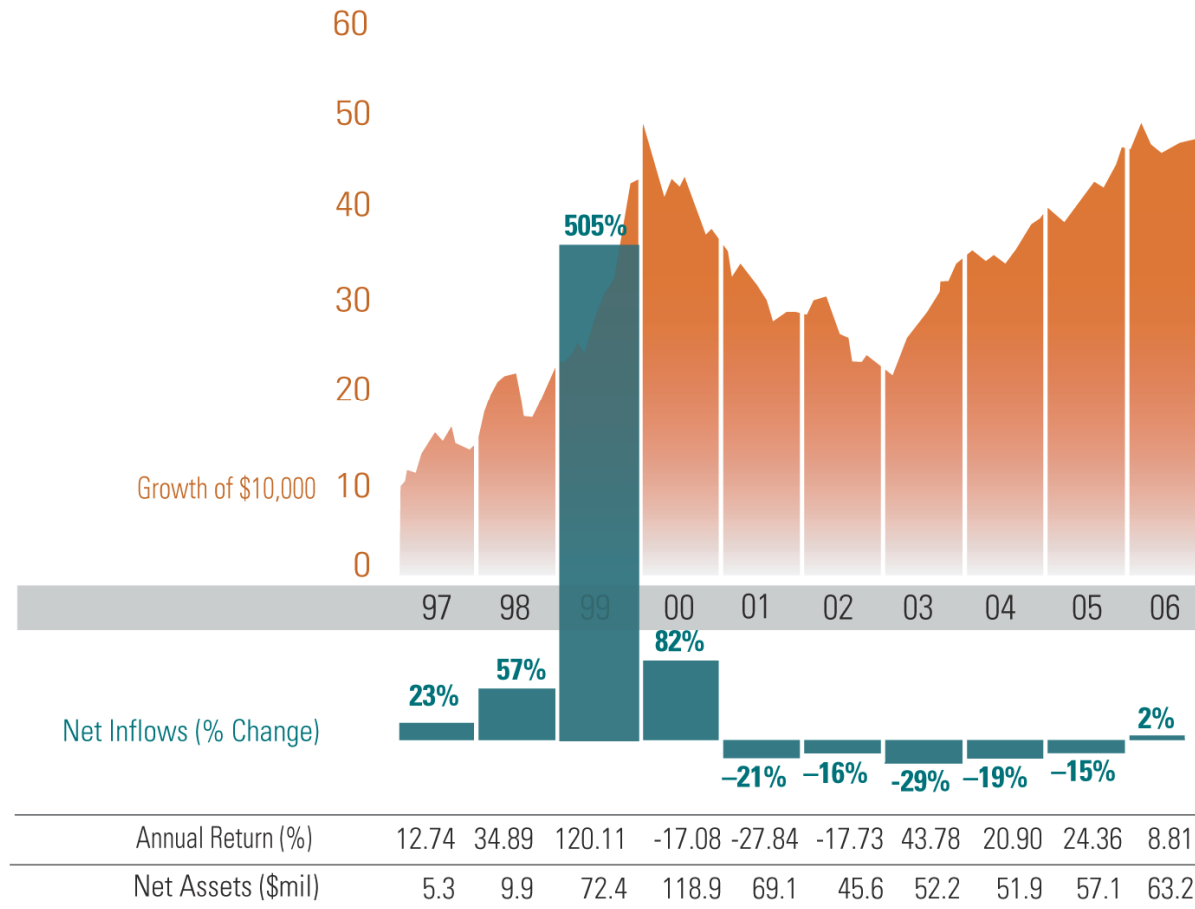
Investor Return

- ▶ Money-weighted calculation
- ▶ Accounts for aggregate monthly purchases and sales by all of a fund's investors

Investors Often Chase Performance

Fund A

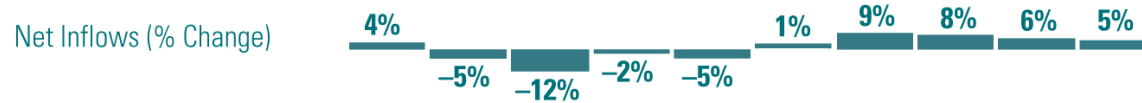
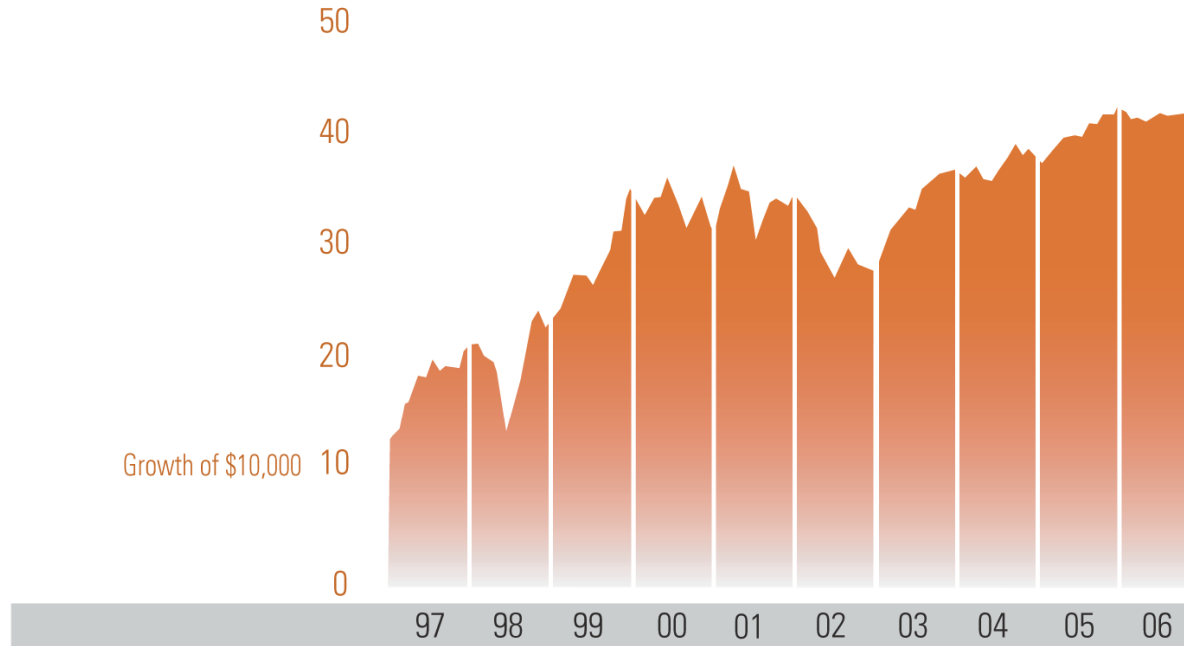
10 Year Total Return: 15.05%
10 Year Investor Return: -1.46%



Slow and Steady Wins the Race

Fund B

10 Year Total Return: 15.03%
10 Year Investor Return: 14.75%



Annual Return (%)	32.88	22.98	42.27	6.65	6.34	-22.45	41.36	13.23	8.13	4.88
Net Assets (\$mil)	258.4	304.0	395.4	428.6	477.6	374.9	561.7	683.0	778.0	856.0

Diversification Leads to Better Investor Results

	10 Year Investor Return	10 Year Total Return
Equity Sector Funds (100% tech, health, etc.)	7.64%	10.42%
Balanced Funds (60% equity/40% bonds)	8.75%	9.00%

10 years ending 9/30/06

Volatility Hurts

	10 yr Investor Return	10 yr Total Return	Success Ratio (IR/TR)
Low Standard Deviation Funds	8.53%	8.70%	98%
High Standard Deviation Funds	5.11%	8.25%	62%

- ▶ High and low standard deviation defined as relative to a fund's category.
- ▶ Group results based on weighted average of the dollar-weighted returns and total returns for each fund, using average assets for the period as the weights.

10 years ending 12/31/05

Smart Fund Companies Pay Attention

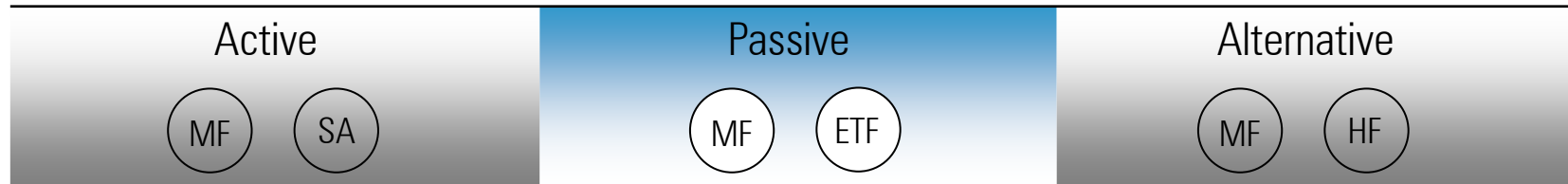
Fund Family	10 yr Investor Return	10 yr Total Return	Success Ratio	2004/2005 Asset Flows
American Funds	10.07	10.58	95%	+ 169B
Vanguard	7.65	8.85	86%	+ 97B
Fidelity	8.01	8.85	91%	+ 29B
Dodge & Cox	12.55	12.77	98%	+ 33B
Franklin Templeton	7.86	8.38	94%	+ 24B
Putnam	4.28	6.37	67%	-48B
Janus	2.30	9.05	25%	-29B

10 years ending 12/31/05

A Culture of Stewardship

- ▶ Create a place where analysts and managers want to have long careers.
- ▶ Launch funds that make investment sense, not just marketing sense. Lifecycle funds, rather than New China Energy/Infrastructure Fund.
- ▶ Communicate in an honest, straightforward manner that helps insure that investors have reasonable expectations. Keeping assets is more important than simply attracting them.
- ▶ Creating funds that you would buy on the same terms that they are sold to the public. Recognition that asset management firms only win if their clients do.

Passive Investments



Perception Clean, efficient

Reality Clean and efficient, but possibly over-praised
and changing rapidly

Indexing Doesn't Magically Solve the Problem

Diversified Stock Funds	10 yr Investor Return	10 yr Total Return	Success Ratio (IR/TR)
Active	7.53	9.18	82%
Passive	7.09	9.11	78%

10 years ending 12/31/05

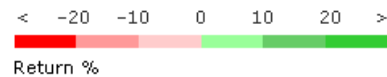
Indexing Offers No Immunity to Investor Greed

Fund (Retail Share Class)	Estimated 1999 Asset Flows (\$ Million)
Vanguard 500	14,782
Vanguard Growth Index	6,677
Vanguard Value Index	652
Vanguard Small Growth Index	59
Vanguard Small Value Index	87

Morningstar Market Barometer: 2000

	Value	Blend	Growth
Large	+5.7	+4.2	-33.5
Medium	+24.6	+14.8	-11.1
Small	+18.7	+23.2	-12.1

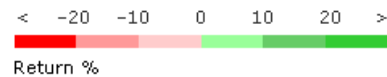
Dow 30 -5.4
S&P 500 -9.1
NASDAQ -39.3



Morningstar Market Barometer: 2001

	Value	Blend	Growth
Large	-3.4	-14.4	-29.1
Medium	+5.1	+6.1	-21.6
Small	+18.6	+14.6	-12.9

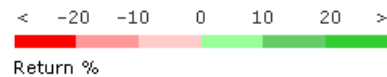
Dow 30 -5.3
 S&P 500 -11.9
 NASDAQ -21.1



Morningstar Market Barometer: 2002

	Value	Blend	Growth
Large	-15.0	-23.8	-33.2
Medium	-10.0	-12.4	-32.5
Small	-8.2	-14.2	-36.9

Dow 30 -15.0
 S&P 500 -22.1
 NASDAQ -31.5



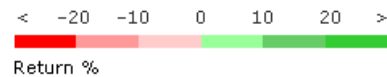
Nor Immunity to Investor Fear/Paralysis

Fund (Retail Share Class)	Estimated 2002 Asset Flow (\$ Mil)
Vanguard 500	-725
Vanguard Growth Index	-351
Vanguard Value Index	-190
Vanguard Small Growth Index	+86
Vanguard Small Value Index	+488

Morningstar Market Barometer: 2003

	Value	Blend	Growth
Large	+26.3	+24.7	+30.7
Medium	+35.9	+38.7	+40.0
Small	+48.9	+42.6	+52.7

Dow 30 +28.3
S&P 500 +28.7
NASDAQ +50.0



Fundamental Weighting Opportunity

- ▶ Opportunity to tame extremes of cap weighting strategies, thus making funds easier for investors to use successfully.
- ▶ To date, promoted largely as a return enhancement strategy—likely overstated due to recent small value run.
- ▶ Could be promoted as a volatility reducing strategy.
- ▶ Moving from high standard deviation to low standard deviation performance can greatly enhance the likelihood of a good investor experience.

Rising Costs, Increasing Risk in ETFs

Launch Date	# of Funds	Expense Ratio	3-Yr Std Dev
< 1996	2	0.19	10.23
1996-2000	87	0.41	13.36
2001-present	131	0.46	14.41

Source: Morningstar Principia January 2006

Heading in Different Directions?

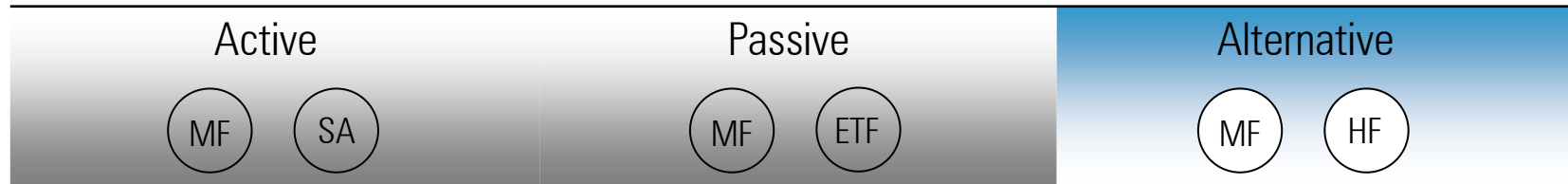
Recent MF Launches

- ▶ GMO Core Equity
- ▶ MFS Lifestyle Funds
- ▶ AIM Allocation Funds
- ▶ AllianceBernstein Retirement Strategy
- ▶ Vanguard Inflation Protected Securities

Recent ETF Launches

- ▶ iShares COMEX Gold
- ▶ PowerShares Biotech and Genome
- ▶ First Trust Dow Jones MicroCap
- ▶ streetTRACKS KBW Insurance
- ▶ Vanguard Emerging Markets VIPERs

Alternative Investments (Hedge Funds and Derivatives)



Perception New, sexy, needed for lower-return era

Reality Seller's market;
Opportunities, but buyer beware

Hedge Fund Potential is Enticing...

	Total Return	Standard Deviation
S&P 500	11.58%	16.71%
Hedge Funds*	8.98%	7.32%
LB Aggregate	6.93%	4.02%

Hedge fund alphas are significantly positive and are approximately equal to the fees, meaning that excess returns are shared roughly equally between managers and investors.

-Ibbotson and Chen, Sept. 2006

* Equally weighted post fee returns from TASS database (1995-April 2006)

...But Hedge-like Mutual Funds Haven't Served Investors Well

Period	Investor Return	Total Return
3 Years	-0.42	0.54
5 Years	-1.42	1.62
10 Years	0.48	3.41

As of 12/31/05

Recent Changes in Hedge Funds Don't Favor Investors

- ▶ Many more managers pursuing similar strategies means returns from traditional approaches will fall. Already seen in convertible arbitrage.
- ▶ Declining returns will pressure managers to take more risks. Increased use of private equity.
- ▶ There's no catalyst for fee cuts on the horizon.
- ▶ Hedge fund managers remain among the least sensitive market participants regarding trading costs and tax implications.
- ▶ Financial planners remain low on the food chain in terms of access to quality funds, behind institutions and traditional high net worth families.

Gravitational Pull of Fees

Investment Vehicle	Expense Ratio	Asset Weighted Expense Ratio
ETFs	0.43	0.30
Index Mutual Funds	0.71	0.23
Active Mutual Funds	1.38	0.89
Hedge-like Mutual Funds	1.82	1.31
Hedge Funds	3.00+	3.00+
Hedge Fund Fund of Funds	4.00+	4.00+

We Are All in the Behavior Modification Business

- ▶ Identifying quality funds is a valuable step. They can be active, passive or alternative, but choose wisely.
- ▶ Determining an appropriate asset allocation is of even greater importance. Good funds can make a bad portfolio.
- ▶ Disciplining investor emotions to reduce mistimed purchases and sales may be of more importance still. We are all in the behavior modification business.
- ▶ Fund companies and advisors who work together toward this goal will greatly enhance the investor experience.
- ▶ If the investor doesn't win, we all lose.

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