Rating the performance of active fund managers

Investors are provided with regular surveys showing how managers perform against the All Ords index. The surveys are intended as a guide to choosing successful managers. But as the following paper explains the surveys do not always tell you what you need to know.

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Examination of the published surveys of the performance of active Australian equity managers suggests that the median manager has recently been adding significant value above the index.

Depending on the universe of managers used and the time period examined, the median manager's outperformance is in the range 2 – 4% pa. This is in contrast to major international equity markets, where the median manager typically underperforms the index by an amount approximately equal to the fees charged.

This paper looks at a number of possible explanations for this seeming outperformance. In particular we examine the impact on reported median manager performance of:

- Size-weighting each fund's returns. An equally weighted median tends to overestimate the industry-wide level of outperformance, as larger funds have performed less strongly than smaller ones.
- Allowance for survivorship bias in the construction of the surveys. Over the latest five year period, approximately 25% of the funds in the survey have exited, and, on average such funds underperform prior to their disappearance. Adding back such funds to the surveys for periods prior to their departure tends to lower cross-sectional summary statistics such as the median.
- The impact of stock selection within the small stock sector. Typically, managers within this sector have outperformed strongly (by 20% pa on average) in recent years. Given this sector is about 10% of the overall market, it is possible that a significant fraction of the reported outperformance has come from a relatively narrow subset of the market.
- Avoiding the stocks that were the main contributors in the Australian market to the so-called technology bubble. Many mainstream fund managers were underweight in the more speculative technology stocks which were sold off heavily when the bubble burst in April 2000. Since many of these stocks were only included in the index after their strong run-ups in 1999 and early 2000, managers were not penalised compared to the index by not holding them in this period, but subsequently benefited when prices fell.
- Underweighting the so-called entrepreneurs, especially in the early 1990s, would have significantly improved manager performance. As with the technology bubble, the companies in question generally failed to attract widespread institutional support, and while avoiding them in the period prior to the 1987 crash would have pulled down median manager returns, doing so would also have boosted performance thereafter.

The net effect of each of the factors listed above is to call in question the extent to which, if at all, the median active manager has consistently added value above index. The outperformance is seen to be largely due to idiosyncrasies in the construction of the surveys, or one-off factors that cannot be relied upon to recur. Thus, the

view that simply selecting an active manager at random will, on average, result in outperformance of the index is likely to lead to disappointment.

Active management is but one approach to the management of equity portfolios. Others include indexing, enhanced management and other, low-risk quantitatively-based approaches. Active management is, however, by far the most widely used approach, with more than 85% of all Australian equity assets being managed in this way.

In contrast to most overseas developed equity markets, active Australian managers seem to have done a good job, on average, of adding value above the most widely used benchmarks in recent years[2].

For example, in both the US and the UK, the median manager typically struggles to add value above the S&P 500 and FTSE All Share Indices, respectively, with the magnitude of the underperformance in those markets being largely explained by management fees and transaction costs.

This raises the question of whether the documented outperformance by the median Australian manager is real and sustainable, or is, to a greater or lesser extent, driven by factors such as (i) the way in which the surveys of managers are constructed, and/or (ii) the way in which median performances are calculated. For example, systematic exclusion of below average funds from surveys will tend to bias upwards the resulting distribution of returns across managers.

It is also possible that the outperformance has been generated episodically, via a relatively small number of "one off" factors, the repeatability or predictability of which is likely to be problematic.

If this is the case, it calls into question the conclusion that the "average" Australian share manager is able to add value consistently above low cost, low active-risk, alternatives.

This paper does not address the issue of risk-adjusted performance. Cross-sectional differences in the level of risk adopted may be an explanatory factor in the return differences observed across managers. For example, it is possible those with the strongest outperformance had simply taken on the most risk. This risk could be purely systematic risk (eg, investment in higher beta portfolios, during a period of generally rising markets), or higher stock specific risk, with larger positions compared to index in certain stocks. The focus in this paper is directed more towards the non-risk adjusted performance of the median manager.

TABLE 1 **Survey median returns to June 2001 (%pa)**

Actual Returns

Performance Period	Diversified Survey	Specialist Survey	S&P/ASX 300 Index
1 year	11.9	13.3	9.1
2 years	14.7	15.5	12.0
3 years	15.7	16.3	13.1
5 years	15.1	16.5	13.2

TABLE 2 **Survey median excess returns to June 2001 (%pa)**

The returns in excess of the index were thus:

Performance Period	Diversified Survey	Specialist Survey
1 year	2.8	4.2
2 years	2.7	3.5
3 years	2.6	3.2
5 years	1.9	3.3

In contrast to most overseas developed equity markets, active Australian managers seem to have done a good job, on average...

The Mercer surveys[3] for diversified and specialist Australian share managers for periods ending June 2001 give the median manager and index performance numbers (% pa) shown in Table 1[4].

It is worth noting that of the total actively managed Australian equity portfolios that exist, a large number are, for various reasons, not included in such surveys.

For example, portfolios managed "in house" by large corporate superannuation funds are not included. Similarly, a number of government-owned and managed funds (some with over $10 billion of Australian equities under management) are not present in the surveys.

This suggests that both diversified and specialist median managers have significantly outperformed the two major indices in recent years, raising the question as to what has caused this result. A number of hypotheses will now be examined. These are:

1. The extent of outperformance on a "size weighted" basis;
2. The impact of survivorship bias on the surveys' composition;
3. The outperformance of stock selection strategies within the small capitalisation sector;
4. A tilt towards, or out of, technology stocks;
5. The impact of avoiding the so-called entrepreneurs.

THE IMPACT OF FUNDS UNDER MANAGEMENT

A summary statistic such as the performance of the median manager fails to allow for the fact that, on an "asset weighted" basis, managers may be adding less value than the median measure suggests. In particular, it is possible that those managers with larger amounts of funds under management have tended to perform worse than smaller funds. This could, for example, be due to the greater market impact larger funds are likely to have when implementing their active stock selection decisions.

Table 1 presents evidence that is consistent with this, in so far as the median performance of specialist managers has consistently

exceeded that of diversified managers. The latter tend to be larger managers, who offer balanced as well as sector specialist funds. Conversely, a number of specialist managers are smaller "boutique" firms that focus exclusively on the Australian equity sector.

The surveys were split into sub-groups, based on the sizes of the funds. Following Mercer's categorisations, these groups were "small" (less than $20 mil), "medium" ($20 mil to $200 mil) and "large" (greater than $200 mil)[5].

There were no "small" funds in the diversified survey, and also no specialist "small" funds that had 5 years of return data to June 2001.

It can be seen in Tables 3 and 4 that the medium and smaller funds have tended to perform better, at least in terms of median returns, relative to the larger funds, with generally higher levels of excess return relative to the index.

For example, over the one year to June 2001, the median manager (return = 11.9%) in the diversified survey outperformed the index (return = 9.1%) by about 2.8%.

However, this disguises the fact that the median medium sized manager's return in that survey was about 0.8% pa higher than that of the median large manager in the survey (returns of 11.3% and 12.1% respectively).

Over two years to June 2001, the performance gap between medium and large managers in the diversified survey is about 1.1% pa. Over three and five years, the two groups' median managers' returns are roughly in line.

Within the specialist survey, a similar pattern is apparent. The small and medium funds have tended to perform better than the large funds. As would be expected, the overall median returns tend to lie between those for the large and smaller funds.

The decline in value added as funds grow calls into question the sustainability of the overall outperformance, especially as investors tend to redirect assets towards those managers with relatively higher recent returns. This selection process may ultimately be self-defeating as a strategy for obtaining significantly above index returns over the long run.

For example, for a $100 million fund wishing to take a 2% overweight position in a preferred company, only $2 million worth of stock needs to be purchased, and in most cases the market impact of this would be negligible.

For a $1 billion fund, $20 million needs to be purchased, and there is likely to be some market impact. For a $10 billion fund (of which there are five in the Australian market, four of whom appear in the surveys)[6] $200 million would need to be purchased, and the market impact of this is likely to be significant.

Similarly, assuming that a fund wishes to hold no more than 5% of any given company's issued equity, so as to avoid substantial shareholder disclosure requirements, then a $10 billion fund, holding in the order of 60-80 stocks, will be limited to stocks that are about $4 billion in market capitalisation or larger.

For companies that are much smaller than this (eg, a $2 billion company) remaining below the 5% threshold when investing in such a company would imply a holding in the fund of $100 million (ie, a 1% holding in a $10 billion fund). Holdings with percentages smaller than this are probably too small to justify inclusion in a typical actively managed fund.

There are currently only 31 stocks listed on the ASX that have market capitalisations of $4 billion or greater. Thus, as funds grow, their potential investable universe will tend to be concentrated in a smaller number of larger stocks, thus limiting the potential for taking a relatively large number of distinct positions with the funds.

The greater outperformance by smaller managers may represent a "risk premium" that such managers have to produce to be competitive relative to their larger peers.

Such managers may be (or, at least, appear to be) more prone to "key person" risk with regard to senior investment manager staff, less able to invest in compliance and other risk control systems and hence investors may demand higher on-going expected returns as a reward for this greater perceived risk.

TABLE 3 **Size categorised survey median returns to June 2001 (%pa)**

Performance Period	Diversified Large	Diversified Medium	Specialist Large	Specialist Medium	Specialist Small
1 year	11.3	12.1	12.6	13.5	13.6
2 years	13.9	15.0	15.3	16.4	18.6
3 years	15.7	15.6	16.4	15.7	20.8
5 years	14.9	15.1	16.4	16.6	N/A
No of funds	13	15	22	29	3

TABLE 4 **Size categorised survey median excess returns to June 2001 (%pa)**

Performance Period	Diversified Large	Diversified Medium	Specialist Large	Specialist Medium	Specialist Small
1 year	2.2	3.0	3.5	4.4	4.5
2 years	1.9	3.0	3.3	4.4	6.6
3 years	2.6	2.5	3.3	2.6	7.7
5 years	1.7	1.9	3.2	3.4	N/A

THE IMPACT OF SURVIVORSHIP BIAS

The phenomenon of survivorship bias arises in studies of manager performance where managers with certain common characteristics are systematically excluded from the data sample over time.

Since surveys tend to focus only on those managers that are currently available for

investment (or are still reporting their returns to the survey compilers), those funds that are no longer included tend not to appear in the summary statistics, such as the median manager return.

For example, if inclusion in the survey is at the discretion of the managers themselves, and if underperforming managers choose to withdraw from the data, then the impact of such managers' underperformance across the sample may be understated.

Similarly, a very poorly performing manager may lose sufficient funds under management that the manager no longer qualifies for inclusion in the survey.

Studies of manager performance in both the US and international contexts have documented strong evidence of such bias[7]. Summary statistical measures such as the median will clearly be biased upwards if those observations that are towards the "left hand tail" of the overall distribution are systematically excluded from the sample under examination.

To gauge the potential impact of survivorship bias on the results presented above, a study was undertaken of the extent to which funds have exited the surveys over time.

For example, it was found that of 34 managers present in the diversified survey as at June 1996, only 26 were still in the survey five years later, as at June 2001. Thus, 8 of 34 funds exited over the five-year period.

In the case of the specialist survey, of 47 managers present in the survey in June 1996, only 34 of these managers were still in the survey as at June 2001.

Examining the performance of the managers that exited the diversified survey over the period since June 1996, we found that, of the 8 funds that exited, 6 had underperformed the index prior to doing so. The average monthly underperformance across the 8 funds in question from June 1996 until the time of exit was -0.03% (ie., approximately 0.4% pa)[8]. The median monthly underperformance by the group of 8 exiting funds was 0.12% (approximately 1.4% pa).

In the case of the specialist survey, for the 13 funds that exited the survey between June 1996 and June 2001, the average monthly underperformance was -0.13% (or –1.5% pa) across these funds prior to their departure. The median monthly underperformance prior to departure was about -0.07% (or -0.93% pa).

If we "recreate" the surveys by adding back those funds up until the time when they did depart, we can calculate the median returns that would have resulted. This will give different results to those in the surveys, since, say, the median five year return in the survey is typically obtained by calculating five-year returns for all (available) managers and then taking the median of these five year returns.

Survivorship bias prevents us doing this. Rather, we can calculate the median return each month (from the "recreated sample" and the "survivors sample") and then compound these monthly returns to obtain 1 years, 2 year, etc. returns.

Doing so shows that over three and five years, the impact of the bias is of the order of 0.5% pa[9].

These results are consistent with international results, where it has been found that survivorship bias in active equity surveys has the potential to increase average returns across the remaining funds by up to 1% pa.

They are also consistent with the impact one would expect given that roughly one quarter of the funds have exited the sample, and that, on average, these funds were underperforming by about 1 – 1.5% pa before doing so.

The impact of survivorship bias on the surveys suggests a "strategy" for selecting an active manager that is highly likely to produce outperformance: only invest in funds that will still be included in the surveys in five years time.

Of course, identifying such funds ex-ante is a non-trivial exercise. Selecting a fund at random suggests that there is about a 25% chance (8 of 34, or 13 of 47) that the fund will exit the survey within a five year period, and that if such a non-survivor is selected, then performance is likely to have been disappointing prior to the fund's departure.

It also suggests that adding the missing funds back into the surveys is likely to reduce the resultant median performances, and the overall extent to which the median manager appears to be adding value over the index, by about 0.5% pa.

LONG-TERM PERFORMANCE TRENDS

Examining the longer-term performance relative to the index, we see that the degree to which the median manager has outperformed has varied over time.

This is shown in Chart 1, which shows the 12-month rolling excess return of the median manager in the specialist and diversified surveys, relative to the S&P/ASX 300 index, over the period since 1990.

It can be seen that the outperformance 10-12 years ago was somewhat higher than the current level of around 2.5% - 4% that was documented in Table 1. Thereafter, it declined to the point that in 1995-97, the median manager was in line with the index (and so below index post-fees). Thereafter, the outperformance has improved again.

There are thus 4 distinct sub-periods that can be identified:

1. In the first, lasting until about September 1991, the median manager was strongly outperforming. This was a period in which the outworkings of the 1987 crash were still being experienced.
2. Thereafter, the median manager return drifts down towards zero (and hence would be negative post-fees), as the impact of the effect(s) that causes the outperformance in the early 1990's "rolls out" of the data.
3. In the period 1995 to mid-1998, the median manager performance drifts up and down, averaging close to zero on a pre-fees basis, and probably below zero on a post-fees basis.
4. Recently, from mid-1998 to June 2001, the median manager again outperforms, suggesting that there have been some factors, over that period that have positively impacted returns over the last 2-3 years.

This pattern raises the question of what underlying factors may have been responsible for these long-term trends.

CHART 1 **Long-term performance trends**

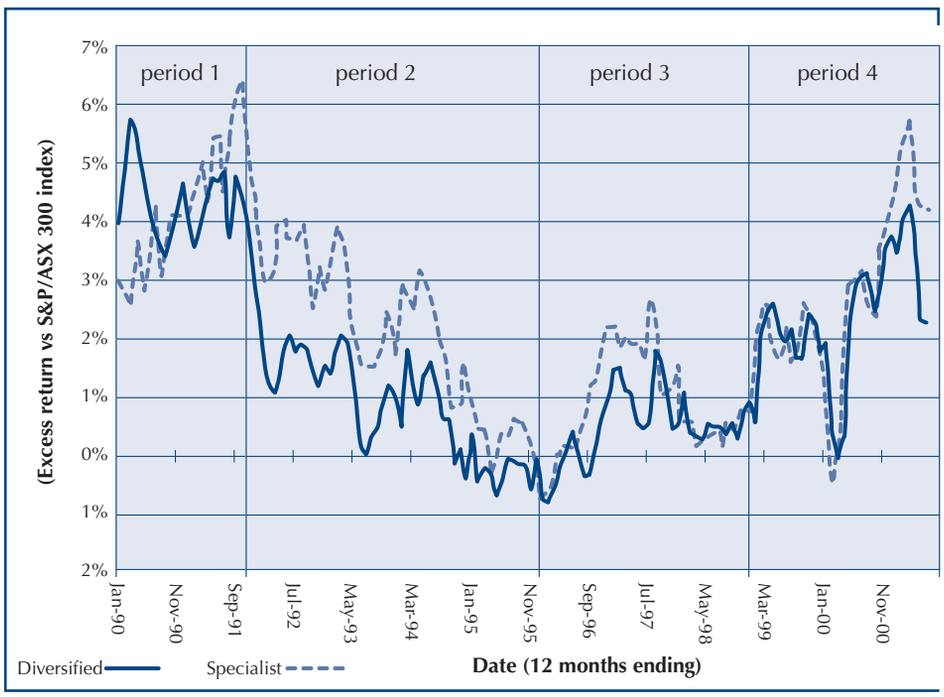

CHART 2 **Effect of half index weight entrepreneurs**
rolling 36 Months

THE IMPACT OF AVOIDING THE "ENTREPRENEURS"

One possible source of manager outperformance, especially in the late 1980s and early 1990s was a systematic underweighting in the so-called "entrepreneurs".

These were a class of companies that were characterised by high levels of merger and acquisition activity, high-profile chief executives, above average levels of gearing in their balance sheets, and a perceived reliance on financial engineering as opposed to business fundamentals in their approach to managing the firms they acquired.

While it is obviously easy in hindsight to say that many of these companies were poor investments, serious concerns were also raised at the time in the professional investment community as to the viability of the business model that was being used.

Consequently, a number of large managers would not invest, or held underweight positions, in the companies concerned.

Chart 2 shows the impact on the rolling three-year excess returns of adopting a half underweight position in the entrepreneurs.

It can be seen that an underweight position in the companies would have contributed to underperformance in the period leading up the 1987 stock market crash.

This is because the entrepreneurial companies were outperforming the market over that period. Post-crash, the tilt away from such stocks would have added considerable value above index, peaking at close to 2% pa in 1992 on a rolling three-year basis. The entrepreneurs' weight in the S&P/ASX 300 Index was over 10% in 1987-88, compared with less than 1.5% in 1996.

THE IMPACT OF SMALL CAP STOCK SELECTION

The typical Australian share manager has an exposure to small cap stocks that is in line with this sector's overall weight in the broader market index.

This is seen in the "style maps" for the Diversified and Specialist surveys (Figures 3 and 4). These charts show the implied exposure of the managers to large vs. small cap stocks, and also to value vs. growth stocks, relative to the index's exposure along these dimensions[10].

For example, it can be seen that on average, most funds have an exposure along the value/growth dimension that is close to that of the index itself, with a possible slight tilt to growth stocks.

Similarly, the funds, on average, display no systematic tilt to small stocks, relative to the index's exposure along the large-small dimension.

Historically, it has been easier to add value in the small cap sector. This is due to the less efficient nature of this part of the index such as lower levels of broker coverage.

As seen in the fourth column of Table 5, the median small cap manager has typically outperformed the small cap Index by between 10 and 20% pa, depending on the time period. If we assume a manager simply replicates the S&P/ASX 100 Index and achieves median manager returns on

the small cap part of their portfolio, the following excess returns (see Table 5) can be deduced:

Column 5 shows the average weights of small caps as a sector within the overall market over the periods in question. The market weight of small caps looks to have varied significantly from period to period. This is partly due to their more volatile nature with respect to large caps, but is also due to the floating of Telstra in October 1997 and the restructure of the ASX indices in April 2000.

The small cap index weight used is their weight in the S&P/ASX 300 Index, as the small cap index is simply the S&P/ASX 300 Index less the stocks in the S&P/ASX 100 Index.

As can be seen from Table 5, the persistence of small cap manager excess returns is quite strong. The effect of this on the median active excess return at the overall fund level is thus quite high, being currently over 1.5% for the last financial year.

If excess returns are solely due to stock selection in small caps, then the argument arises as to why a manager would not simply adopt an indexed or enhanced approach to managing the S&P/ASX 100 Index part of their portfolio and actively manage the small cap part as a separate asset class. Interestingly, this approach has been suggested in the industry of late.

THE IMPACT OF TECHNOLOGY STOCK INVESTMENT

The technology bubble significantly impacted the median manager's returns over the last 18 months, with massive run-ups in the prices of such stocks, followed by the bursting of the resultant bubble. It is thus a possible explanation for the strong performance seen in period 4.

It can be argued that, even at the time, it was not difficult to see that many of these companies had invalid business models and/or were seriously overvalued.

Consequently, it ought to have been relatively straightforward for a manager to avoid at least some of these companies, such as loss-making junior telecommunication and technology companies.

CHART 3 Mercer Australian Shares Diversified Universe (all funds)
Style Map for 5 years ending 30 June 2001

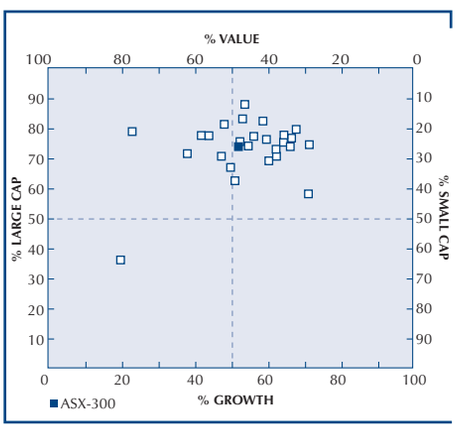

CHART 4 Mercer Australian Shares Specialist Universe (all funds)
Style Map for 5 years ending 30 June 2001

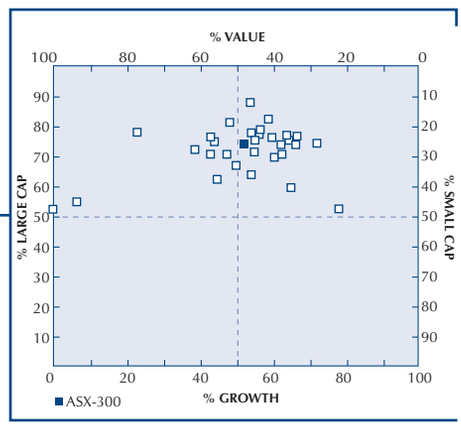

TABLE 5 Excess returns from small cap stock selection (%pa)

Performance Period	Small Cap Index	Median Manager	Excess Return	Avg Mkt Weight	Implied Excess
1 year	–3.2%	11.7%	14.9%	12.7%	1.9%
2 years	–1.5%	18.9%	20.4%	10.5%	2.1%
3 years	5.4%	21.0%	15.6%	9.9%	1.5%
5 years	4.3%	17.5%	13.2%	11.1%	1.5%

TABLE 6 Excess returns from "tech wreck" (market cap weighted)

Stock	Date entered the index	Price entered the index	Index weight upon entry	Current price	Fall since entering index (%)	Impact on index(%)
SMX	1/10/99	$2.87	0.04%	$0.63	–78%	–0.03%
AUN	1/11/99	$5.10	0.23%	$0.52	–90%	–0.21%
MYO	1/11/99	$2.23	0.05%	$0.52	–77%	–0.04%
HTA	1/12/99	$3.57	0.15%	$0.24	–93%	–0.14%
PWT	1/10/99	$1.93	0.10%	$0.24	–88%	–0.09%
ONE	9/10/00	$0.75	0.14%	$ –	–100%	–0.14%
OTT	2/4/00	$3.20	0.14%	$0.11	–97%	–0.14%
SNX	2/4/00	$12.50	0.13%	$1.22	–90%	–0.12%
MLC	2/4/00	$14.25	0.11%	$0.53	–96%	–0.11%
DVT	2/4/00	$5.40	0.27%	$0.04	–99%	–0.27%
MAQ	1/2/00	$2.69	0.05%	$0.09	–97%	–0.05%
KYC	2/4/00	$16.95	0.09%	$1.31	–92%	–0.08%
SOH	1/10/99	$5.47	0.09%	$1.00	–82%	–0.07%
LOK	31/5/00	$1.31	0.04%	$0.06	–95%	–0.04%
NWL	2/4/00	$3.75	0.06%	$0.19	–95%	–0.06%
TOTAL					–1.57%	

Many of these companies had little or no institutional backing at the time, being dominated by day traders and so-called "mum & dad" investors.

It is worth noting that the impact of the returns of a number of these technology companies on the index was one-sided. Many of them had experienced their strong run-ups in price before entering the major indices, so that their outperformance relative to other companies did not adversely impact the performance relative to index of those managers who had chosen not to hold them.

On the other hand, as their prices fell, they dragged down the performance of the index, but not that of the managers who were not holding the companies in question. A listing of the companies in this category, and their capitalisation weighted impact on the overall market, is given in Table 6.

As can be seen, the total effect on the S&P/ASX 300 index from not holding these stocks was of the order of –1.6% over the last 18 months or so, with the stocks in question falling in price by an average of 91% from the levels at which they entered the index.

This has been fairly consistent since March 2001, the anniversary of the height of the technology bubble. Note that these stocks now represent only 0.5% of the S&P/ASX 300 Index, compared with 2.9% as at March 2000, so the benefit from any further falls in these stocks for those managers not holding them will be quite minor.

CONCLUSION

Superficially, it appears that the median active share fund manager in the Australian market has been adding significant value above benchmark for an extended period of time. This paper has shown that this result can to a large extent be explained by the factors listed in Table 7.

Thus, any examination of the published surveys that (i) focuses on equally weighted median performance; (ii) ignores the impact of survivorship bias on the surveys; (iii) fails to allow for various one-off factors, such as the technology bubble and the entrepreneurs, will tend to overestimate the likely sustainable value added by the median manager.

As well, most managers have invested roughly in line with the overall market exposure to small capitalisation stocks (approximately 10%), and within this class, active managers have outperformed by around 20% pa in recent years. If the efficiency of this sector were to improve, such levels of outperformance, and their consequent impact on overall fund performance, are likely to decline.

The factors listed above are not necessarily additive in terms of their impact on the overall performance of the funds under examination. Nevertheless, taking them into consideration suggests that the documented 2.5% - 3.5% outperformance by the median active manager in recent years is likely to be considerably smaller than this in practice.

Unless we continue to see the sort of one-off factors referred to above, it is likely that the performance of the median manager will "mean revert" back to the point where, after fees, the average manager struggles to add value above the benchmark. While the continuation of such effects is possible, it is probably not a viable basis upon which to build a manager selection philosophy.

While our comments have tended to focus on the median or average manager performance, calling into question the extent of any outperformance when measured this way, we leave open the possibility that some managers, when examined in isolation, may indeed be consistently adding value above index. In other words, we do not conclude that the market is completely informationally efficient.

TABLE 7

Factor	Range of impact (%pa)
Size-weighting impacts	0.0 – 3.5
Survivorship bias	0.0 – 0.5
Small stock selection	1.0 – 2.0
Technology stock selection	1.5 – 1.7
Avoiding the entrepreneurs	0.0 – 2.0

Rather, the conclusion is that the selection of an active Australian equity manager is not a "riskless" decision, in terms of longer-term outperformance potential.

In particular, while the recent performance of the median manager in the published surveys suggests that outperformance has been large and seemingly sustainable, this is not clear. Selection of a genuinely skilled active manager is likely to require significant effort, beyond simply selecting a manager at random from the published surveys.

One conclusion that can be drawn from the findings above is as follows: as a starting point for selecting an active equities manager, attention should be focused on those managers (i) with lower than average funds under management, or (ii) who have an inherent long-term tilt towards smaller companies.

The greater difficulty in adding value as a fund's size grows and the outperformance potential in the small cap sector suggests such managers can be expected to produce higher excess returns relative to managers lacking one or both of these characteristics.

The predictability of these two factors is likely to be considerably greater than for the other positive contributors described in this paper.

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NOTES

1 The focus is primarily on active managers. Most major surveys of managers have separate categories for so-called "indexed" and "enhanced" managers. The principal criterion

upon which the funds are categorised is typically tracking error against the relevant benchmark. Active managers tend to have tracking errors that are 2.5% pa or greater.

2 Since April 2000, the Australian Stock Exchange has calculated and disseminated both 300 stock and 200 stock indices. Some managers have chosen to benchmark themselves against one index, and other managers against the other. The performances of the indices themselves have been extremely close, with a correlation of 0.9995 since inception. The choice of index has negligible impact on the results and conclusions presented here, and the S&P/ASX 300 has been used post April 2000, with the S&P/ASX All Ordinaries used prior to that date.

3 Unless otherwise noted, all returns are pre-tax and pre-management fees. Fees vary, depending on (among other things) the amount of assets under management in any particular mandate, and the relative bargaining power of the manager versus his/her clients. Values typically range from 0.3% to 0.7% pa.

4 The Diversified survey comprises the Australian shares component of diversified, or balanced, funds. The Specialist survey are those funds that manage "stand alone", or sector specialist, Australian equity mandates. There is considerable overlap in the names of the managers across the two surveys, although for a given manager the performance may vary. A number of smaller "boutique" managers only offer specialist products. For the year to June 2001, there are 28 funds in the Diversified survey, and 54 in the Specialist survey.

5 This categorisation is quite coarse. In particular, there is a large range covered by the class of managers with greater than $200 million under management, including a number with $5 billion or more.

6 There are also 8 funds in the range $5 bil - $10 bil, and another 20 with assets of greater than $1 billion. As noted, some of these do not appear in the surveys at all, while for others, only a selected fund or funds is in the surveys.

7 See, for example, Brown, et. al, (1992) and Dolan (1995), for further details.

8 The reason for looking at average monthly underperformance is that the date of exit varies by fund. In other words, the number of months that a given fund remains in the survey after June 1996 varies across the sample of exiting funds.

9 Over 1 and 2 years, the effect is less pronounced (0.3 – 0.4% pa). Interestingly, over one year in the Specialist survey, the effect is reversed, ie, the median return is 0.13% higher for the sample that includes the fund(s) that exited during the year.

10 This form of style analysis is due to Sharpe (1992). The definitions used for growth/value are the Frank Russell indices. Basically, these use a stock's price to net tangible assets to determine whether it is "value". If it is in the lower 50% by market cap of stocks ranked by P/NTA, then it is a value stock. All other stocks are assumed to be growth, regardless of their actual growth profile. J