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LIVING ON BORROWED TIME? DISSECTING THE CURRENT EQUITY MARKET RALLY

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Living on Borrowed Time? Dissecting the Current Equity Market Rally

The rally in U.S. equities has been powerful. Since tumbling in early March, the S&P 500 has enjoyed seven consecutive months of gains, posting a 46% total return from the end of February to September, the biggest seven-month jump since 1938, while from its March 9 low of 677 to its recent high of 1,072 on September 22, the S&P rallied 58%. Following such a run, and especially given the still-tenuous state of the U.S. economy, most investors are justifiably anxious. While of course the usual pundits have been heralding a new bull market, most investors remain skeptical, and rightfully so in our opinion (not to mention that most investors are still weary from last year's grizzly bear). Is another plunge around the corner? Or is now the time to pile in to reap additional gains?

To know where we are going, we first have to understand where we have been. This report reviews the drivers of the current rally and gauges where we stand in relation to past economic recovery–related market rallies. Our summation is that the current market rally is living on borrowed time—the run-up has outpaced fundamentals. History indicates that at this point in the cycle the easy gains have been made and returns going forward will likely be muted. While the potential for additional upside in equities clearly remains, a surge from current levels comes at an increasingly unfavorable risk-reward trade-off for investors. Therefore even if our concern is premature, investors are better off not chasing this rally. Instead, a disciplined approach to rebalancing and a dose of patience are in order.

A Three-Stage Rocket

Despite the blast-off nature of the current run, the rally has not been a straight line. We have identified three stages, and view the market as entering a precarious fourth stage, where we will either see the market stumble (if not worse) or prepare to take off again (Table A).

Stage 1: Justified Pop

Following the collapse of Lehman Brothers the global banking sector seemed poised for financial Armageddon, and investors re-priced assets on the belief that a repeat of the Great Depression was building. This uncertainty prevailed for months amid a policy vacuum until the U.S. Federal Reserve and Treasury Department announced comprehensive plans to remove troubled assets from banks and further insure the functioning of short-term credit markets. With more clarity and direction regarding the plans to shore up the financial system (misguided or not), the threat of collapse faded. The seeds of a market rally, meanwhile, were clearly in place; sentiment had become so pessimistic, markets so oversold, that something had to give. Indeed, the S&P 500 had fallen more than 3 standard deviations below its 200-day moving average—a divergence from trend that has historically triggered some degree of short-term reversion to the mean (Table B).

Furthermore, many market participants had argued since the beginning of the year that in order to rally markets did not need to see an actual improvement in economic conditions or earnings, but simply signs that the rate of decline was slowing. This scenario began to unfold in early spring, as the deterioration in

economic data began to moderate, with figures beginning to exceed depressed expectations. According to Barclays Capital, by the end of April positive economic "surprises" had reached their highest level in ten years, helping to thaw investor paralysis and propelling the market higher. Overall, equities rallied 37.4% from the March 9 close through May 8, the largest initial two-month pop since the 1932 lows.[1] The elimination of this Armageddon risk premium coupled with drastically oversold conditions drove the initial snap-back in the market, which in our opinion was largely justified.

Stage 2: Consolidation

Given such a historic bounce from the lows, equities were certainly due for a period of "consolidation." Indeed, equities traded sideways from mid-May until late June, with the S&P 500 ultimately sliding 5.4% from May 8 through July 10. However, even as prices stalled, market internals were gathering strength. For instance, by mid-May the S&P 500 Index had moved convincingly above its 200-day moving average for the first time since late 2007, and successfully "retested" this level in June and July without falling through (Table C). While market breadth and volume did contract during this phase, it did not plummet as during the previous market rallies in 2008, implying firmer support. June also witnessed the 50-day moving average crossing above the 200-day moving average (the so-called golden cross), a widely watched and highly respected indicator that has an impressive (but not infallible) record of signaling a change in underlying market direction.

Stage 3: Speculative Re-Rating

The weakness in early summer also coincided with the approaching second quarter earnings season. A series of earnings "surprises" (as corporate profits fell less than expected) seemed to provide a catalyst in mid-July for a "technical breakout," with the market rising sharply on both expanding breadth and volume, but especially breadth (Table D). Combined with growing signs of economic stabilization, the S&P rallied another 20% over the following two-and-a-half months into September. This marked the third phase, as equities re-rated higher in anticipation of an economic recovery and earnings growth.

What Drove Performance?

While all three stages of the rally were distinct in terms of size and speed, similar types of stocks drove performance in the first and third stages. More bluntly, this rally has been driven in large part by speculative issues (e.g., the smallest, most expensive, highly levered companies, etc.). The second stage, on the other hand, saw higher-quality, defensive names perform the best. Overall, it seems "junk stocks" have been far and away the best-performing stocks for the entire period.

[1] The previous record was a price gain of 37.0% after the market found a trough in June 1932.

Low Quality

Tables E and F justify our statements about the speculative nature of this rally. We divided both the S&P 500 Index and the Russell 2000® Index into quintiles based on capitalization size, valuation (forward price-earnings ratio), return on equity (ROE, a rough quality proxy), and leverage (total assets to stockholder equity ratio). Our analysis shows that the best-performing stocks during the rally were the smallest, most expensive, and highly levered companies. The issues in the lowest quintile of the S&P 500 Index by ROE, for instance, returned 117%, while returns in the remaining quintiles ranged from 43% through 66%. The outperformance of the smallest companies in Russell 2000® Index, where speculative issues are highly concentrated, meanwhile, is quite remarkable: the stocks in the smallest quintile by market capitalization returned 244%, which was over three times the return of the index itself, and nearly five times that of the largest quintile of stocks in the S&P 500 Index.

Our assessment of a low-quality rally is also confirmed by Standard & Poor's equity ratings.[2] Since the end of February, for instance, A+ equities have returned 36.5%, while stocks rated C have returned over 81.9%. Further, low quality[3] has recouped its relative losses since the bear market began, with low-rated stocks besting high-rated issues by 2.4% over this period. This is unusual, as high quality often enjoys a much longer, and sharper, period of relative outperformance, as seen during the cycles in the early 1980s, mid-1990s, and early 2000s (Table G).

Sector and Style Composition

"High quality" or "low quality" aside, cyclical sectors and value stocks considerably outperformed, while more defensive sectors lagged the index by over 20%.[4] Financial shares were the biggest contributor to the rally, with the sector returning 146% since the March 9 low. Indeed, even though the sector makes up less than one-sixth of the S&P 500 by market cap, it constituted 22.5% of the index's return during the rally. The information technology sector, meanwhile, was the second largest contributor, constituting over 20% of the return. Among small caps, it was a similar story, as financials and information technology contributed almost 40% of the Russell 2000® Index return, while defensive sectors within the benchmark lagged (Tables E and F).

After trailing growth during the bear market decline, in early March value stocks began to outperform across the capitalization spectrum, largely related to the rise in financial stocks. For example, as

[2] We still regard S&P rankings as an imperfect definition of "quality" given the large weighting of financials among "high quality" in late 2007, despite high quality traditionally being underweight this sector. Please see our May 2008 Market Commentary *Quality: A Closer Look*.
[3] Most analysts define "high quality" as those stocks with an S&P quality ranking of B+ and above, while defining "low quality" as B and below. The S&P rankings range includes A, A-, B+, B, C (least stable earnings), and D (companies in reorganization).
[4] We consider the following sectors to be cyclical: consumer discretionary, energy, financials, industrials, information technology, and materials. We consider the remaining sectors to be more defensive: consumer staples, health care, telecommunications, and utilities.

of September 30, the large-cap Russell 1000® Value Index returned 66.0%, compared to 54.2% for the Russell 1000® Growth Index; while small-cap value returned 81.5%, compared to 73.8% for growth.

In fairness, these types of speculative issues should be expected to rally more than their defensive counterparts given that they experienced the largest declines prior to the run-up. The magnitude of their recent gains, however, has reversed nearly all the relative underperformance of such stocks since the bear market began. The issues in the lowest quintile of the S&P 500 Index by ROE, for instance, have outperformed those in the highest quintile since October 9, 2007. This statement also holds true with the smallest quintile of stocks in the Russell 2000® Index compared with the largest issues in the S&P 500.

The initial stages of any market rise are always somewhat speculative in nature, as fear slowly gives way to hope. Excessive speculation, however, is one of the distinguishing characteristics of a bear market rally (or a short-lived bull). To us, the composition of the recent rally looks more like a speculative, liquidity-driven burst than the sustainable underpinnings of a new bull market. History has shown that sustained bull markets are marked by a change in market leadership; the previous market's darlings do not lead the next advance. Given that the market advance of 2003–07 was driven by value stocks, small caps, financials, and low-quality junk stocks in general, the current rally is either going to break with history, or the market is due for another shake-out that may result in a better footing.

Market Rallies and Recessions

Much of the justification for the current market rally rests on the idea that the U.S. recession has come to an end; given that the stock market is forward looking, concerns over current economic weakness are misguided. As such, it is worth reviewing the typical pattern of market behavior around recessionary periods to see what we should expect going forward.

Historically, equities undergo an "acknowledgement" phase in anticipation of economic and earnings weakness; since 1926 equities peak on average four months prior to the start of a recession, falling 9% before the "official" recession begins. The bulk of the bear market then occurs during the early part of the recession, as equities "capitulate" to the reality of the situation with the market falling an additional 23%, on average. However, the bottom in the market is usually well before the bottom in the economy, leading on average by five months. During this "relief rally," markets rise on average 25% through the official end of the recession (Table H).

The recent downturn is following this pattern, albeit on a scale not seen since the late 1930s. Similarly, the market has rallied more vigorously from its trough through the end of the recession than the historical average. Indeed, if we assume economic activity bottomed at the end of July,[5] the market "relief

[5] In an August forecasting survey conducted by *The Wall Street Journal*, economists named July, on average, as the ending month of the recession.

rally" of 46% has been the most explosive of its kind since our analysis begins in 1926—more than 20% above the historical average.

This should not be very surprising given that the economy went through its worst recession in the postwar period. On the other hand, investors should be concerned with the economic recovery–related rally's implications for prospective returns. Historically, it appears the easy gains are made in the relief rally (Table I). Indeed, the median cumulative return six months after the end of a recession is 11.6%, while the median cumulative return 12 months after is just 10.3%, implying that the market lost ground during the latter half of the first year into a business cycle recovery.

Table I also displays equity valuations (as measured by the Shiller P/E) at the end of each recession. One would expect that, if markets remained cheap after the relief rally, there would be further room for them to move higher and catch up with fundamentals. Indeed, when markets were undervalued (i.e., approximately more than 0.5 standard deviation below their long-term P/E average) at the end of a recession, they gained an average of 30.8% over the next 12 months. In 1932, for instance, despite rallying 33.0% from its trough through the end of the recession, equities were nearly 82% higher 12 months later thanks in part to an extremely low P/E of 7.4 at the end of the economic downturn. Even excluding the early 1930s cycle, markets were an average of 18.1% higher in the subsequent 12 months after a recession when valuations remained low. On the other hand, when markets ended a recession in the fair-value range or overvalued, equities price returns were an average of 10.2% and -3.8%, respectively, 12 months after the recession. At the end of July and August, equities were moving toward the upper end of what we would consider fair value, trading at a P/E of 17.7 and 18.4, respectively. Thus, current conditions argue for more subdued equity performance over the near term.

Show Me the Money! Where Are the Earnings?

We postulate that history shows muted stock market returns following the end of recession (contrary to intuition) as most of the expected recovery is rapidly priced in, leaving the market vulnerable to disappointment, as is increasingly the case today. Over the past six months multiple expansion has been the sole driver of equity returns, as both quarterly operating and reported earnings have declined on a year-over-year basis for seven straight quarters. Yet investors, ever forward-looking, have looked past the collapse in earnings per share (EPS) to focus on positive earnings "surprises." In the second quarter, for instance, 73% of companies exceeded analyst forecasts, despite quarterly profits falling by almost one-third from a year earlier.

Analyst estimates, however, tend to lag turning points in the earnings cycle and thereby create an environment where expectations are easily beaten during the initial period of an earnings recovery. This sets in motion a temporary virtuous cycle: the market rallies on the back of initial earnings surprises, which in turn leads analysts to increase their earnings forecasts, which itself triggers a rally based on positive earnings revisions. The game goes on until revisions peak, and companies start to disappoint.

Indeed, it appears that the better-than-expected news during the first two quarters of this year is persuading analysts to become more optimistic. Operating earnings for 2010 are forecast to be roughly $73 per share, only 20% below their 2007 peak levels, with four of ten economic sectors projected to post new record levels of EPS. Overall, bottom-up forecasts are projecting EPS growth of nearly 35% in 2010. While such a jump in profits is not out of the question, the estimates likely underestimate the impact a deleveraging economy will have on future earnings.

The recent "rebound" in earnings, meanwhile, has been driven by aggressive cost cutting by corporations, and not top-line revenue growth, as second quarter corporate revenues were down 25% from the same time a year earlier. Companies cannot cut costs forever, and absent a recovery in sales, earnings will likely disappoint. However, history implies that sales normally lag EPS following a recession. According to Ned Davis Research, since 1958 the S&P Industrial Average's sales growth has bottomed an average of nine months after the end of a recession, and three months *after* EPS bottom, as companies normally cut cost throughout the recession. Thus, if EPS did bottom in June, we should expect revenue to follow in early 2010. Furthermore, once sales bottom, the growth rate tends to accelerate for several quarters, possibly implying further upside to earnings from corporate "operating leverage." The 1980 recession is the lone exception, as sales continued to decelerate following the end of the recession and the earnings recovery was not sustainable, which foreshadowed a double-dip recession in 1981. Thus, if sales continue to deteriorate well into 2010, current expectations for earnings growth will be dashed, especially absent clear signs of sustainable economic growth.[6]

Stage Four: We Need Confirmation

Investors, however, will ultimately demand that fundamentals catch up with the current level of valuation. Therefore markets are entering the tricky "confirmation" phase, where data need to justify the strength of the expected economic and earnings rebound. In other words, while the market has been rallying on the back of news that had become less bad (i.e., the second derivative), earnings and economic data will need to become increasingly good for the rally to continue. In some respects, the market may have already run out of steam; seven of the last ten trading days in September witnessed price declines, while a lower-than-expected reading from the closely followed ISM PMI Index sent the S&P down 2.6% on October 1.

Still, there is a case to be made for the cyclical rally to continue. Indeed, should the stock market make it through the traditionally weak seasonal period of September through October, it may be positioned for a "melt-up" into year-end, as fund managers that are lagging the index will be motivated to chase performance, while investors that had been sitting on the sidelines are tempted to pour back in. Further, while economic fundamentals are mediocre, the year-over-year data should improve markedly given that the economic free-fall began roughly a year ago. In addition, third quarter EPS could still beat rising revisions, and provide a catalyst into year-end. And of course, zero interest rates and rampant liquidity mean market overshoots are more probable than in the past.

[6] See our August 2009 Asset Allocation in the Current Environment paper *Now What?!*

Therefore, an aggressive bet against the market may not be justified at this time. However, some of the indicators that were "flashing green" in early March now signal that a much more cautious approach is warranted. For instance, in late 2008 and early 2009, U.S. equities were more than 3 standard deviations oversold based on their 120-day rate of change. Since 1928, when the S&P 500 Index broke through this level, the average jump over the next 60-, 120-, and 360-day periods has been 17.4%, 9.1%, and 44.5%, respectively—all price gains that have been exceeded since the March low. Today, this indicator (along with the S&P 500's deviation from its 200-day moving average) implies the market remains in overbought territory (Tables B and J).

Valuation, meanwhile, is currently at the upper end of what we would consider fair value. Thus, the risk-reward trade-off, which favored an increase in risk-taking earlier in the year, has noticeably receded. The higher equities rise without concrete improvement in earnings and fundamentals, the more the stage is sent for a tumble; a rise in the S&P 500 above 1,100, and certainly above 1,200, would put the index at a normalized P/E ratio well above 20, a level where we would be increasingly nervous.

Secular Bear Continues

Tables K and L highlight the secular risks U.S. equities still face. While U.S. equities have broken below their long-term price trend, history shows that markets fall well below 1 standard error, and often remain depressed for an extended period. In other words, the rapid nature of the rally in 2009 seems like a head fake; equities may have been depressed in March, but sadly, not depressed enough.

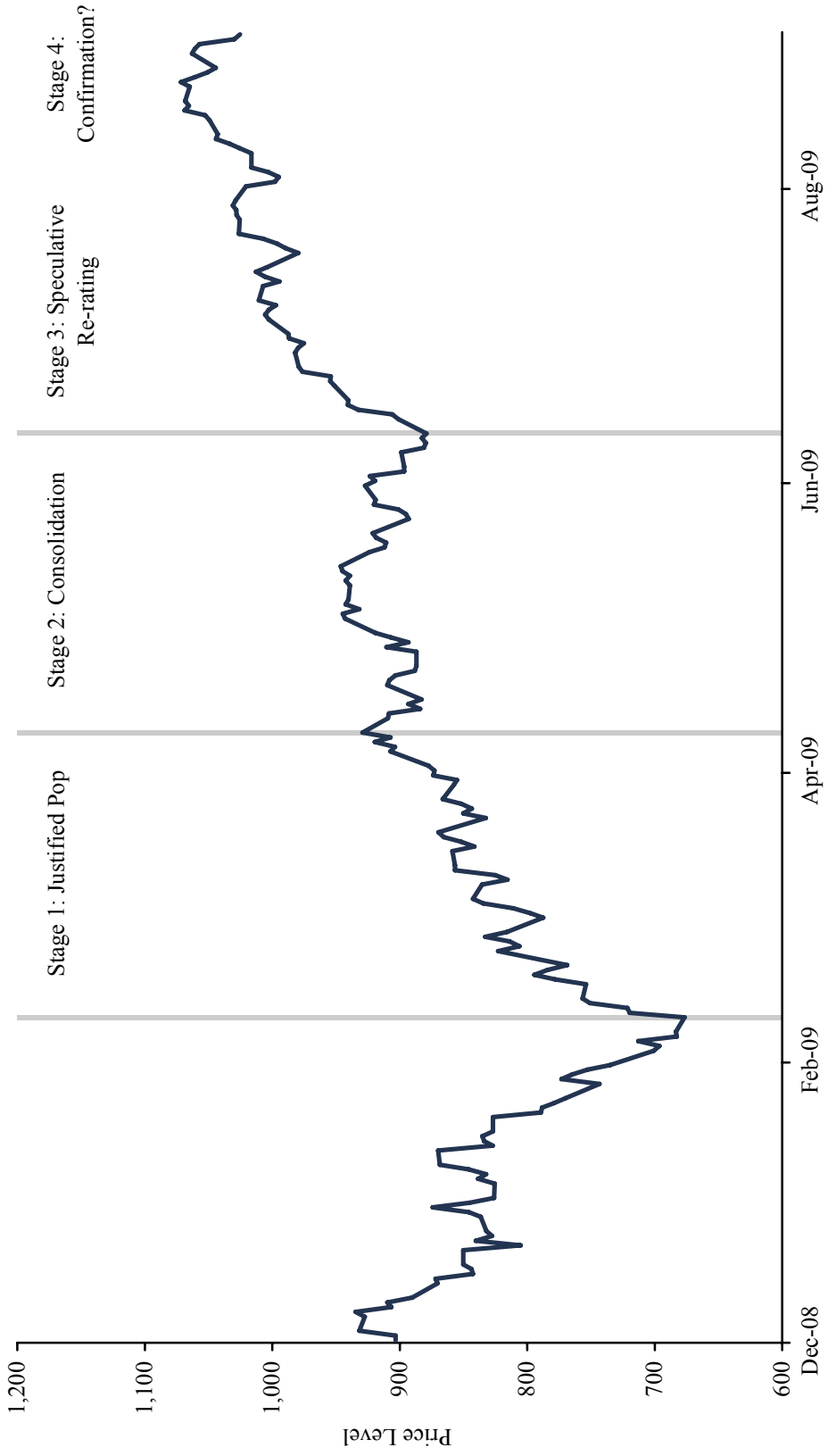
Despite secular headwinds, we do not think investors should focus on whether or not markets have "hit bottom." Indeed, the market does not necessarily need to "retest" its March lows. Rather, the market could slowly move sideways, rising in nominal terms, but not in real terms, or at a pace less than the nominal earnings growth. Such was the case in the 1970s (the market never broke below its 1974 lows in nominal terms). The secular bear market that began in 1929 did not end until 1949, although the market never broke below the 1932 lows.

Investors should instead focus on relative valuation opportunities and rebalancing to make hay while they can. From a tactical perspective, we continue to believe that investors should generally remain defensive, investing in high-quality assets across the equity spectrum. Investors should only move into low-quality assets, such as distressed investments, when pricing is exceptionally low, as was the case for high-yield bonds and bank debt earlier this year. In regard to rebalancing, we recommend investors take equities back down to target if the recent gains have pushed allocations higher. The current market environment may continue to be volatile for some time. Thus, disciplined investors should buy the market when it falls sharply and rebalance after it experiences an explosive rally like we have seen since early March. This is the key to navigating what will be a period of heightened economic uncertainty.

Table A

S&P 500 INDEX PRICE LEVELS

December 31, 2008 – October 2, 2009

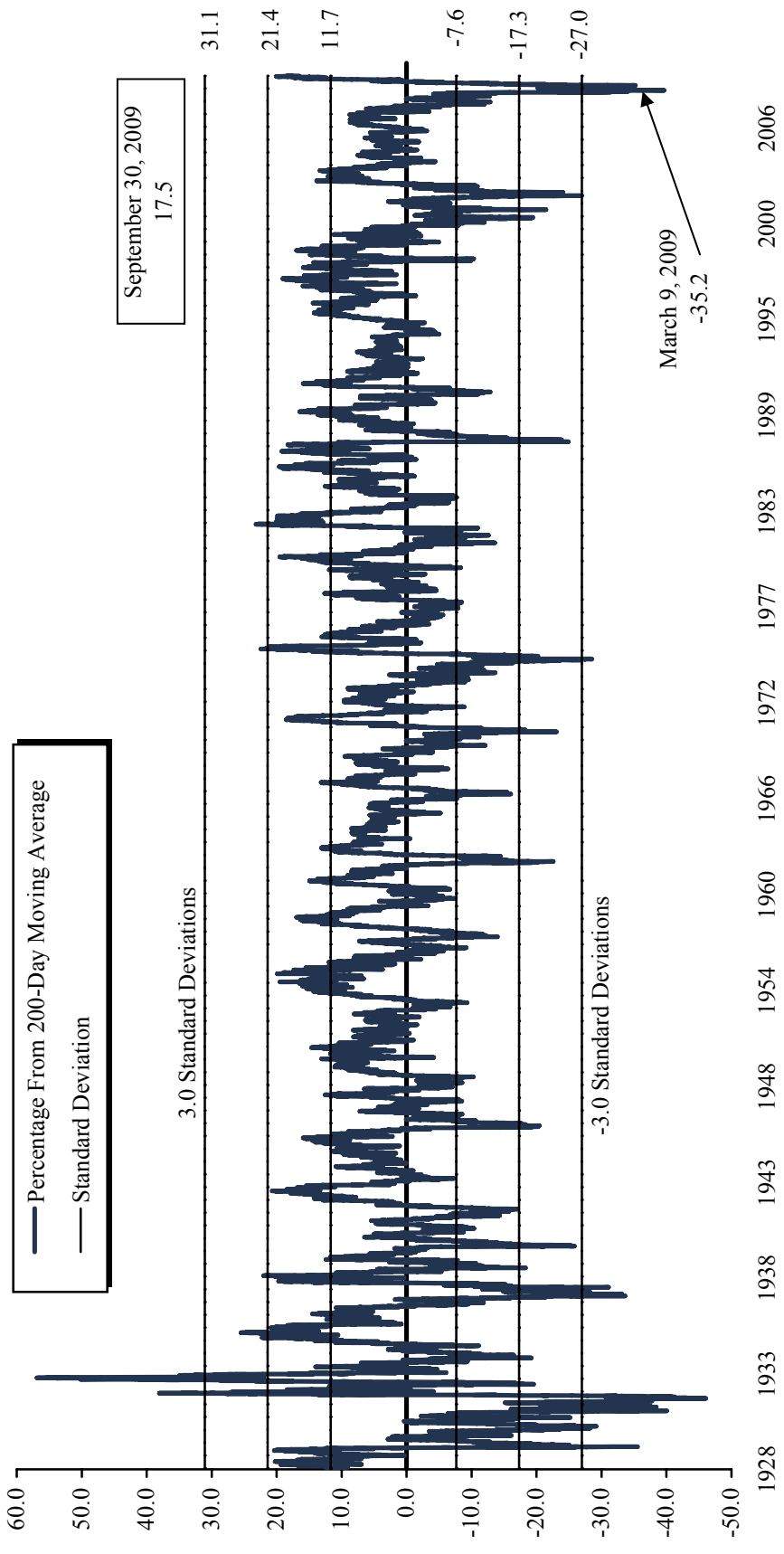


Sources: Standard & Poor's and Thomson Datastream.

Table B

S&P 500 PERCENTAGE FROM 200-DAY MOVING AVERAGE

December 31, 1927 – September 30, 2009



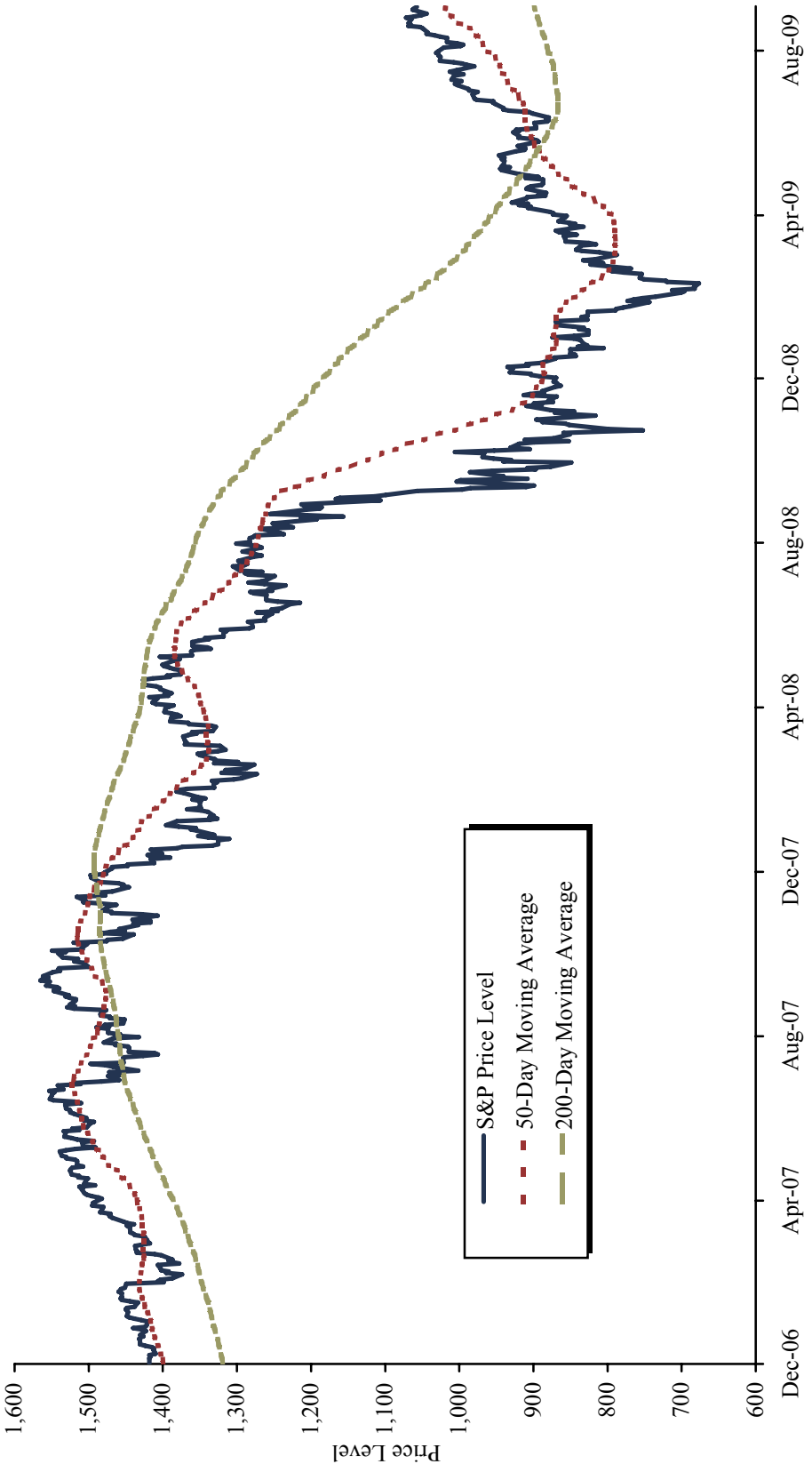
Sources: Global Financial Data, Inc., Standard & Poor's, and Thomson Datastream.

Notes: Daily data from December 31, 1927, to December 31, 1965, provided by Global Financial Data, Inc. Data from January 3, 1966, to present provided by Thomson Datastream.

Table C

S&P 500 PRICE LEVEL AND MOVING AVERAGES

December 31, 2006 – September 30, 2009

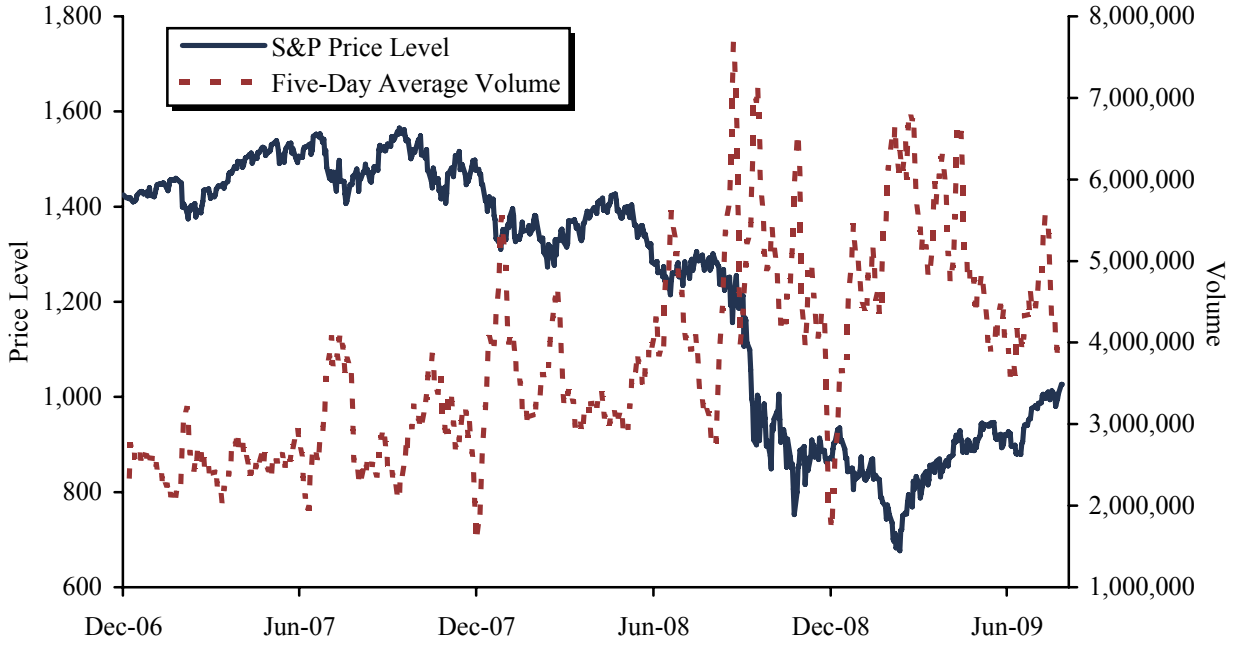


Sources: Standard & Poor's and Thomson Datastream.

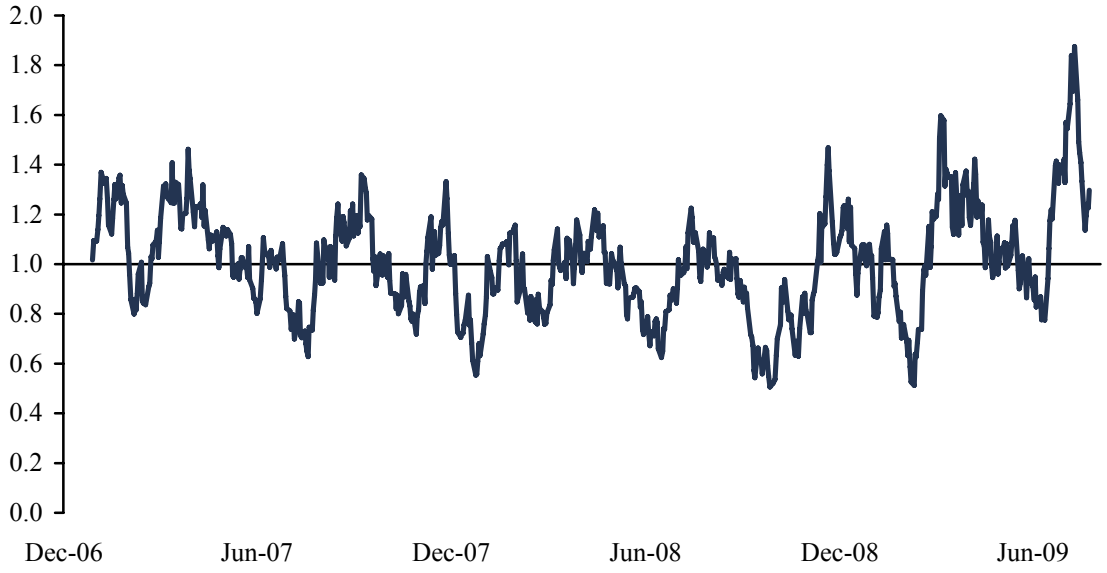
Table D

S&P 500 PRICE VOLUME AND BREADTH

December 31, 2006 – September 30, 2009



Advance/Decline 20-Day Average



Sources: Standard & Poor's and Thomson Datastream.

Table E

S&P 500 PERFORMANCE

	Stage 1 Mar 10 – May 8		Stage 2 May 9 – Jul 10		Stage 3 Jul 11 – Sep 21		Total Mar 10 – Sep 21	
Sector	Return	Contribution	Return	Contribution	Return	Contribution	Return	Contribution
Consumer Discretionary	50.5	4.2	-7.5	-0.7	26.7	2.4	76.3	6.4
Consumer Staples	17.1	2.4	2.8	0.3	11.3	1.4	34.0	4.6
Energy	28.1	3.8	-12.2	-1.6	21.2	2.6	36.3	5.1
Financials	110.8	9.6	-14.8	-2.1	36.9	4.9	145.7	13.4
Health Care	17.1	2.8	1.3	0.2	12.7	1.8	33.7	5.3
Industrials	55.7	5.1	-11.8	-1.2	32.2	3.1	81.6	7.5
Information Technology	33.9	6.4	4.1	0.7	21.3	4.0	69.2	12.2
Materials	48.4	1.5	-9.2	-0.3	32.8	1.1	78.9	2.4
Telecommunication Services	20.5	1.0	-5.1	-0.2	10.4	0.4	26.2	1.3
Utilities	22.3	1.0	-0.2	0.0	11.2	0.5	35.8	1.6
Index Return		**37.8**		**-4.9**		**22.0**		**59.8**
Market Cap Quintiles								
Q1 (Largest)	31.7	22.4	-4.2	-2.8	19.1	12.9	50.5	35.5
Q2	41.8	6.5	-5.8	-1.0	24.7	4.1	65.0	10.1
Q3	52.3	4.1	-5.6	-0.5	26.8	2.2	83.4	6.6
Q4	56.1	2.7	-7.9	-0.4	33.3	1.7	87.0	4.2
Q5 (Smallest)	116.4	2.1	-10.3	-0.3	42.5	1.1	182.0	3.4
Forward P/E Quintiles								
Q1 (Cheapest)	33.4	6.6	-4.4	-0.9	18.2	3.7	49.1	10.5
Q2	20.2	6.5	-1.7	-0.4	11.7	3.2	32.5	10.0
Q3	32.7	6.5	-0.5	-0.1	20.8	4.1	59.8	11.7
Q4	55.5	10.7	-8.7	-1.9	28.3	5.6	83.3	15.1
Q5 (Most Expensive)	69.3	5.8	-9.8	-1.1	36.6	3.9	108.4	9.5
Nonearners	97.7	1.8	-20.2	-0.6	43.4	1.0	126.6	2.5
ROE Quintiles								
Q1 (Highest)	23.7	7.0	0.3	0.0	14.6	4.0	43.0	12.3
Q2	27.1	6.1	-2.4	-0.5	18.3	3.8	48.1	10.5
Q3	43.8	7.1	-8.5	-1.2	25.7	3.6	65.9	10.7
Q4	29.3	4.6	-3.8	-0.6	19.5	2.7	47.9	7.4
Q5 (Lowest)	83.8	8.1	-10.0	-1.3	30.0	4.4	116.6	11.8
NA	63.2	5.0	-12.8	-1.4	36.9	3.5	89.5	7.3
Leverage								
Q1 (Highest)	83.0	12.0	-12.3	-2.5	33.0	6.3	113.5	17.2
Q2	32.5	4.4	-4.6	-0.6	20.5	2.7	52.4	7.1
Q3	33.2	6.4	-4.0	-0.7	22.2	4.0	56.1	10.5
Q4	24.5	8.3	-2.4	-0.7	16.6	5.0	41.8	13.8
Q5 (Lowest)	32.2	5.9	-1.7	-0.3	20.7	3.7	56.7	10.2
NA	55.5	0.8	-7.0	-0.1	17.9	0.3	70.6	1.0

Sources: FactSet Research Systems and Standard & Poor's.

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. Leverage is defined as total assets divided by stockholder equity.

Table F

RUSSELL 2000® PERFORMANCE

	Stage 1 Mar 10 – May 8		Stage 2 May 9 – Jul 10		Stage 3 Jul 11 – Sep 21		Total Mar 10 – Sep 21	
Sector	Return	Contribution	Return	Contribution	Return	Contribution	Return	Contribution
Consumer Discretionary	72.8	8.2	-7.7	-1.0	35.5	4.6	115.7	13.2
Consumer Staples	32.7	1.4	-2.8	-0.1	16.1	0.6	49.5	2.2
Energy	83.8	3.1	-20.9	-1.0	41.0	1.8	104.5	4.2
Financials	53.0	11.0	-13.6	-2.8	26.7	5.2	67.2	14.9
Health Care	27.1	4.7	2.5	0.3	24.7	3.6	62.2	9.6
Industrials	55.9	8.4	-10.3	-1.7	28.1	4.5	78.9	12.4
Information Technology	47.5	8.8	4.3	0.7	25.0	5.0	92.1	16.4
Materials	68.8	2.3	-7.0	-0.3	47.4	1.8	131.0	4.2
Telecommunication Services	46.3	0.6	-4.1	0.0	12.2	0.2	57.1	0.9
Utilities	17.8	1.0	3.3	0.1	10.3	0.4	34.1	1.7
Index Return		**49.6**		**- 5.8**		**27.7**		**79.6**
Market Cap Quintiles								
Q1 (Largest)	32.6	18.7	-5.5	-2.4	23.1	11.5	53.1	29.1
Q2	55.6	13.1	-6.7	-1.7	30.3	7.2	86.0	20.8
Q3	72.0	8.5	-5.4	-0.8	33.5	4.7	117.4	14.5
Q4	84.9	5.4	-3.3	-0.4	33.9	2.7	135.8	9.2
Q5 (Smallest)	163.1	3.9	-6.9	-0.5	34.8	1.6	243.8	6.5
Forward P/E Quintiles								
Q1 (Cheapest)	45.4	6.8	-6.2	-0.9	22.0	3.2	65.6	10.2
Q2	42.0	8.6	-3.4	-0.7	21.8	4.2	68.7	13.8
Q3	46.3	8.9	-4.2	-0.7	26.3	4.8	76.1	14.6
Q4	44.9	7.2	-5.1	-0.7	25.5	4.0	72.9	11.9
Q5 (Most Expensive)	56.9	7.3	-6.9	-0.9	36.0	4.6	97.4	12.2
Nonearners	64.8	10.8	-8.9	-1.9	39.4	7.7	109.0	18.4
ROE Quintiles								
Q1 (Highest)	44.9	7.4	-4.5	-0.6	23.4	3.1	70.9	11.6
Q2	37.7	6.9	-5.8	-0.9	19.4	3.2	56.9	10.5
Q3	42.2	7.2	-4.5	-0.7	20.3	3.0	62.3	10.8
Q4	42.9	6.0	-5.5	-0.7	20.6	2.6	63.0	9.0
Q5 (Lowest)	48.0	6.5	-7.6	-0.8	25.7	2.8	75.2	10.1
NA	73.4	15.6	-6.4	-2.0	39.6	12.6	128.1	27.5
Leverage								
Q1 (Highest)	67.9	9.3	-14.0	-2.2	28.1	4.4	85.2	12.7
Q2	51.6	10.7	-6.7	-1.5	31.2	6.7	85.3	17.9
Q3	49.7	11.0	-6.5	-1.4	30.6	6.5	81.4	17.8
Q4	46.2	9.7	-2.8	-0.5	25.0	5.0	77.5	16.0
Q5 (Lowest)	36.1	7.2	1.0	0.1	21.4	4.0	67.1	13.0
NA	59.7	1.5	-10.6	-0.3	54.7	1.7	120.9	3.1

Sources: FactSet Research Systems and Frank Russell Company.

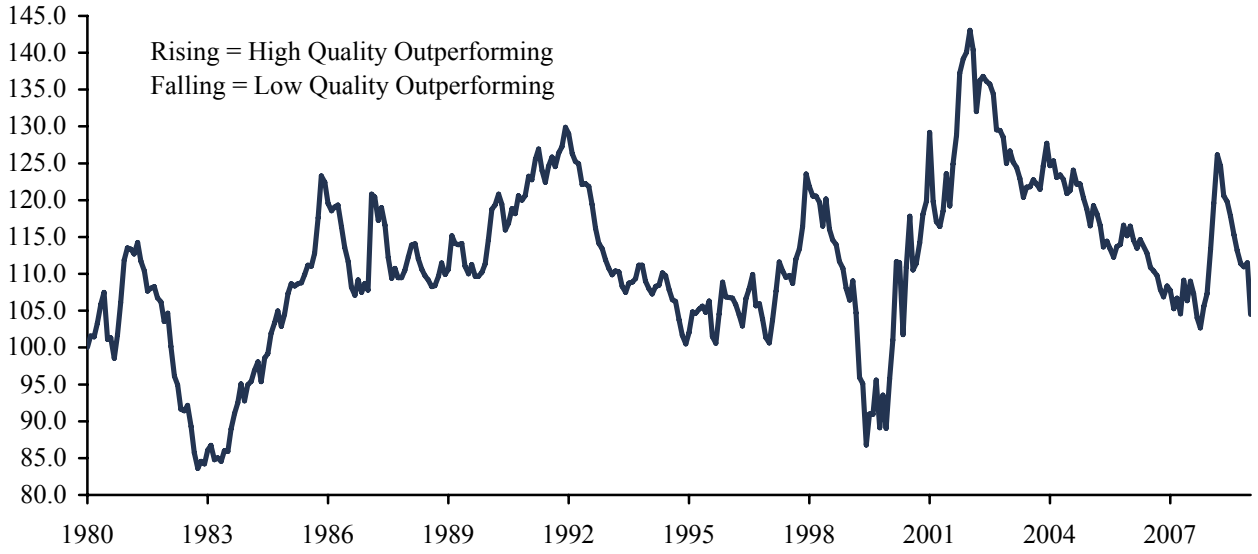
Notes: NA indicates data were not available or the companies were not in the index for the entire period. Nonearners include companies that reported less than $0.10 earnings per share or negative earners. Leverage is defined as total assets divided by stockholder equity.

Table G

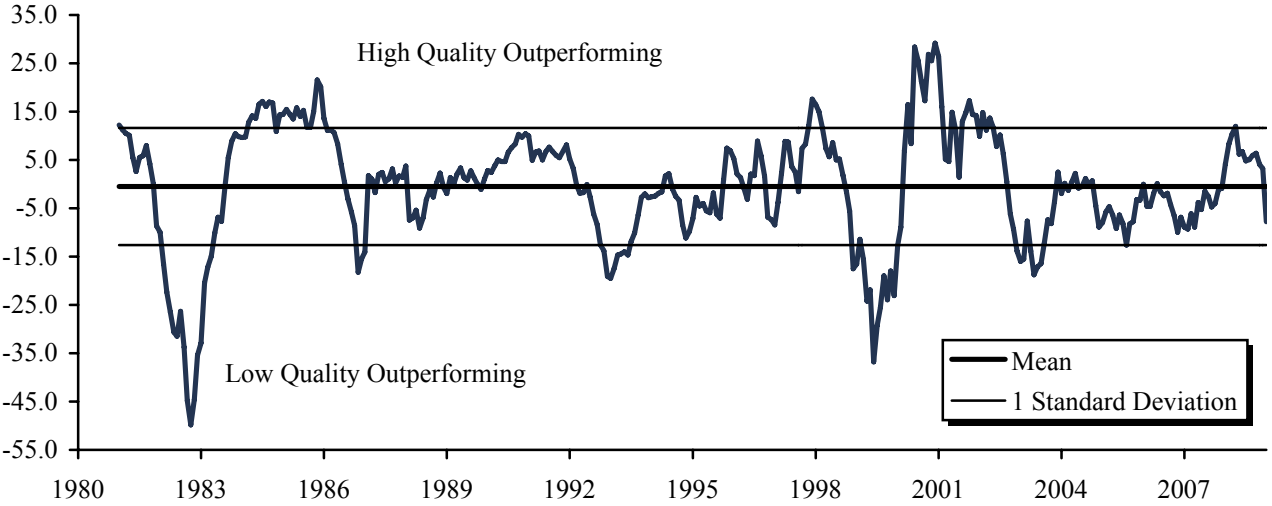
HIGH-QUALITY STOCK INDEX VS LOW-QUALITY STOCK INDEX

September 30, 1980 – September 30, 2009

High-Quality/Low-Quality Index Relative Performance



High-Quality Total Return (YoY) Minus Low-Quality Total Return (YoY)



Sources: FactSet Research Systems, Ned Davis Research, Inc., and Standard & Poor's.

Notes: Based on S&P common stock rankings. High quality are stocks rated A+ to B+; low-quality stocks are rated B or below. Indices are an equal-weighted average. Data from September 1980 through August 2009 are from Ned Davis Research, Inc. Data from September 2009 and thereafter are calculated by FactSet Research Systems. Performance chart rebased to 100 on September 30, 1980.

Table H

RECESSION PATH

1926–2009

					Acknowledgment		Capitulation		Full Impact		Relief Rally
S&P 500 Peak	Recession Start Date	S&P 500 Trough	Recession End Date	Recession Duration (Months)	S&P 500 Peak to Start of Recession (Months)	S&P 500 Peak to Start of Recession (% Change)	Start of Recession to S&P 500 Trough (Months)	Start of Recession to S&P 500 Trough (% Change)	S&P 500 Peak to Trough (Months)	S&P 500 Peak to Trough (% Change)	S&P 500 Trough to End of Recession (% Change)
Sep-1929	Aug-1929	Jun-1932	Mar-1933	42.9	-0.2	-0.4	33.0	-86.1	32.8	-86.2	33.0
Mar-1937	May-1937	Mar-1938	Jun-1938	13.0	2.7	-12.9	10.0	-47.7	12.7	-54.5	36.0
Jun-1945	Feb-1945	Aug-1945	Oct-1945	8.0	-3.9	-7.0	5.7	0.7	1.8	-6.3	15.6
Jun-1948	Nov-1948	Jun-1949	Oct-1949	11.0	5.5	-13.5	6.4	-8.1	11.9	-20.6	18.7
Jan-1953	Jul-1953	Sep-1953	May-1954	9.9	6.8	-7.1	1.5	-8.2	8.3	-14.8	28.5
Jul-1957	Aug-1957	Oct-1957	Apr-1958	8.0	1.5	-8.0	1.7	-13.8	3.2	-20.7	11.4
Jan-1960	Apr-1960	Oct-1960	Feb-1961	10.0	3.8	-10.0	5.9	-3.8	9.6	-13.4	21.3
May-1969	Dec-1969	May-1970	Nov-1970	11.0	7.5	-13.1	4.8	-24.7	12.3	-34.6	25.8
Jan-1973	Nov-1973	Oct-1974	Mar-1975	15.9	10.6	-9.9	10.1	-42.4	20.7	-48.2	33.7
Feb-1980	Jan-1980	Mar-1980	Jul-1980	6.0	-0.4	-3.6	1.8	-14.0	1.4	-17.1	23.9
Nov-1980	Jul-1981	Aug-1982	Nov-1982	16.0	8.0	-6.8	12.4	-21.8	20.4	-27.1	35.3
Jul-1990	Jul-1990	Oct-1990	Mar-1991	7.9	0.5	-3.1	2.4	-17.0	2.8	-19.6	27.0
Mar-2000	Mar-2001	Sep-2001	Nov-2001	8.0	12.1	-23.9	5.7	-16.8	17.8	-36.6	18.0
Average				**12.9**	**4.2**	**-9.2**	**7.8**	**-23.4**	**12.0**	**-30.7**	**25.2**
Median				**10.0**	**3.8**	**-8.0**	**5.7**	**-16.8**	**11.9**	**-20.7**	**25.8**
Oct-2007	Dec-2007	Mar-2009			2.7	-6.2	14.2	-53.9	17.0	-56.8	46.0*

Sources: Global Financial Data, Inc., Morgan Stanley Research, NBER: *Business Cycle Expansions and Contractions,* Robert J. Shiller, Standard & Poor's, and Thomson Financial.

Notes: Concept obtained from Morgan Stanley's *US Portfolio Strategy: Atonement - Navigating a US Recession,* December 10, 2007. Returns are based on daily price levels.

* This assumes a recession end date of July 31, 2009. In an August forecasting survey conducted by the *Wall Street Journal,* economists named July, on average, as the ending month of the recession. NBER has yet to date the current business cycle trough.

Table I

RECESSION RELIEF RALLIES AND SUBSEQUENT RETURNS

1926–2009

		Relief Rallies	Valuation	Early Recovery Gains	
S&P 500 Trough	Recession End Date	S&P 500 Trough to Recession End (% Change)	S&P 500 Normalized Real P/E at Recession End	S&P 500 Subsequent Six Months from Recession End (% Change)	S&P 500 Subsequent 12 Months from Recession End (% Change)
Jun-01-1932	Mar-31-1933	33.0	7.4	66.2	81.5
Mar-31-1938	Jun-30-1938	36.0	14.0	13.7	-6.1
Aug-20-1945	Oct-31-1945	15.6	14.5	12.7	-10.9
Jun-13-1949	Oct-31-1949	18.7	10.2	11.6	21.4
Sep-14-1953	May-28-1954	28.5	13.5	17.3	29.9
Oct-22-1957	Apr-30-1958	11.4	14.2	18.2	32.6
Oct-25-1960	Feb-28-1961	21.3	19.6	7.3	10.3
May-26-1970	Nov-30-1970	25.8	15.4	-8.9	8.1
Oct-04-1974	Mar-31-1975	33.7	10.1	0.6	23.3
Mar-27-1980	Jul-31-1980	23.9	9.0	6.5	7.6
Aug-12-1982	Nov-30-1982	35.3	8.4	17.2	20.1
Oct-11-1990	Mar-28-1991	27.0	18.0	3.4	7.6
Sep-21-2001	Nov-30-2001	18.0	30.2	-6.3	-17.8
Average		**25.2**	**14.2**	**12.3**	**16.0**
Median		**25.8**	**14.0**	**11.6**	**10.3**
Mar-09-2009		46.0*	17.7		

Sources: Global Financial Data, Inc., Morgan Stanley Research, NBER: *Business Cycle Expansions and Contractions,* Robert J. Shiller, Standard & Poor's, and Thomson Financial.

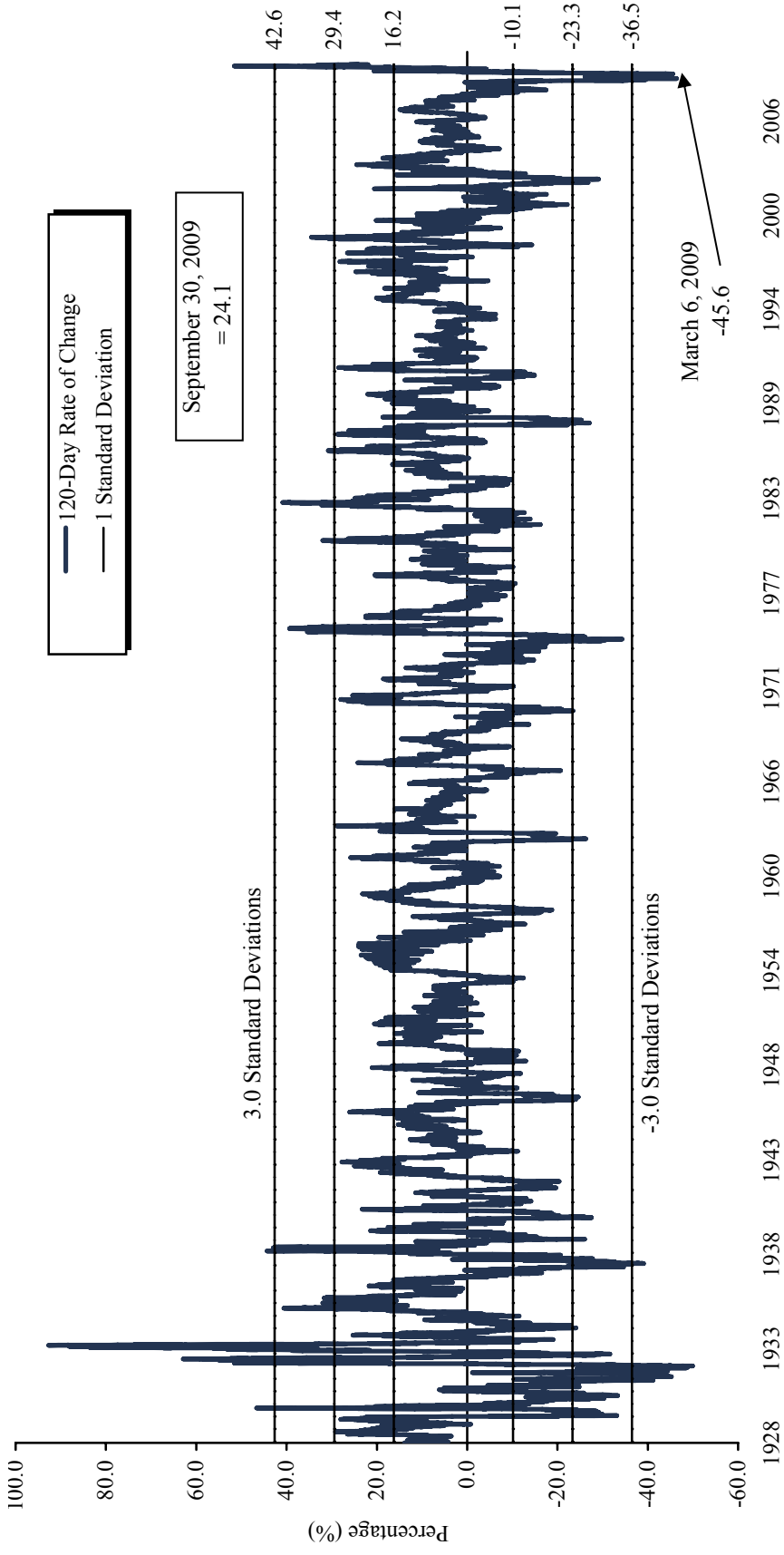
Notes: Concept obtained from Morgan Stanley's *US Portfolio Strategy: Atonement - Navigating a US Recession,* December 10, 2007. Returns are based on daily price levels.

* This assumes a recession end date of July 31, 2009. In an August forecasting survey conducted by *The Wall Street Journal,* economists named July, on average, as the ending month of the recession. NBER has yet to date the current business cycle trough.

Table J

S&P 500 INDEX 120-DAY RATE OF CHANGE (%)

December 31, 1927 – September 30, 2009



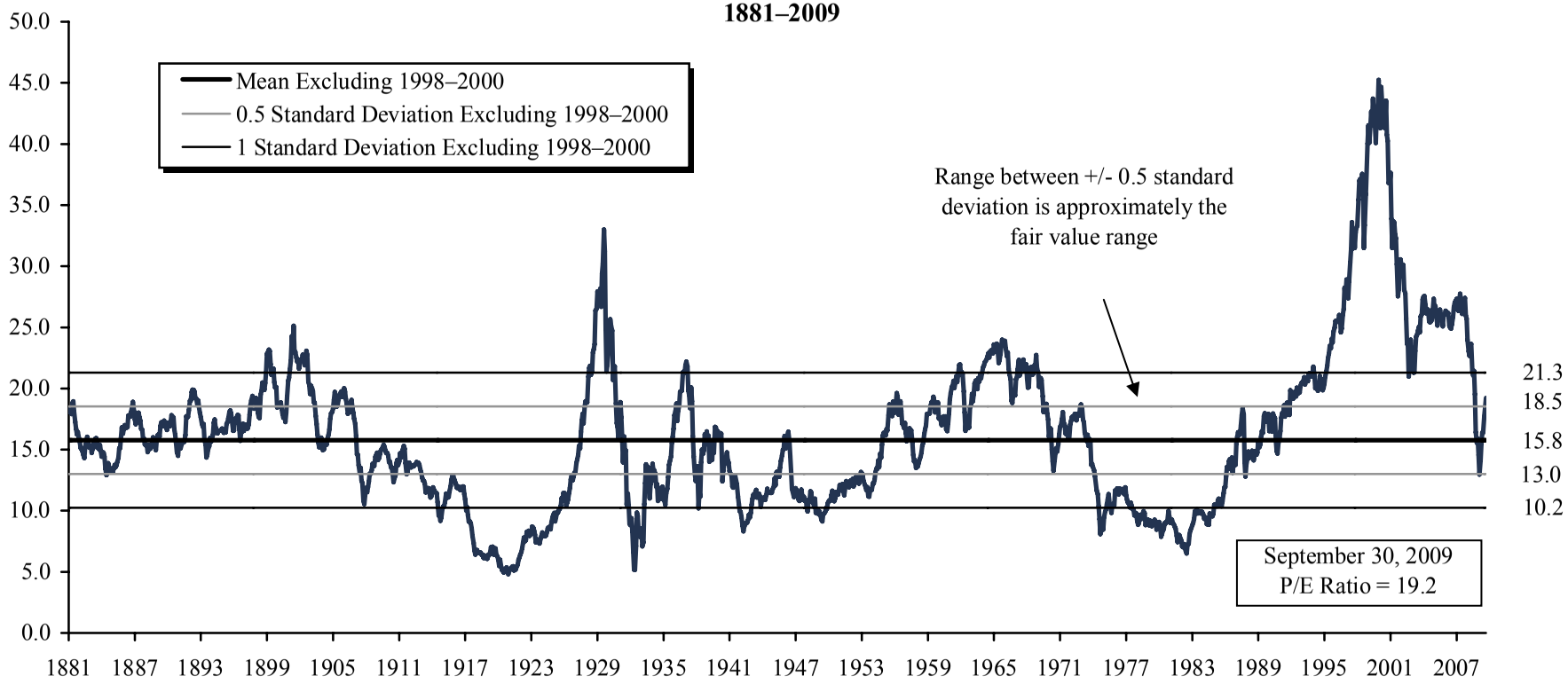
Sources: Global Financial Data, Inc., Standard & Poor's, and Thomson Datastream.

Notes: Daily data from December 31, 1927, to December 31, 1965, provided by Global Financial Data, Inc. Data from January 3, 1966, to present provided by Thomson Datastream.

Table K

S&P 500 NORMALIZED REAL PRICE-EARNINGS RATIOS

1881–2009



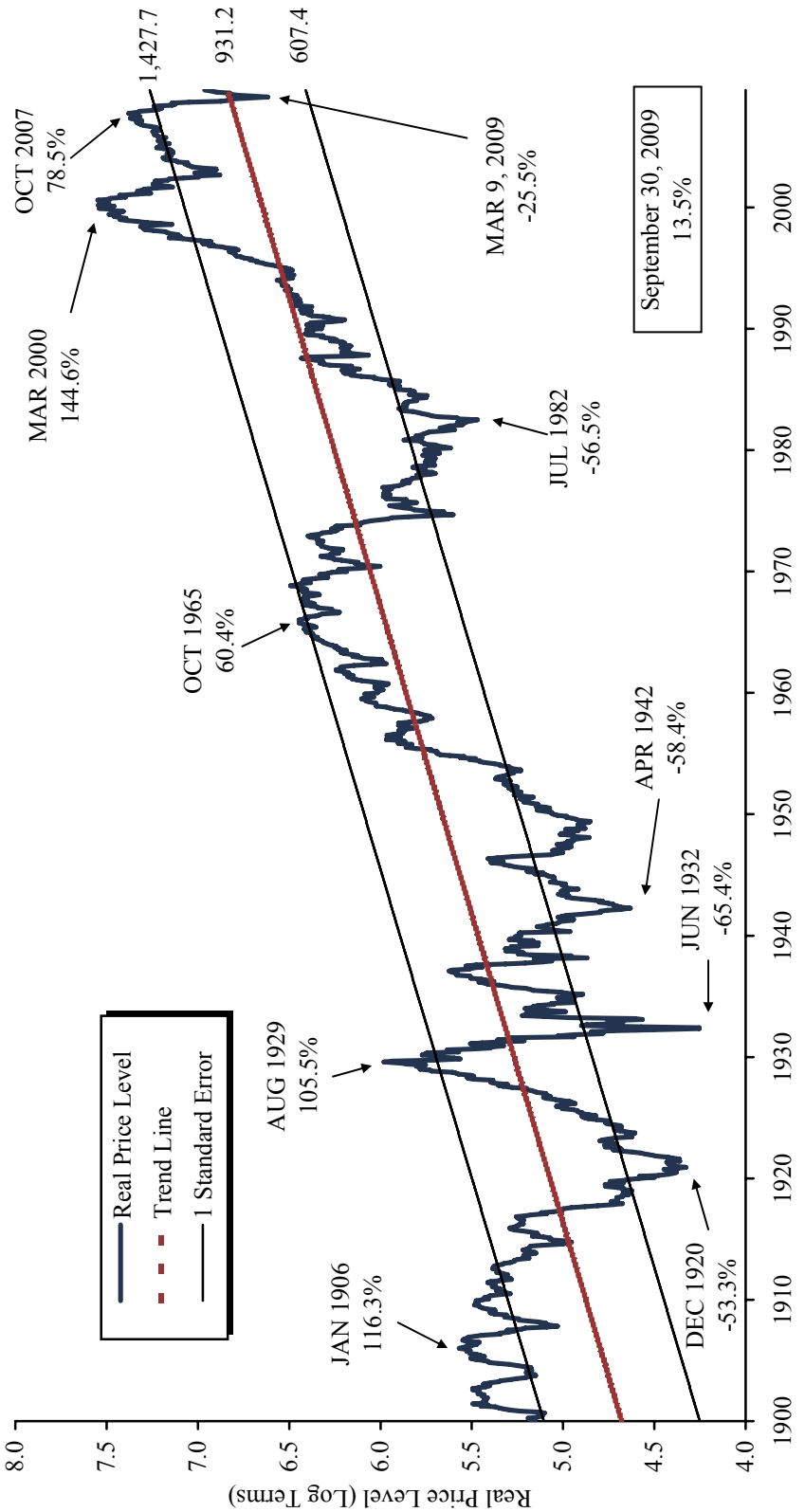
Sources: Robert Shiller, Standard & Poor's, and Thomson Datastream.

Notes: The calculation of the mean and standard deviation of real normalized price-earnings (P/E) ratios excludes the 1998–2000 period to minimize the distortion caused by the final years of the technology bubble on long-term valuation norms. Even excluding this period, approximately 68% of P/E observations still fall within 1 standard deviation around the mean, in line with a normal distribution. We generally consider 0.5 standard deviation around the mean to capture fair value, as readings in this range generally have been followed by subsequent returns consistent with long-term historical averages. For more information, please see our 2009 report *U.S. Historical Capital Market Valuations*. Graph is based on monthly data. Normalized real P/E ratios (Shiller P/E ratio) for the S&P 500 are calculated by dividing the current index value by the rolling ten-year average of inflation-adjusted earnings. Monthly earnings are interpolated from actual quarterly reported EPS. Real earnings are deflated in terms of August 31, 2009, dollars. Historical data before 1936 provided by Professor Robert Shiller.

Table L

S&P 500 INDEX REAL PRICE LEVEL AND DEVIATION FROM TREND

January 31, 1900 – September 30, 2009



Sources: Global Financial Data, Inc., Standard & Poor's, and Thomson Datastream.

Notes: Data are shown in logarithmic terms. Trend line based on simple linear regression trend model. Price level data are deflated by CPI-U based on August 31, 2009, level. Indicated percentages represent difference between trend line and real price level.