CAMBRIDGEASSOCIATES LLC U.S. MARKET COMMENTARY

## RELATIVE VALUATIONS: LESSTHAN MEETSTHE EYE

## March 2006

Eric Winig<br>Alice Lin

## Copyright © 2006 by Cambridge Associates LLC. All rights reserved.

This report may not be displayed, reproduced, distributed, transmitted, or used to create derivative works in any form, in whole or in portion, by any means, without written permission from Cambridge Associates LLC ("CA"). Copying of this publication is a violation of federal copyright laws ( 17 U.S.C. 101 et seq.). Violators of this copyright may be subject to liability for substantial monetary damages. The information and material published in this report are confidential and non-transferable. This means that authorized members may not disclose any information or material derived from this report to third parties, or use information or material from this report, without prior written authorization. An authorized member may disclose information or material from this report to its staff, trustees, or Investment Committee with the understanding that these individuals will treat it confidentially. Additionally, information from this report may be disclosed if disclosure is required by law or court order, but members are required to provide notice to CA reasonably in advance of such disclosure. This report is provided for informational purposes only. It is not intended to constitute an offer of securities of any of the issuers that are described in the report. This report is provided only to persons that CA believes to be "Accredited Investors" as that term is defined in Regulation D under the Securities Act of 1933. When applicable, investors should completely review all Fund offering materials before considering an investment. No part of this report is intended as a recommendation of any firm or any security. Factual information contained herein about investment firms and their returns which has not been independently verified has generally been collected from the firms themselves through the mail. CA can neither assure nor accept responsibility for accuracy, but substantial legal liability may apply to misrepresentations of results delivered through the mail. The CA manager universe statistics, including medians, are derived from CA's proprietary database covering investment managers. These universe statistics and rankings exclude managers that exclude cash from their reported total returns, and for calculations including any years from 1998 to the present, those managers with less than $\$ 50$ million in product assets. Returns for inactive (discontinued) managers are included if performance is available for the entire period measured. Performance results are generally gross of investment management fees. CA does not necessarily endorse or recommend the managers in this universe.
Cambridge Associates LLC is a Massachusetts limited liability company headquartered in Boston, MA with branch offices in Washington, DC and Menlo Park, CA. Cambridge Associates Limited is a Massachusetts limited liability company headquartered in Boston, MA and registered in England and Wales (No. FC022523, Branch No. BR005540). Cambridge Associates Limited also is registered to conduct business in Sydney, Australia (ARBD 109366 654). Cambridge Associates Asia Pte Ltd is a Singapore corporation (Registration No. 200101063G).

## Relative Valuations: Less Than Meets the Eye

Over the past several years, small caps have trounced large caps, while value stocks have far outdistanced growth stocks. Signals were clearly flashing at the turning point (and had been for some time leading up to the second quarter of 2000): most relative valuation metrics (for small cap versus large cap and value versus growth) reached extreme levels never seen before. The ratio of price-earnings ( $\mathrm{P} / \mathrm{E}$ ) multiples for value stocks relative to growth stocks, for example, bottomed out at 0.28 (value $\mathrm{P} / \mathrm{E}$ of 18.5 , compared to growth P/E of 67.3 ), roughly 3 standard deviations below its long-term mean. Since that point, not only have returns for small-cap and value stocks trounced those for large-cap and growth stocks, ${ }^{1}$ but relative valuations have returned to levels more in line with historical averages. The $\mathrm{P} / \mathrm{E}$ ratio of value stocks relative to growth, for example, is now 0.70 , compared to a post-1978 mean of 0.66 . Small caps relative to large caps, on the other hand, have rebounded from a relative $\mathrm{P} / \mathrm{E}$ of 0.79 in the third quarter of 2000 to 1.54 at the end of February, compared to a historical mean of 1.22.

Overall, small caps now look somewhat rich relative to large caps, while value looks slightly expensive relative to growth. However, the market as a whole looks overvalued and valuations continue to be relatively concentrated. For example, on March 31, 2000, near the market top and right around the starting point for value and small-cap dominance, valuation differentials across stocks were significant, with the ratio of cheapest to most expensive stocks (excluding outliers) of 24.2 to 1 , compared to only 8.0 to 1 today. ${ }^{2}$ Thus, while relative valuations suggest a small overweight to growth and large caps may be sensible, we would caution investors against expecting a comparable degree of outperformance in the growth and largecap sectors relative to the significant performance differential just experienced. We continue to believe investors should pay less attention to capitalization and style issues than to quality, which remains underpriced and is likely to outperform the broad market, particularly if the current uptrend reverses.

## Sizable Issues

The continued predictions of large-cap outperformance remind us of the old joke about the local weatherman, who is said to have predicted "ten of the last three snowstorms." While the small-cap rally is certainly extended and valuations have appreciated materially, these factors alone are not sufficient to cause a market turn. Further, valuation disparities have historically grown more significant, and relative rallies been of longer duration and greater magnitude, before turning points occurred. Still, according to Merrill Lynch, small caps are now a full standard deviation more expensive than large caps, based on a composite of price-to-book (P/B), price-to-sales, and P/E ratios, with data going back to 1980. Much of this appears to be concentrated in P/E ratios (Table A), but clearly small caps look expensive relative to large caps on a variety of measures. Further, small-cap earnings growth has slowed dramatically of late, particularly when compared to large caps, though earnings growth for both cap sectors is comparable on a year-over-year basis (Table B).

[^0]Nevertheless, large caps are not particularly cheap on an absolute basis (Table C). While P/E and P/B ratios are close to their post-1978 averages, these averages have been skewed upwards due to the generally high valuations persisting through a period that primarily covers the secular bull market extending from 1982-2000. The long-term historical average valuations for the S\&P 500-a P/E of roughly 15 and a P/B of about 2-suggest large caps remain overvalued. (We would also note that the recent surge in mid caps has pushed valuations on this sector of the market higher than those of mega caps [Table D]; thus, investors may wish to favor very large-cap stocks [e.g., Russell Top 200®] over mid- to large-cap [Russell 1000®]).

Overall, we continue to believe investors should overweight large caps (particularly mega caps), with an emphasis on quality, as these areas appear to offer the best risk-reward ratios on a relative basis, especially over the medium to long term. According to GMO, quality equities are as cheap as they have ever been relative to the S\&P 500 as a whole (data began in 1965). ${ }^{3}$

## Value: Always in Style?

Last July, GMO published a paper with the cheeky subtitle: Please Stop Listening to Your Value Managers. The point was that, while GMO remains a hard and fast believer in value investing, the overwhelming popularity of this style in recent years has pushed valuations of value stocks to levels where they no longer offer much (ahem) value. Indeed, since July value has continued to outperform: from August 1, 2005 through February 28, 2006, the Russell $3000 ®$ Value Index returned $6.8 \%$, versus $4.3 \%$ for the Russell 3000 ® Growth Index.

As would be expected, value now looks expensive relative to growth, although both styles look expensive on a stand-alone basis (Tables E through G). Indeed, while growth stock valuations have come down sharply in recent years, they remain extremely elevated on an historical basis. The current $\mathrm{P} / \mathrm{E}$ of growth stocks, for example, is 22.0 , a level that prior to 1996 generally marked a top for growth stocks. In other words, when the bubble years are excluded, absolute valuations of growth stocks look very rich indeed. Also, as mentioned above, the limited time frame for which we have valuations tends to skew the averages upwards; thus, investors should not expect growth stocks to revert to their average mean P/E of 23.2, nor does the post-1978 average P/E of 14.5 likely represent a reasonable long-term mean for value stocks. ${ }^{4}$ (Dow Jones style indices, which we feel are more representative of style, tell a similar story on valuations, but are even more constrained by data limitations as their history began in 1991.)

We would also caution that while growth stocks are slightly less expensive than value stocks, they should be expected to do worse in down markets due to their higher volatility. According to GMO, since 1960 growth stocks have had an annual volatility of $18.9 \%$, with a beta of about 1.1 to the overall market, while value stocks have shown annual volatility of $15.7 \%$ and a beta of 0.9 . Thus, if the secular bear market

[^1]resumes its downward trajectory (as we expect it eventually will), growth stocks in aggregate would be expected to do worse than value, although more defensive, high-quality stocks would be expected to outperform. Indeed, since 1978 the Russell $3000 ®$ Growth Index has underperformed its value counterpart in $70 \%$ of negative quarters for the overall index ( 21 out of 30 ). Further, growth lagged value by an average of $6.1 \%$ in quarters when it underperformed, and led by only $2.4 \%$ during quarters when it outperformed. Finally, we would note that earnings for value stocks have actually been growing faster than those of growth stocks of late, although both have been growing at a rapid pace (Table H). Over the past 12 months, year-over-year earnings growth for value stocks has averaged $19.9 \%$, versus $16.2 \%$ for growth stocks.

## The Bottom Line

Capitalization and style sectors of the market tend to move in cycles. Historically, the impetus for shifts in leadership has varied, based sometimes on changes in the economic climate, and other times on significant valuation disparities. For example, at year-end 1993, both growth and value stocks traded at approximately 1 standard deviation above their own historical means based on $\mathrm{P} / \mathrm{B}$ and $\mathrm{P} / \mathrm{E}$; thus, the valuation of growth relative to value was at its average historical premium. In other words, valuation analysis alone did not present an obvious buy signal for growth, even though the Russell $1000 ®$ Growth Index outperformed the Russell $1000 ®$ Value Index by an average of $8.2 \%$ per year over the subsequent six years. Instead, the driving force for the growth bull market was a number of qualitative factors, including falling interest rates, a rapid increase in capital spending, and rapid technological innovations. The overriding point is that history is dynamic and instructive rather than simply repetitive, and relative valuations, while helpful, should not be relied on exclusively to identify market turning points.

With value and small-cap stocks having outperformed growth and large-cap stocks, respectively, for nearly six years, a change in market leadership might seem to be at hand. However, despite these large performance gaps, and relative valuation measures that look somewhat stretched, we believe the relative opportunity in large-cap and growth stocks today to be somewhat limited. There is, however, a strong case to be made for buying quality. As noted above, quality looks quite cheap relative to the broad market, and should do well on a relative basis if risk aversion rises and/or liquidity is drained from the market.

## Table A

## RUSSELL EQUITY MARKET VALUATIONS: <br> 2000® RELATIVE TO TOP 200®

December 31, 1978 - February 28, 2006

## Price-to-Earnings



Price-to-Book Value


Dividend Yield (\%)


Return on Equity (\%)

$\square$
Source: Frank Russell Company.
Note: Return on equity is calculated by dividing the index's price-book ratio by its price-earnings ratio.
$C \mid A$
Table B
YEAR-OVER-YEAR EARNINGS GROWTH (\%) FOR THE RUSSELL 2000® INDEX AND RUSSELL TOP 200® INDEX

Sources: Frank Russell Company and Thomson Datastream.

Table C

## EQUITY MARKET VALUATIONS: <br> RUSSELL TOP 200® INDEX

December 31, 1978 - February 28, 2006


Source: Frank Russell Company.

Note: Return on equity is calculated by dividing the index's price-book ratio by its price-earnings ratio. 663 m

## Table D

## RUSSELL EQUITY MARKET VALUATIONS: <br> MIDCAP ${ }^{\circledR}$ RELATIVE TO TOP 200®

December 31, 1978 - February 28, 2006


Source: Frank Russell Company.

Note: Return on equity is calculated by dividing the index's price-book ratio by its price-earnings ratio.

## Table E

## RUSSELL EQUITY MARKET VALUATIONS: $3000{ }^{\circledR}$ VALUE RELATIVE TO 3000® GROWTH

March 31, 1979 - February 28, 2006

Price-to-Earnings


Price-to-Book Value


Dividend Yield (\%)


Return on Equity (\%)


$$
\begin{array}{ll}
\hline & \text { Mean } \\
\hline & \text { One Standard Deviation } \\
\hline
\end{array}
$$

Source: Frank Russell Company.

Note: Return on equity is calculated by dividing the index's price-book ratio by its price-earnings ratio.

## Table F

## EQUITY MARKET VALUATIONS: <br> RUSSELL 3000® GROWTH INDEX

March 31, 1979 - February 28, 2006


Source: Frank Russell Company.

Note: Return on equity is calculated by dividing the index's price-book ratio by its price-earnings ratio. 659m

## Table G

## EQUITY MARKET VALUATIONS: RUSSELL 3000® VALUE INDEX

## March 31, 1979 - February 28, 2006



- Mean

One Standard Deviation

Source: Frank Russell Company.

Note: Return on equity is calculated by dividing the index's price-book ratio by its price-earnings ratio. 660m
$C \mid A$
Table H
YEAR-OVER-YEAR EARNINGS GROWTH (\%) FOR THE RUSSELL 3000® GROWTH INDEX

Sources: Frank Russell Company and Thomson Datastream.


[^0]:    ${ }^{1}$ From June 2000 through February 2006, the Russell $2000 ®$ returned $51.9 \%$ (AACR of $7.7 \%$ ), versus - $15.9 \%$ (AACR of $-3.0 \%$ ) for the Russell Top $200 ®$, while the Russell $3000 ®$ Value Index returned $56.2 \%$ (AACR of $8.2 \%$ ), against $-35.0 \%$ (AACR of $-7.3 \%$ ) for its growth counterpart.
    ${ }^{2}$ The ratio of the 95 th percentile $P / E$ to the fifth percentile $P / E$ of stocks in the Dow Jones Total Market Index of roughly 1,600 stocks.

[^1]:    ${ }^{3}$ For more details on quality, please see our October 2005 U.S. Market Comment: The Appeal of Quality.
    ${ }^{4}$ The upward bias seems to be quite significant. For the S\&P 500, for example, the average P/E from 1925 to January 2006 was 15.8 , compared to 19.0 from 1979 to February 2006.

