

Russell Research

By: Mary Fjelstad, Senior Research Analyst, Russell Indexes
Dave Hintz, Head, U.S. Equity Research, CFA

MAY 2009

Surviving U.S. recessions with style

Do recessions have an impact on style? Conventional wisdom has it that women's hemlines are highly correlated with the economy, rising during economic expansions and lowering during contractions. Lipstick sales soar during recessions, and men's ties tend to narrow. What about style in the U.S. stock market? What happens to growth and value during U.S. recessions?

Growth and value have long been identified as major investment styles in the U.S. market. Value managers look for bargains: they purchase stocks that have low current market valuations relative to book value and other fundamental metrics—stocks whose values will, they expect, rise to be more in line with fundamental measures and thus produce attractive returns. Growth managers are willing to pay higher valuations for higher expected growth rates. They seek to beat the market by identifying stocks of companies that will sustain above-average levels of future growth. The Russell growth and value indexes track the performance of these two very different parts of the U.S. market and provide performance benchmarks for these two styles of investing.

In a recent Russell Research report, we identified notable performance differences between U.S. large and small cap market segments during recessionary periods. We examined the performance of the Russell 3000[®], Russell 1000[®] and Russell 2000[®] Indexes during specific periods before and after the last four recorded U.S. recessions ended. We found that on average the broad market, as measured by the Russell 3000[®] Index, led the overall economy out of recessions: the stock market improved prior to the economic trough. We also found that small cap stocks led the broader market: small caps on average outperformed large caps prior to the economic inflection point.¹

In this Russell Research Report, we test our belief that there has also been a discernable pattern in style performance during U.S. recessions. We confirm that, on average, value has underperformed relative to growth during periods of economic contraction. This relative underperformance has reversed almost immediately when the economy bottomed out and turned upward, and value has markedly outperformed growth in the early periods of economic expansion. This pattern has been strongest in the small cap segment of the market.

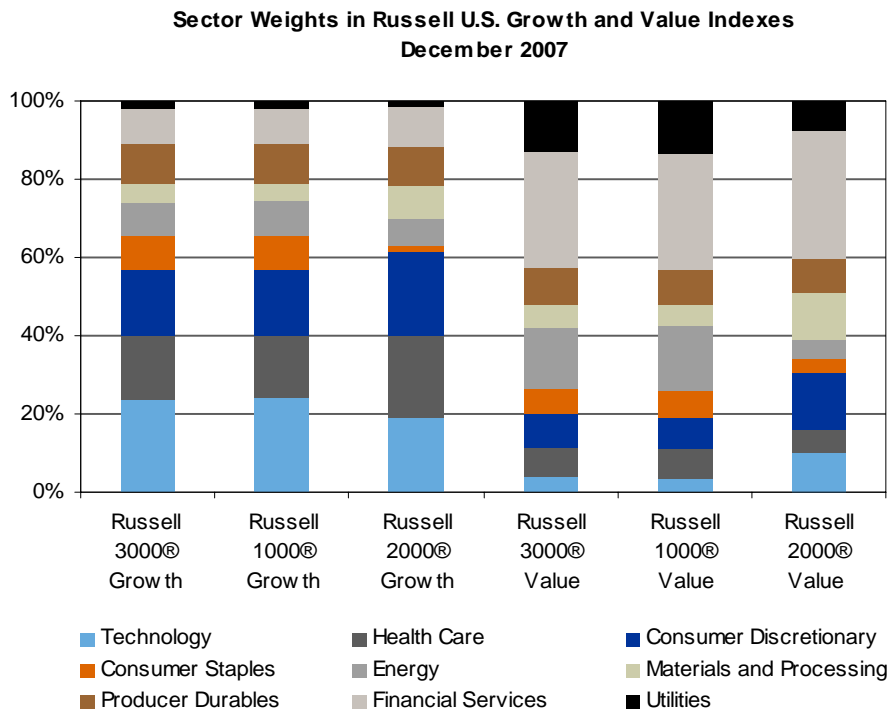
¹ Fjelstad, M. "Recessions and the U.S. Equity Market," [Russell Research](#), March 2009.

Value and growth during recessions: An overview

Why would returns to these two parts of the U.S. market be different during recessions? During periods of market crises and economic uncertainty, investors seek safety and liquidity and avoid riskier markets and assets. They may see value stocks as being riskier than growth stocks because the valuation metric itself signals that the market sees some kind of trouble: value stocks are usually cheap for a reason. Many growth companies have unique competitive advantages that allow their fundamentals to be less sensitive to economic and credit cycles. Research has demonstrated that the fundamentals of value companies—for example, earnings and dividend growth—worsen far more than those of growth companies during recessionary periods.²

Greater exposure to troubled sectors may also contribute to poor relative performance of value indexes during economic contractions. Figure 1 below is a snapshot of the sector exposures of the Russell 1000®, Russell 2000® and Russell 3000® Value and Growth Indexes as of December 2007, the beginning of the current recession. All growth indexes are on the left, and value indexes on the right to clearly demonstrate that growth and value differ in sector allocations regardless of cap range. Most pronounced is the heavy exposure of value indexes to the financial services sector, a sector that can be hit hard during periods of economic turmoil.

Figure 1



Indexes are unmanaged and cannot be invested in directly. Data is as of the date specified and is not indicative of future results. Current data may differ.

² Xing, Y. and Zhang, L. "Value versus Growth: Movements in Economic Fundamentals." Working Paper, University of Rochester, August 2004.

Value and growth during recessions: Performance

According to the National Bureau of Economic Research (NBER), the U.S. economy has experienced four complete recessionary periods since 1980. We are currently in the throes of a fifth, which began in December 2007.³ Table 1, below, shows the start and end dates as well as the durations of these recessions.

Table 1

Peak (Recession Begins)	Trough (Recession Ends)	Length of Recession
January 1980	July 1980	6 months
July 1981	November 1982	16 months
July 1990	March 1991	8 months
March 2001	November 2001	8 months
December 2007		

For each of these recessions, we simulate the returns investors would have experienced if they had invested for a 12-month period in the value premium (the value index minus the growth index return) at 12, 9, 6 and 3 months before and after the economy bottomed, as well as at the inflection point (the trough) itself.⁴ We do this for the broad market (the Russell 3000[®]), the large cap market (the Russell 1000[®]) and the small cap market (the Russell 2000[®]). All simulations demonstrate that on average, value has underperformed relative to growth prior to trough. This relationship undergoes a strong reversal as soon as the economy begins to improve.

³ See www.nber.org for U.S. business cycle dating

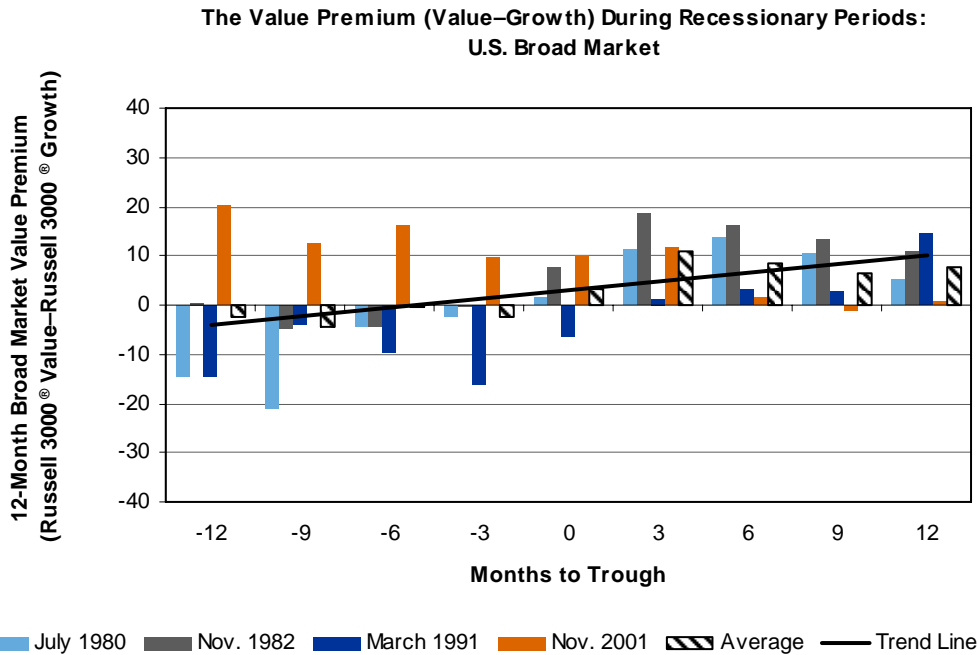
⁴ The authors thank Ernie Ankrim for defining this simulation approach.

The broad market: The Russell 3000® Index

Figure 2 plots performance of the broad market value premium for each of the four recessionary periods as well as the average for investing at each time point. For example, the investor who allocated to the value premium 12 months prior to the trough for the recession that bottomed in July 1980 first invested in August of 1979. Holding that portfolio (the Russell 3000® Value Index return minus the Russell 3000® Growth Index return) for twelve months—through July 1980—earned a return of -14.65%. That return is represented by the bar furthest to the left in the chart, the July 1980 return for an investment at -12 Months to Trough. If this investor had the same strategy—investing twelve months prior to trough and holding until the economy bottomed—across all four recessions, the average return (the striped bar at the -12 investing point) would have been -2.24%. An investor buying in at the inflection point itself (0 months to trough) for our first recession, July 1980, would have held the strategy through June of 1981, and would have earned 1.52%. The average return for the investor coming in at the trough across all four recessions would have been 3.22%.

The average return over all four recessions (again, represented by the striped bars) turns positive at Time 0, the inflection point identified by the NBER. On average, those investing three months after the economy bottomed earned the greatest premium—10.7%. The trend line depicts how this average return across all four recessions changed with the time of initial investment. The trend line is upward sloping: value underperformed growth (the premium is negative) prior to trough and then turned positive as the economy expanded.

Figure 2

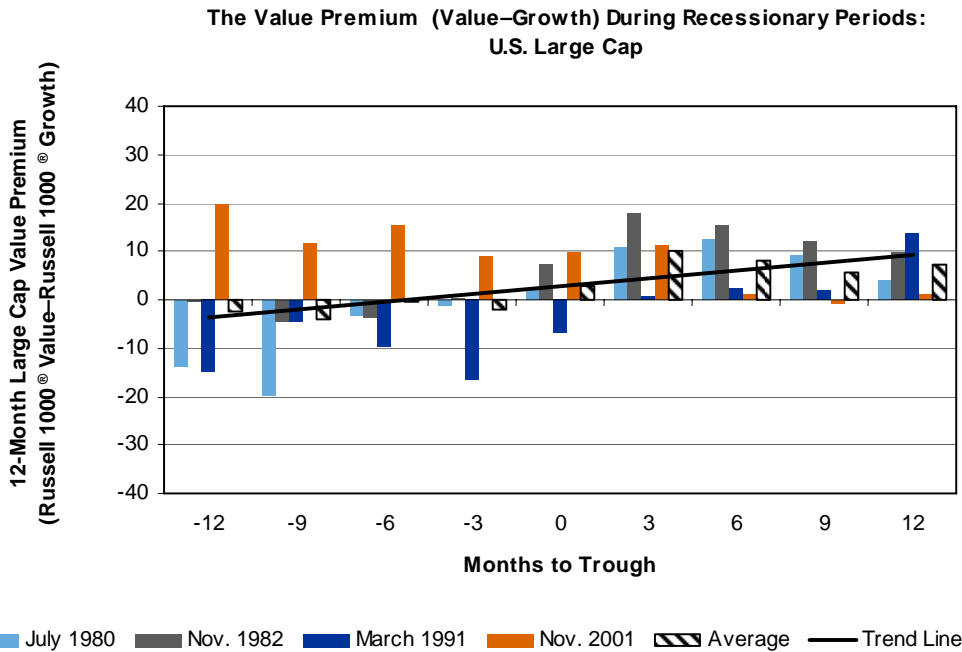


Indexes are unmanaged and cannot be invested in directly. Past performance is not indicative of future results.

Large cap: The Russell 1000® Index

Figure 3 shows the same analysis for the large cap part of the U.S. equity market. The pattern of returns is the same as for the broad market: the value premium was on average negative during the period of economic contraction, and at the turning point—the trough—it became positive. The change in style leadership happened swiftly, with the investor who came in at three months after the economy bottomed achieving the highest average return: 10.2%, slightly lower than what we observed in the broad market. Value continued to outperform growth on average for investors entering 6, 9 and 12 months after trough.

Figure 3

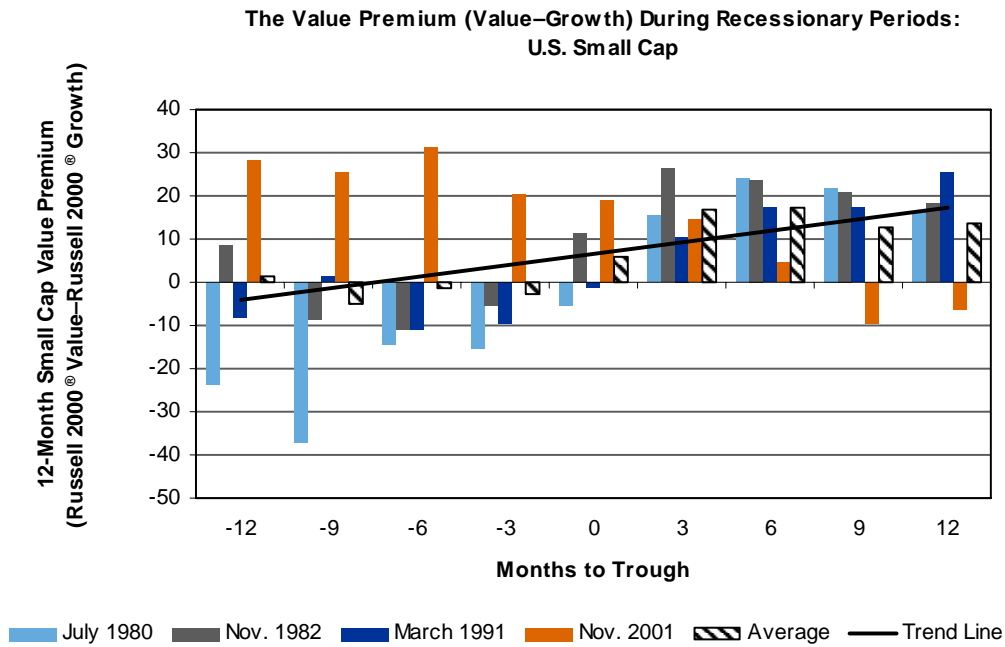


Indexes are unmanaged and cannot be invested in directly. Past performance is not indicative of future results.

Small cap: The Russell 2000® Index

The small cap results (see Figure 4 below) follow the broad and large cap market patterns but with the rewards to value notably increased at all investing entry points after trough. Investors who entered at 3 and 6 months after the economy turned earned average value premia of 16.7% and 17.4% respectively over the ensuing 12-month periods. Even at entry points of +9 and +12, the average 12-month premia—12.7% and 13.5%—were greater than any experienced in the broad and large cap markets.

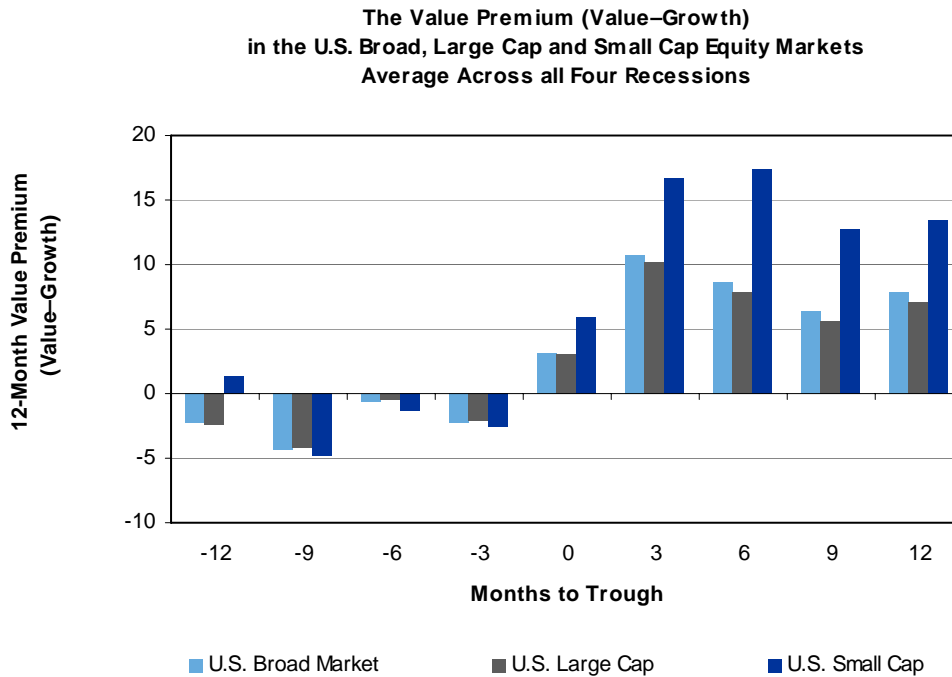
Figure 4



Indexes are unmanaged and cannot be invested in directly. Past performance is not indicative of future results.

The more extreme performance of value versus growth in the small cap segment of the market as the economy turned upward is the focus of Figure 5, where we compare the average value premia at each investing entry point across the broad, large cap and small cap markets.

Figure 5



Indexes are unmanaged and cannot be invested in directly. Past performance is not indicative of future results.

The 2001 recession

In our March 2009 paper, “Recessions and the U.S. Equity market,” we reported that the 2001 recession followed a different pattern than the other three recessions in our sample. We see from Figures 2, 3, and 4 that the 2001 recession is anomalous for rewards to value and growth as well. In 2001, value outperformed growth for all investing entry points until nine months after trough. The 2001 recession was unusual for many reasons. First, growth stocks may have become so expensive due to the tech bubble prior to the 2001 recession that they were actually riskier than value stocks during that recession. Second, the 2001 downturn presented serious dating challenges for the NBER, which identified the end of the recession only after a 20-month lag, and controversy continues about the dating of the peak and trough. Nevertheless, it is important to remember that all recessions are not alike, and that although on average we see a consistent pattern across our sample and for 3 of these 4 recessions, past performance is no guarantee of future investment outcomes.

For more information about Russell Indexes call us or visit www.russell.com/indexes.
Americas: +1-877-503-6437; Asia: +81-3-5772-8385; EMEA: +44-0-20-7024-6600

Disclosures

Russell Investments is a Washington, USA corporation, which operates through subsidiaries worldwide and is a subsidiary of The Northwestern Mutual Life Insurance Company.

Russell Investments is the owner of the trademarks, service marks and copyrights related to its respective indexes.

Indexes are unmanaged and cannot be invested in directly. Past performance is not indicative of future results.

The Russell 3000[®] Index measures the performance of the largest 3000 U.S. companies representing approximately 98% of the investable U.S. equity market.

The Russell 3000[®] Growth Index measures the performance of the broad growth segment of the U.S. equity universe. It includes those Russell 3000 companies with higher price-to-book ratios and higher forecasted growth values.

The Russell 3000[®] Value Index measures the performance of the broad value segment of the U.S. equity universe. It includes those Russell 3000 companies with lower price-to-book ratios and lower forecasted growth values.

The Russell 1000[®] Index measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000[®] Index and includes approximately 1000 of the largest securities based on a combination of their market cap and current index membership. The Russell 1000 represents approximately 92% of the U.S. market.

The Russell 1000[®] Growth Index measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

The Russell 1000[®] Value Index measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values.

The Russell 2000[®] Index measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 Index is a subset of the Russell 3000[®] Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership.

The Russell 2000[®] Growth Index measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000 companies with higher price-to-value ratios and higher forecasted growth values.

The Russell 2000[®] Value Index measures the performance of small-cap value segment of the U.S. equity universe. It includes those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

This is not an offer, solicitation or recommendation to purchase any security or the services of any organization.

Copyright © Russell Investments 2009. All rights reserved. This material is proprietary and may not be reproduced, transferred or distributed in any form without prior written permission from Russell Investments. It is delivered on an "as is" basis without warranty.

First use: May 2009.

CORP-5707

USI-3899