



C A M B R I D G E A S S O C I A T E S L L C

## U.S. MARKET COMMENTARY

# U.S. EQUITY STYLE PERFORMANCE: IT'S ALL RELATIVE

November 2008

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## U.S. Equity Style Performance: It's All Relative

Given the dramatic and relentless decline in U.S. equities since late September, investors may find little comfort in the relative performance of different segments of the stock market. With the broad market down some 45% year-to-date and no clear “winners” amid the bloodletting, focusing on which stocks lost the least may seem trite.

Nevertheless, since late September we have seen a sharp shift in relative performance toward high-quality and mega-cap stocks, while growth stocks have held up better than value, especially in November. This shift reverses the summer’s trend of strong small-cap and value stock (and especially small-cap value stock) performance, which wrong-footed many managers and frustrated those investors that chose the opposite tilt—focusing on quality and avoiding junk.

Below we review the recent divergence in market leadership while trying to assess why small caps and value bounced so sharply in the middle of the year and whether their recent underperformance means it is time to think about shifting from a high-quality, mega-cap growth bias to a small-cap, value bias. In short, we judge it is too early to switch from a defensive high-quality portfolio at this juncture. Relative valuations are not yet compelling enough to suggest otherwise, especially as this bear market may have more to run and the headwinds against small caps and value may continue to blow.

### A Rally in Junk?

After lagging behind small caps and value stocks for nearly seven years, in late 2006 and early 2007 mega caps and growth stocks began to outperform the broader market. While such a shift is common in the later stages of a bull market (as market breadth begins to narrow), this shift also occurred amid very low valuations for mega caps and growth compared to small caps and value, respectively. We noted at the time that valuations made these equity segments relatively attractive, despite the general level of overvaluation in the market.<sup>1</sup> We also felt that such stocks were inherently more defensive and contained a higher-quality bias, which should offer some shelter in a difficult market environment.

Yet as Table A illustrates, this relative performance quickly downshifted in early 2008, with large caps and growth underperforming sharply over the summer and early fall, just as market conditions were becoming increasingly volatile, forcing some investors to question whether a mega-cap growth bias made sense. For example, the mega-cap Russell Top 200® Index returned -7.9% over the third quarter, compared to -1.1% for the small-cap Russell 2000® Index; while large-cap growth returned -11.1%, compared to -6.1% for value. The growth/value differential was even wider among small caps, with the Russell 2000® Value Index returning 5.0% for the quarter, while the Russell 2000® Growth Index returned -7.0%.

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<sup>1</sup> Please see our August 2006, March 2007, and June 2007 Market Commentaries *The Unloved Mega Caps, It's Getting Late—Risks Are Rising*, and *U.S. Value Stocks Moving Out of the Markdown Aisle*.

So what drove the divergence? While the market can often move in mysterious ways, we think the action seen over the summer was driven more by sector composition, short-covering, and a need for liquidity rather than by a shift in fundamentals in favor of small caps and value. Specifically, the abrupt reversal in financial shares (itself largely driven by short-covering following the nationalization of Fannie Mae and Freddie Mac in mid-July) favored value at the expense of growth, while small caps (and especially small-cap value) were well positioned to benefit from the general rise in financial stocks and the sharp tumble in energy shares over the summer. Our analysis also shows that the best-performing stocks over the third quarter were the smallest, most expensive, and among the lowest earning stocks in the universe—precisely the types of stocks to be shorted and underweighted by active fundamental managers—while large caps, the most liquid segment of the market, bore the brunt of selling in September and early October because they could be easily sold to raise cash or meet margin calls by extended market participants. (For a more detailed description of what drove third quarter performance, see the Appendix at the end of this commentary and Tables J–N.)

### **Quality Strikes Back**

While third quarter performance was due partly to a technically driven rally in junk, fourth quarter market action to date shows a resumed flight to quality. However, this news may provide cold comfort to investors given the scale of overall losses. For example, by November 20, small caps had lost over 40% of their value since the end of September (yes, 40% in less than two months!), compared to only 29% for mega caps. If anything, the relative performance differential has been accelerating, with mega caps outperforming small caps by 5.0 percentage points in October, and another 8.1 percentage points by late November.

Size differentials clearly have been important in the fourth quarter, but growth and value returns have been fairly even. The Russell 3000® Value Index is down nearly 38% since September, compared to 36% for the Russell 3000® Growth Index. Most of growth's outperformance occurred in November, bringing year-to-date returns between growth and value to neutral. However, the simplistic construction of the Russell Growth/Value indices may not be reflective of active manager portfolios or of the true differentiation between styles.<sup>2</sup> Indeed, based on the more recently developed S&P 500/Citigroup Pure Growth and Pure Value indices, whose selection and weighting process is more comparable to that used by many active style managers,<sup>3</sup> growth has solidly outperformed value by 9 percentage points since September.

Mega-cap growth, meanwhile, has been the best-performing segment so far in fourth quarter (although it has lost 32%), and is showing increasing relative strength versus the broad market (Table B).

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<sup>2</sup> The Russell style methodology is based on a simple model that ranks stocks based on price-to-book (value) and expected forward earnings growth to form a composite value score. Those stocks with the highest value score are placed in the Value Index, and those with the lowest scores placed into the Growth Index. Stocks that fall in the middle of the distribution (showing both value and growth characteristics) are then given relative weights in both the Growth and Value indices, so that no stock in the overall parent index (the Russell 1000® Index) is excluded from the style indices. In other words, there are value stocks in the growth index, and growth stocks in the value index.

<sup>3</sup> These indices include only constituents that are highly ranked based on their style attributes. Index constituents are then weighted not by market capitalization, but by each stock's style score.

Indeed, U.S. quality stocks that meet our quality screens<sup>4</sup> held up well in the three months ending October 31, generating an equally weighted average return of -19.6%, compared to -24.3% for the Russell 3000® Index. Over the 12 months ending October 31, this equally weighted quality universe has returned -27.1%, compared to -36.6% for the broader market.

Based on the trouncing of small caps relative to the broader market and the recent relative outperformance of high-quality mega-cap stocks, is now the time to tilt portfolios back in favor of small caps and value stocks? We judge it is not yet time given the following factors in the current environment:

- **High volatility and risk aversion.** Small caps tend to do worse than large caps when risk aversion and volatility are high and/or rising. To the extent that markets remain volatile in the coming months, the environment for large caps should remain favorable. With that said, small caps have historically been a high-beta play, and therefore will likely lead any tentative market rally. While history shows that small caps often lead following a market bottom, it is unclear whether we have reached such a major turning point.
- **Extremely tight credit conditions.** This factor is a major headwind for small-cap stocks, as these companies tend to be much more reliant on bank lending and the high-yield bond market than are companies with large capitalizations. Indeed, it could be argued that the lax credit conditions of the past few years flattered the fundamentals of the small-cap space, as marginal companies were able to obtain low-cost financing and to roll over debts instead of paying them off. Although short-term liquidity markets have improved, corporate credit market conditions continue to deteriorate while banks hoard cash and tighten lending requirements. There is a clear correlation between high-yield credit spreads and small-cap relative performance and until corporate credit begins to flow again and on less onerous terms, we would advise staying away from small caps.
- **Worsening domestic economic conditions.** Small-cap stocks are much more geared to the domestic economy than large-cap stocks, and especially mega-cap stocks, which derive nearly one-third of their earnings from overseas. Some market observers have argued that concerns about the impact on large-cap profits of a rising dollar and falling global growth expectations contributed to the relative underperformance of large-cap growth over the summer. However, we see the diversified exposure of mega caps as a positive, given that domestic demand in the United States is poised to be lackluster for some time. Also, whatever is bad for large-cap profits tends to be bad for small-cap earnings as well, as large-cap firms tend to be the major customers of smaller firms (suppliers). A retrenchment across both corporate and main street America may represent a double squeeze on smaller firms.
- **Earnings cycle headwinds.** While all stocks face the headwind of lower earnings going forward, expectations still seem higher for both small caps and value stocks. Even by mid-November, bottom-up consensus earnings expectations still called for 17% earnings growth for the Russell 2000® Index, compared to 13% for the S&P 500. Such expectations seem overly optimistic given the

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<sup>4</sup> Please see our May 2008 Market Commentary *Quality: A Closer Look*.

economic environment ahead, especially given that earnings revision ratios (number of companies experiencing earnings upgrades relative to downgrades) are worsening for small caps relative to large caps, while for the first time in four quarters small-cap earnings growth is coming at in less than that of large caps. At some point the market will begin paying up for earnings growth, something we still think is likely to happen next year as earnings continue to come in lower. At that time we may see a further widening of growth and value performance, as those companies that produce steady, quality earnings in a difficult environment (and pay dividends) are rewarded.

- **Index concentration in financials.** It is important to realize that the composition of “growth” and “value” changes over time, as do the types of companies that dominate certain sectors. Today “value” has become increasingly a financial and energy play, with those two sectors accounting for 26% and 16%, respectively, of the Russell 1000® Value Index at the end of October (Table C). Small-cap value is an even more concentrated bet on financials, which account for 38% of the Russell 2000® Value Index, with consumer discretionary making up another 11%. Thus “value” is likely to outperform whenever financial and energy stocks rally. However, given the massive uncertainties facing the financial sector in the form of increased regulation and government intervention, lower leverage and return on equity (ROE), and possibly further shareholder dilution, it is hard to determine how much “value” is there in terms of future earnings power.<sup>5</sup> From a long-term standpoint, this may no longer be a dynamic sector of the economy. While “value” stocks by definition are unpopular and unloved, some stocks are cheap for a reason!

Large-cap growth is still heavily weighted to technology stocks at 32%, but the tech stocks of today are much different than those of the late 1990s, and include some of the most innovative companies in the world. Importantly, the traditional defensive sectors of consumer staples (17.8%) and health care (15.4%) offer a counterbalance to big-cap technology in the mega-cap growth space. Thus, we view the opportunity set of growth managers to be much richer today than value, especially as the lines between “growth” and “value” are blurred by the fact that companies across the stock market appear cheap.

- **Neutral relative valuations.** We would be more constructive on small caps and value stocks if all of the factors above were already in the price. Tables D–I show relative valuations across capitalization and style segments based on ROE-adjusted price-earnings (P/E) ratios (which normalize for the level of ROE across the cycle) and absolute valuations based on other normalized measures. While relative valuations between small and large caps have narrowed rapidly, at the end of October mega caps and large caps still traded slightly below their historical average relative valuation to small caps. This gap has certainly closed over November, but a compelling valuation case for overweighting small caps at this time is still lacking. Indeed, some *absolute* P/E measures (especially those based on trend-line and real ten-year average earnings) show small caps to still be somewhat expensive, while according to Merrill Lynch, at mid-November the forward P/E ratio of the Russell 2000® Index relative to the Russell 1000® Index stood at 1.1, compared to a long-term trend of 0.3. Merrill

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<sup>5</sup> Please see our July 2008 Market Commentary *U.S. Financials: Catch a Falling Knife?*

notes that at beginning of small-cap outperformance cycles, small caps have usually traded at a discount to large caps, something our data confirm (Table E).

The same holds for growth versus value. Indeed, by the summer it seemed that growth and value relative valuations had returned to historical norms. Yet given the sharp relative underperformance over third quarter, at the end of October growth again appeared cheap compared to value, with the ratio of Russell 1000® Growth Index ROE-adjusted P/Es to those of the Russell 1000® Value Index at 0.9 standard deviation below average. Given the marginal outperformance of growth thus far in the fourth quarter, we doubt this has narrowed much. Furthermore, growth appears to be fundamentally undervalued relative to value based on market expectations. At the end of October, the ratio of forward P/Es shows that value stocks were priced greater than 1 standard deviation above average relative to growth stocks, largely on hopes that financial sector profits will rebound next year (Table E). Analysis by Morgan Stanley shows that both the highest quintile of stocks in the S&P 500, based on long-term consensus forward earnings growth estimates, and the lowest quintile trade at the same average forward P/E ratio of roughly 9.2. In other words, investors are refusing to pay any type of premium for growth. While this somewhat reflects skepticism over current analyst forecasts, it is nevertheless striking that the market is not differentiating at all between the highest and lowest growth companies. The only other time since 1990 when the spread between the highest and lowest growth quartiles has been this narrow was mid-2007, from which growth subsequently re-rated.

Thus, at this time, it is hard to make a relative valuation case in favor of any segment of the market, except to say that growth stocks still seem to trade at a meaningful discount relative to value. Historically, the time to appreciably overweight one segment of the market is when valuations have reached some sort of extreme, the likes of which we do not currently see. We would argue that coming on the heels of extreme relative valuations for small-cap and value stocks in recent years, these valuations may need to overshoot on the downside before they are clearly attractive.

## **Conclusion**

Over October and November we have seen a shift in market leadership back toward mega-cap and high-quality growth stocks, while small caps and financials continued to be thrashed as the market as a whole has taken a phenomenal beating.

At this point in the cycle and especially following such a sharp decline, the outlook for large caps versus small caps and growth versus value is not clear cut. As a result of the “flight to quality” seen over the past two months, valuations are largely neutral between style segments. Our preference is to remain defensively positioned among high-quality mega-cap growth stocks, which are better positioned to survive what seems likely to be a dismal period of economic growth and a volatile market environment in which investors are increasingly risk adverse. After seven years of near continuous quality and mega-cap growth underperformance, this new trend may have more to run.

Indeed, in our opinion the brief period of small-cap, and particularly small-cap value, outperformance over the summer was largely technically driven, rather than a fundamental shift in the outlook/drivers of relative return. However, it was also symptomatic of the fact that whenever risk aversion subsides, if even temporarily, the subsequent rally will likely be driven by small caps and financial stocks, as these remain the most geared to signs of an economic recovery.

Therefore, those investors that wish to add additional beta to the portfolio in the belief that market conditions may soon stabilize may want to increase small cap and value exposure. Yet we think the bear market may have more to growl, and current valuations do not offer enough of a discount to take the plunge. Thus fundamentals still point to strong headwinds for small caps, while a significant tilt to value stocks implies a positive view for financial and energy stocks, which both face increasing political headwinds and uncertainty. Growth stocks, meanwhile, seem just as bruised as value, despite arguably less uncertain prospects.

## Appendix

### WHAT DROVE THIRD QUARTER PERFORMANCE?

#### Sector Composition

In large part, the sharp reversal in the fortunes of energy and financial stocks explains the relative performance of equity market segments. Over the third quarter energy stocks fell sharply alongside the price of oil and other commodities as it became clear global growth was indeed slowing. At the same time, financial stocks were the second-best-performing sector over the third quarter, despite the tumultuous events of the summer and the collapse of Lehman Brothers in September, falling only 5% in September and returning 3% for the quarter.

Heading into the third quarter, small caps were overweight financials at 18% relative to 14% for large caps, and substantially underweight energy at 9% compared to nearly 16% for large caps. Thus small caps were well positioned to benefit from the general rise in financial stocks and the sharp tumble in energy shares.

This overweight to financials was especially important for small-cap value returns, as financials made up 33% of the Russell 2000® Value Index on June 30, with energy accounting for only 6%. Thus despite tumbling 31%, the energy sector only detracted 1.7 percentage points from the index's 5.0% return, while financials effectively accounted for the entire quarter's performance, returning 18.0% and contributing 5.7 percentage points. Conversely, small-cap growth had minimal exposure to financials and was overweight high-flying energy shares heading into the third quarter, and therefore drastically underperformed. Furthermore, small-cap financials were arguably under less pressure, especially in September, as attention was focused on the huge systemic risks facing the mega-cap banks, insurers, and those institutions formerly known as investment banks.

Among large and mega caps, the story was similar; however, unlike in the small-cap space, large-cap value tends to be heavily weighted in both financials and energy stocks (each accounting for around 20% of the Russell 1000® Value Index) and thus failed to post positive returns for the quarter, as the gains from financials were unable to offset the losses from energy and other sectors. Large-cap growth, meanwhile, was destined to underperform due to its mere 4% exposure to financials and its nearly 30% weight in technology shares, which fell in September.

#### Short-Covering

While short-interest (the number of shares held short relative to the amount of shares outstanding) had been steadily rising since the beginning of the year across the equity market, it sharply fell over the third quarter, which we think contributed to the divergent market action earlier in the quarter. Short-covering especially benefited financial shares, as traders moved quickly to cover positions amid the brief rally



following the nationalization of the Fannie Mae and Freddie Mac in mid-July and general confusion as to the regulatory crackdown against naked short-selling (which culminated in September with an outright ban in short selling of nearly 1,000 financial-related stocks). Our bottom-up data show that by the end of June, 13.7% of the small-cap S&P 600 constituents were held short, compared to only 3.6% for the S&P 500 and only 2.3% for the mega-cap S&P 100, with financial and consumer discretionary shares the most widely shorted sectors overall. By the end of the quarter S&P 600 short-interest fell to 11.6% (a 16% decline), meaning over 2.0% of shares outstanding had to be covered, compared to only 0.7% for the S&P 500.

Tables J–N further confirm our theories about performance across the capitalization and style segments. We divided each style segment (mega caps, large-cap growth, small-cap value, etc.) into quintiles based on capitalization size, valuation (trailing price-earnings ratios), return on equity (ROE, a rough quality proxy), and forward consensus long-term (i.e., three to five years) earnings growth estimates. Our analysis shows that the best-performing stocks over the third quarter were typically the smallest, most expensive, second lowest earning stocks in the universe—precisely the types of stocks to be shorted and underweighted by active fundamental managers. Furthermore, among value stocks lower ROE quintiles on average performed better than the highest ROE quintile. In other words, what we saw over the third quarter, especially in small-cap value, was a junk rally. Indeed, despite the strong 5% return of the Russell 2000® Value Index over the third quarter, according to data from Merrill Lynch the “average” active small-cap value manager returned -2%, while only a dismal 5% of active managers beat the index for the quarter.

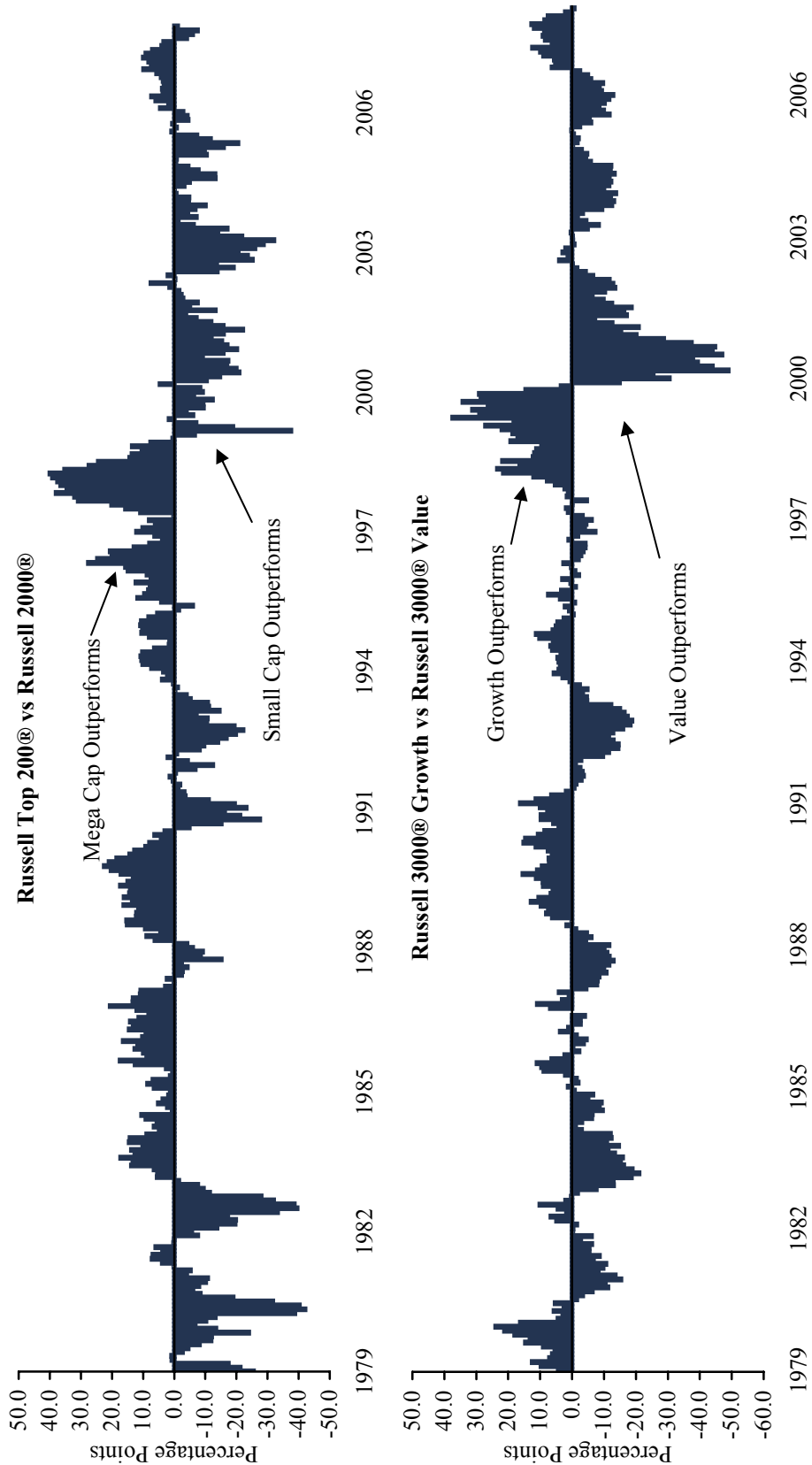
## Liquidity

The bear market rally of July and August aside, why did mega-cap stocks underperform amid the turmoil in September, right when you would expect them hold up better than small caps? We think large caps, the most liquid segment of the market, bore the brunt of selling in September and early October because they could be easily sold to raise cash or meet margin calls by extended market participants. Breaking the broad Russell 3000® Index into liquidity quintiles (based on 52-week average daily volume) confirms this: the most liquid quintile of stocks (an average daily volume of over 7.0 million shares) declined by an average 13.7% in September, compared to a decline of 2.2% for the least liquid stocks (with an average daily volume of 0.09 million). Furthermore, the most liquid quintile accounted for 78% of market capitalization, while the bottom quintile amounted to only 2%.

Table A

**STYLE PERFORMANCE  
ROLLING 12-MONTH RETURN DIFFERENTIAL**

January 1, 1979 – October 31, 2008



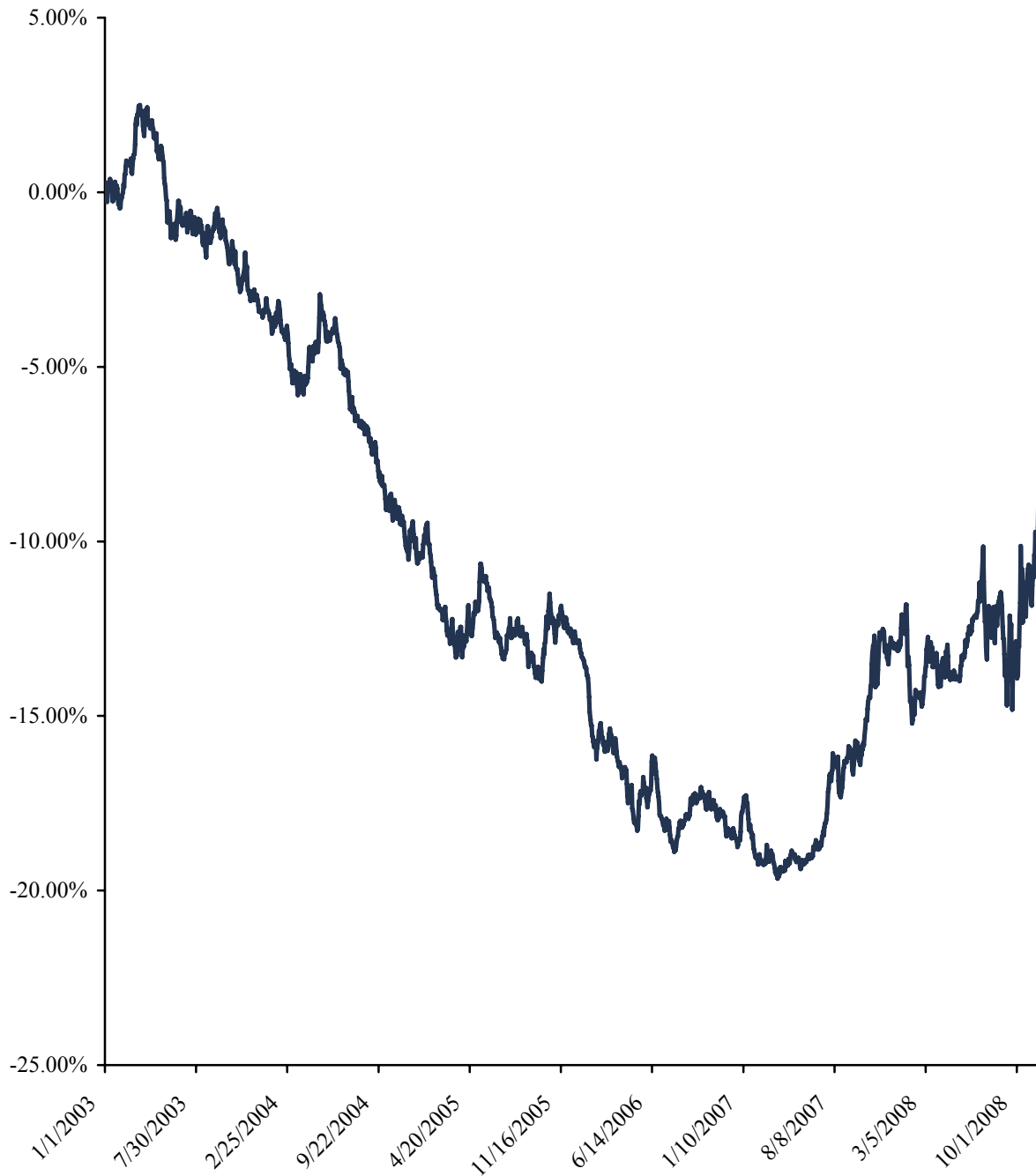
Sources: Frank Russell Company and Thomson Datastream.

Notes: Each graph shows the difference between each index's rolling 12-month total return.

Table B

**RUSSELL TOP 200® GROWTH INDEX COMPARED TO RUSSELL 3000® INDEX  
RELATIVE TOTAL RETURN INDEX LEVEL**

January 1, 2003 – November 20, 2008



Sources: Frank Russell Company and Thomson Datastream.

**Table C**  
**SECTOR WEIGHTS FOR STYLE INDICES**

As of October 31, 2008

	<b>Russell 1000®</b>	<b>Russell 1000®</b>	<b>Russell 1000®</b>	<b>Russell 2000®</b>	<b>Russell 2000®</b>	<b>Russell 2000®</b>
	<b>Growth</b>	<b>Value</b>	<b>Growth</b>	<b>Value</b>	<b>Growth</b>	<b>Value</b>
Consumer Discretionary	8.80	8.18	9.41	11.59	12.81	10.50
Consumer Staples	11.97	9.67	14.24	3.87	2.95	4.69
Energy	12.71	16.15	9.31	5.42	7.70	3.37
Financials	15.01	26.09	4.05	22.54	5.40	37.99
Health Care	13.76	12.54	14.97	14.68	25.40	5.02
Industrials	11.09	9.11	13.04	16.33	18.80	14.11
Information Technology	15.84	2.73	28.80	16.84	21.76	11.72
Materials	3.49	3.36	3.62	3.92	3.20	4.57
Telecommunication Services	3.20	5.71	0.72	1.08	1.22	0.95
Utilities	4.13	6.46	1.83	4.09	0.76	7.08

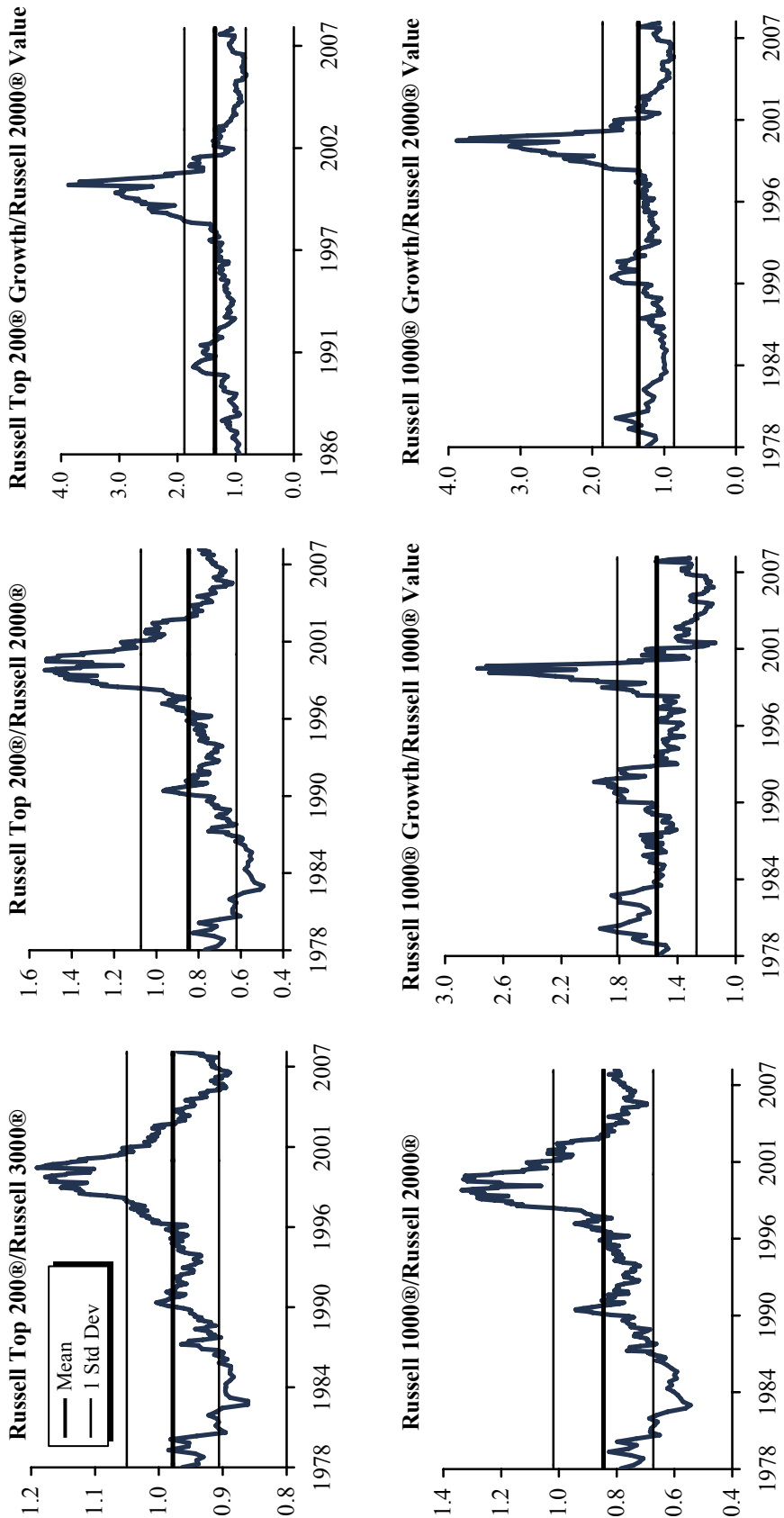
	<b>Russell Top 200®</b>	<b>Russell Top 200®</b>	<b>Russell Top 200®</b>	<b>S&amp;P 500</b>	<b>S&amp;P 500/Citigroup</b>	<b>S&amp;P 500/Citigroup</b>
	<b>Growth</b>	<b>Value</b>	<b>Growth</b>	<b>Growth</b>	<b>Pure Growth</b>	<b>Pure Value</b>
Consumer Discretionary	6.35	6.41	6.29	8.21	19.11	21.09
Consumer Staples	13.95	10.11	17.76	12.90	9.03	4.94
Energy	14.50	19.99	9.06	13.15	12.01	2.57
Financials	13.50	23.83	3.28	14.92	6.78	30.16
Health Care	15.38	15.34	15.41	13.85	21.10	4.97
Industrials	10.62	9.76	11.46	10.96	7.74	4.92
Information Technology	16.93	1.49	32.21	15.74	17.97	1.85
Materials	2.77	2.22	3.31	3.14	5.29	4.69
Telecommunication Services	3.61	7.25	0.00	3.31	0.00	3.47
Utilities	2.40	3.60	1.21	3.82	0.97	21.32

Sources: FactSet Research Systems and Frank Russell Company.

Table D

RUSSELL NORMALIZED ROE-ADJUSTED PRICE-EARNINGS RATIOS

December 31, 1978 – October 31, 2008



Source: Frank Russell Company.

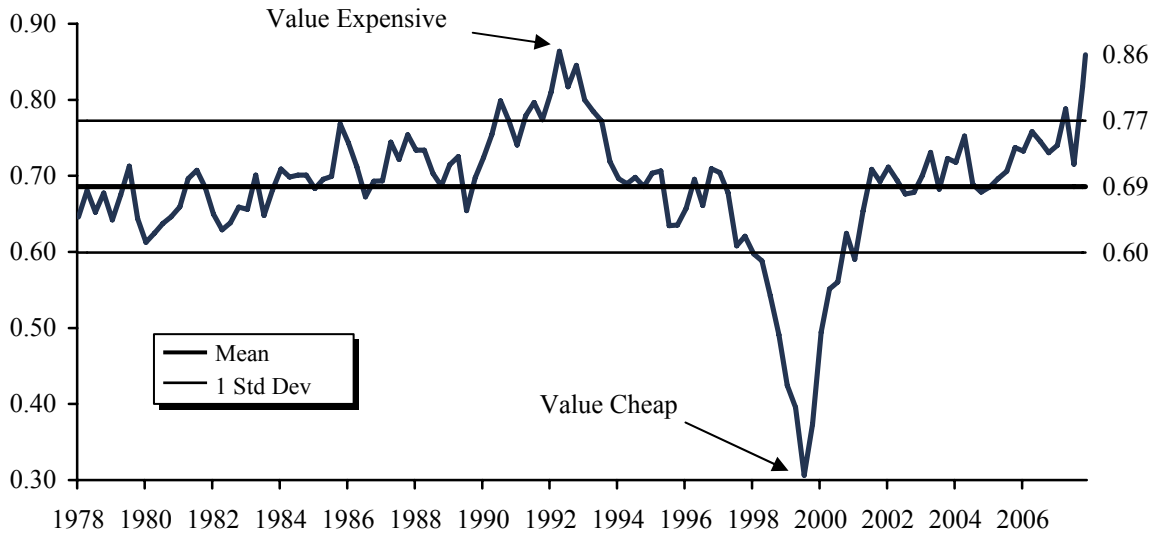
Notes: Return on equity (ROE) is calculated by dividing the index's price-to-book ratio by its price-earnings (P/E) ratio. The ROE-adjusted P/E ratio is the current trailing P/E ratio multiplied by the ratio of the current level of ROE to its historical norm for each index. Data for the Russell Top 200® Growth Index begins March 31, 1986.

**Table E**

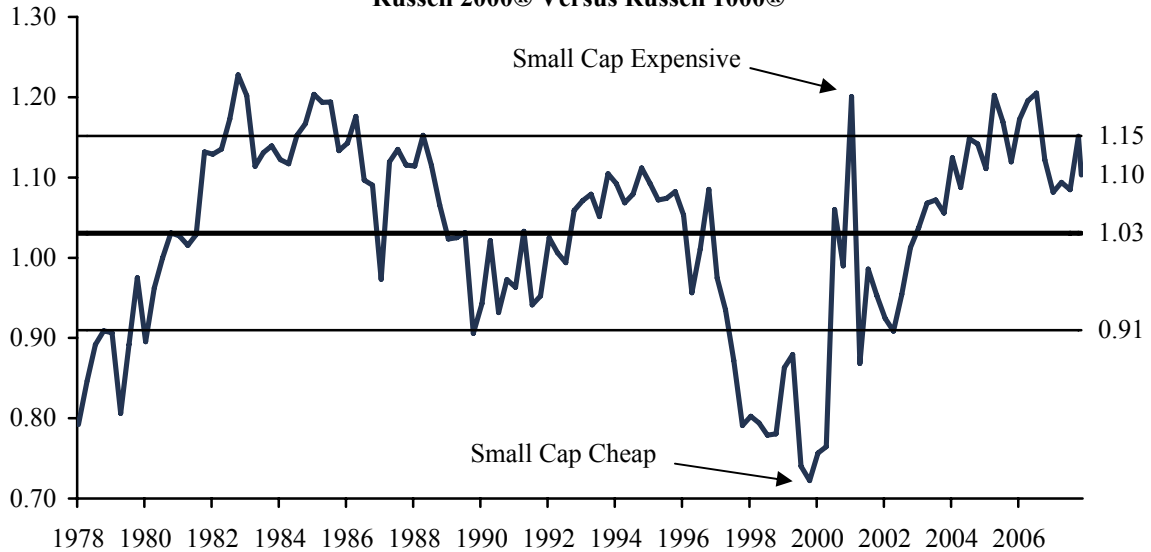
**RELATIVE VALUATION BASED ON FORWARD PRICE-EARNINGS RATIOS**

**December 31, 1978 – October 31, 2008**

**Russell 1000® Value Versus Russell 1000® Growth**



**Russell 2000® Versus Russell 1000®**



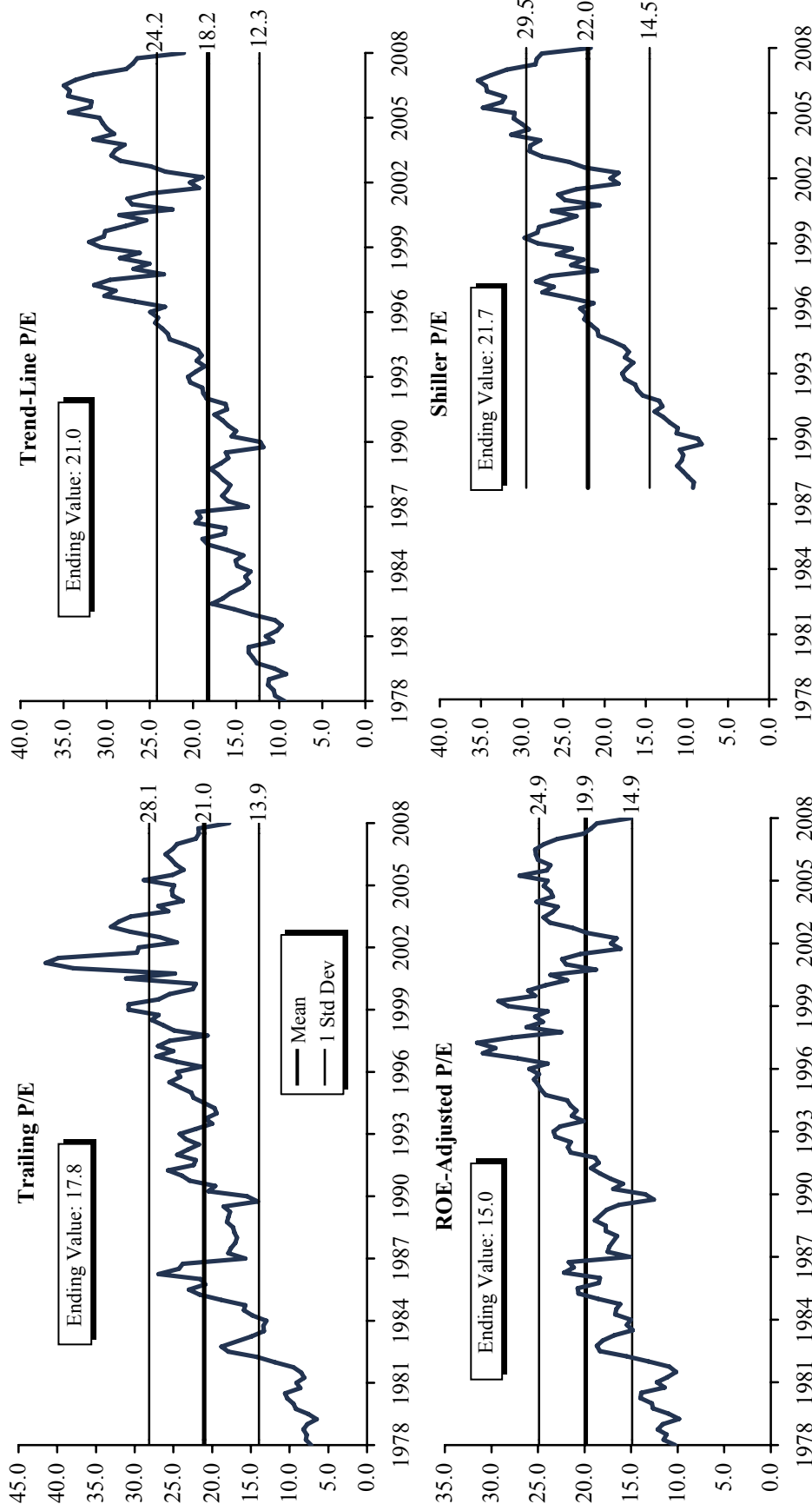
Source: Frank Russell Company.

Note: Forward price-earnings ratios are calculated by Russell using the I/B/E/S one-year forecast earnings per share.

Table F

RUSSELL 2000® PRICE-EARNINGS VALUATIONS

December 31, 1978 – October 31, 2008



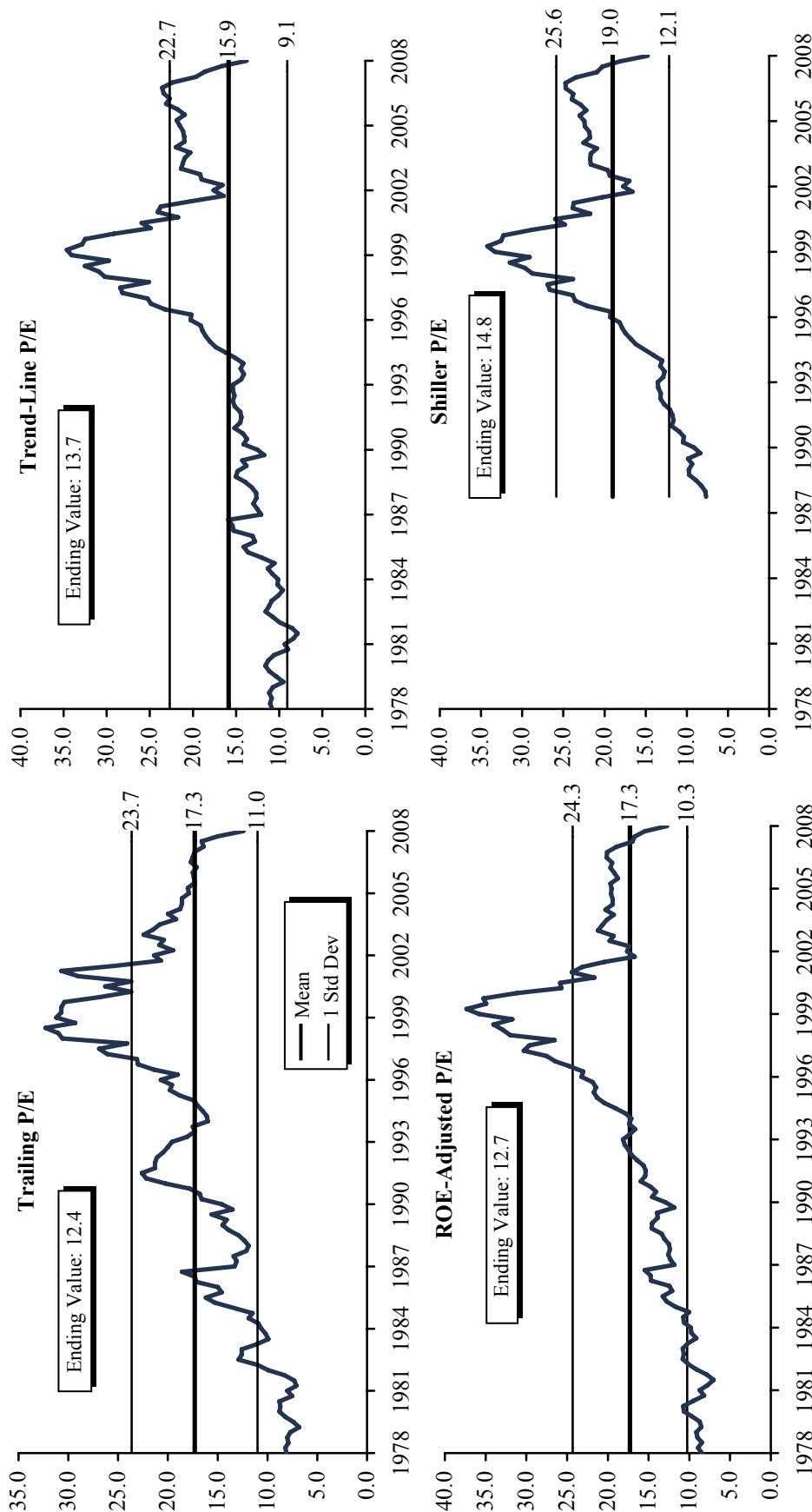
Sources: Frank Russell Company and Thomson Datastream.

Notes: Return on equity (ROE) is calculated by dividing the index's price-to-book ratio by its price-earnings (P/E) ratio. The ROE-adjusted P/E ratio is the current trailing P/E ratio multiplied by the ratio of ROE to its historical norm. The Shiller P/E is calculated by dividing the current price level by the ten-year average of real (inflation-adjusted) earnings per share. Trend-line P/E ratios compare current stock prices to the level of earnings predicted by long-term real earnings growth based on a simple linear regression. All data are quarterly with the most recent data through October 31, 2008.

Table G

RUSSELL 1000® PRICE-EARNINGS VALUATIONS

December 31, 1978 – October 31, 2008



Sources: Frank Russell Company and Thomson Datastream.

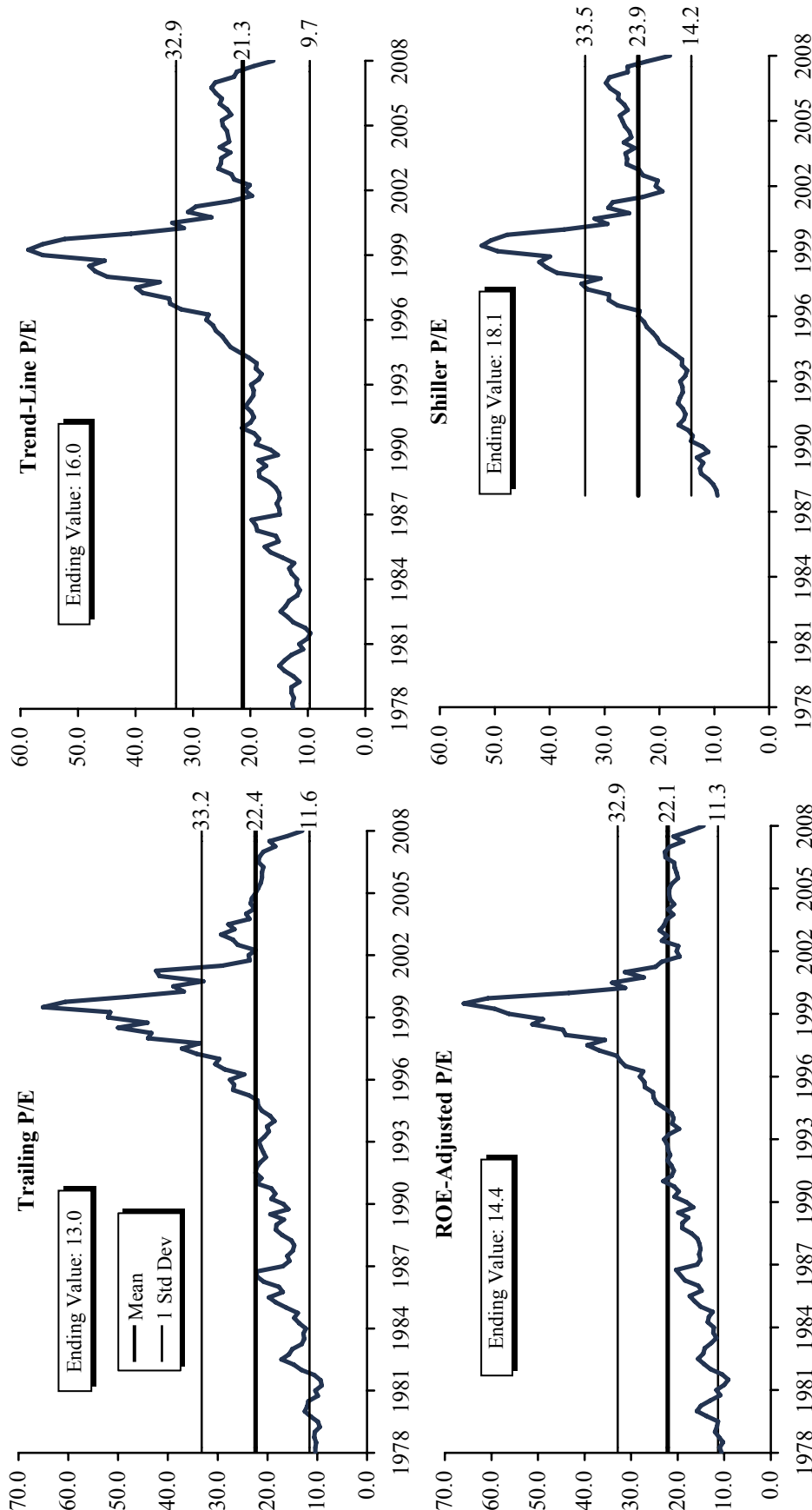
Notes: Return on equity (ROE) is calculated by dividing the index's price-to-book ratio by its price-earnings (P/E) ratio. The ROE-adjusted P/E ratio is the current trailing P/E ratio multiplied by the ratio of the current level of ROE to its historical norm. The Shiller P/E is calculated by dividing the current price level by the ten-year average of real (inflation-adjusted) earnings per share. Trend-line P/E ratios compare current stock prices to the level of earnings predicted by long-term real earnings growth based on a simple linear regression. All data are quarterly with the most recent data through October 31, 2008.



Table H

**RUSSELL 1000® GROWTH PRICE-EARNINGS VALUATIONS**

December 31, 1978 – October 31, 2008



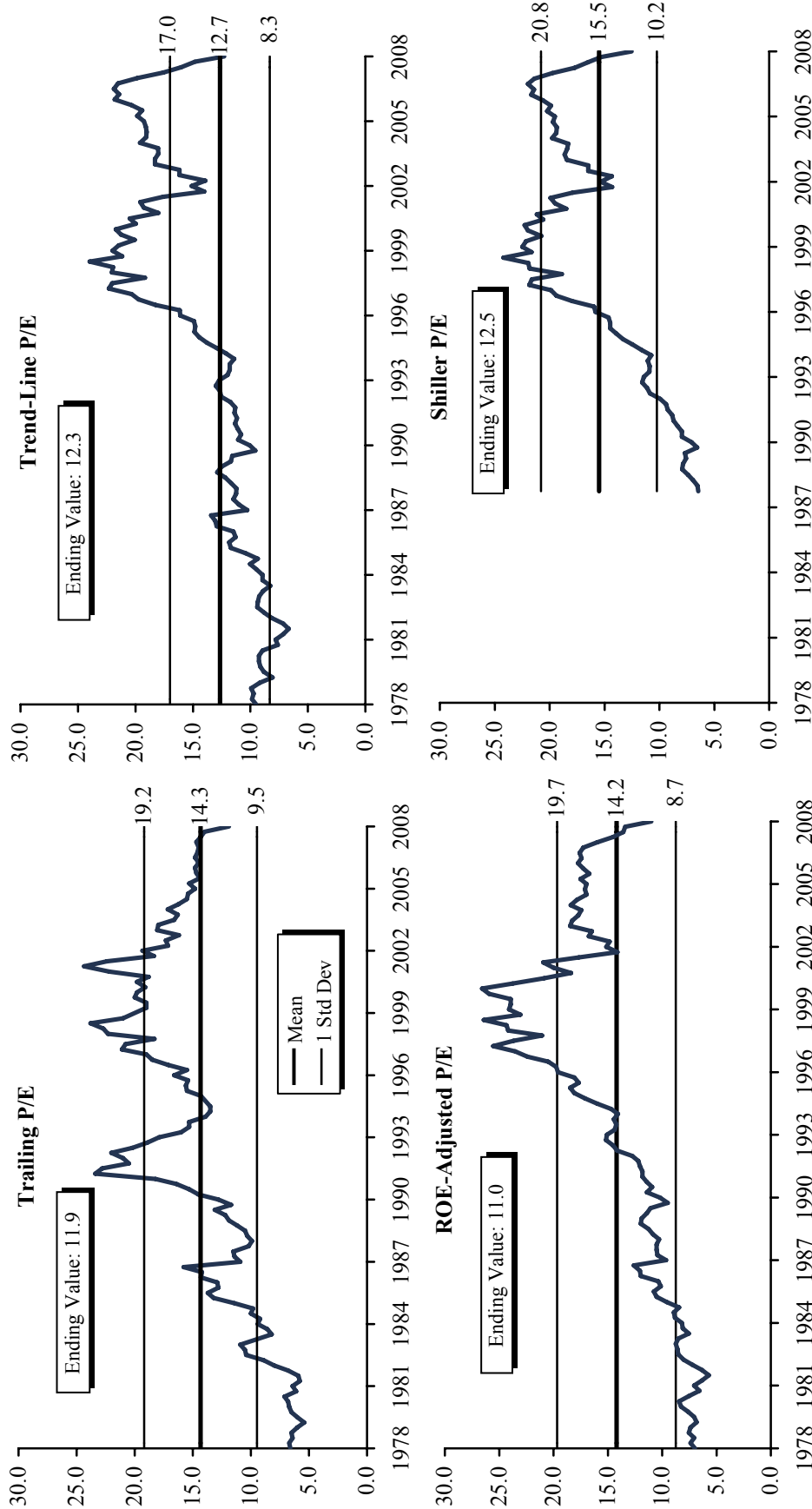
Sources: Frank Russell Company and Thomson Datastream.

Notes: Return on equity (ROE) is calculated by dividing the index's price-to-book ratio by its price-earnings (P/E) ratio. The ROE-adjusted P/E ratio is the current trailing P/E ratio multiplied by the ratio of the current level of ROE to its historical norm. The Shiller P/E is calculated by dividing the current price level by the ten-year average of real (inflation-adjusted) earnings per share. Trend-line P/E ratios compare current stock prices to the level of earnings predicted by long-term real earnings growth based on a simple linear regression. All data are quarterly with the most recent data through October 31, 2008.

Table I

**RUSSELL 1000® VALUE PRICE-EARNINGS VALUATIONS**

December 31, 1978 – October 31, 2008



Sources: Frank Russell Company and Thomson Datastream.

Notes: Return on equity (ROE) is calculated by dividing the index's price-to-book ratio by its price-earnings (P/E) ratio. The ROE-adjusted P/E ratio is the current trailing P/E ratio multiplied by the ratio of the current level of ROE to its historical norm. The Shiller P/E is calculated by dividing the current price level by the ten-year average of real (inflation-adjusted) earnings per share. Trend-line P/E ratios compare current stock prices to the level of earnings predicted by long-term real earnings growth based on a simple linear regression. All data are quarterly with the most recent data through October 31, 2008.

Table J

## RUSSELL TOP 200® PERFORMANCE

Sector	October 2008		Third Quarter 2008		Year-to-Date	
	Return	Contribution	Return	Contribution	Return	Contribution
Consumer Discretionary	-16.6	-1.0	0.5	0.0	-26.6	-1.6
Consumer Staples	-10.2	-1.4	5.0	0.5	-12.7	-1.6
Energy	-17.1	-2.7	-22.9	-3.9	-32.4	-5.3
Financials	-21.7	-3.3	3.3	0.4	-44.6	-7.2
Health Care	-10.3	-1.6	0.8	0.1	-20.1	-2.8
Industrials	-17.8	-1.8	-7.1	-0.8	-34.6	-3.7
Information Technology	-16.6	-2.6	-11.0	-1.9	-35.3	-6.0
Materials	-22.6	-0.7	-30.6	-1.2	-43.5	-1.6
Telecommunication Services	-6.6	-0.1	-15.3	-0.6	-35.1	-1.2
Utilities	-12.0	-0.3	-17.3	-0.4	-26.1	-0.6
<b>Index Return</b>		<b>-15.5</b>		<b>-7.8</b>		<b>-31.7</b>
<u>Market Cap Quintiles</u>						
Q1 (Largest)	-13.4	-7.4	-4.1	-2.1	-29.3	-15.4
Q2	-14.2	-2.5	-10.9	-2.1	-34.4	-6.6
Q3	-20.2	-2.3	-17.4	-2.2	-36.5	-4.5
Q4	-21.2	-2.0	-12.7	-1.1	-34.8	-3.6
Q5 (Smallest)	-22.4	-1.3	-3.6	-0.3	-29.6	-1.3
<u>P/E Quintiles</u>						
Q1 (Cheapest)	-18.3	-3.3	-20.2	-4.0	-39.8	-8.0
Q2	-21.3	-3.2	-10.8	-2.0	-39.1	-6.7
Q3	-13.0	-3.1	-4.6	-1.0	-25.9	-5.6
Q4	-11.4	-2.2	1.1	0.2	-13.3	-2.3
Q5 (Most Expensive)	-13.5	-2.5	3.4	0.5	-24.7	-4.3
Nonearners	-26.5	-1.2	-30.1	-1.5	-68.8	-5.1
<u>ROE Quintiles</u>						
Q1 (Highest)	-14.3	-4.0	-8.5	-2.4	-25.0	-7.5
Q2	-13.3	-2.8	-12.0	-2.7	-28.8	-6.4
Q3	-16.9	-3.3	-7.2	-1.4	-30.5	-6.0
Q4	-12.6	-1.8	-4.2	-0.6	-33.0	-4.4
Q5 (Lowest)	-22.8	-3.4	-5.2	-0.7	-51.7	-7.1
NA	-15.1	-0.3	-1.9	0.0	-33.9	-0.5
<u>Long-Term Expected Earnings Growth</u>						
≥ 0%, ≤ 10%	-12.0	-4.0	2.7	0.6	-25.0	-7.2
> 10%, ≤ 20%	-17.1	-10.3	-9.3	-6.1	-33.8	-20.6
> 20%	-17.4	-1.1	-22.7	-1.9	-41.0	-3.8
NA	-29.1	-0.1	-32.0	-0.5	-31.2	-0.4

Sources: FactSet Research Systems, Frank Russell Company, and Merrill Lynch & Co.

Notes: NA indicates data were not available or the companies were not in the index for the entire period. Nonearners include companies that reported less than \$0.10 earnings per share or negative earners.

Table K

## RUSSELL 1000® PERFORMANCE

Sector	October 2008		Third Quarter 2008		Year-to-Date	
	Return	Contribution	Return	Contribution	Return	Contribution
Consumer Discretionary	-20.6	-1.9	-2.4	-0.3	-34.5	-3.1
Consumer Staples	-11.5	-1.4	4.1	0.4	-15.2	-1.6
Energy	-18.8	-2.5	-26.7	-4.1	-33.6	-4.8
Financials	-22.4	-3.7	2.5	0.3	-42.6	-7.0
Health Care	-12.6	-1.8	0.8	0.0	-22.3	-2.9
Industrials	-19.3	-2.1	-10.6	-1.2	-37.0	-4.2
Information Technology	-17.8	-2.6	-12.5	-2.0	-36.8	-5.8
Materials	-23.8	-0.9	-24.9	-1.1	-41.0	-1.8
Telecommunication Services	-10.2	-0.3	-15.3	-0.5	-36.6	-1.1
Utilities	-11.6	-0.4	-19.2	-0.8	-30.3	-1.2
<b>Index Return</b>		<b>-17.5</b>		<b>-9.3</b>		<b>-33.4</b>
<u>Market Cap Quintiles</u>						
Q1 (Largest)	-15.5	-11.1	-8.4	-5.9	-31.7	-21.9
Q2	-22.5	-3.1	-15.2	-2.2	-38.7	-5.7
Q3	-23.0	-1.6	-10.7	-0.8	-39.0	-2.9
Q4	-21.5	-1.0	-8.0	-0.4	-33.6	-1.7
Q5 (Smallest)	-26.6	-0.7	-0.6	0.0	-37.4	-1.0
<u>P/E Quintiles</u>						
Q1 (Cheapest)	-27.3	-3.6	-23.1	-4.4	-48.4	-7.3
Q2	-19.0	-3.5	-11.0	-2.3	-37.9	-7.3
Q3	-15.1	-3.6	-7.0	-1.5	-28.2	-6.4
Q4	-12.4	-2.7	3.2	0.6	-16.4	-3.2
Q5 (Most Expensive)	-15.0	-2.3	-2.1	-0.3	-26.3	-3.9
Nonearners	-26.7	-1.8	-20.8	-1.5	-60.3	-5.5
<u>ROE Quintiles</u>						
Q1 (Highest)	-15.6	-4.7	-12.4	-3.8	-28.4	-9.0
Q2	-16.8	-4.4	-11.0	-2.9	-32.4	-8.7
Q3	-14.5	-2.5	-5.6	-1.0	-29.4	-4.7
Q4	-20.3	-2.5	-1.3	-0.2	-33.3	-4.2
Q5 (Lowest)	-26.8	-2.8	-12.8	-1.3	-59.6	-6.1
NA	-18.9	-0.6	-3.2	-0.1	-28.4	-0.9
<u>Long-Term Expected Earnings Growth</u>						
≥ 0%, ≤ 10%	-13.5	-4.2	0.5	0.0	-26.6	-7.2
> 10%, ≤ 20%	-18.7	-11.1	-10.0	-6.3	-35.3	-21.2
> 20%	-19.8	-1.4	-24.9	-2.4	-41.3	-4.1
NA	-30.0	-0.8	-19.7	-0.6	-34.0	-1.0

Sources: FactSet Research Systems, Frank Russell Company, and Merrill Lynch & Co.

Notes: NA indicates data were not available or the companies were not in the index for the entire period. Nonearners include companies that reported less than \$0.10 earnings per share or negative earners.

Table L

## RUSSELL 1000® VALUE PERFORMANCE

Sector	October 2008		Third Quarter 2008		Year-to-Date	
	Return	Contribution	Return	Contribution	Return	Contribution
Consumer Discretionary	-23.0	-2.1	-0.7	-0.1	-36.8	-3.2
Consumer Staples	-9.8	-0.9	3.5	0.3	-16.2	-1.4
Energy	-14.7	-2.3	-21.1	-3.8	-26.9	-4.5
Financials	-21.7	-6.1	4.1	1.1	-42.2	-11.7
Health Care	-12.3	-1.5	1.0	0.1	-21.1	-2.2
Industrials	-20.6	-1.8	-5.7	-0.5	-36.9	-3.5
Information Technology	-24.2	-0.7	-13.7	-0.4	-44.8	-1.5
Materials	-25.3	-1.0	-18.6	-0.8	-40.5	-1.7
Telecommunication Services	-8.3	-0.3	-15.1	-0.9	-36.3	-1.9
Utilities	-11.0	-0.6	-12.7	-0.8	-24.6	-1.5
<b>Index Return</b>		<b>-17.3</b>		<b>-6.0</b>		<b>-33.0</b>
<u>Market Cap Quintiles</u>						
Q1 (Largest)	-15.4	-11.2	-5.9	-4.3	-31.5	-21.9
Q2	-23.8	-3.2	-8.8	-1.1	-39.1	-5.9
Q3	-21.9	-1.4	-7.1	-0.5	-35.5	-2.6
Q4	-19.3	-0.8	-3.6	-0.2	-30.6	-1.6
Q5 (Smallest)	-27.9	-0.7	4.4	0.1	-37.0	-1.0
<u>P/E Quintiles</u>						
Q1 (Cheapest)	-25.7	-3.8	-20.2	-4.8	-42.1	-7.1
Q2	-17.6	-4.0	-8.3	-1.9	-33.3	-8.0
Q3	-12.1	-1.8	-2.1	-0.4	-25.4	-3.8
Q4	-10.5	-2.1	10.7	1.5	-11.2	-1.9
Q5 (Most Expensive)	-18.5	-2.7	15.3	1.7	-23.7	-2.9
Nonearners	-28.0	-2.8	-20.8	-2.2	-65.0	-9.3
<u>ROE Quintiles</u>						
Q1 (Highest)	-13.0	-4.3	-9.6	-3.4	-24.4	-7.7
Q2	-16.5	-3.6	-4.7	-1.0	-24.5	-5.7
Q3	-14.3	-2.0	-3.5	-0.6	-28.9	-4.4
Q4	-23.1	-3.9	9.5	1.3	-35.4	-5.6
Q5 (Lowest)	-28.0	-3.1	-20.8	-2.4	-66.2	-8.8
NA	-23.8	-0.4	-2.9	0.0	-41.7	-0.8
<u>Long-Term Expected Earnings Growth</u>						
≥ 0%, ≤ 10%	-13.7	-7.4	1.1	0.5	-26.7	-12.6
> 10%, ≤ 20%	-21.3	-8.8	-11.8	-5.9	-38.2	-18.6
> 20%	-20.5	-0.2	-12.5	-0.1	-43.1	-1.0
NA	-28.2	-0.9	-12.0	-0.5	-30.5	-0.7

Sources: FactSet Research Systems, Frank Russell Company, and Merrill Lynch & Co.

Notes: NA indicates data were not available or the companies were not in the index for the entire period. Nonearners include companies that reported less than \$0.10 earnings per share or negative earners.

Table M

## RUSSELL 2000® PERFORMANCE

Sector	October 2008		Third Quarter 2008		Year-to-Date	
	Return	Contribution	Return	Contribution	Return	Contribution
Consumer Discretionary	-27.8	-3.6	0.8	0.0	-40.9	-5.4
Consumer Staples	-8.6	-0.3	7.1	0.2	-12.2	-0.4
Energy	-32.7	-2.0	-33.6	-3.1	-33.7	-1.7
Financials	-17.2	-3.5	16.8	2.9	-19.8	-3.5
Health Care	-18.4	-3.0	7.3	1.0	-26.9	-4.3
Industrials	-20.3	-3.1	-4.5	-0.7	-28.5	-4.3
Information Technology	-22.7	-3.9	-5.4	-0.9	-38.3	-6.9
Materials	-22.8	-0.9	-14.1	-0.6	-34.8	-1.5
Telecommunication Services	-23.9	-0.3	-14.2	-0.2	-49.7	-0.7
Utilities	-8.7	-0.3	5.9	0.2	-12.0	-0.4
<b>Index Return</b>		<b>-20.8</b>		<b>-1.1</b>		<b>-29.0</b>
<u>Market Cap Quintiles</u>						
Q1 (Largest)	-18.5	-8.7	-5.6	-2.5	-27.3	-10.7
Q2	-22.4	-5.4	1.4	0.3	-31.5	-8.6
Q3	-23.5	-3.5	2.4	0.3	-34.5	-5.3
Q4	-22.0	-1.9	4.3	0.3	-31.0	-3.2
Q5 (Smallest)	-26.5	-1.3	11.6	0.6	-34.0	-2.2
<u>P/E Quintiles</u>						
Q1 (Cheapest)	-32.0	-3.9	-16.2	-2.2	-44.8	-6.3
Q2	-24.7	-4.0	-4.5	-0.7	-33.6	-5.5
Q3	-16.0	-2.5	4.3	0.6	-16.1	-2.3
Q4	-13.0	-2.0	8.7	1.3	-11.6	-1.6
Q5 (Most Expensive)	-15.4	-2.2	7.5	1.0	-11.4	-1.7
Nonearners	-26.0	-6.2	-5.4	-1.1	-45.1	-11.7
<u>ROE Quintiles</u>						
Q1 (Highest)	-20.3	-4.1	-7.8	-1.7	-22.9	-4.8
Q2	-16.9	-3.7	1.2	0.2	-21.1	-4.6
Q3	-18.2	-3.7	5.6	1.0	-22.4	-4.3
Q4	-25.2	-4.2	1.8	0.2	-40.0	-6.4
Q5 (Lowest)	-27.3	-3.3	-7.1	-0.8	-53.2	-6.6
NA	-21.6	-1.8	-0.5	0.0	-28.3	-2.4
<u>Long-Term Expected Earnings Growth</u>						
≥ 0%, ≤ 10%	-15.8	-2.3	9.6	1.3	-16.9	-2.2
> 10%, ≤ 20%	-20.6	-8.6	-0.4	-0.2	-27.1	-11.2
> 20%	-22.9	-4.3	-6.9	-1.3	-37.9	-8.5
NA	-22.7	-5.6	-3.7	-0.9	-30.4	-7.2

Sources: FactSet Research Systems, Frank Russell Company, and Merrill Lynch & Co.

Notes: NA indicates data were not available or the companies were not in the index for the entire period. Nonearners include companies that reported less than \$0.10 earnings per share or negative earners.

Table N

## RUSSELL 2000® VALUE PERFORMANCE

Sector	October 2008		Third Quarter 2008		Year-to-Date	
	Return	Contribution	Return	Contribution	Return	Contribution
Consumer Discretionary	-32.1	-4.2	5.1	0.6	-43.0	-5.8
Consumer Staples	-8.2	-0.4	10.7	0.4	-12.6	-0.5
Energy	-31.0	-1.2	-30.7	-1.7	-31.6	-0.6
Financials	-17.0	-5.9	18.0	5.7	-20.3	-6.3
Health Care	-17.6	-1.0	11.5	0.5	-23.4	-1.4
Industrials	-19.5	-2.5	1.7	0.4	-24.2	-3.1
Information Technology	-24.1	-3.1	-2.9	-0.3	-38.1	-5.2
Materials	-23.6	-1.1	-16.2	-0.9	-33.8	-1.6
Telecommunication Services	-25.5	-0.3	-8.6	-0.1	-46.1	-0.6
Utilities	-6.8	-0.3	7.4	0.4	-8.6	-0.5
<b>Index Return</b>		<b>-20.0</b>		<b>5.0</b>		<b>-25.6</b>
<u>Market Cap Quintiles</u>						
Q1 (Largest)	-17.2	-7.6	1.1	0.6	-21.6	-8.1
Q2	-21.5	-5.4	5.6	1.4	-27.9	-8.0
Q3	-23.9	-3.7	7.3	1.1	-31.6	-4.9
Q4	-20.0	-1.8	9.4	0.8	-24.8	-2.6
Q5 (Smallest)	-27.4	-1.5	18.9	1.0	-28.2	-1.8
<u>P/E Quintiles</u>						
Q1 (Cheapest)	-31.3	-3.9	-12.0	-1.7	-36.3	-4.9
Q2	-23.7	-3.8	4.0	0.7	-24.9	-4.2
Q3	-12.8	-2.1	11.2	1.8	-9.8	-1.5
Q4	-11.3	-1.7	17.0	2.4	-1.5	-0.1
Q5 (Most Expensive)	-16.1	-2.2	13.1	1.8	-9.7	-1.3
Nonearners	-26.7	-6.3	-0.4	0.0	-45.7	-12.3
<u>ROE Quintiles</u>						
Q1 (Highest)	-18.2	-2.9	-2.4	-0.4	-8.6	-1.1
Q2	-15.9	-3.6	8.9	2.0	-14.4	-3.2
Q3	-18.6	-4.2	9.3	2.0	-21.5	-4.9
Q4	-26.0	-4.7	5.8	1.0	-39.9	-6.9
Q5 (Lowest)	-27.0	-3.2	0.5	0.1	-53.3	-6.3
NA	-17.4	-1.4	3.1	0.2	-24.1	-2.0
<u>Long-Term Expected Earnings Growth</u>						
≥ 0%, ≤ 10%	-15.7	-4.2	10.4	2.7	-15.7	-3.9
> 10%, ≤ 20%	-20.5	-8.5	4.0	1.7	-28.7	-13.1
> 20%	-24.4	-0.9	1.3	0.0	-21.5	-1.1
NA	-23.0	-6.4	1.6	0.5	-25.7	-6.2

Sources: FactSet Research Systems, Frank Russell Company, and Merrill Lynch & Co.

Notes: NA indicates data were not available or the companies were not in the index for the entire period. Nonearners include companies that reported less than \$0.10 earnings per share or negative earners.