

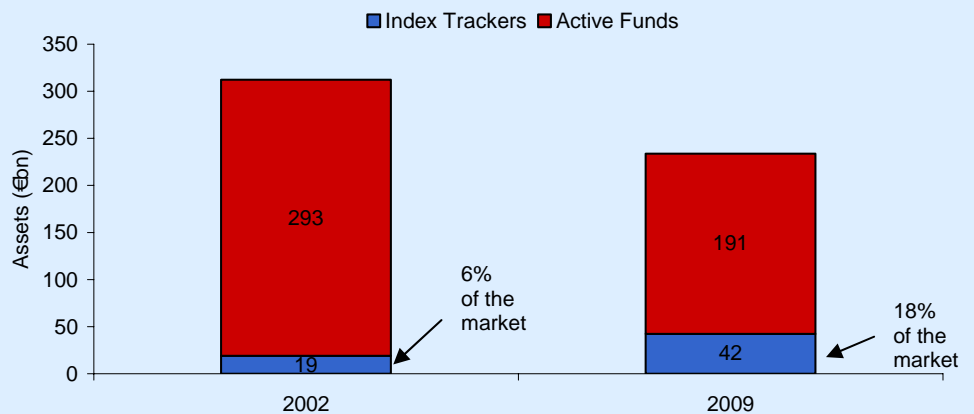
# ACTIVE VERSUS PASSIVE: THE CASE FOR ACTIVE MANAGEMENT

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- There is evidence to support active fund management outperformance
- High active money and high tracking error are positively correlated to outperformance

In recent years, there has been a noticeable increase in the level of investments into passive funds. The main reasons for this have been the belief that active managers can not outperform on a consistent basis over the longer term and because active funds have higher fees, which are not compensated by additional performance. This paper will refute these claims and also put forward the arguments for active management.

## Passive funds have taken an increased market share over the last 7 years



Source: Lipper FMI. Assets as at 31 January 2002 and 31 January 2009. Including funds in the following sectors in all domiciles across Europe: Equities Euroland, Equities Euroland Convergence, Equities Euroland Mid/Small Caps, Equities Europe, Equities Europe Mid/Small Caps.

## A BRIEF HISTORY OF THE DEVELOPMENT OF FUNDS

Passive or index funds date their existence back to around the 1950's when Harry Markowitz's (1952) laid the foundations for modern finance theory. His theory stated that investors should focus on selecting a portfolio based on their *overall* risk-reward rather than simply combining securities that individually offer an attractive risk reward opportunity. In other words, investors should buy portfolios, not individual shares to get the best possible risk reward trade off. Sharpe (1964) concluded that theoretically all investors should hold the "market portfolio." This model is more commonly known as the Capital Asset Pricing Model (CAPM).

The market portfolio is the optimal portfolio, which gives the investor the highest rate of return with the lowest risk. By definition, there is only one optimal portfolio but in reality, due to a combination of factors such as taxes, liquidity, transaction costs such as exchange fees or commission on trades, it is very difficult to create this optimal portfolio. Furthermore, this model assumed that all investors have the same time horizon and investors have the same opinions about expected returns, volatility and correlation of returns.

In practice, this assumption is unreasonable, so CAPM is largely of theoretical value. In the 1960's, Jensen came up with a formula, 'Jensen's alpha', to calculate the excess return of a security in a portfolio over the market return. This is now widely known as "alpha".

Then in the 1970's, Fama developed the 'efficient market hypothesis'. It was after this research that companies started to sell funds which merely tracked the market and did not carry out fundamental research, believing that the current share price reflected all information, i.e. the market was efficient and investors could not get alpha.

It was not until the late 1970's that investors in the UK began to explore the theory that the market was not efficient and through fundamental research, it was possible 'to beat the market'. Following this, the active fund became a widespread investment theory and now many forms of active funds exist, covering many markets, different market capitalisations and more complex investment strategies.

### THE POWER OF REBALANCING

One of the major tools that active managers have over passive funds is buying cheap companies and selling, reducing or not owning what is over priced. This may be counter intuitive to some investors who want to own what is hot rather than what is not, but according to Hertog and Gordon (2003) by systematically buying low and selling high, active managers can deliver outperformance.

Furthermore, passive funds own shares in proportion to their value. Therefore as a share gets more expensive, it becomes a bigger proportion of an index and passive funds continue to hold. If you think about Volkswagen in 2008. The company saw its share price shoot up, due to a large 'short' squeeze. Unlike passive funds, which held the company on the way up and back down, many fundamental investors did not lose money when the shares came back down as they realised the price was not correct. They were able to sell out at the higher price, passive funds did not have this insurance.

Another recent example would be financials. Active investors have had the option not to hold these companies or were even short. The chart below shows that within a selection of Fidelity's European equity range, 5 out of 6 funds had positive contribution from financials and all the funds were underweight the sector.

#### Fidelity European fund's financials attribution during 2008

2008 Financial's Attribution	Average Weight (%)			Basis Points		
	Fund	Benchmark	Rel weight	Security Selection	Market Selection	Total contribution
FF* European Dynamic Growth	10.0	24.8	-14.8	3	209	212
FF* European Larger Companies	12.9	18.4	-5.5	23	145	168
FF* Euro Blue Chip	20.5	27.3	-6.8	104	34	138
FIF** European	16.1	25.3	-9.2	0	37	36
FF* European Growth	19.5	24.1	-4.6	30	-25	5
FIF** European Opportunities	20.4	26.0	-5.6	-32	14	-18

Source: Fidelity. Benchmark: Fidelity Funds - European Dynamic Growth = MSCI Europe, Fidelity Funds - European Larger Companies = MSCI Europe, Fidelity Funds - Euro Blue Chip = MSCI EMU, FIF European, = MSCI Europe ex UK, FIF European Opportunities = FTSE Europe ex UK FF European Growth = FTSE World Europe. Past performance is not indicative of future performance.

\* FF – Fidelity Fund \*\*These funds are not authorized in Singapore and are not available to Singapore residents

Being underweight financials positively contributed to returns within Fidelity's European equity fund range

### WHAT ARE THE BENEFITS OF ACTIVELY MANAGED FUNDS?

- Active funds are not 100% correlated to the market. They can therefore be useful as a portfolio diversifier and can reduce overall portfolio volatility.
- They offer investors more choices because they do not invest in the whole market and can be tailored to individual clients investment needs.
- Active funds can also manage volatility by investing in less-risky, high-quality companies rather than having exposure to the full market, which can not be done with passive funds. Conversely, some investors may want to take on additional risk in exchange for the opportunity of obtaining higher-than-market returns.
- Investors may also want to buy active managers because they may be sceptical of the efficient market theory or believe that some market segments are less efficient in creating profits than others.
- Investors in passive funds are buying beta only, this in essence is why passive funds are cheaper as they do not offer any upside relative to the market. In recent years, beta has given investors a tough lesson in the magnitude of broadly diversified equity risk.
- Some investors may wish to follow a stock/sector strategy that avoids or underweight particular industries compared to the market as a whole, and hence may find an actively-managed fund more in line with their particular investment goals.

Diversification

More tailored offering

#### Active managers able to over or underweight a stock depending on their view

	Weightings relative to MSCI Europe (%)			
	Weighting in MSCI Europe	Vanguard European Stock Index	FF European Growth	FF European Aggressive
Nestle	2.9	0.0	-2.0	0.3
BP	2.8	-0.1	0.2	-2.8
Novartis	2.3	0.0	-0.8	0.6
Total	2.3	0.0	-2.3	-2.3
HSBC	2.3	-0.1	0.3	-2.3
Roche	2.1	0.0	3.0	0.6
Vodafone	2.1	0.0	4.0	0.7
GlaxoSmithKline	1.9	0.0	-1.9	-1.9
Telefonica	1.8	0.0	-1.7	-0.9
E.On	1.5	0.0	1.1	1.2

Source: Fidelity funds: Fidelity. Vanguard: Morningstar. MSCI Europe. DataStream, all data as at 31.12.08

Managed funds make informed decisions.

References made to specific securities are for illustration purpose only and they should not be construed as a recommendation or an advice to transact in them

This table above shows the differences between active funds that can choose to overweight or underweight a particular stock depending on their view and a passive fund that buys all companies in line with their market weight regardless of their valuation.

With large positions, passive funds have to hold the company regardless of the outlook for the company or sector. For example, in June 2007 within the top 20 companies in the MSCI Europe Index which constituted 28.9% of the index, there were 6 financial companies (HSBC, RBS, UBS, Banco Santander, Allianz & Barclays) these accounted for 7.9%. While at end of January 2009, there were only two financial companies (HSBC & Banco Santander) which accounted for only 3.6% of 36% of the top 20 companies' constituents.

**BUT ARE THESE MANAGED FUNDS AS ACTIVE AS YOU THINK THEY ARE?**

Cremers and Petajisto (2007) looked at why passive managers have been shown to outperform active managers. Put simply, many so-called active managers are not in fact active; they are what they termed "closet index funds".

In their research they classified all funds in four main categories depending on two key characteristics. Do they have high active money? (i.e. greater than 80%) And what is the tracking error? (i.e. greater than 6-8%).

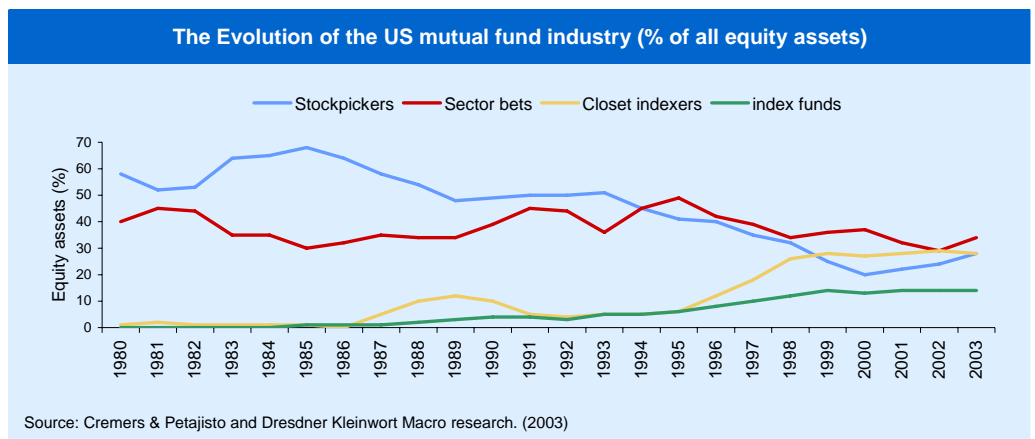
- = Active funds
- = Active funds but act as a passive fund
- = Passive funds

		Tracking Error		
		High	Low	Zero
Active money (concentration)	High	<b>Concentrated stock pickers</b> (active money > 80%, tracking error > 8%)	<b>Diversified stock pickers</b> (Active money > 80%, tracking error < 8%)	-
	Low	<b>Sector bets</b> (Active money < 80%, tracking error > 6%)	<b>Closet index</b> (active money <60%, tracking error <6%)	-
	Zero	-	-	<b>Index fund</b>

Source: Cremers and Petajisto (2007)

Those funds with high active money and high/low tracking errors are 'stock pickers'. Their active money is testament to them taking lots of bets but their low tracking errors suggests that they are running a portfolio which is large enough to diversify specific stock positions. There are also those managers with low active money but high tracking errors. These fund managers are defined as "sector bets". They seem to be relatively passive in stock selection but with low tracking error. Finally, there are "closet indexers". These have low active money and low tracking errors.

Cremers and Petajisto concluded that "there has been a significant shift from active to passive management over the 1990s". For example over the last 10 years, 'closet' indexing has risen from 10% of the total mutual fund industry to over 30%. At the same time, stock picking has declined from 60% in the 1980's to under 30% by mid 2000. They also state that 'pure index funds' grew substantially over the 1990's in the US, from about 1% to 15% of mutual funds assets. This is evident in the chart below.

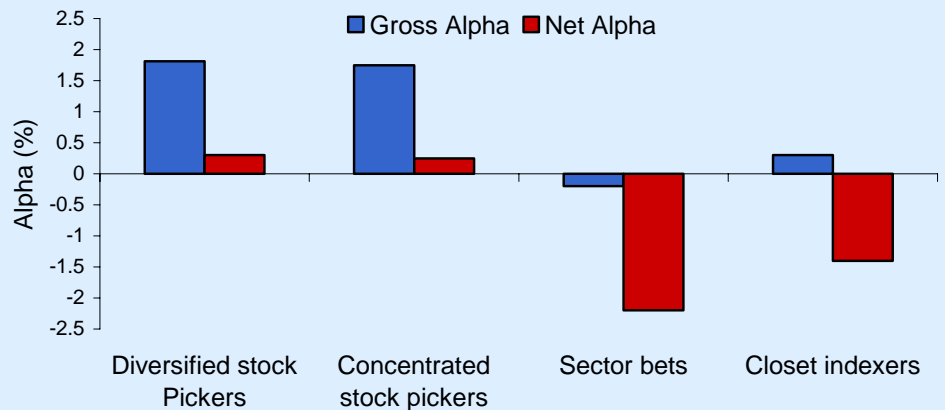


Source: Cremers & Petajisto and Dresdner Kleinwort Macro research. (2003)

However, their findings also showed that the returns of these different types of "active" investors vary dramatically and can explain why some 'active funds' have underperformed, i.e. those classified as 'Sector bets'.

Fidelity funds would be classified as "stock pickers"

Only certain managed funds produced alpha (% return) – 1980-2003



Source: Cremers & Petajisto and Dresdner Kleinwort Macro research. (2007)

If nobody picks stocks, information cannot be impounded into prices, and the market will become inefficient

### WHY IS STOCKPICKING IMPORTANT?

Research from Bhattacharya and Galpin (2005) also supports the evidence that the level of stockpicking in the market has gone down. Their research found that in the US, stock picking is on a secular decline from a high of 60% in the 1960s to a low of 24% in the current decade. Furthermore, they predict stock picking will eventually settle at just 11% of trading volume in the US. As Gross-Stiglitz (1980) suggested; if nobody picks stocks, and the industry is completely dominated by passive funds then the information that stock pickers gain cannot be reflected in prices, and so the market will become inefficient. If that was the case that would present an opportunity to gather information, pick stocks and make trading profits. Of course, if this trend was to continue this would play to Fidelity's strength, as a bottom-up stockpicking house.

Taken collectively research suggests analysts do add value

### WHAT ABOUT THE COST ARGUMENTS?

Another reason why investors have bought passive funds is due to the costs involved. Active managers have search and trading costs that passive managers do not bear. Furthermore, active managers face costs associated with servicing investors and fulfilling an intermediate function through redemption needs.

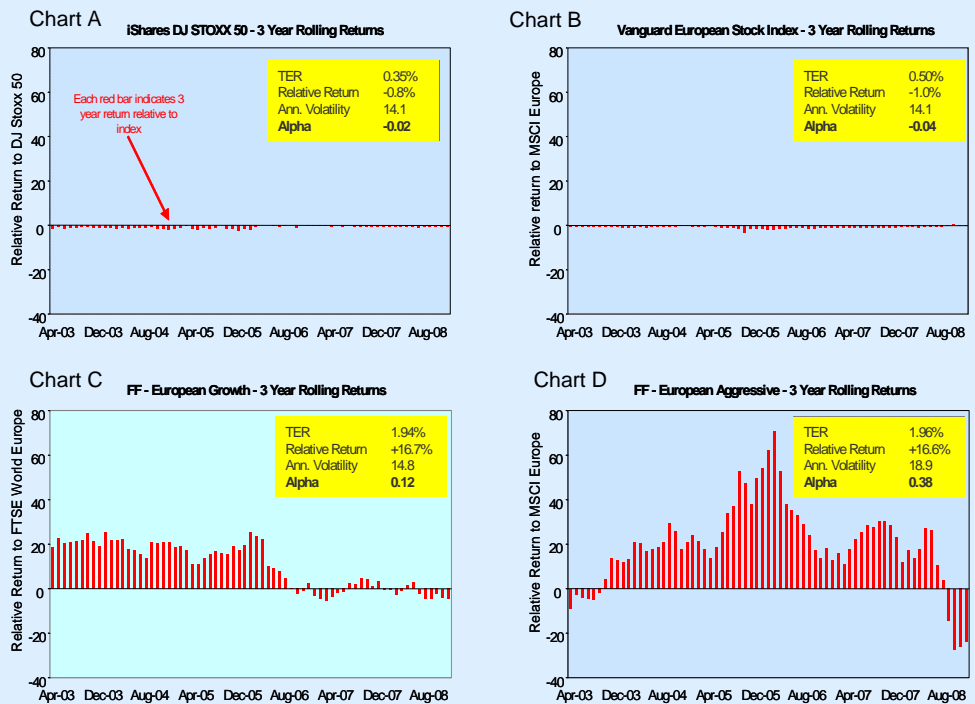
One of the largest costs are the analysts that do the research. Research from Womack (1996) found that sell-side analysts were able to deliver value added and had market timing and stock picking abilities. Other papers from Loughran and Ritter (1995), Michaely, Thales and Womack (1995) and Ikenberry, Lakonishok and Vermaelen (1995) also found that analyst are able to add value.

Taken collectively, these papers suggest that analysts do have access to good information, and make informed decisions based on this. Also, if cost could explain the performance of active manager's vis-à-vis a passive index, it is not the entire reason, as otherwise active managers as a group would underperform the market over time.

### DO FIDELITY FUNDS PROVIDE ALPHA?

The analysis below represents three year relative returns on a monthly basis since early 2003 for four funds net of fees. Charts C and chart D represents active funds; FF European Growth and European Aggressive respectively. Both have produced positive net alpha over the time period, with a relative return of 16%. In contrast, charts A and B represents passive funds, where although the total expense ratio's (TER) are much lower, they have both produced a negative relative return and negative alpha. Importantly, all four funds have a similar level of annualised volatility. In the current market environment, clearly the active Fidelity fund performance has suffered and an investor would have lost less in a passive fund. However, when markets recover an investor would want to capture the outperformance that an active fund has the ability to produce.

## Fidelity Funds provide alpha



As shown, Fidelity active funds produce relative returns and alpha, while the passive funds, despite having lower costs do not produce the same levels of returns or alpha.

Source: Morningstar Workstation. Basis: nav-nav, gross income reinvested in euros to 31/12/08 over every 3 year time period since 30/04/2000 to 31/12/08 starting at each month end. Relative return, ann. volatility and alpha is the average of all 3 year periods displayed. Data starting from 30/04/2000 as iShares fund was launched at that date.

Past performance is not indicative of future performance. \* FF – Fidelity Funds

## CONCLUSIONS

We have seen that the arguments about passive versus active managers are complex and it is true there is a role for passive managers. We also know that there is evidence that supports active management and there are many examples of fund managers who have been able to consistently outperform in the long-run and generate alpha as well as beta. There is research which suggests that there are many fund managers who claim to be active and hence charge a higher price but who are not active and underperform.

Research suggests that in order to outperform, investors need to take bets that are different from the market (high tracking error) and also to have a high active money component. The active managers which most resemble closet index funds are in general not able to outperform the market. Investors, similar to good fund managers who take time to research companies, who take a careful look at the product, will be rewarded with superior performance.

## Definitions

Active management "A money-management approach based on informed, independent judgement"

Alpha "A coefficient which measures risk-adjusted performance, factoring in the risk due to the specific security, rather than the overall market. A high value for alpha implies that the stock or mutual fund has performed better than would have been expected given its beta (volatility)."

Beta "A quantitative measure of the volatility of a given stock, mutual fund, or portfolio, relative to the overall market, usually the S&P 500.

Specifically, the performance the stock, fund or portfolio has experienced in the last 5 years as the S&P moved 1% up or down. A beta above 1 is more volatile than the overall market, while a beta below 1 is less volatile."

Passive management "A money-management approach which seeks to match the performance of the overall market by mirroring its composition"

Short "To sell a equity (which you borrow from a holder) hoping that it will go down and profit as you return the stock to its original holders after you buy it back at a lower price"

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