Characterizing Value and Growth Investing in Institutional Portfolios

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Abstract

We examine the characteristics of 4,754 non mutual fund value- and growth-oriented portfolios of large-, mid-, and small-cap stocks over the period 2001-2003. Consistent with style definitions, we find that on average, growth funds have price-earnings ratios, price-to-book ratios and earnings growth rates that are twice as large as those for value funds. We find that large and mid-cap value funds hold stocks of companies with significantly higher financial leverage than those held by growth funds. We measure style adherence relative to Russell indexes as well as the funds' own benchmarks. We find that large cap funds tend to stay closer to their own benchmarks. We also find a strong correlation between high-performing funds and the tendency to shift toward value investing.

JEL Classification: G11, G23
Keywords: Growth and value style investment, portfolio performance evaluation, information ratio, style adherence, style shift, benchmarks.

I. Introduction

It is widely recognized that value and growth investing are two distinctive styles used by money managers. The heightened attention to style in recent years can be attributed to several factors. First, sophisticated investors now recognize the importance of investment style in developing an optimized portfolio. Second, there has been a rapid development and market acceptance of a wide range of specific style benchmarks. Third, accounting for style allows for better performance evaluation and attribution analysis.

The performance differences between value and growth styles have been studied extensively in the recent literature. For instance, Fama and French (1992), Chan, Hamao, and Lakonishok (1991) and Lakonishok, Shleifer and Vishny (1994) among others have found support for the superior performance of value investment strategies. More recently, Chan, Chen and Lakonishok (2002) and Chan and Lakonishok (2004) use equity mutual fund holdings to provide further evidence of a value premium. They conclude that the observed return differential between value and growth appears not to be captured by standard risk factors.

This paper adds to the foregoing literature in the following ways. We characterize growth and value investing using the PSN database, in which quantitative and qualitative data are obtained for a large number of non mutual fund institutional equity portfolios. Our sample contains 4,754 privately managed portfolios over a three-year period from the beginning of 2001 to end of 2003. Unlike the extant studies in which the identification of value and growth is inferred from each portfolio's underlying stocks, our study classifies value and growth portfolios using each portfolio manager's stated investment strategy.

We find that consistent with style definitions, growth funds have mean price-earnings (PE) ratios, price-to-book (PB) ratios, and earnings growth rates that are twice as large as those

for value funds, and lower dividend yields. These differences between value and growth portfolios appear to be stable across capitalization levels and years. We also find that value funds outperformed growth funds during the sample period. Moreover, we find that large and mid-cap value funds hold stocks of companies with significantly higher financial leverage than those held by growth funds, which is consistent with Fama and French's (1996) view that value stocks are relatively more financially distressed and thus that they yield an added risk premium.

We also explore the issue of benchmark style adherence. We first measure the extent to which portfolio managers adhere to their stated investment style relative to the Russell indexes and then relative to the funds' own benchmarks. We find that large cap funds tend to stay closer to their own benchmarks. Moreover, we find that high performing funds in terms of absolute returns have a tendency to give more emphasis to value investing as compared to low performers. This observation is consistent with the superior performance of value investment strategies.

This paper is organized in six sections. In the next section we describe in detail the database used for the study. In section III, we characterize value and growth investing using the sample data. The relative performance of value and growth portfolios is examined in section IV. In section V, we explore the issue of style adherence of each fund to a generic style benchmark as well as to their stated benchmark. We compare high and low performing funds using both benchmark and risk-adjusted measures. The final section provides a brief summary and some concluding remarks.

II. Data Description

The Plan Sponsor Network database (PSN) is a product of Informa, previously known as Effron Enterprises. The PSN database compiles information on the characteristics of money

managers and their portfolios. PSN is survivor bias-free, which allows the analysis of portfolios no longer in existence, and avoids the problem of biasing the results in favor of successful funds. The primary users of this database have traditionally been pension plan sponsors and other fiduciaries, in their efforts to identify the top portfolio managers in various categories.

The PSN data is compiled through quarterly surveys of money managers. The data types range from survey responses about investment styles and decision-making processes, to objective portfolio performance statistics and identification of portfolio performance benchmarks. The December 2003 release of PSN contains information on 7,841 independent portfolios managed by 1,836 companies. Of these, 4,754 are equity portfolios that are managed by 1,529 companies. These 4,754 equity portfolios constitute our starting sample.

PSN defines growth funds as funds emphasizing stocks that have a relatively high return on equity, above average earnings growth, PE ratios that are higher than the PE for the S&P 500 index, and dividend yields that are lower than the S&P 500 index yield. PSN defines value funds as placing emphasis on fundamental-value-based strategies such as Graham-Dodd or other similar intrinsic value approaches that favor strong balance sheets, low PB ratios and market values perceived to be below the fair investment value of a company.

It is useful to clarify how the investment style data are categorized. PSN asks its survey respondents to indicate whether the value or growth styles of investing are "important," "very important," "not important," "utilized," or "not utilized." PSN records fund managers responding "important," or "very important," to the value (growth) style category to be adherents to the value (growth) style, and all others to be non-adherents. We exclude from our analysis the Blend-style category, a designation in PSN that applies to funds following a mixture of growth and value styles, and portfolios that do not profess to follow any particular style.

It is important to emphasize at the outset, that the classification method of value and growth used in our study is very different than the one used in Chan, Chen, and Lakonishok (2002). While they infer value and growth from the characteristics of the individual stockholdings, we use the portfolio managers' explicit identification of their investment styles as either growth or value. Although the information contained in this database is richer in many respects than Morningstar Principia, the drawback of using the PSN database is that it does not maintain a time series record of the survey variables. It is therefore not possible to undertake a study using survey variables, such as investment styles, over a long time period.[1]

Due to the limited availability of observations for several PSN financial data such as portfolio PE and PB ratios prior to 2001, we are restricted to the use of 2001, 2002 and 2003 observations for accounting and market ratios. All our financial variables are measured at calendar-year end. The key variables used are the forward PE ratio, PB, dividend yield (DY), 5-year beta, debt-to-equity ratio (DE), 5-year historical earnings growth (EG) and ROE. Furthermore, we limit the sample to funds with 3 years worth of historical monthly returns prior to these dates.[2] Thus, our sample includes three-year average monthly returns covering the January 1999-December 2003 period. On average, this sample period produces a pooled set of 2,676 fund-year-observations per variable.

III. Sample Characteristics of Value and Growth Portfolios

Summary statistics for the sample of growth and value portfolios are provided in Table 1. We report the means and standard deviations of thirteen key portfolio attributes for large,

[1] In order to conduct this research over a three-year horizon, the sample had to be reconstituted for each of the prior years from archive disks made available to us by Informa.

[2] We selected funds that had at least 24 actual monthly observations over the three-year horizon. Our first three-year return observation (2001) is the average monthly return over the three years January 1999-December 2001, and the next two observations are calculated using a rolling average.

medium, and small capitalization funds. Three variables pertain to market returns, and the others are accounting-based and market-based ratios such as forward PE and PB. The most striking feature in Table 1 is perhaps the overall consistency across caps and years of the differences between value and growth portfolio characteristics.[3]

<Table 1 about here>

In accord with style definitions adopted by PSN, we find that across the three years and across market capitalizations, growth funds consistently exhibit higher PE and PB ratios than value funds. Overall, the average PE ratio for all growth funds is 26.5 or about 60% larger than the average PE of 16.5 for value funds. The grand average PB ratio for growth portfolios is 4.3, which is double that of value funds at 2.1. On average, growth funds invest in companies that have almost double the historical 5-year earnings growth (EG), slightly higher betas, and about 70% lower dividend yields (DY) than value funds. Moreover, we find that the portfolio turnover ratio (TO) is higher for growth than for value portfolios. On average, growth funds turn their portfolios 1.7 times more than value funds.

We find that betas are very stable for both investment styles. Growth portfolios have a very stable average of 1.1, versus 0.9 for value portfolios across years and market caps. Thus, growth investing appears slightly more risky than the market, while value investing is slightly less risky than the market. The remarkable consistency across market caps and styles is surprising, since we might have expected a much larger difference, for example, between large and small cap funds.

Examining portfolio returns, we find that value portfolios consistently outperform growth portfolios in terms of one-year and three-year mean monthly returns as well as on a risk-adjusted

[3] This is especially noteworthy since the stock market experienced both a crash and a recovery during the years spanning 2001-2003.

return basis. This result is not too surprising for the year 2001, since value funds are expected to perform better than growth funds during bear markets. However, when the market rebounded in the fall of 2002, and in 2003, value funds still outperformed growth funds.[4] These findings are generally consistent with earlier findings (for example Chan, Jegadeesh, and Lakonishok (1995) and Chan and Lakonishok (2004)) that value *stocks* tend to outperform growth *stocks* over a wide range of historical periods and market conditions. The persistence of this superior performance of value stocks over growth stocks has been referred to in the literature as the value premium puzzle.

A number of explanations for the observed value premium have been put forth. For example, Haugen (1995) argues that investors are irrationally under-pricing value stocks, viewing them as distressed companies, while they overpay for growth stocks. A competing explanation is advanced by Petkova and Zhang (2003), in which they invoke a rational asset pricing approach to demonstrate that value stocks are actually riskier than growth stocks during recessionary periods and less risky than growth stocks during good market conditions.[5]

A closer look at Table 1 shows that large and mid-cap value funds invest in companies that have significantly more leverage than growth funds. Specifically, the average debt to equity ratio (DE) is 33% higher for value funds than for growth funds. This higher leverage of firms held by large and mid-cap value funds represents a risk factor that may help explain the value premium. In essence, it is possible to argue that ex-post returns for value stocks are higher than growth stocks for two reasons. First, dividend yields are higher for value stocks than for growth stocks. Second, financial leverage risk induces investors to discount the price of value stocks

[4]The only exception to this general observation is that small-cap growth portfolios outperform small-cap value portfolios with respect to three-year mean returns.

[5] They provide a risk-based explanation for the value premium. They show that the risk associated with a given style varies with the business cycle and in turn affects stocks' betas and expected CAPM returns. Chan and Lakonishok (2004) also show that value stocks suffer less severely than growth stocks during poor performing markets.

more heavily than growth stocks. Using the same logic used in Petkova and Zhang (2003), this second argument is likely to lead to lower capital losses or greater capital gains for value stocks, depending on the phase of the business cycle.[6]

In the case of small-cap portfolios however, we find that growth portfolio managers tend to invest in firms with lower ROE and *higher* leverage than value portfolios. A possible reason for this different behavior is that growth managers invest in small-cap firms with high growth potential. Fast growing firms require increased levels of both debt and equity financing, which is likely to lead to a higher average DE ratio.[7] In this case, the existence of a premium for value investing cannot be inferred as easily as before. The obvious reason is that small-cap value companies do not benefit from a leverage risk premium.[8]

IV. Performance Attributes of Value and Growth Portfolios

In this section, we examine the characteristics of high versus low return portfolios for both value and growth categories. We construct the high and low return categories using the following procedure. For each sample of funds for a specific style, capitalization and year, we sort portfolios by their three-year mean monthly returns. We then divide each sorted-sample into three equal size groups (terciles). The "high" category (H) contains funds that earned the highest

[6]During recessions, this effect leads to smaller capital losses on average for value stocks, since their prices already embody downside risk. During expansions, capital gains for value stocks may actually keep pace with those of growth stocks, since expansions usually correspond to periods of lower risk premia, which also means a lower leverage risk premium and therefore a smaller discount rate.

[7] Given the large financing need for these small and fast growing firms, and since access to equity markets is relatively more difficult for these firms, it is expected that debt financing would rise.

[8] However, during market downturns, small cap value stocks may still produce better returns since their risk exposure is now much less than that of growth stocks. This is confirmed in Table 1 when looking at one-year returns for the years 2001 and 2002. Another possible explanation is that small-cap growth firms as a group could have smaller asset size than their small-cap value counterparts. As shown by Ogden, Jen, and O'Connor (2003), the smaller the firm's total assets, the less profitable it tends to be.

mean returns, and the "low" category (L) contains funds that earned the lowest returns. We discard the middle tercile in order to accentuate the contrast between good and bad performers.

Table 2 presents summary statistics for high and low return portfolios within each style and market capitalization.[9] In addition to displaying the mean returns, we also present t-statistics for difference-of-means tests between the H and L categories.[10] The first column contains the three-year average monthly return, while the second column contains the risk-adjusted returns using the three-year standard deviation of monthly returns (Ret/Risk). We first note that the return-risk ratio is significantly greater for high performers in every year, and across market capitalizations. Another clear pattern in the data is that in every case, value funds outperformed growth funds in their respective H and L categories for both the return and return-risk variables.

<Table 2 about here>

Further examination of the results in Table 2 shows that there are no systematic differences between high and low performing portfolios with respect to ex-post levels of the PE ratio.[11] We find a statistically significant difference between the high and low-return categories in only five of the eighteen cases. Since ex-post PE ratios are not significantly different between the high and low performing portfolios, and noting that there are no significant differences in DY and Beta risk, the higher returns achieved by the H portfolios are likely due to fund managers initially buying lower PE stocks.[12] Interestingly, this is true for both value and growth managers.

[9] We decided to drop the following variables from Table 2: EG, ROE, and TO, since no pattern appeared to directly explain the relative performance of portfolios within each style, which is a main focus of this paper.
[10] This is a t-test of differences in sample means, assuming unequal sample sizes and variances.
[11] It is important to keep in mind that while the returns and risk-adjusted returns are measured over three-year periods, the PE, PB, DY, Beta and DE variables are all measured as of the end of each three-year period. There is however a clear difference in the behavior of PE ratios between the years 2001 and 2002. In 2001, better performing funds held higher PE stocks across management styles and market caps, whereas in 2002 they held lower PE stocks. For the year 2003, only in the case of growth funds did we find that the better performers held lower PE stocks.
[12] An alternative explanation could be that earnings rose faster for the H-category funds than for the L-category funds, resulting in little change in the H-category PE ratios. However, we find (unreported in Table 2) that in almost all the cases the historical growth rate of earnings for the H-category was nominally smaller than for the L-category.

This suggests that for this sample of non mutual fund portfolios, high performing fund managers must have placed greater emphasis on value investing.[13]

The PB ratio is the only variable in Table 2 that exhibits a consistent pattern across management styles, market caps and years. Even though most differences in PB ratios between H and L performing funds are not statistically significant, high-performing funds have nominally lower PB ratios in fourteen out of the eighteen cases. Given the higher returns observed for the H portfolios, and given the lower ex-post PB ratios, it follows that high performing fund managers initially bought their portfolios at much lower PB. This finding is also consistent with fund managers utilizing enhanced value-investment strategies.

With the exception of the year 2001, the dividend yield (DY) is nominally larger for high-performing portfolios in 2002 and 2003, with only five statistically significant observations. This shift towards higher dividend paying stocks may reflect an adjustment of fund managers to the market decline of 2001. Finally, we find no reliable relationship between betas and returns. For example, both small-cap growth and value funds achieved superior performance in 2001 by holding high-beta stocks, and then by holding low beta stocks in 2002, while beta did not seem to matter at all in 2003.

The results in Table 2 show that the relationship between portfolio performance and the DE ratio of the underlying stocks is sensitive to capitalization. Only in the case of large caps do we find statistically significant differences in the DE ratios between H and L portfolios throughout the three years. Moreover, in 2002 and 2003, high-performing large cap growth stocks curiously had significantly higher DE ratios and no precipitous change in their beta risk. By contrast, high performing large-cap *value* funds exhibit significantly lower leverage ratios

[13] This behavior is generally consistent with contrarian-trading strategies (buying past losers and shorting past winners) often used by value fund managers.

than their peers. Furthermore, the average DE ratio steadily decreased for the high-performing large-cap value category over the three-year period. A possible explanation for these findings is that growth managers were trying to acquire stocks that behaved more like value stocks and that value managers were seeking to reduce exposure to leverage risk within value stocks.

Overall, it appears that the price-to-book ratio is the best predictor of returns among conventional style measures such as PE, PB, DY and betas. This result is consistent with the findings of Fama and French (1992). Furthermore, the weak relationship between returns and beta is again broadly consistent with the findings of Fama and French. Finally, we found that high performing funds adopted more of a value investment strategy compared to the low performing funds, irrespective of the investment style claimed by the portfolio managers.

V. Style Adherence and Active Management

Evidence suggests that portfolio managers tend to deviate from their stated investment styles during certain market conditions. For instance, Chan, Chen and Lakonishok (2002), find that when mutual funds deviated from their benchmark during 1978-97, they were more likely to favor growth over value and high past returns over low past returns. Lakonishok, Shleifer and Vishny (1997) also find that among pension fund managers, there is a tendency to favor glamour (i.e. growth) stocks.

In this section, we examine the extent to which money managers adhere to their declared investment style. The PSN database provides returns for various benchmarks including the Russell benchmarks of each cap and style combination. PSN also provides the identity of each portfolio's *actual* benchmark. We first consider style adherence relative to the commonly used Russell value and growth indices, and then proceed one step further by examining style

adherence relative to managers' own chosen benchmarks. The results from this section show that small cap and mid-cap funds deviate more from their declared benchmarks. Further, we find that high performing funds deviate from their benchmarks more than low performing funds. Moreover, high performing funds in both value and growth styles, tend to give more emphasis to value benchmarks.

A. Style Adherence based on Russell Indexes

To estimate the extent to which portfolio managers adhere to specific investment style, we estimate the following OLS regression for *each* fund:

$$R_{ict} = a_{ic} + b_{1ic}G_{ct} + b_{2ic}V_{ct} + e_{ict} \qquad (1)$$

where R_{ict} is the return for fund i belonging to capitalization category c in month t, and G_{ct} and V_{ct} respectively are the returns in month t on the capitalization-matching Russell growth and Russell value indexes. The variable e_{ict} is a random error term. For large-cap growth portfolios we use the Russell 1000 growth index, while we use the Russell Mid Cap growth index for mid-cap growth and the Russell 2000 growth index for small-cap growth. For value portfolios we used the same corresponding value benchmarks.

<Table 3 about here>

The total number of regressions estimated was 2,063 or 687 per year. Of this number, 982 were large cap, 401 were mid cap and 680 were small cap funds. We then averaged the estimated regression coefficients across each of the H and L categories previously defined in Section IV. Thus, the coefficients in Table 3 are cross-sectional averages of the time-series regression estimates in Equation (1). Table 3 reports the mean excess return over the Russell index along with the Russell-based information ratios for each capitalization.

The Information Ratio (IR), also known as the appraisal ratio, measures the risk-adjusted performance of a portfolio in excess of that of a comparison benchmark. Specifically, the IR for growth funds is calculated as:

$$IR_{ic} = \frac{\overline{R}_{ic} - \overline{G}_c}{\sigma_{BAR}}$$

where $\overline{R}_{ic}$ is the arithmetic average monthly return for portfolio i in capitalization class c, $\overline{G}_c$ is the arithmetic average monthly return for the benchmark growth portfolio for capitalization class c, and σ_{BAR} is the standard deviation of the benchmark adjusted monthly return during the same time period. For value funds, $\overline{V}_c$ replaces $\overline{G}_c$ in the information ratio.

We also show the average slope coefficients and t-statistics from estimating Equation (1). Column 1 contains the mean Russell-adjusted returns over a three-year period. These returns are calculated as the mean realized return for each portfolio minus the historical mean return for the corresponding capitalization and style Russell index over rolling three-year periods. The Russell-adjusted returns and the information ratio estimates are significantly higher for the H-category funds, regardless of capitalization or style. Furthermore, in eight out of the nine cases considered, high performing growth funds had higher returns than high performing value funds when measured against the respective Russell indexes. This superior benchmark adjusted performance of growth portfolios is consistent across years and capitalizations. However, the apparent superior performance of benchmark-adjusted growth funds in this case is driven by the poor performance of the Russell growth indexes relative to Russell value indexes, and possibly by more extreme departures of growth portfolios from their declared style.

Independently of whether funds are high or low performers, both growth and value managers seem to adhere closely to their own fund styles as evidenced by the statistically significant high slope coefficients on the matching Russell style indexes. When comparing high

and low return portfolios in 2002 and 2003, we find that high performing funds of both styles favored value benchmarks more than their low performing counterparts. This is evidenced by the smaller slope coefficients on the Russell growth indexes and higher coefficients on the Russell value indexes for high performing funds compared to low performing ones. These differences are statistically significant for 22 out of 24 cases.[14] Our results suggest that in spite of the portfolio's declared style, high performing managers are tilting stock selection in favor of the style perceived to produce better returns in the face of current and expected market conditions.[15]

B. Style Adherence based on Own Benchmark

The PSN database identifies the benchmark used by each individual portfolio. In this section we examine style adherence relative to each manager's actual benchmark. Table 4 provides an overview of the top five benchmarks used by portfolio managers for each cap-style. With few exceptions, Russell indexes appear to have a dominant position among adopted benchmark indexes. Based on the top utilized five benchmarks, Russell indexes are used about 80% of the time. Distant runners-up are the Standard and Poor's (S&P) indexes, with the S&P 500 being used frequently by large-cap portfolios.

<Table 4 about here>

On average, more than 75% of all funds use indexes that are both capitalization based *and* style based. An important exception is that 36% of large capitalization growth funds use the S&P 500. In the small and mid-cap realm, 85% of growth funds use a capitalization- and style-based benchmark, while only 76% of value funds do. This suggests that outside of the large cap category, growth funds may have less flexibility to make style adjustments in response to

[14] A reversal of this pattern was observed in 2001, after excluding large and mid-cap value funds. Note that these results control for market capitalization, since the Russell indexes reflect both style and capitalization, hence we are not witnessing a capitalization drift here.

[15] This observation was also documented in Chan, Chen and Lakonishok (2002).

changing market conditions than value funds, since growth funds as a group use more restrictive benchmarks.

To analyze style adherence with respect to own benchmarks, we estimate the following time-series regression model:

$$R_{it} = a_i + b_i B_{it} + e_{it}, \qquad (2)$$

where B_{it} is the return on the benchmark index specified by fund i in month t.[16] The total number of regressions estimated for all funds is 2,054 or 684 per year. Of this number, 976 were large cap, 399 were mid cap and 679 were small cap funds. Using the same sorting procedure as before, the regressions were first estimated, and then their coefficients were averaged within each of the H and L categories. Thus, the coefficients in Table 5 are again cross-sectional averages of the time-series regression estimates in Equation (1).

<Table 5 about here>

Table 5 shows the results from estimating Equation (2). It reports the mean returns in excess of each fund's own benchmark, as well as the information ratios for each of the cap-style categories and for the H and L performers. The table also shows the average slope coefficients, t-statistics and the adjusted R^2s. Generally, we observe that large cap funds have higher R^2s and larger slope coefficients on their own benchmarks than do other categories. Thus, large cap funds tend to stay closer to their own benchmarks than other categories.

Similar to our earlier results, we find that high-performing funds did better in terms of benchmark-adjusted returns and information ratios than their low-performing counterparts. More importantly, we find that in about 75% of the cases, the high-return portfolios had *smaller* R^2 values than the low-return portfolios. Thus, high performing funds were more apt to stray from

[16] It should be noted that in these regressions, each fund's returns were matched with its own benchmark.

their benchmarks than low performing funds. This effect is especially strong for the large-cap category. The difference between the R^2s in the higher and lower terciles ranges from 5% to 15%.[17] Interestingly, although high performing large cap funds seem to stray more from their benchmark, this behavior may largely be due to their ability to choose benchmarks that are more style-neutral, as documented earlier in Table 4.

A further examination of the differences in the style adherence between high and low return portfolios shows that in the majority of cases, high-return *value* funds have a *larger* slope coefficient on their own benchmark than low-return funds. This means that even though they distance themselves from their benchmarks, these funds are more intently emphasizing value investing than the low performers. In the case of high performing *growth* funds, we observe *smaller* slope coefficients on their own benchmarks. In conjunction with the results of Table 3, this implies a shift away from the portfolio's declared style and a greater emphasis placed on value investing.

The results in this section along with our prior findings suggest that the divergence from the benchmark does not necessarily come in the form of a *drastic* style shift, since the R^2s and the slope coefficients on the funds' own benchmarks are already high for both H and L funds, especially for large cap funds. However, there is evidence of a significant emphasis placed on value investing for the high-performing funds over the period 2002-2003. One possible explanation for this result is that these funds were looking to hedge against downside risk and got rewarded for doing it. In addition to our results from Table 4, the observed non-adherence to

[17] However, in the case of mid and small-cap portfolios, the effect is less perceptible as we observe low statistical significance for the t-test of R^2 differences. Since these funds have lower R^2s to begin with, they appear to follow a more active investment approach.

style is likely to correspond to a modest re-weighting of the index component securities, especially for large cap funds since they adopt style neutral benchmarks more frequently.

VI. Summary and Conclusions

In this article, we study the differences in the characteristics of value and growth style portfolios held by institutional money managers. We use the PSN database and study 4,754 non mutual fund portfolios from the large-mid-small capitalization spectrum over the period 2001-2003. We find that value and growth managers generally conform to their stated investment styles in terms of PE and PB ratios, betas and dividend yields. The observed difference among value and growth portfolios with respect to these variables is shown to be remarkably consistent across capitalizations and over time.

We find that value portfolios consistently outperform growth portfolios in terms of one-year and three-year mean monthly returns as well as on a risk-adjusted return basis. We document this result for years associated with both bull and bear markets. Our findings for this brief period are generally consistent with earlier literature (for example Chan, Jegadeesh, and Lakonishok (1995) and Chan and Lakonishok (2004)) showing that value *stocks* tend to outperform growth *stocks* over a wide range of historical periods and market conditions.[18]

We examine the debt-to-equity ratio and find that large and mid-cap value funds hold companies with significantly higher leverage than growth funds. This finding suggests that leverage risk may constitute an alternate risk-based explanation for the value premium that is consistent with the distress risk factor analyzed in Fama and French (1996) and with the approach developed by Petkova and Zhang (2003). Using a sorting procedure to examine the differences between high-return portfolios and low-return portfolios, we find that high

[18]Chan and Lakonishok (2004) further show that value stocks suffer less severely than growth stocks in poor performing markets and outperformed growth stocks over the expansion decade of the 1990s.

performing funds appear to have initially invested in lower PE and lower PB stocks and have tended to emphasize value investing strategies more than low performing funds.

Finally, we examine the extent to which portfolio managers adhere to their stated investment style. Focusing first on standardized style benchmarks, we find that in the majority of cases, high performing funds shifted their holdings towards value benchmarks. Examining each fund's adherence to its own benchmark, we observe large cap funds staying closer to their own benchmark than other capitalization classes. Based on regression estimates, we find that high-performing funds stray from their own benchmarks more than low performing funds. Because large cap funds are in general, managed closer to their benchmarks, our finding that high-performing large cap funds stray significantly more from their benchmarks can be explained partly by the fact that these funds frequently choose to use style-neutral benchmarks. Small and mid-cap funds on the other hand, are often managed more loosely around their benchmarks.

Several unanswered questions remain for future research. For example, after controlling for capitalization, is style-neutrality a desirable feature for fund managers, and does the managerial flexibility gained from using style-neutral benchmarks enhance return performance? Furthermore, it would be useful to examine the extent to which fund managers within specific investment styles, drift in terms of capitalization. Given the important differences in the performance of small, medium and large cap stocks, it is possible that capitalization drift, at least at the margin, may be an additional strategy that managers use to chase good performance.

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Table 1

Summary Statistics for the PSN Sample Portfolios

Means and standard deviations for key attributes of value and growth portfolios at year end 2001, 2002, and 2003. Portfolio size is assets under management, and Avg Mkt Cap is average equity market capitalization of firms whose stock is held in the portfolio, both measured in millions of dollars. Other variables are year-end price-to-earnings ratio (PE), price-to-book ratio (PB), dividend yield (DY) , beta, debt-to-equity ratio (DE), earnings growth rate (EG), return on equity (ROE), annual portfolio turnover (TO), 12-month and 3-year monthly mean return, and average portfolio return divided by return standard deviation (Ret/Risk). The number of observations reported is the average across variables.

	2001				2002				2003			
	Value		Growth		Value		Growth		Value		Growth	
Variables	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Large Capitalization												
Portfolio Size	1,966	4,333	1,900	5,286	1,543	3,292	1,456	3,694	2,184	5,143	1,851	4,475
Avg Mkt Cap	NA	NA	NA	NA	50,077	22,218	84,968	38,419	52,366	46,364	73,597	47,252
PE	18.8	5.0	29.8	8.3	15.0	3.7	20.8	4.1	17.0	4.7	24.0	5.5
PB	3.0	1.5	5.3	1.5	2.3	0.9	4.2	1.6	2.7	0.7	4.9	1.8
DY	1.8	0.5	0.8	0.5	2.3	0.6	0.9	0.3	1.9	0.5	0.8	0.3
Beta	0.9	0.3	1.1	0.2	0.9	0.1	1.1	0.6	0.9	0.1	1.1	0.2
DE	56.8	45.4	34.4	52.7	56.1	48.5	40.5	59.8	54.5	49.1	38.8	55.8
EG	12.3	5.9	19.2	11.9	9.2	6.0	16.5	22.2	8.0	4.5	14.5	5.8
ROE	17.4	4.6	20.0	5.3	16.0	4.4	19.9	4.9	16.0	4.4	19.0	5.6
TO	60.9	95.9	80.4	98.9	45.6	56.8	79.2	92.9	52.4	72.6	73.7	73.3
Return 12M	-0.7%	7.1%	-18.8%	9.3%	-17.7%	5.7%	-28.8%	7.8%	28.1%	4.5%	26.8%	6.4%
Return 3Y	6.3%	4.8%	2.0%	7.2%	-2.8%	5.9%	-17.9%	7.2%	2.5%	5.6%	-7.2%	6.0%
Ret./Risk 3Y	0.40	--	0.08	--	-0.15	--	-0.77	--	0.15	--	-0.35	--
Avg. No. Obs.	193		213		221		216		223		216	
Mid Capitalization												
Portfolio Size	681	1,239	890	1,625	599	975	606	1,212	876	1,631	873	2,063
Avg Mkt Cap	NA	NA	NA	NA	4,900	1,880	5,216	1,709	5,317	4,106	5,172	2,145
PE	17.2	5.0	33.7	11.1	13.6	2.4	22.2	4.9	16.6	2.9	25.3	5.3
PB	2.1	0.5	4.8	1.8	1.8	0.5	3.8	1.5	2.2	0.4	4.3	1.2
DY	1.4	0.7	0.3	0.3	1.7	0.8	0.4	0.2	1.5	0.8	0.3	0.2
Beta	0.9	0.2	1.2	0.3	0.9	0.2	1.1	0.2	0.9	0.2	1.1	0.2
DE	35.1	42.3	26.1	32.2	36.3	46.6	29.0	30.1	33.0	45.4	34.5	36.7
EG	10.9	4.9	24.4	6.4	9.6	4.7	19.2	5.2	9.1	6.9	18.8	5.1
ROE	13.3	4.3	16.0	8.5	12.1	4.3	15.3	4.4	12.2	4.3	14.2	6.9
TO	83.8	78.6	149.6	202.8	66.7	40.7	116.4	80.5	63.3	45.8	107.2	83.0
Return 12M	13.4%	9.5%	-18.3%	14.0%	-10.9%	7.7%	-27.9%	9.5%	33.2%	6.8%	32.6%	6.1%
Return 3Y	14.4%	6.6%	13.7%	7.7%	7.3%	6.0%	-11.8%	10.1%	11.1%	5.5%	-3.6%	9.5%
Ret./Risk 3Y	0.80	--	0.42	--	0.38	--	-0.39	--	0.63	--	-0.16	--
Avg. No. Obs.	63		96		78		109		79		107	
Small Capitalization												
Portfolio Size	707	1,122	708	1,103	701	1,163	482	724	958	1,935	681	1,007
Avg Mkt Cap	NA	NA	NA	NA	1,026	407	1,203	475	1,221	733	1,265	739
PE	18.2	6.4	33.7	14.6	14.1	2.9	21.2	6.0	18.3	4.7	27.5	9.0
PB	1.9	0.6	3.9	2.1	1.6	0.4	3.0	1.0	2.2	0.7	4.1	2.2
DY	1.2	0.8	0.3	0.3	1.4	0.7	0.3	0.3	1.1	0.6	0.2	0.3
Beta	0.9	0.2	1.2	0.3	0.9	0.2	1.1	0.2	0.9	0.2	1.2	0.7
DE	11.3	5.1	21.0	29.7	8.6	7.3	18.0	22.0	9.9	6.0	20.7	28.0
EG	11.8	4.9	25.6	9.7	10.8	4.3	20.6	7.8	10.8	3.7	18.4	8.6
ROE	34.1	46.0	11.3	6.9	34.6	41.8	12.6	6.2	36.3	48.7	11.0	6.3
TO	67.6	46.2	119.3	73.5	60.5	42.8	115.2	75.7	58.9	43.2	113.4	80.6
Return 12M	18.2%	8.8%	-5.9%	13.5%	-8.9%	9.3%	-29.2%	10.1%	38.1%	8.6%	41.6%	9.3%
Return 3Y	16.6%	6.9%	17.0%	11.0%	10.0%	5.4%	-10.5%	10.0%	15.6%	5.9%	1.7%	9.8%
Ret./Risk 3Y	0.89	--	0.47	--	0.50	--	-0.30	--	0.81	--	0.06	--
Avg. No. Obs.	129		143		142		149		145		154	

Table 2

Performance Differences Based on Portfolio Characteristics

In each year 2001 to 2003, Value and Growth samples are sorted into three equal size groups based on 3-prior-years average monthly portfolio returns. Only the two extreme categories high (H) and low (L) are reported. Mean values for average portfolio return divided by return standard deviation (Ret/Risk), price-to-earnings ratio (PE), price-to-book ratio (PB), dividend yield (DY), beta, and debt-to-equity ratio (DE) are reported for portfolio H and L mean returns. The number of observations reported is the average across variables. Italicized values are t-statistics for testing the difference between H and L group means. Boldface t-statistics indicate significance above the 90% level.

Year and	LargeCap								MidCap								SmallCap							
Category	Obs.	Return	Ret/Risk	PE	PB	DY	Beta	DE	Obs.	Return	Ret/Risk	PE	PB	DY	Beta	DE	Obs.	Return	Ret/Risk	PE	PB	DY	Beta	DE
L	57	0.2%	0.04	18.2	3.2	1.9	0.9	66	18	0.6%	0.16	15.0	2.2	1.5	0.9	17	38	0.8%	0.17	16.2	1.9	1.6	0.8	76
Value		***21.7***	***21.4***	*0.6*	*-1.5*	*-1.6*	*-0.1*	***-1.7***		***15.0***	***4.4***	***1.9***	*-1.2*	*-1.6*	*1.0*	***2.1***		***19.6***	***14.1***	***2.5***	*0.1*	***-4.4***	***2.8***	*-0.7*
H	60	1.0%	0.20	18.6	2.7	1.7	0.9	52	18	1.8%	0.32	19.2	1.9	1.1	0.9	49	43	2.0%	0.35	20.5	1.9	0.9	1.0	70
2001																								
L	63	-0.4%	-0.05	29.2	5.3	0.7	1.1	40	28	0.5%	0.07	32.4	4.8	0.4	1.2	16	42	0.6%	0.06	28.8	4.2	0.4	1.1	17
Growth		***19.1***	***23.7***	*0.6*	*0.2*	*0.4*	*0.2*	*0.1*		***14.9***	***9.6***	*0.3*	*-0.4*	*-1.0*	*0.4*	*1.1*		***16.5***	***12.7***	*1.4*	*-0.4*	***-2.0***	***2.7***	*0.2*
H	59	0.8%	0.10	30.2	5.4	0.8	1.1	41	29	1.8%	0.19	33.6	4.6	0.3	1.2	27	44	2.3%	0.21	33.3	4.0	0.2	1.3	19
L	66	-0.7%	-0.13	14.9	2.3	2.0	0.9	62	22	0.1%	0.01	13.8	2.0	1.5	0.9	28	42	0.4%	0.06	14.4	1.7	1.1	0.9	72
Value		***22.1***	***23.0***	*-0.8*	*-0.7*	***3.5***	*-1.1*	***-2.2***		***17.9***	***14.8***	*-0.9*	*-1.6*	*1.6*	*0.3*	*0.8*		***18.6***	***17.5***	*-0.9*	*-1.0*	***3.7***	***-2.3***	***-1.8***
H	66	0.3%	0.05	14.5	2.2	2.4	0.9	48	22	1.1%	0.21	13.1	1.7	2.0	0.9	42	48	1.3%	0.25	13.8	1.6	1.6	0.8	55
2002																								
L	67	-2.1%	-0.27	20.9	4.2	0.9	1.2	25	37	-1.8%	-0.17	23.9	3.9	0.3	1.1	23	43	-1.7%	-0.15	22.4	3.3	0.3	1.2	19
Growth		***24.4***	***14.4***	*-0.5*	*0.3*	***2.1***	*0.2*	***2.5***		***19.8***	***18.1***	***-2.1***	*-0.8*	*1.2*	***-2.2***	*1.0*		***18.0***	***13.8***	*-1.6*	***-3.6***	*1.4*	***-1.8***	*-0.8*
H	60	-0.8%	-0.15	20.5	4.3	1.0	1.2	69	30	-0.1%	0.0	21.2	3.7	0.4	1.0	32	44	0.0%	0.00	20.1	2.5	0.4	1.0	14
L	51	-0.3%	-0.07	16.8	2.8	1.9	0.9	66	20	0.4%	0.12	15.9	2.3	1.5	0.8	32	40	0.8%	0.15	19.2	2.4	1.1	0.9	60
Value		***19.1***	***19.4***	*0.5*	*-1.4*	*0.5*	*0.4*	***-2.0***		***13.6***	***4.7***	*0.4*	*-0.9*	*0.0*	***2.3***	*0.9*		***15.8***	***11.1***	*-1.4*	***-2.8***	*0.1*	*-0.1*	*0.2*
H	70	0.6%	0.12	17.2	2.6	1.9	0.9	43	25	1.4%	0.3	16.3	2.1	1.4	1.0	48	46	1.8%	0.31	17.5	2.0	1.1	0.9	62
2003																								
L	58	-1.1%	-0.18	25.7	4.8	0.7	1.2	26	26	-1.2%	-0.16	26.7	4.8	0.3	1.1	46	38	-0.8%	-0.10	29.6	4.5	0.2	1.2	24
Growth		***18.7***	***16.2***	***-2.6***	*0.8*	***2.2***	*-1.5*	***1.9***		***14.8***	***15.3***	*-1.7*	*-1.4*	*1.2*	*-0.4*	*-0.3*		***16.2***	***16.6***	***-1.8***	*-0.3*	*1.6*	*-0.1*	*-1.1*
H	64	-0.2%	-0.03	22.8	5.2	0.8	1.1	53	33	0.4%	0.06	24.1	4.2	0.4	1.0	41	46	0.9%	0.12	25.9	4.3	0.3	1.2	15

Table 3

Regression Results and Performance Measures using Russell Indices

In each year 2001 to 2003, Value and Growth samples are sorted into three equal size groups based on 3-prior-years average monthly portfolio returns. Only the two extreme categories high (H) and low (L) are reported. Mean values are reported for benchmark-adjusted returns (RusAR) using each portfolio's capitalization-matched Russell index, information ratio (IR) against the relevant Russell index, slope coefficients from regressing portfolio raw returns on both Russell Growth and Value index returns, and t-statistics for the regression coefficients. Italicized values are t-statistics for testing the difference between H and L groups. Boldface t-statistics indicate significance above the 90% level.

Year and	LargeCap							MidCap							SmallCap						
Category	Obs.	RusAR	IR	Slope G	Slope V	t-G	t-V	Obs.	RusAR	IR	Slope G	Slope V	t-G	t-V	Obs.	RusAR	IR	Slope G	Slope V	t-G	t-V
L	81	-0.1%	-0.07	0.12	0.82	3.4	14.2	28	0.0%	0.00	0.07	0.86	1.8	11.9	59	-0.1%	-0.06	0.03	0.92	0.2	8.1
Value		***21.6***	***20.1***	*-0.6*	*0.9*	***-2.8***	***-4.6***		***13.7***	***12.8***	*1.6*	*0.7*	*0.7*	***-2.3***		***19.5***	***17.8***	***2.6***	*-0.8*	***2.6***	***-4.0***
H	80	0.7%	0.29	0.10	0.85	1.6	10.1	24	1.1%	0.37	0.14	0.92	2.3	8.8	53	0.9%	0.27	0.13	0.88	1.5	5.6
2001																					
L	76	0.1%	0.04	0.84	0.12	21.0	1.8	39	-0.1%	-0.01	0.76	0.05	15.4	0.8	54	0.2%	0.06	0.83	0.19	10.4	1.2
Growth		***16.4***	***11.8***	*0.1*	***-2.0***	***-7.0***	*-1.2*		***14.1***	***12.0***	***2.8***	***-3.6***	***-1.9***	***-2.8***		***15.2***	***15.3***	***4.3***	***-4.8***	*0.8*	***-5.5***
H	84	1.1%	0.25	0.84	0.00	10.6	1.2	39	1.2%	0.23	0.96	-0.27	12.7	-0.9	54	1.9%	0.34	1.13	-0.19	11.0	-0.8
L	87	-0.4%	-0.17	0.22	0.73	5.0	11.9	29	-0.3%	-0.11	0.17	0.77	3.8	9.7	60	-0.4%	-0.11	0.16	0.81	2.0	5.9
Value		***22.1***	***28.2***	***-8.8***	***8.4***	***-10.7***	***2.2***		***17.9***	***16.3***	***-3.6***	***3.6***	***-3.8***	***2.9***		***18.6***	***19.7***	***-5.3***	***2.5***	***-5.4***	***3.4***
H	89	0.6%	0.30	0.00	0.99	-0.5	13.8	29	0.7%	0.33	0.04	0.98	0.8	13.3	60	0.6%	0.20	-0.02	0.94	-0.4	7.6
2002																					
L	88	-0.1%	-0.04	1.04	-0.09	19.4	-0.1	42	-0.5%	-0.10	1.02	-0.26	16.5	-1.4	59	-0.2%	-0.04	1.14	-0.11	12.5	-0.6
Growth		***24.4***	***20.3***	***-12.1***	***9.2***	***-7.6***	***10.1***		***19.8***	***17.9***	***-10.0***	***7.9***	***-4.1***	***7.9***		***18.0***	***20.9***	***-6.6***	***5.6***	***-5.5***	***7.1***
H	88	1.1%	0.29	0.53	0.33	8.6	4.4	42	1.3%	0.26	0.53	0.33	11.3	4.2	59	1.5%	0.34	0.74	0.22	8.6	1.6
L	67	-0.3%	-0.20	0.14	0.82	3.5	11.4	25	-0.2%	-0.10	0.09	0.81	1.6	9.4	54	-0.3%	-0.14	0.19	0.71	2.1	6.6
Value		***19.7***	***23.9***	***-3.2***	***5.1***	***-5.3***	*0.6*		***12.4***	***10.8***	*0.7*	***2.6***	*-0.1*	*-0.1*		***14.1***	***14.7***	*-0.4*	***2.7***	*-1.6*	*1.4*
H	86	0.4%	0.24	0.05	0.97	0.4	12.0	28	0.6%	0.29	0.12	0.97	1.5	9.4	60	0.6%	0.25	0.17	0.81	1.5	7.5
2003																					
L	71	-0.3%	-0.15	0.90	0.09	12.4	0.9	35	-0.7%	-0.24	0.84	0.06	12.4	0.5	49	-0.7%	-0.20	0.98	-0.06	9.2	-0.4
Growth		***16.5***	***17.3***	***-8.2***	***8.4***	***-3.9***	***8.7***		***16.3***	***15.0***	***-4.7***	***5.8***	***-2.7***	***6.7***		***17.0***	***20.0***	***-2.9***	***3.6***	***-2.5***	***4.4***
H	85	0.5%	0.16	0.54	0.37	8.8	4.1	41	0.6%	0.18	0.54	0.39	8.9	3.9	59	0.7%	0.22	0.75	0.18	7.4	1.5

Table 4

Performance Benchmarks Used by PSN Institutional Portfolios, 2002

Top 5 performance benchmarks used by PSN institutional equity portfolios as of December 31, 2002, listed by market capitalization and investment style category.		
Investment Style	**Benchmark**	**Relative Frequency**
Large Cap Growth	Russell 1000 Growth	51.9%
	Standard & Poor's 500	36.1%
	Barra/S&P 500 Growth	5.6%
	Russell 3000 Growth	1.5%
	Russell Top 200 Growth	1.1%
Large Cap Value	Russell 1000 Value	57.0%
	Standard & Poor's 500	23.6%
	Barra/S&P 500 Value	14.4%
	Russell 1000	0.8%
	Standard & Poor's Utility	0.8%
Mid Cap Growth	Russell Mid Cap Growth	56.7%
	Russell 2500 Growth	12.6%
	Standard & Poor's 400 Mid Cap	9.4%
	Russell Mid Cap	7.1%
	Russell 2000 Growth	4.7%
Mid Cap Value	Russell Mid Cap Value	48.3%
	Russell 2500 Value	12.4%
	Standard & Poor's 400 Mid Cap	10.1%
	Russell Mid Cap	11.2%
	Russell 2500	3.4%
Small Cap Growth	Russell 2000 Growth	78.8%
	Russell 2000	11.7%
	Russell 2500 Growth	5.6%
	Russell 2500	1.7%
	*	0.6%
Small Cap Value	Russell 2000 Value	68.0%
	Russell 2000	22.1%
	Russell 2500 Value	6.6%
	Standard & Poor's 600 Small Cap	1.7%
	Russell 2500	1.1%

* One portfolio each used the Russell 1000, a Barra/S&P 600 Growth blend, the NASDAQ Composite, and the Wilshire 5000 Mod Energy.

Table 5

Regression Results and Performance Measures using Own Benchmark

In each year 2001-2003, Value and Growth samples are sorted into three equal size groups based on 3-prior-years average monthly portfolio returns. Only the two extreme categories high (H) and low (L) are reported. Mean values are reported for own benchmark-adjusted returns (BAR), information ratios (IR), slope coefficients on benchmark, followed by t-statistics for the slope coefficient and the regression's R^2, for the years 2001 to 2003. Italicized values are t-statistics for testing the difference between H and L groups. Boldface t-values indicate significance above the 90% level.

Year and	LargeCap						MidCap						SmallCap					
Category	Obs.	BAR	IR	Slope	t- Slope	R^2	Obs.	BAR	IR	Slope	t- Slope	R^2	Obs.	BAR	IR	Slope	t- Slope	R^2
L	79	0.0%	-0.03	0.88	16.6	81%	27	-0.1%	-0.01	0.85	11.0	72%	59	0.0%	-0.03	0.81	9.9	66%
Value		***19.3***	***18.3***	*0.4*	***-5.1***	***-3.5***		***10.5***	***10.9***	***2.2***	*-1.5*	*-0.9*		***17.3***	***16.0***	***4.2***	***-2.6***	*-0.8*
H	81	0.7%	0.30	0.89	10.9	71%	25	1.0%	0.34	0.99	9.2	68%	54	1.0%	0.27	1.00	8.0	63%
2001																		
L	77	0.0%	0.00	0.96	22.6	90%	38	-0.1%	-0.01	0.87	15.0	79%	54	0.1%	0.04	0.95	14.6	81%
Growth		***16.3***	***13.2***	*1.1*	***-6.9***	***-9.3***		***12.4***	***9.7***	*1.5*	***-2.0***	*-0.8*		***15.2***	***14.3***	***3.5***	*-1.3*	*-0.1*
H	84	0.9%	0.23	1.00	11.2	72%	40	1.1%	0.22	0.96	12.2	77%	53	1.8%	0.33	1.13	13.2	81%
L	84	0.0%	0.02	0.91	18.1	86%	28	0.1%	0.02	0.85	10.9	74%	60	0.2%	0.01	0.89	10.3	71%
Value		***11.6***	***14.1***	*1.5*	***-2.5***	***-2.5***		***6.0***	***7.2***	***2.6***	***2.5***	***1.9***		***5.4***	***8.3***	*-0.2*	*0.0*	*0.0*
H	87	0.8%	0.33	0.94	15.0	81%	29	0.8%	0.33	1.01	13.8	81%	60	0.7%	0.22	0.88	10.3	71%
2002																		
L	86	-0.2%	-0.07	1.03	22.4	86%	42	-0.5%	-0.11	1.01	15.7	83%	59	-0.3%	-0.05	1.11	17.5	88%
Growth		***11.8***	***11.4***	*-5.7*	***-4.9***	***-3.8***		***10.0***	***8.6***	*-5.7*	*-0.5*	***-2.5***		***13.3***	***14.2***	***-4.9***	***-2.9***	***-3.7***
H	87	0.6%	0.19	0.85	13.3	79%	41	0.9%	0.19	0.74	14.5	75%	58	1.2%	0.29	0.89	14.2	80%
L	66	-0.1%	-0.04	0.93	24.0	90%	23	0.0%	-0.01	0.92	16.8	87%	54	-0.1%	-0.06	0.89	15.8	85%
Value		***21.5***	***21.0***	*1.6*	***-2.6***	***-2.3***		***7.5***	***7.5***	***2.2***	*-0.6*	*-0.9*		***10.5***	***11.6***	***2.8***	*0.9*	*0.1*
H	87	0.3%	0.08	0.97	18.8	87%	29	0.7%	0.30	1.06	15.7	84%	60	0.6%	0.27	1.01	16.8	85%
2003																		
L	72	-0.4%	-0.19	0.99	20.4	89%	37	-0.8%	-0.28	0.91	18.1	84%	50	-0.7%	-0.22	0.96	16.5	85%
Growth		***13.9***	***13.2***	*-3.1*	*-0.7*	*-1.3*		***12.9***	***13.2***	*-2.1*	*-1.2*	*0.2*		***14.4***	***17.0***	*-1.3*	*-0.2*	*0.1*
H	86	0.2%	0.08	0.87	19.3	87%	40	0.3%	0.11	0.80	16.0	85%	58	0.6%	0.19	0.90	16.3	85%