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Professional fund management vs. "the Index"

Introduction

We often hear from the mutual fund industry about the benefits of "professional management". These smart, well-educated dedicated mavens use sophisticated analysis tools, exceptionable databases, and meetings/conference calls with companies. They also employ competent technical support staff coupled with modern /telecommunications /computer networks and thus in theory, are well equipped to routinely beat the market benchmarks. Benchmarks are a surrogate for the general movements in the economy which are not otherwise available on a day- to day basis. Note that not all managers choose the most appropriate benchmark, sometimes perhaps setting a lower standard (the S& P 500 is only one of dozens of available benchmarks). The role of the portfolio manager is to manage the fund in accordance with the fund mandate defined in the Prospectus with the goal of providing unitholders superior (positive returns superior to a pre-defined benchmark, other similar funds and what a reasonably informed investor could do on his/her own) returns. This is active professional management. Sounds good eh?

Are there fund superstars in Canada?

Canada doesn't normally go to extremes but we've indeed had a few superstars- fund managers whom the popular press lavish with praise for outstanding fund management, professionalism and financial genius. Sir John Templeton is certainly an exception with a solid track record since 1954. Michael Lee-Chin of AIC has made the front cover of Canadian Business.

Canada even had its own minor personal trading circus in 1996. Fidelity, desperate to get a Canadian equity fund with decent performance, had

wooded high profile manager Veronika Hirsch from rival AGF. She got a brand-new fund, Fidelity True North, and the defection caused a blaze of publicity because AGF had built a massive TV advertising campaign around her. But Ms. Hirsch soon parted company with Fidelity when it emerged that, while at AGF, she had invested in a junior gold stock and then bought it for her fund. She paid \$140,000 to regulators to settle the case and now runs her own fund company, *Hirsch Asset Management*.

On a more positive note Canada has several veteran fund managers steeped in traditional fundamentals of valuation. The list would include Irwin Michael at ABC funds, Peter Cundhill of the IVY funds, Robert Tadersall at Saxon, Larry Sarbit at AIC and Ian Moorehead at low fee Phillips, Hager & North. Billboards, Spot ads, ROBTV and interviews /quotes in the popular/Newsletter press have raised their profile.

One Company Phillips, Hager & North (PH&N – www.phn.ca), is itself a standout although celebrity status is not the goal of its managers. It has low MER's, solid performance and doesn't spend money advertising or paying out incentives to middlemen. It's conservative investment style derives from the fact that it's more of a pension fund manager than a mutual fund manager. Gordon Pape of Buyer's Guide to Mutual Funds fame named PH&N "fund company of the decade" in the 2000 edition. PH&N's Vintage fund was the only equity fund to beat the TSE300 index return every year from 1994 to 1998. Its Dividend Income Fund (\$ 25,000 min. investment) has the second highest average annual rate of return over 15 years of any Canadian equity fund, giving it a well-deserved Morningstar 5 STAR rating. The managers at PH&N focus on managing money and not on marketing/distribution of a mutual fund "product".

Appendix I lists a few other funds that have an outstanding 10-year record. These funds are selected from the TD Mutual Funds (winner of top funds 2002 Award) Analyst Choice Funds list (FundSmart Quarterly-Summer Edition). All figures to May 31, 2002. Funds on this list are characterized by low turnover and that the manager have a 3 yr track record. Focus is on long-term results (10 yr). Note that all returns are based on 100% distribution reinvestment. All distributions are assumed to be re-invested without paying taxes. Also, any set-up fees or short-term redemption fees would subtract from stated returns. TD has a minimum of \$1000 investment but fund companies may be higher. Every quarter, a 3 member executive committee reviews the list based on sophisticated research, face-to-face interviews and a host of other techniques.

The reality

There is no statistically valid evidence that "professional management" results in consistently superior returns (even considering

the positive effects of survivorship bias that can add 1-2 % to returns over longer measurement periods). A 1997 study at Wilfred Laurier University by G. Athanassakos et al concluded: "Our results demonstrate the absence of any consistent stock-picking or market timing abilities by the managers of the majority of Canadian mutual funds, with the possible exception of resource funds. Moreover, past performance is not found to have any predictive ability for a fund's future performance. However, a few individual funds that performed consistently over this study's subperiods were found and these consistent winners belonged to three fund families, AGF, Dynamic, and Mackenzie. This may imply that although one can not choose consistent fund winners, he/she can identify consistently winning fund families to select funds from and hope that these specific funds within the winning families will perform as well in the future as in the immediate past."
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“In a 10-year period from 1989 to 1999, only 4 out of every 10 mutual funds performed better than 5-year Guaranteed Investment Certificates. And unlike mutual funds, GIC's are guaranteed.”

-The Fundletter



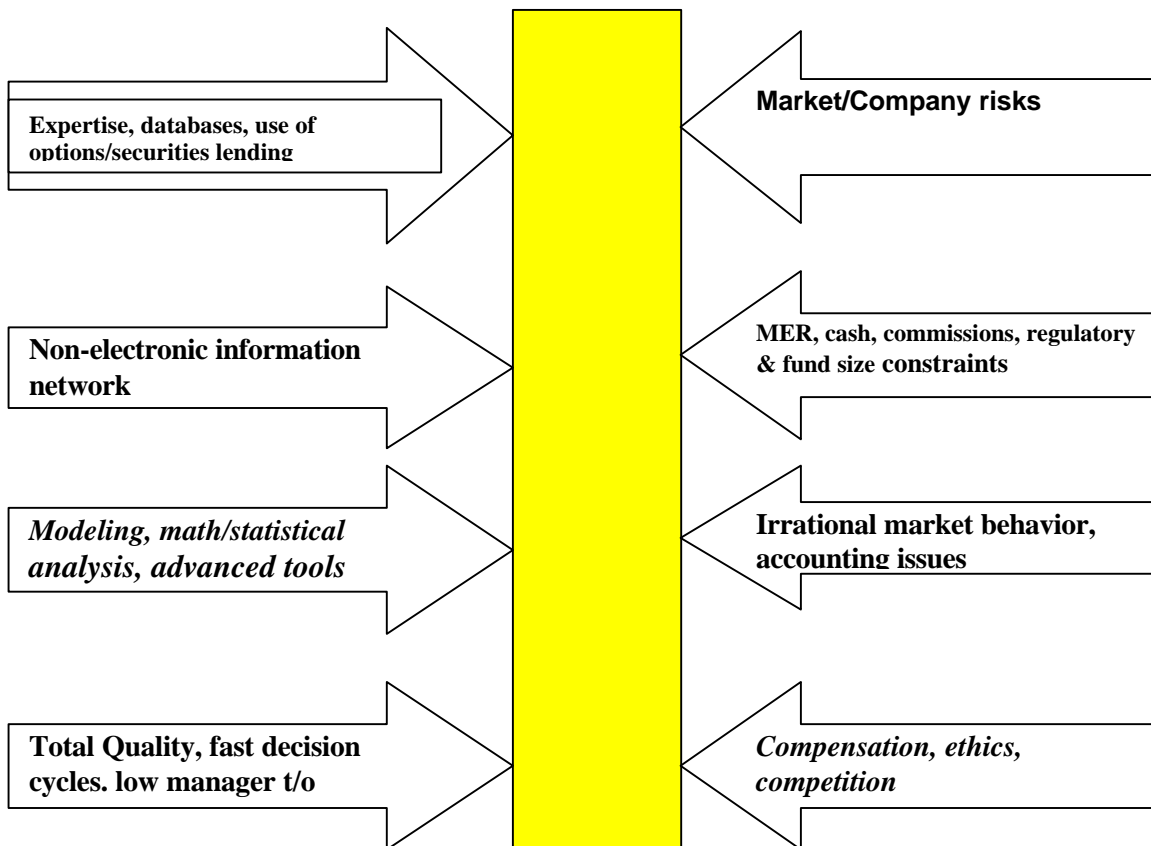
Two-minute portfolio:

The two-minute portfolio, is a passive investment strategy based solely on picking the largest companies by market capitalization in each of the 14 TSE stock subgroups and investing equal amounts in each. This mindless strategy, up 2.9 percent, has beaten virtually all mutual funds in 2001 and beaten the TSE 300 Composite index (down 13.9 percent) for the third consecutive year. So even financially illiterate, complacent Canadians can match or beat the mutual fund pros.

Source: The Globe and Mail

Yes, the professional analyst team pour through financial reports, analyze the charts and numbers, meet with management and work hard to understand the industry sector and dynamics. Despite this, the job is an almost impossible one today. Let's review each of the factors adversely impacting today's stock analyst /portfolio manager.

Force Field Diagram



Meetings with Management

Meetings with management can be useful but more as negative signals than positive. Attitude, experience, signs of opulence and the ability to answer tough questions are powerful indicators. Contemporary CEO's are trained, skilled and convincing communicators. Two portfolio managers independently interviewing the same company executives, can and have come to diametrically opposed conclusions about the future direction of a company. (*buy-side* analysts with self-serving motives tend to write tainted reports; the media has covered this issue ad nauseum, so there's no need to repeat here.)

A word about Risk

Risk is the chance that mutual fund investment returns will vary depending on a number of random or unexpected factors. The measurement of risk is a complex subject. Risk is composed of systematic (market risk) and unsystematic risk (company-specific). Systematic risk cannot be eliminated by diversification. Beta (β) is essentially a statistic that compares the individual movements of a fund (or stock) and the movements of a market as a whole. A high-risk fund can sometimes lead to *negative* returns thereby reducing your capital base. Risk is probabilistic, meaning that its exact state in the future is unpredictable not deterministic. A number of indicators have been developed in an attempt to estimate/measure risk of which volatility is one. Risk-Adjusted Return is another.

Systematic risk includes currency risks, inflation risks, foreign investment risk, political and regulatory risks, interest rate risk, economic risks, and lately terrorist risk. Even bad weather risk can affect certain market sectors such as retailers, agriculture, forest products, insurance, airlines and tourism. Systematic risk *cannot* be eliminated by diversification.

Unsystematic risk /Company –specific risks include a sales decline, litigation over patent infringement, a product recall, credit risk on debt securities, a failed product launch and the like. Diversification CAN reduce unsystematic risk by buying approximately 40-50 companies whose business activities are only loosely correlated with each other.

With so many random and quasi-random variables involved, we shouldn't be surprised that significant errors can be made.

Product /service assessment

Determining the market success of the company's offerings and hence the earnings growth rate requires making assumptions under uncertainty.

In the technology sector especially, the task of timing product introductions, in evaluating product success and determining margins is daunting not just for analysts but for companies themselves. Disruptive technologies such as the internet can lead to tremendous, unpredictable market volatility and irrationality. Again, more assumptions are needed to make earnings projections. As assumptions pile on assumptions, the valuation model has a good chance of error.

Market Dynamics, the MER and More

Even with the best analytical tools in the world, how the stock price will behave is becoming more unpredictable than ever due to program trading, day trading, online chat groups, after-hours trading, complex derivative products, globalization of markets, currency/ interest rate fluctuations, option programs etc. New unpredictable forces like terrorism don't make the job easier-terrorism alone can quickly throw several industries into unpredictable shock-airlines, tourism, insurance, energy, entertainment, aerospace.

Managers themselves can get caught up in fads and issues of conflict of interest hang around like a dark cloud. Many analysts were caught up in the "new economy" firms built on a foundation of Jello or sand. New valuation methodologies were proposed such as web-site hits /day and new e-business funds were created. Outrageous stock option plans were ignored as was the method of accounting for them. Nortel stands out as a prime example of all that can go wrong with "on -site " visits and financial analysis when a mania hits.

It is not surprising then that so few funds beat their benchmarks over the long and even short run. Actually, they can beat the benchmark in down markets easier than they can in bull markets. (of course, investors have other alternatives in down markets). This is partially because they are prevented by regulation from holding more than 10 percent of assets in any one equity. This made quite a few equity managers look good when Nortel went through the roof and the stock later tumbled to ground. Also, since they always need some cash to deal with redemptions, they just can't lose money with cash. Redemptions in a down market may actually force sales at preferred prices before stocks tank further.

Professional managers do however always have to contend with the management expense ratio (MER) "tax" on invested assets. The average actively managed Canadian equity fund has a MER of about 2.3 percent so this is quite a hurdle even in a down market. As Warren Buffet and others expect returns for the decade ahead to be more like 8 percent than 13%, high MER's will make it exceptionally difficult for portfolio managers to beat the benchmark without taking on more risk.

In a rising market the opposite effects occur .By it's nature, cash does not earn the benchmark return. The investment money pours in and must be invested quickly to capture the benefits of the bull. Since the MER % stays constant independent of fund size, there are no economies of scale benefits. On top of this, trading commissions which are not part of the MER must be incurred to make new purchases. True, large funds will pay a low unit transaction rate but it's still a drag on returns. The miracle of compounding ensures that the longer these fees eat away at your asset base, the greater the damage will be.

Here's some simple arithmetic to illustrate the challenge of a high MER fund. Assume \$ 10,000 is put into a 2.3 % MER actively managed fund and the associated benchmark index has returned 10 % in the year. Assuming linear growth in the year the average amount invested is \$ 10,500 and the return lost to the MER is $0.023 \times \$ 10,500 = \$ 241.50$. Now we'll assume we bought an index ETF and the commission was, say \$30.00, for \$ 10,000 dollars worth; then the gain of the ETF is $\$ 10,000 \times 0.10 - \$ 30.00 = \$ 970$. To get an equivalent return (R) from the active fund we must have $R \times \$ 10,000 - \$ 241.50 = \$ 970$ or $R = (\$ 1211.50 / \$ 10,000) = 12.11\%$. This implies a 20 %⁺ improvement over the index. Adding in the effect of low yield cash holdings would only increase the hurdle rate but we'll be kind and assume the manager can make up the difference by securities lending or writing some covered calls. We'll also be very generous and assume the brokerage commissions paid by the fund are the same as the lower turnover index ETF fund /benchmark index. That 20⁺ % is still quite a challenge.

The impact of fund size

Another major issue of course is fund size. Mutual funds have grown enormously over the last decade due to GIC refugees, concerns about the Canada Pension Plan, increased investor education, higher RSP limits, and the shift from deferred benefit pension plans to defined contribution plans. With \$450 billion to invest, there are some real challenges to find suitable investments.

Paradoxically, the most awkward problems for fund managers occurs when they are very successful. Because they collect fees on every dollar in the fund, the Fund Companies want as much money in the fund as possible. But while it may be relatively easy to manage a \$200 million fund, it is much harder to manage a \$2 billion fund. The ideal number of stocks for diversification purposes is between 30 and 40. If a fund has \$200 million in it, an average of 6 million would be required to be invested in each underlying stock. Government regulations prevent mutual funds from holding more than 10 percent of any one-company stock. At \$6 million per Company, a few companies would be at the 10 percent threshold. However, when the fund reaches \$1 billion it will have to put approximately \$30 million into each stock in order to keep within the target of 40 companies. They are effectively prevented from investing in companies with less than \$300 million in market capitalization. If the fund has \$2 billion in assets, as many Canadian funds do, the maximum of 10 percent per Company would mean investing only in companies with over \$600 million in market cap.

Although nothing prevents a fund from investing less than 10 percent in the target company, the compromise that this entails is a rapid increase in

the total number of companies held in the fund. Large funds or "deworsified" funds (over- diversified funds) generally create mediocre returns with 100 or more holdings. With 100 holdings, many positions will be less than 1 percent of the fund. Simple statistics suggests then that no matter how good stock selection is, a 1 percent holding even with a spectacular price appreciation won't have much of an impact on the overall fund value.

A billion dollar Canadian equity fund for example has to contain some if not many large capitalization stocks if for nothing more than liquidity purposes. For example, the billion-dollar portfolio must have some companies like BCE, one or more major bank or insurance stocks, Alcan or maybe Bombardier and on and on. Whether they want to hold them or not. A small fund can hold just those stocks the portfolio manager prefers. He can take a position in a lightly traded Small Cap, fast-growing company, which the bigger one wouldn't or couldn't. The net result is, the bigger a fund becomes, the fewer the prime opportunities to some extent. Too few Fund Companies have capped contributions to their funds, thus making the job of the manager more challenging.

Transaction Costs

Driven by the need to perform, the onslaught of ETF's and sometimes by tax considerations, portfolio managers need to constantly move in and out of positions. John Bogle, Chairman of the Vanguard Group in the U.S., in his 1994 book, *Bogle on Mutual Funds*, scrutinized the "invisible cost" of executing portfolio trades. Even though large mutual funds pay lower commissions to buy and sell stocks than individual investors, brokerage costs can account for 0.5 percent to 2% percent of fund assets per year (these brokerage commissions are expenses of the fund but for tax reasons are not included in the MER). Furthermore, smaller funds with high rates of portfolio turnover have even higher costs. Portfolio turnover in equity funds is almost double that of pension funds. When all visible costs are added up, Bogle found that the average cost of owning a U.S. mutual fund is 2.2 % a year with the highest cost families and funds as high as 3.5 percent. And he noted that the economies of scale for larger funds often are used to benefit Fund Companies rather than unitholders.

The added costs of this portfolio turnover ultimately takes it's toll on relative fund performance because it is higher than that experienced by the benchmark indices. (after-tax, the situation would be even worse for unitholders since the portfolio turnover of a "churn " fund is far greater than an index). The more active the manager, the more the costs pile up. In extreme cases, trading costs have been known to be double the funds ' MER.

Cash/ Short term Holdings

Funds have to have some cash to deal with redemptions and exploit buying opportunities. Distribution reinvestment brings in a constant flow of new cash. The problem- in a low interest rate environment or rising market, cash may have difficulty earning the benchmark rate of return. Typically, cash in a Canadian mutual fund runs between three and 10 percent.

Manager Turnover

The Fund Company wants more Profit and the more fees the more Profit. Fund managers understand this, but typically don't control the Fund Company, which places them in a potential conflict situation. Fund managers truly want to do the best they can for clients investing in their fund, which helps their own careers, while the Fund Company cares about getting the fund as large as possible. Managers know that funds tend to underperform as they become larger.. This gives managers an incentive to leave a fund after it becomes too large, but before the size has eroded its performance. Investors are best served by investing for the long run, but it is quite possible that the manager will not be there as long as the unitholder. An individual investors long run of 25 or more years to retirement is likely to be much longer than the tenure of a hot fund manager at any given Fund Company. Manager turnover is a problem with all mutual fund investing. The best money managers are like free- agent professional athletes, here today- gone tomorrow.

Not only do managers job-hop, with surprising regularity, but the mandates of the funds themselves also change. Mutual fund companies routinely merge funds with each other, change fund objectives and change fund style. Sometimes all these changes, from individual manager, portfolio cleansing to style and objective, can occur with little or no change in branding and little disclosure to investors. All of this change can be disruptive to the main goal-beating the benchmark.

Selling Issues

Holding large block of stocks also poses a problem when it comes time to divest. It can be difficult for the market to absorb a block of \$30 million from one fund, and Fund Companies rarely hold stock in only one fund of their family. This will often result in taking a lower price than desired; this is especially important for the large funds. The new TSX "Iceberg " trading system will help alleviate this to a degree.

Ethics and Self-Interest

Whenever there's a lot of money to be made, ethics issues pop-up. More often than not, ethical issues can detract from the funds performance.

In a mid 90's article in the Globe and Mail, Wendy Brodtkin of Towers Perrin raised eyebrows in the investment community, by suggesting ethics issues were rampant in the industry.

"It's been going on forever and may continue to go on forever given the current standards. The investment industry is fraught with questionable practices and even more questionable ethics.... A lot of people are getting away with a lot of things".

Among other things, Brodtkin mentioned front-running (buying a stock for your account, and later for the fund), questionable priority of transactions and allocation of securities and unauthorized trading and allocation of securities after price changes. She warned investors to be alert.

Traditionally, the Canadian mutual fund industry has been subject to minimal regulations and enforcement. Canadian regulations lag those imposed by the U.S. Securities and Exchange Commission, the OSC and other provincial regulators are under-resourced and the industry continues to effectively lobby that it can regulate itself via the Mutual Funds Dealers Association as an SRO.

In 1998, Glorianne Stromberg reported to the standing Senate committee on Banking, Trade and Commerce reported, "current regulatory requirements contain few requirements respecting the establishment in structuring of these funds. There is no requirement for the investment fund manager to be registered with any securities authority in order to establish and operate investment funds. In addition, there's no requirement for the investment fund manager to have outside directors. There are no requirements with respect to minimum regulatory capital, insurance and bonding coverage, management resources, competency and proficiency of personnel, adequacy of internal systems, controls and procedures, or procedures for monitoring the same. In addition there's no requirement in the case of investment funds sponsored by the investment fund manager for the sponsor investment funds to have independent boards"

While some firms have documented and well communicated ethics policies, most do not." Hotlines" to reveal fraud or abuse are not prevalent. The larger firms do run limited ethics training but this is not part of an on-going process. Annual ethics certifications are required at some firms but details are not known. There is no disclosure or communication of ethics/proper business practices health. Finally, there is little evidence /information that Regulators, fund companies or brokers effectively deal with violators especially if they are high-performers.

Regulations are slowly tightening but with Canada 's fragmented regulatory system, compromises are made at every turn. It's not clear how much self-serving actions impact relative returns but it is clear, they do have an adverse effect. The benchmark index of course has no such issues.

Soft dollars

So called "soft dollars" are essentially kickbacks the mutual fund managers receive from the stockbrokers that clear their trades. It works like this. Let's say that you or I would pay a commission of two or 3 cents per share on a 1,000-share trade. If we were trading blocks of 10,000 shares, we would expect economies of scale to earn us an even lower commission, say 1-1/2 to two cents per share. Reports are that the Securities and Exchange Commission will allow a mutual fund manager to pay a broker an inflated commission of say six cents per share for a 10,000 share trade and then enter into a side agreement for the broker to rebate four cents per share of "soft dollar" goods and services. Some examples of these goods and services are listed below:

- research reports
- paid travel and expenses for" seminars"
- notebook computers for the mutual fund manager
- pay the mutual fund managers office rent
- pay for the mutual fund managers magazine subscriptions
- pay for the mutual fund managers phone bill
- pay the wedding expenses for the fund managers daughter (this actually happened according to Barry Barbash, the SEC's director for the division of investment management.)

Source: the Retire Early homepage

Soft dollars lead to higher costs for the fund. Since benchmarks don't even include commissions in their formulation, it's yet another hurdle to deal with.

Style Drift

Style drift involves the gradual change in investments away from the fund's declared style/mandate as a fund attempts to obtain higher returns (higher risk) in a challenging market. It is hard to detect due to infrequent and late reporting of portfolio holdings. Higher risks inevitably fall prey to the laws of statistics.

Analytical tools

Modern Portfolio Theory (MPT) developed in the 1950's by Nobel laureate Harry Markowitz says investors should pay more attention to getting their asset allocation right for the desired level of risk, leaving market timing and individual security selection as secondary considerations. His great contribution to investor's wallets was his demonstration that anything less than perfect positive correlation can potentially reduce risk. MPT concentrates at least as much on risk as return.

An ideal asset allocation is the optimal mix of investments that have the potential to get the desired return with the least fluctuation in the total value of their portfolio (i.e. risk). This is achieved by mixing together asset classes that react to market conditions in different ways. Asset classes whose performances diverged under similar market conditions have what's known as low correlation with each other. Real estate for example goes up during periods of high inflation. Bonds on the other hand tend to wither away under these conditions. However, movements in long-term bonds do not mirror those of other assets and tend to provide relatively stable returns when held to maturity. The key point is that the portfolio as a whole can be less risky than any of the individual holdings in it. (the mathematics can be daunting but the concept is easy to understand). This kind of counterbalancing of risk vs. return through asset class diversification is a hallmark of asset allocation. According to MPT, diversification has a far greater impact on portfolio returns than smart investment selection or psychic market timing and this belief is the foundation of portfolio management today.

Around the time modern portfolio theory was being propounded in the early 1960s, another market concept was taking hold, the efficient markets hypothesis (EMH). EMH says that stock prices reflect all past and present public information about a stock. In other words, the market is perfectly efficient and immediately factors into a stock price all relevant information. As a result, you cannot expect extraordinary returns from a stock. You may get extraordinary returns, but if you do it is purely a fluke. Don't bother doing detailed fundamental analysis, it won't pay, at least according to EMH.

There are three versions of EMH: the weak, semi -strong and strong. The weak versions says you can't predict future stock price moves by studying past price/volume movements, thus technical analysis (charting) is pointless. Technical analysis, which involves studying the pattern/chart of a stock's price/volume movement is compromised by the speed of a efficient market's adjustment to new information. The numerous technical rules have been tested exhaustively using stock price data going back as far as the early 1900's-the results reveal that past movements cannot be used reliably to foretell future movements. There is little "memory" and whatever short-term momentum there is will be gnawed at by transaction.

costs. Other technical theories include the hemline indicator, the Super Bowl indicator, the January effect and the odd-lot theory. In any event, portfolio managers are not day traders but instead are investors seeking longer term results.

**“ If the market does not go up or down, it will remain unchanged”
- Anonymous but famous chartist**

Likewise, the semi- strong version takes the knife to fundamental analysis. It says that the current market price of a stock reflects all publicly available information about a stock and that scrutinizing annual reports, financial statements (additionally, accounting aberrations (e.g. Enron) prevent even seasoned professional auditors from uncovering major misdeeds), economic forecasts will not lead to any consistently superior returns. Off-balance sheet accounting, revenue recognition issues, and accounting for stock options add to the complexity and necessitate more analyst assumptions. The more assumptions, *the* greater the risk. The strong arm of EMH holds that the market price of a stock reflects absolutely all information, including insider information. This means that even those trading on insider information will not be able to make superior returns. If the market is as perfectly efficient as the theory purports, there's not much point in trying to beat it -you might as well join it by indexing.

Of course the real world isn't that perfect or totally efficient; those with access to the patent office, drug testing facilities, regulatory bodies, large legal firms, M&A organizations, Index firms (being added or deleted from an index can impact a stocks' price) and of course insiders have key information that if accessed, legally or otherwise, could give a manager a short -term advantage. The herd instinct, sudden shifts of mood and emotion also drive market prices. Clearly there are examples that seem to violate or contradict these theories but by and large, they are a persuasive force to be reckoned with.

Perhaps the simplest argument against active management and for passive management (indexing) is Dr. William F. Sharpe's famous argument from logical first principles. Sharpe is professor of finance at the Stanford University graduate school of business and a Nobel laureate. He argues that the average actively managed dollar will equal the return on the average passively managed dollar, but after costs, the return on the average actively managed dollar will be less than that of the average passively managed dollar. He begins with the self-evident observation that the market return will be a weighted average of the returns on all the securities within the market.

Since each passive manager will obtain the market return (before costs) than it follows that the return on the average actively managed dollar must

equal the market return. The market is a closed system, therefore the average passive return must equal the average actively managed return (before costs). If the average active dollar outstripped that passive dollar, then the total market return would be increased, and this isn't the case because it is a closed system. The market return is unchanged whether active or passive managers are plying their trade. Therefore, collectively active managers cannot consistently beat out passive managers.

Sharpe acknowledges that some active managers do beat the market sometimes, even after costs, but the trick of course is to find them just before they do it. As of early 2001, Canadian securities regulators have required mutual funds to identify and publish every fund's benchmark index so investors can compare the fund's returns with that of an appropriate index. There are effectively only two ways for a fund manager to beat his/her benchmark index. The first is to buy superior investments that aren't in the index and the second is to overweight or underweight benchmark positions. Individual investors need to trade off the possibility of exceeding the index for the high probability of beating the vast majority of actively managed funds.

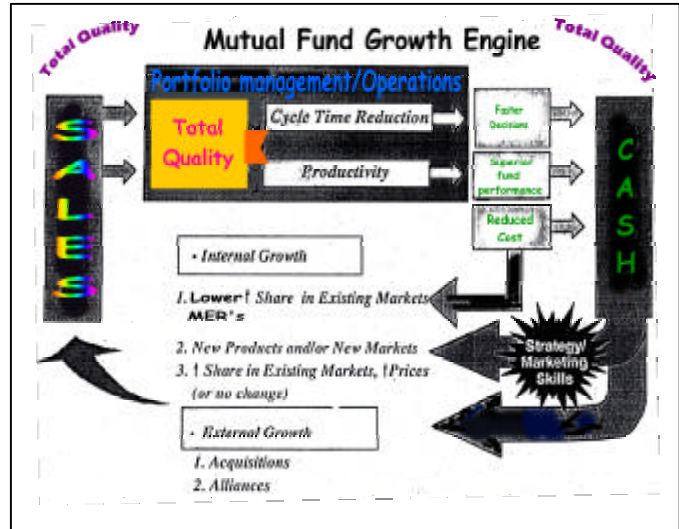
Compensation Practices

There's an old expression in the HR field—"What gets rewarded, gets repeated". If portfolio managers are rewarded on the growth of the fund i.e. Fees rather than performance, then portfolio managers will tailor their initiatives towards growth. They'll be quoted by the media, appear on ROB tv, maybe even publish a book. Anything to help attract investors to the fund. This activity, coupled with a marketing blitz, while distracting the manager from obtaining return performance goals, does earn the Fund Company increased profits and the portfolio manager a fat compensation package. While the 2 goals should be consistent, in practice they are not. If more compensation was truly performance-based and unitholder focused, we might see superior results.

Continuous Process improvement

Industrial and service companies have embraced Total Quality (sometimes referred to as Six-Sigma or Excellence initiative) as a standard approach to process improvement and problem solving. Malcolm Baldrige Award winners have significantly beaten the S&P 500 index because of the emphasis on continuous improvement. Even if all the critiques of portfolio management prove to be wrong, mutual fund companies have not embraced Total Quality (TQ) i.e. there is no well-organized process to continuously improve results.

The basic foundations of TQ are teamwork, training, analytical tools, problem-solving tools, communication, metrics, process mapping etc. Until a TQ culture is embedded into the portfolio management process, MER's will remain high, mistakes will be repeated, ethics will be lax, cycle times will not improve and returns will be sub optimized-all factors that prevents a fund from beating an index.



Benchmark index adjustments

Actively managed closet index mutual funds including index funds show their difference markedly when there is an index change that involves a large addition to the index. Both closet/index mutual funds and ETF's sell the stock leaving the index (triggering capital gains if any) and both (the closet indexer will generally follow along lest he be left behind) buy the stock entering the index. But if the purchase is more than the sale, the mutual fund sells more of the other stocks in the index thereby triggering more gains. The ETF, in contrast, issues more units to the underwriter to finance the additional purchases. The ETF does not need to sell as much stock and thus ends up triggering fewer gains. This isn't significant all the time, but they do occur from time to time. The benchmark index of course does not incur these expenses at all. Again these added expenses are yet another issue for the beleaguered portfolio manager to deal with.

NOTE: There is some controversy on whether all indexes are truly representative benchmarks .The S&P 500 in particular has been criticized for its criteria. Unlike most index publishers, such as the Nasdaq and Dow Jones, Standard & Poor's adds and subtracts stocks from its three broad indexes -- the large-cap 500, the Midcap 400 (\$MID.X) and the Smallcap 600 (\$SML.X) frequently in accordance with a largely subjective list of criteria that includes market capitalization, liquidity and their representation of industrial sectors. One reason that S&P, a division of McGraw-Hill has not come under fire for the index's poor performance is that most investors seem to think that it is a quasi-scientific measure that depends on little or no human intervention. The truth is that an eight-person committee of S&P bureaucrats -- editors, business managers, quantitative analysts and an economist -- wield a heavy hand in its purportedly passive management. . Yet, as risks of the S&P

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orthodoxy have become more apparent, a few voices in the industry have emerged to speak against it. Alan Newman, an analyst at brokerage H.D. Brous & Co. in New York, said in an interview that he believes Vanguard, among others, "has done a very great disservice by advancing the thesis that instead of trying to beat the market you should buy the market. The problem is that the S&P 500 isn't the market -- it's an actively managed fund, and a poorly managed one at that." Kenneth Safian, chief executive of Safian Investment Research in New York, says he thinks the problem arose because the S&P 500 and Nasdaq 100 are not true indexes measuring the U.S. economy or the strength of an investment philosophy, but rather are the products of marketing organizations with something to sell. "These indexes don't represent anything but some manager's hopes and dreams," he said.

Source: "The S&P 500 is a mutual fund-and a bad one", Jon D. Markham, available at <http://msn.com/content/P25387.asp>

Note also that benchmarks are costless and frictionless, so are in a way idealized constructs.

Government related constraints/cost-drivers

Canada' current rules on taxation limit many funds to 30 % foreign content in RRSP's. ("clone" funds with a 0.5 percent higher MER eliminates this constraint) This can put a damper on a fund's investment choices if it is to remain RRSP eligible. The goods and services tax (GST) of course must be applied to segments of the fund's expenses. And the government limits fund investments to 10 % of any publicly traded company's market capitalization.

Additionally, higher regulation related costs in the future may drive fund expenses higher (or fund Company profits lower). Thanks to Enron, Worldcom, Nortel, Bre-X and others there are new regulations being developed that will require Governance boards and tighter reporting and disclosure- this will add to fund expenses.

Higher expenses and constraints just add to the challenge for benchmark-beating performance by active managers.

"Unhappily, the basic assumption that most institutional investors can outperform the market is false. The institutions are the market. They cannot as a group outperform themselves. Today, 90 percent of all NYSE trades are made by investment professionals. The reason that investing has become a loser's game-especially for the professionals who manage mutual funds-is that each manager's efforts have become the dominant variables."

-Charles D. Ellis, "Winning the loser's Game"

Conclusion

A basic change has occurred in the investment environment; the markets have come to be dominated by the very institutions that were striving to win, by outperforming it. In fact, by the 1990s, the institutions became the market. No longer is the active fund manager competing with amateurs; now he's competing with other experts in a losers game where the secret to winning is to lose less than the other.

For one manager to outperform the other professionals, he must be so skillful and so quick that he can regularly catch other professionals making errors-- and can systematically exploit these errors faster than others. Modern telecommunications, the Internet and high-speed computer networks have also tended to put more managers on a level playing field in a faster paced environment. A main reason managers' results are so disappointing is that the competitive environment has changed in just 30 years from quite favorable to *very adverse*.

Competitive pressures will also add to the manager's stable of challenges. As individual investors get more educated, it will require more advertising to attract new investment. It will also take a lot of marketing effort to keep baby boomers from shifting to tailored managed portfolios .As a result of these cost increases, the marketing budget may impinge on the analyst budget, thereby reducing portfolio management resources just as they are needed most. Of course, the already excessive MER rate could be raised but investor resistance would be high and this would increase the manager's hurdle rate still further. Alternatively, the Fund Company could accept a lower profit margin.

Given the many factors outlined in this document, it should not be surprising that contemporary portfolio managers face a major uphill battle in their war against the benchmark. So-called professional management (the heart of the mutual fund industry) has lost much of its effectiveness and credibility. For those few managers who focus globally, move quickly, consider small caps/special situations, have advanced forecasting tools, use sophisticated financial instruments and practice continuous improvement (Total Quality), there's still a good chance to outperform. (Note also that beating the benchmark is only one factor for investors--consistency, downside risk, tax-efficiency, service and even ethical investment considerations play a role in decision making.)

Finding these exceptional managers will be the challenge of mutual fund investors in the decade ahead. Use the internet, talk to colleagues, buy a fund Guidebook, consult a competent/ unbiased/hands-on adviser (itself a

challenge)-the information is out there .Do your homework. Caveat Emptor. If you haven't the time, take a good look at Exchange Traded index funds. Or REIT's or income trusts, convertible bonds, real property etc.-there are lots of alternatives to mutual funds.

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Suggested Reading and Web-site visits

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Stoffman, Daniel, “The Money Machine: How the mutual fund industry works and how to make it work for you”, Macfarlane, Walter & Ross, ISBN 1-55199-052-0, 2000

Stromberg Reports: Ms. Glorianne Stromberg, a lawyer by profession, has issued two Key reports relevant to the mutual fund industry in Canada. *With the release in 1995 of “Regulatory strategies for the Mid 90’s”: Recommendations for regulating investment funds in Canada”, Ontario Securities Commission member Glorianne Stromberg dissected and analyzed the mutual fund industry. Ms. Stromberg embarked upon a comprehensive review of every aspect of the industry and boldly proclaimed the need for significant change. In response to the rather scathing observations of the Stromberg report in the area of sales practices and incentives, on May 1st 1998 a new national instrument titled “Mutual fund sales practices” came into force. Under NI 81 - 105, the interests of investors are paramount and conflicts between the commercial goals of fund companies and the best interests of investors must be minimized. NI 81 - 105 restricts certain sales practices between fund management companies and distributors, prohibiting the payment of money and the provision of non-monetary benefits except as specifically permitted. It requires that fund companies deal with and compensate distributor firms rather than sales representatives directly, and prescribes parameters for the payment of sales commissions, including trailing commissions. It also requires prospectus disclosure of commissions paid and the incentives provided to distributors, and to ownership relationships between a member of the mutual fund organization and a participating distributor.*

In October 1998 a second report entitled “Investment funds in Canada and Consumer Protection: Strategies for the Millennium” was prepared for the Office of Consumer Affairs, Industry Canada. This report (ISBN-0-662-27425-3/code 52487E) examined the requirements for the reasonable protection of investors and made recommendations to enhance consumerism about investors. It is available from the OSC (<http://www.osc.on.ca>) and Industry Canada Web sites (<http://strategis.ic.gc.ca>).

These two classic reports are the foundation upon which improvements in regulation, fund governance, sales practices and the role of financial planners will be based. They are highly recommended reading.

www.capitalstool.com- Owner Lee Adler, known as Dr. Stool, says his web site is a celebration of contempt for all of Wall Street's churn of pronouncements. This site certainly dumps on Wall Street and the investment industry in general. The site captures attention because it is an unlikely marriage of sophisticated technical market analysis, conspiracy theories and relentlessly cynical commentary. Topics include "The anal of stock proctology", a lively bulletin board and some zinger cartoons. Nasdaq is affectionately referred to as Nascrap. Dr Stool claims that the news services are Infomercials and "you can't believe anything Wall Street says". Adler hasn't yet taken a look at Bay Street.

www.globefund.com -Globefund.com has much of the same fund-specific information found at similar sites listed. It's unique features include easy-to-use fund charting functions, a quick link to relevant Globe and Mail fund articles, and links to their monthly report on mutual funds.

www.ific.ca The Investment Funds Institute of Canada (IFIC) is the Member Association of the investment funds industry in Canada. Established in 1962 the institute membership is currently made up of 82 fund management companies. IFIC's responsibilities include broadening the awareness of mutual funds, administering education courses, providing certain voluntary guideline documents, compiling fund statistics and of course lobbying Government for laws and regulations that enhance the industry's profitability, competitiveness and long term interests. The site includes useful statistics and articles.

www.russell.com/CA- Interesting site if you want to learn about indexes. Some excellent articles on investing in general. Discusses the Russell family of indexes. See also www.wilshire.com and www.djindexes.com.

www.sterlingmutuals.com -This is an excellent site with good educational materials, financial links and mutual fund research. Sterling Mutual Funds Inc. is a no-load mutual funds broker representing over 60 fund companies.

www.strategicsector.com This site is run by prominent investment adviser/portfolio doctor Hans Merkelbach (IPC Investment Counsel). Contains some excellent material on mutual funds, financial links and a complimentary /confidential mutual fund portfolio review.

APPENDIX I SOME TOP PERFORMING FUNDS

Category/ Style	Fund Name	Assets \$ Mil	Manager	MER (%)	Trans. Fee NTF or TF	10 yr pre- tax return (%/) turnover %	Index/return	Basis points	Perf. Ratio	Morningstar Rating	Comment
Canadian Small cap/ Value	Saxon small cap	103	R.Tattersal	2.53	TF	16.7/< 30%	Nesbitt Burns Small cap/10.6 %	+590	1.58x	*****	Low P/B value, hold period 4-6 yrs
Specialty/ Value	Mackenzie Universal Canadian Resource	170	F.Sturn	2.52	NTF	16.6/>100%(for 2001)	TSE -100 Resource Index/9.4%	+720	1.76	*****	3 yr beta 1.0,recent returns pulled up all time periods avg.
Canadian Large Cap/buy& hold	Spectrum Canadian Invest.	703	K.Shannon	2.53	NTF	12.5/ 38 % yr2001	S&P TSX Comp. /10.7	+150	1.17	*****	Low volatility, oldest fund in Canada
U.S. Large cap /Agg. gwth	Spectrum Amer. Growth	466	T.Shimura	2.60	NTF	12.5/160-256 % yr 2000- 2001	S&P500 /14.8%	-230	0.84	*	3yr Beta 1.10,hi 3 yr downside risk
Canadian Dividend/ Growth	AGF Canadian dividend	2310	G.MacDougal	1.90	TF	11.7/ 25 % typically	TSX-100— Total Return/10.5	+220	1.11	***	Missclassified as a div. fund
Int'l Equity/value	Templeton Int'l stock	4800	D.Reed	2.71	NTF	11.3/<35%	Morgan Stanley EAFE/8.1	+320	1.39x	****	3 yr beta 0.76,overweight in Europe
Canadian Balanced/value	Trimark Income growth	1530	K.Graham	1.67	NTF	11.2/ about 50% avg.	Balanced Fund Composite/10.5	+70	1.07x	*****	High DSC MER, bottom up
Global Equity/value	Templeton Growth	8720	G.Morgan	2.20	NTF	10.5/<35%	Morgan Stanley World index/11.2	-70	0.94x	****	3'rd fund mgr. in 2 years
Asia & Pacific Equity/growth	Fidelity Far east	482	K.C.Lee	2.75	NTF	8.6/ 22 % approx.	MSCI Pacific Ex Japan/6.6	+200	1.30x	***	Heavy weight to HK/3 big bets
Canadian Income	TD Canadian bond	2710	S.Rai	1.02	NTF	8.8/35-100% due to nature of bond fund	Paltrak avg. Cdn bond/7.2	160	1.22x	****	Overweight in hi qlty corp, holds to mty,,low MER

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