An important function of managers of diversified portfolios is to make the asset allocation decisions. However, the ways in which managers decide on this asset allocation and put the decisions into practice can vary substantially. David Hartley and Mario Tritsiniotis identify and attempt to quantify the outworkings of different asset allocation styles and examine whether style has had any influence on relative performance.

Although the effects of manager style can be dominated by factors such as poor performance in important classes of assets, in certain market environments style can have a significant effect on relative performance. Nonetheless, selection of managers by style clearly needs to be viewed in the context of other qualitative and quantitative assessments.

These include:

- **Organisation:** Financial stability, size, ability to handle growth, conflicts of interest.
- **Personnel:** Quality, number, stability, teamwork, backup.
- **Strategies:** Sector selection, stock selection, risk protection.
- **Process:** Research, decision-making, management controls, administrative systems
- **Product conditions:** Management fees, termination conditions, other charges.
- **Performance through full market cycles:** Reasons for past performance as indicator of functional weakness.

At one level an investment portfolio can be viewed as a combination of return-seeking investments and risk-controlling investments.

Assets such as shares and property have historically provided high long-term returns but have also incurred a degree of short-term pain, defined by measures such as the incidence of negative returns. Shares and property are often categorised as “growth” assets, even though in any period they may provide negative returns.

On the other hand, assets such as bonds and cash have more defensive characteristics and, although they can provide excellent returns over certain periods, generally provide lower returns than shares and property, with a commensurately lower level of pain. We have defined these assets as “defensive” assets.

The most critical investment decision is to define the maximum level of pain that can be borne in the search for high long-term returns. In its translation to an investment policy statement, this is often interpreted in terms of the maximum exposure to
growth assets that an investment portfolio can bear.

We analysed the styles used for 32 pooled fund products managed with broadly similar objectives. Manager 2 of our survey described itself as a "benchmark-style" manager and Manager 32 described itself as a "timing-style" manager. Figure 1 shows, on a monthly basis, the exposure each of these managers had to growth assets over the three years to September 1993. The styles employed by Manager 2 and Manager 32 appear very different.

Quantification of asset-allocation style

We examined two ways in which style can be quantified. The first related to the range of exposure to growth assets that managers have used over a period, in this case the three years to September 1993. For the other measure we calculated the absolute value of the change in exposure to growth assets over each month and have used the 36-month average as a measure of style. This latter measure has been defined as "jump size".

Figure 2 shows Australian pooled fund products categorised by both of these measures over the three-year period to September 1993.

Although the correlation between range and jump size is high, as can be seen from the quite linear relationship between the two in the chart, some important differences exist.

A manager with a high range of growth assets shows a willingness to respond to market conditions. However, the change to asset allocation can be implemented either quickly or gradually. A manager with a high jump size is one who is willing to change growth asset exposure abruptly in anticipation of market changes.

For example, even though Manager 21 has acted within wider ranges than Manager 30, Manager 30 has been much more active on a month-to-month basis, as shown by its higher jump size measurement.

We believe that a jump size is a better measure of the relative timing focus of a manager's style. However, both measures are useful. Over a full market cycle, a small average jump size is likely to be associated with a benchmark style and a high jump size with a timing style. A wide range coupled with a relatively low jump size is likely to be an indication of some degree of value orientation, where a manager is willing to make significant changes to the portfolio structure either through modest shorter-term movements or through a one-off change followed by a period of very small adjustments.

The use of a three-year period implicitly assumes that managers' styles are reasonably stable over the period and that the managers' styles are also fairly represented by that period. Although some managers appear to have altered their styles as measured over the period, relative measures do appear to have been reasonably stable. Figure 3 shows rolling six-month average jump size for Manager 6 and Manager 32 against the average of all managers.

Manager 32 has been quite consistently more active than the average whereas Manager 6 has moved from above-average activity to below average, partly as a result of specific constraints imposed by their product.

The managers have clearly exhibited quite different asset allocation styles. The next question is whether style as measured has had any effect on relative performance.

Relative performance is affected by a number of important factors, such as exposure to the different asset classes, stock selection and risk protection strategies. However, the long-
term exposure to asset classes is largely determined by an investment policy and it is therefore appropriate to isolate the effect on performance of the average exposure to various asset classes.

We performed linear regression analysis to determine whether style as measured by jump size had any effect on relative performance. We used as independent variables average allocation to each of the asset classes in our allocation surveys together with our style measurements. The dependent variable was the actual return and analysis was done for each of the past three years ending September.

We found that in the year to September 1993, style, as measured by jump size, had a positive effect on performance at a 97.5 per cent confidence level. Interestingly, for the year to September 1993, style as measured had a more statistically significant impact than the average exposure to Australian shares. In the previous two years, style appears to have had a neutral influence.

Those managers who were willing and able to alter asset allocation in, or before, the year to September 1993 appear to have performed relatively well in that 12-month period.

Although the trend in relative returns has been dominated in the recent past by the method managers use to gain exposure to property, managers with more flexible approaches have been able to take advantage of the strong trends in the year to September 1993. Those with a benchmark focus were not disadvantaged, however, in either of the two previous years. Importantly, there is no evidence to suggest that any one style is superior in all market environments.

**Table 1: Three asset allocation styles**

<table>
<thead>
<tr>
<th>Style</th>
<th>Benchmark</th>
<th>Value</th>
<th>Timer</th>
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<tbody>
<tr>
<td>Description</td>
<td>Maintain a constant mix. As soon as asset allocation deviates implement automatic rebalancing. This style would include rebalancing of specialist managers to a benchmark by a consultant/manager.</td>
<td>Decisions based on anticipated future returns from different classes of investment. Prepared to weather short-term market movements to gain longer-term benefits.</td>
<td>Attempt to predict and take advantage of short-term fluctuations in markets.</td>
</tr>
<tr>
<td>Attributes</td>
<td>1. Asset mix relatively constant in the short term.</td>
<td>1. Changes to asset mix on basis of relative value.</td>
<td>1. More frequent changes to asset mix.</td>
</tr>
<tr>
<td></td>
<td>2. More inclined to utilise indexation at sector level.</td>
<td>2. Tend to increase holdings as market declines and vice versa – ie, counter cyclical or contrarian.</td>
<td>2. Tend to be active at sector level.</td>
</tr>
<tr>
<td></td>
<td>3. Unlikely to alter asset mix in reaction to temporary market moves.</td>
<td>3. Change asset allocation less frequently than timer but could implement periodical significant changes</td>
<td>3. Prepared to change view and act accordingly.</td>
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**Figure 4: Response of managers to trends in relative performance of assets**

1. **Benchmark** will automatically buy near low points and sell near the high points, thereby making profits. **Value** has already started to buy, anticipating 2, but may be early. **Timer** trying to buy at low points, selling at high points to make most use of changing market conditions but may make mistakes until trends emerge.

2. **Benchmark** sells and buys the underperforming assets. **Value** enjoys the trend that had been anticipated. **Timer** holds stock, may buy more if not already fully weighted.

3. **Benchmark**: reallocates towards benchmark. Very little movement in anticipation of forthcoming conditions. **Value** has already started to sell in anticipation of fall but may miss out on some good returns. **Timer** looking to sell but may get caught by the “noise”.

4. **Benchmark** reacts to market movements by rebalancing and should perform well. **Value** readjusts allocation and may rebalance similar to a benchmark style. **Timer** trying to buy at low points, selling at high points to make most use of changing market conditions but may make mistakes until trends emerge.

5. **Benchmark**: buying the underperforming assets to bring allocation back to benchmark. **Value** enjoys (in a relative sense) the trend that had been anticipated. **Timer** may continue to sell.

6. Begin the “new cycle”.

**Interpretation**

We have defined three broad categories of asset-allocation style: Benchmark, Value and Timer (see Table 1). Benchmark-oriented managers maintain a relatively constant asset allocation over all periods. If share prices increase relative to other asset classes, then a benchmark manager will tend to rebalance automatically by selling shares and buying the under-performing assets.

Value-style managers assess the relative value of the various asset classes and weight their portfolios according to their perception of that relative value. During a full investment cycle a value manager is likely to alter weightings significantly as cyclical turning points approach but may maintain static weightings until value is recognised. Value-style managers may therefore appear to be similar to benchmark managers over part of an investment cycle and similar to timing-style managers while they are re-setting their portfolios.

Timer-style managers are more
likely to alter asset allocation on a short-term basis to protect the portfolio against short-term risk or to take advantage of expected market trends.

Few managers can be categorised as employing purely only one style. Many appear to have exhibited a mixture of timing and value styles, as measured by jump size and range, over the three years.

Figure 4 attempts to identify the likely responses of the various styles to different market environments.

Logically, one would expect that the various styles would be relatively advantaged by particular environments as shown in Table 2.

Figures 5, 6 and 7 show relative performance of markets over the three years to September 1991, 1992 and 1993.

The year to September 1993 showed trending outperformance by growth assets (except for direct property) while the other two years showed somewhat mixed results.

As detailed in our idealised situation, we would expect more aggressive managers, and managers willing to make large changes to their growth-asset exposure, to have been able to take advantage of the strong trend in 1993.

These managers could hold or even buy more of the continuously outperforming sectors.

Benchmark-style managers would be continually reducing exposure to the outperforming classes by rebalancing, and would have been buying those classes which have not performed as well.

The net outcome is that a benchmark-style manager is expected to have sold high-returning assets (which in 1993 continued to do well) and to have bought assets which continued to relatively underperform.

Our quantitative analysis provides some evidence that style can be a very important influence on performance in particular market environments.

Although managers’ returns tend to be highly correlated (as they invest in the same markets), the differences in style mean that, in a relative sense, one manager may be doing well when another is not and vice-versa.

Those who diversify managers by style gain the benefits of:

- mitigation of the effect of underperformance by a particular manager due to poor investment decisions, management disruption or other manager-specific problems;
- an ability to take advantage of fluctuating market conditions which first suit one style of manager and then another.

Table 2: Effect of market environment

<table>
<thead>
<tr>
<th></th>
<th>Benchmark</th>
<th>Value</th>
<th>Timer</th>
</tr>
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<tbody>
<tr>
<td>Favourable</td>
<td>Outperforms in a stable return environment or when market experiences a lot of noise</td>
<td>Potentially avoids major downturns as it places emphasis on relative value of the different asset classes</td>
<td>Recognises and reacts quickly to news, can outperform by correctly predicting market reaction to events and taking advantage of trends as they develop</td>
</tr>
<tr>
<td>Unfavourable</td>
<td>Lose ground in a trending market or initial stage of a fundamental change in investment environment</td>
<td>Could have substantial period of underperformance until market recognises inherent value</td>
<td>Can underperform if markets experience false starts or if manager incorrectly predicts markets moves</td>
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