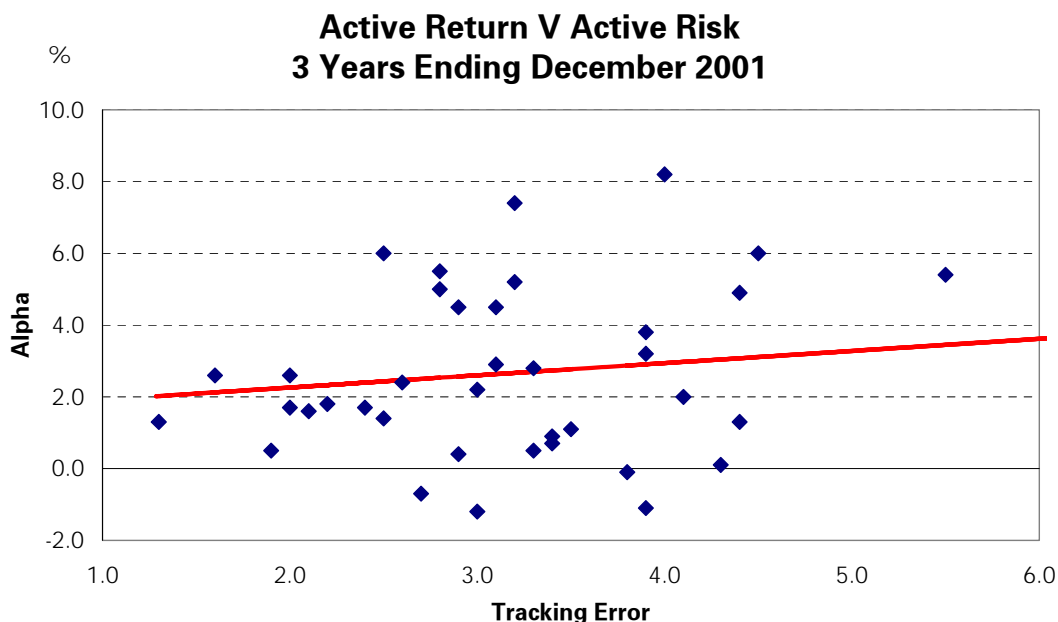


A moderate dose of risk is enough

If you look at a recent risk/return chart from a performance survey of Australian equity managers you might conclude that active equity returns improve as active risk increases. This assumption heavily influences the selection and configuration of equity managers. How reliable is the relationship between active return and active risk? The evidence suggests that in fact the relationship is slippery and there are good reasons why this is so.

The chart below, derived from William M. Mercer data, shows the performance of specialist Australian equity managers for the three years ending December 2001. A few extreme points have been clipped for presentation purposes, but all available data has been included in the calculation of the trend line, which is only meaningful for the range of active risk examined.



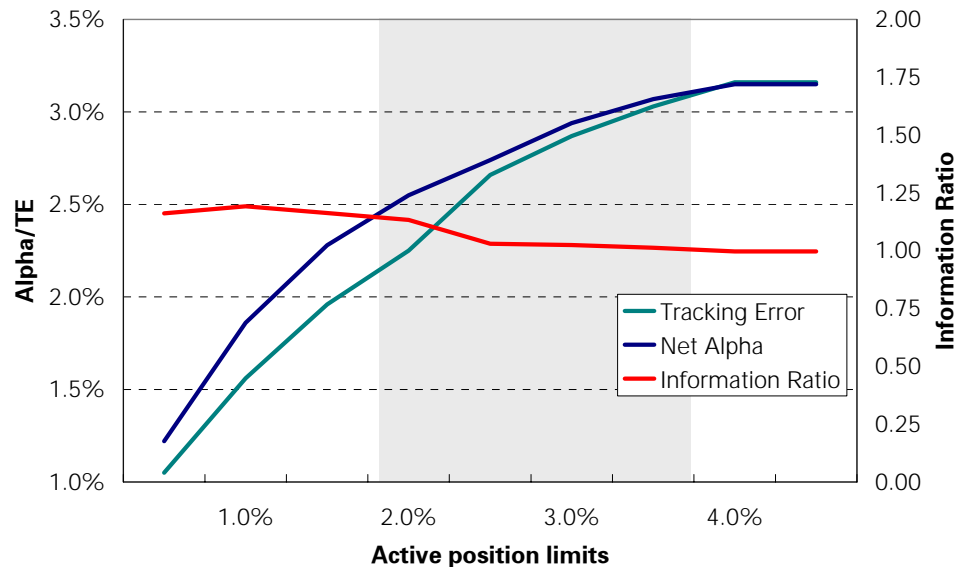
The line of best fit suggests that for every 1% of additional tracking error, alpha improves by around 0.3%. The data doesn't define the relationship very tightly over this period, so the result might be better expressed as lying somewhere in the range of 0.0% to 0.6%.

If we do the same exercise at the end of 2000, the incremental reward per unit of risk actually appears to be negative at -0.5%. For the three years ending 1999 the incremental reward is again negative at -0.2%, and for the three years to 1998 negative again at -0.2%. In these latter two cases the result is not significantly different from zero. Survivorship bias, whereby high-risk, poor performing managers tend to remove themselves quietly from surveys is not a problem here. If present, it artificially induces some positive slope that might disappear if all data were available. The conclusion from these results is that the relationship between active return and active risk across Australian equity managers is unreliable, and certainly not definitively positive.

Returns will exhibit a high tracking error when a portfolio is very concentrated. A common misconception is that portfolio concentration is attractive and improves return. WestAM research on portfolio construction indicates that there is little advantage in amplifying overweight positions in stocks beyond a moderate limit.

The chart below shows what happens to tracking error, alpha, and information ratio as the maximum permissible stock position is increased.

Single Manager Risk and Return



A stock position limit of benchmark plus 4%, equivalent to a tracking error of just over 3%pa, reaches maximum return. In this exercise, a disciplined portfolio construction model finds no benefit in looser portfolio restrictions. Higher levels of tracking error can also be due to taking on significant sector risk, either deliberately or incidentally. WestAM research shows the rewards to sector risk are low compared to the high reward available from stock selection within a diversified portfolio. Consequently performance is unlikely to improve significantly by extending risk in this way.

If consistently successful managers do use higher levels of active risk to achieve outperformance we would expect to observe that phenomenon in performance surveys. Using William M. Mercer data we created a risk/return survey for the three years ending December 1998. We first identified the above median tracking error managers in this period, then further subdivided these between above and below median performers. This identified the group of managers that were above median in tracking error, but also above median in excess return. Of the nine managers in this cohort, over the subsequent three years ending December 2001, four did better than median, four did worse and the remaining manager was equal to median excess return. Using higher tracking error as a way to select managers who will consistently beat the median manager does not appear to be a well based strategy.