



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

2012 OUTLOOK U.S. MARKET COMMENTARY

Harvesting Ripe Fruit From a Frost-Covered Tree

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Harvesting Ripe Fruit From a Frost-Covered Tree

Sean McLaughlin, Lisa Miller, Sam Hecht, & Jeffrey Khoury

The U.S. economy is still on life support, but investors should not assume that equities and credit are dead money.

Owners of U.S. stocks and bonds can count their blessings and curses as 2011 ends and 2012 begins. Some elements of the investment backdrop are little changed from the prior year, while other aspects have improved and a few have deteriorated further.

What has not changed appreciably? The domestic economic backdrop is still lousy, with stubbornly high unemployment and continued housing pressure conspiring to depress consumer spending growth. Also little changed from 2010's levels are equity prices (though, of course, the intra-year volatility was substantial, as we discuss below). Another characteristic that persists into 2012 is the strong investor appetite for liquid high-quality bonds despite their low yields, and the lack of enthusiasm for equities.

What has improved? A few aspects of the domestic economy are showing nascent signs of life, and recent economic releases have surprised to the upside. Equity valuations are somewhat better than they were a year ago (normalized earnings are higher than a year ago, while share prices are stable). Continued dollar weakness and relatively flat wages have improved U.S. competitiveness. Debt burdens continue to ease for consumers and businesses (though, of course, much of the decline in household debt continues to emanate from foreclosures).

What has deteriorated? The political divide has widened (and is unlikely to narrow before November's presidential elections), shrinking the chance of meaningful deficit reduction. Certainly, the debt dynamics in Europe have become more

worrisome as well, and the growth outlooks for China and Europe have downshifted. Valuations of high-quality bonds have deteriorated meaningfully, with five-year Treasury yields cut in half versus a year ago and ten-year yields trimmed by 40%, or about 140 basis points (bps).

Compared to our viewpoint a year ago, the outlook for equity-dominated portfolios is somewhat more favorable on a fundamental basis; however, it is more challenging from a macro perspective.

It has been our experience, of course, that equity valuations can and often do trump economic fundamentals and macro head/tailwinds, as well as corporate fundamentals over the intermediate to long term. Current valuations are generally reasonable, lowering the risk of a sharp sell-off in response to any deterioration in the near-term earnings outlook.

We continue to recommend a defensive, lower-beta equity portfolio tilt; in the United States, that would likely incorporate high-quality equities, well-selected long/short equity hedge funds, and perhaps a ladleful of credit as an additional equity substitute.

For bonds intended as deflation hedges, taxable investors should stick with high-quality municipals. Tax-exempt investors perennially need to incorporate some long-duration high-quality bonds for their beneficial response during slow growth and deflationary conditions, but given the skewed risk-reward outlook with ten-year Treasury yields of just 1.9%, we would continue to keep some of the target allocation in cash.

Reversal of Fortune for Bonds and Equities as 2011 Progressed

As 2011 opened, Treasuries and municipal bonds were giving investors a conniption fit, while equities and all things commodity were off to the races. Sentiment turned in late springtime as domestic economic data soured, and then, beginning in August, domestic political dysfunction and European turmoil precipitated an equity rout and a hunger for Treasuries.

U.S. equity returns for calendar year 2011 were roughly flat; however, they followed a tumultuous route to reach that point. Stocks returned about 10% during the first four months of the year, then lopped off nearly 20% during the summer and early fall, before recovering part of the earlier declines with a roughly 15% bounceback late in the year. Indeed, the roughly flat return for large-cap equities also masks some divergence of sector returns, which ranged from 20% for utility shares to -17% for financials; however, most sectors were roughly flat for the year. Small caps, which started the year with rich valuations, sold off more sharply than mega caps and large caps (the Russell 2000® Index returned -29% from peak to trough, versus about -15% for mega-cap stocks).

Bonds chalked up another solid year. The Barclays Capital Aggregate Bond Index returned 7.9% (well above the index's yield at the year's inception). Government bonds, investment-grade corporate bonds, and government-guaranteed mortgage-backed securities all delivered mid-single-digit returns, with mortgages taking up the rear with a roughly 6% return as investors continued to fret about the impact of any increase in refinancing activity on premium-priced, high-coupon securities. Long-duration high-quality bonds, including nominal Treasuries, Treasury Inflation-Protected Securities (TIPS), and

municipals, delivered fabulous annual returns despite inauspicious beginnings in January and February. The Barclays Capital index of 22+ year municipal bonds returned 15% and TIPS returned 14%. High-yield bonds, by comparison, managed a modest 5% return for the year, as spreads ballooned even as the annual default pace narrowed to just 2%.

Graceless Economic Recovery Stumbles Ahead

The U.S. economy appears on track to continue its tentative, anemic recovery from the 2008–09 recession, which was the deepest in postwar history. Inflation-adjusted GDP did not crest above 2007's peak levels until third quarter 2011; the 15-quarter slog back above water took roughly twice as long as the recoveries from the mid-1970s and early 1980s recessions. While domestic conditions no longer appear to be tilting the United States toward a double-dip recession,¹ a recession in Europe or a sharp slowdown in China could certainly reverse the progress of the U.S. recovery.² Unemployment has now fallen to 8.5% after spending nearly three years above that level, but some of the improvement in the unemployment rate stems from labor force dropouts. Since 2010, the employed percentage of the population has hovered between 57% and 59% (from 1987 until 2009, the rate had never dipped below 60%, and the average rate since 1980 has been 62%). Consumer surveys show that anxiety and pessimism remain high. The Consumer Confidence Index was just 64.5 in December, a level that is in the lonely 91st percentile of survey results dating back to 1967 and not far above typical

¹ GDP growth in first quarter 2011 was barely positive, and second quarter growth was just north of a 1% annual pace, but third quarter revised growth was at a 2% pace.

² For more on the prospects in Europe and China, please see our forthcoming 2012 Outlook Global Market Commentary.

trough levels during most prior recessions (Exhibit 1). The OECD's leading economic indicators metric is currently elevated (normally a positive sign); however, stripping out the index's financial components such as the shape of the yield curve points to a roughly flat result, indicating economic prospects that are neither expansionary nor contractionary.

Mortgage programs and policy changes, including 2011's expansion of the Home Affordable Refinance Program (HARP 2.0), have had little success in reversing the housing-related pain, although home prices appear to have more or less stabilized, and some homeowners have benefitted from refinancing into lower-rate or shorter-term mortgages. Housing is a weighty component of the U.S. economy, with homes serving as most households' largest asset and chief source of collateral. Home prices have stagnated since early 2009, bouncing roughly between 30% and 35% below their peak levels, offering no help to homeowners who are underwater on their mortgages (i.e., owing more than the value of the property). Property derivatives do not bake in much improvement in the medium term (Exhibit 2). Approximately one-quarter of homeowners with mortgages are underwater, limiting the ability of those homeowners to improve monthly cash flow by refinancing into cheaper debt (despite the record-low mortgage rates that the Federal Reserve has spent trillions of dollars to secure via quantitative easing and Operation Twist), and also hampering the ability of those homeowners to relocate in order to secure a job.

Consumer Struggles Remain

The U.S. consumer remains under stress, with little relief on the job or housing fronts and dismal confidence levels as a result. The diminishing debt level is a lone bright spot, and even those statistics have a dark side.

The progress of necessary consumer deleveraging has hardly been cheerful. In fact, it has largely been involuntary, with two-thirds stemming from foreclosures and bank charge-offs of delinquent credit card debt according to McKinsey. However, the result remains generally positive for the U.S. economy looking forward. Household debt in dollar terms has shrunk by about 5% compared to its \$13.9 trillion peak level, and debt levels as a percentage of GDP have fallen by 12 percentage points since their 2008 peak, and now stand at 87% (Exhibit 3). Revolving debt (e.g., credit cards) has dropped by about \$170 billion, or 18%, compared to 2008 levels. Commercial banks are now charging off about 1.6% of total loan balances per year, which is well above historical average levels of 1.0%; however, the charge-off rate is about half its 3.0% peak level of late 2009. Perhaps more importantly, vastly lower interest rates paired with lower debt levels have pushed debt service costs to just 11.1% of disposable income—the lowest level since 1994 and about 3 percentage points below the peak level reached during the housing bubble (Exhibit 4).

The savings rate, which troughed at 1% of disposable income in 2005 as households increasingly used cash-out refinancing to finance current consumption, bounced back during the recession, but dipped from 5% to 3.5% during 2011 (Exhibit 5). Current period savings decrease consumption, of course, but have a stabilizing impact over the long term. Even though employed consumers may now have a renewed balance sheet capacity for taking on additional debt to fuel a strengthening of consumer spending, their willingness to take on incremental debt obligations is limited.³

The credit-lite frugality (whether self-imposed or because of externally imposed constraints) is

³ The exception to this is student loans, the total balances of which continue to grow rapidly and attract controversy.

clear when one looks at automobile sales. These had run at roughly a 15-million-per-year pace since the 1980s, before falling off a cliff in 2008 to a ten-million-per-year pace (likely well below replacement levels). As Exhibit 6 illustrates, sales remain anemic at just 13.8 million. Strikingly, the average age of vehicles on U.S. roads has accelerated recently, jumping about 8% since the beginning of the recession, and now stands at 10.8 years (the oldest domestic fleet since data became available in 1995).

Retail sales data (Exhibit 7) do not paint such a gloomy picture, in part because they are not inflation-adjusted and also because they include items that most consumers have no choice but to purchase regularly. Holding on to an old car longer than planned is feasible for many consumers; replacing burnt-out light bulbs or filling the car's fuel tank is harder to delay. Retail sales in nominal dollar terms surpassed prior peak levels by 2010, and they continue to grow at about an 8% annual level, exceeding inflation by a significant margin. Spending on durable goods, non-durable goods, and services has now surpassed pre-recession peak levels, even on an inflation-adjusted basis, by 1% to 2%.

Balance Sheets in Decent Shape

Balance sheets of nonfinancial corporations tend to be reasonably healthy today (Exhibit 8). Corporate debt is moderate at about 4 times corporate cash flow (roughly the average level in recent decades), while the interest payments required to service that debt are at levels not seen since the 1950s, due to very low interest rates. Cash on the balance sheets of S&P 500 member corporations has gotten some attention in recent years. The volume of cash and short-term securities held by S&P 500 nonfinancials swelled from about \$400 billion ten years ago to around \$800 billion over 2004–08, and has jumped to nearly \$1.2 trillion today, a 9.6% compound annual growth rate over the past decade (Exhibit 9).

At least two caveats apply to the statistic. First, the cash is concentrated, with just 20 firms holding 48% of the total, although the level of concentration has been fairly stable over the past decade and is similar to the concentration of S&P 500 dividends paid.⁴ A second caveat is that significant fractions of the cash holdings are undoubtedly held overseas, and in the absence of a tax holiday, bringing the cash back onshore may prove problematic.⁵

Some observers point to the possibility of increased share buybacks stemming from the increased cash buildup; we do not hang our hat on that possibility, even if the repatriation issue does not stand in the way. The recent history of buybacks is not encouraging, because it mirrors share prices rather than exhibiting any pattern of value-based purchases (Exhibit 10). Buybacks were quite slim in 2001–02, even after share prices had fallen far from their bubble highs. Buybacks then increased nearly fivefold through third quarter 2007 as share prices neared peak levels, before plummeting to trough again in first quarter 2009, along with share prices. A countercyclical expansion of buybacks would be a welcome way to accelerate per-share earnings; alas, past experience indicates that it is an unlikely outcome.

There is the possibility that shareholders will press for dividends from cash-rich firms (either one-time special dividends similar to Microsoft's \$33.4 billion 2004 payout, or an ongoing dividend increase). Of the 20 firms that are particularly cash rich, many, including GE and Microsoft, already pay hefty dividends, while others, such as Google and Apple, seem like unlikely candidates to initiate a dividend. However, some that pay modest or no dividends

⁴ However, the market value of the index is somewhat less concentrated, with the 20 largest stocks representing 36% of the index's total market capitalization.

⁵ Even with a tax holiday, it is far from certain that companies would repatriate significant cash.

and that have limited growth prospects might find themselves under pressure to return money to shareholders. The nonfinancial firms within the S&P 500 are paying about \$59 billion in quarterly dividends, and during the most recent quarter, nonfinancial dividends surpassed prior peaks (Exhibit 11). Dividends from financials, of course, remain at less than half their peak levels, as some large banks continue to have regulatory constraints on their ability to restore or increase dividends. Goldman Sachs forecasts S&P 500 dividend payments to increase 11% in 2012 and 9% in 2013 (well above the 8% and 4% implied rates of increase for 2012 and 2013 calculated from dividend swaps).

Another potential use of cash is capital expenditures (capex) and other business expansion. In December, Fitch analyzed capex behavior for 324 U.S. corporate bond issuers and determined that these companies had grown their capex by 15% versus the prior year; however, the energy sector accounted for 28% of total capex for the period, and the growth in capex for non-energy companies was 2 percentage points lower than that for the full universe. In 2012, Fitch anticipates that the full sample of issuers will *shrink* its capex by 2% as capital spending by energy firms decreases by more than one-fifth. U.S. business leaders that have generally shown little inclination to invest since the end of the recession are unlikely to become much more bullish this year, amid the political and regulatory uncertainty surrounding an election year.

Government Finances Deteriorating Further

As banks, households, and nonfinancial corporations have delevered, the government's balance sheet has deteriorated as it has stepped in to fill the gap. Federal government debt held by the public now stands at 67% of GDP, and the stock of marketable Treasury debt has *grown* by \$5.4 trillion since the end of 2007 and has continued

to swell by more than \$1 trillion per year. Further, a high-stakes, high-profile bid to reduce future deficits via a bipartisan "super committee" utterly failed in November. Mandatory cuts to both defense and social programs starting in 2013 are the penalty for failure to reach a deal, but legislators already appear to be maneuvering to free themselves from the punitive timeout chair as well.

The interest cost to service the federal debt remains manageable at this point because the average maturity of the debt is quite low, benefiting from the Fed's control of short-term interest rates. However, shifting to a safer, longer-tenor average maturity would be costly, as would any shift upwards in Fed policy rates in years to come. In addition, the Treasury remains highly dependent on foreign government purchases of Treasuries; there is no indication that foreign investment in Treasuries will be imperiled anytime soon, but conditions could certainly deteriorate, forcing interest rates upward. Beyond the cost to the government of over-indebtedness, there are costs to the private sector as well—the prospect of higher taxes, of course, but also the crowding out of other borrowers. The Treasury's share of the Barclays Capital Aggregate Bond Index has ballooned from 23% of the index at the end of 2007 to 35% today.

Faced with Economic Lemons, Corporations Making Plenty of Lemonade

While the past ten years have been something of a lost decade for investors in large-cap equities, as well as for the typical American wage earner, U.S.-listed large corporations have found some success in growing both their income and their shareholder dividends. As of September 30, share prices were just 1% below their level at the end of 2001, dividends had grown by a healthier 60%, sales had grown by 22%, and operating profits had grown by a solid 154%, roughly a

10% compound annual rate (Exhibit 12). Each nonfinancial sector has delivered growth in operating earnings over the past ten years, but the very strong average annual gains in some sectors, including technology and energy, have outstripped those of other sectors (Exhibit 13).

The *sustainability* of corporate profit and payout growth, however, is an open question. Margins for some sectors are elevated, compared to their median levels over the past ten years (Exhibit 14). Margins have benefitted from offshoring to cheap wage regions; however, in recent years, the wage differentials for China, India, and some other key offshoring and manufacturing markets have shrunk.

On the other hand, domestic wage pressures are light compared with those in emerging markets. High levels of unemployment and generally slack demand have suppressed U.S. wage growth, which is at an increasingly low annual rate of about 1.7% (well below recent inflation).

U.S.-listed firms have also boosted profits by tapping into faster-growing markets outside of the United States; firms with more globally diversified revenue streams have benefitted from higher margins.⁶

Analyst consensus earnings estimates have only incorporated a moderate degree of concern over the sustainability of S&P 500 component profits. Earnings growth for calendar year 2012 is now pegged at 10%, compared to the 13% 2012 growth that analysts projected a year ago (Exhibit 15). The 10% projection for earnings growth is only about 40 bps above the annualized growth rate of operating earnings over the past ten years.

Equity Valuations Improving

While the economic backdrop is sobering, investors must understand that subpar economic growth does not necessarily spell doom for equity returns. The conventional wisdom is to conflate GDP growth with equity returns. While there has historically been *some* association between real GDP growth and real equity returns, the two factors are not always joined at the hip. As Exhibit 16 illustrates, U.S. growth and returns (both measured over rolling ten-year periods) have exhibited a weak relationship, with a low correlation of just 26% and an R² statistic of 7% since 1947.⁷ U.S. real GDP growth for the ten years through the end of second quarter 2011 totaled an annualized 1.6%, which is the bottom 4% of historical ten-year growth rates dating back to 1947. Inflation-adjusted equity returns were also disappointing, at just 0.4% annualized during the past ten years, near the bottom quintile of postwar ten-year returns.

However, initial valuations provided a tighter relationship to forward-looking equity returns than actual GDP growth over the same period (Exhibit 17). The initial Shiller P/E had a much stronger 43% R² statistic, and the correlation coefficient was -66%, indicating that low initial valuations have unsurprisingly tended to coincide with strong future returns. Therefore, even as both economic growth and real equity returns were low over the last decade, the sky-high valuations at the start of the decade are the more likely culprit, as the Shiller P/E at the end of 2001 was 30.6.

Equity investors might conclude that a simple spreadsheet of current period normalized valuations might be more valuable than a gaggle of economists, even if those economists were guaranteed to be right!

⁶ Please see our August 2011 Market Commentary *Can U.S. Corporate Profit Margins Continue to Defy Gravity?*

⁷ This analysis even incorporates a two-quarter lag to improve the fit.

So what is the valuation spreadsheet telling us today? We believe that U.S. equities are at the rich end of our fair value range. Our composite normalized P/E ratio is sitting right on top of its historical average level (Exhibit 18), while our very-long-term Shiller P/E metric indicates moderate overvaluation.⁸ While we believe that normalized earnings metrics are optimal because they minimize the distortions to valuations that can occur during turns in the earnings cycle, other investors continue to focus on trailing or forward P/E multiples. A snapshot of current P/Es for individual mega-cap stocks illustrates that neither forward nor trailing P/E multiples appear immoderate. The median trailing P/E for these mega-cap stocks is 13.3; the median forward P/E is 11.5, and the median 2012 earnings growth implied by 2011 and 2012 earnings estimates is 8.8% (Exhibit 19).⁹ While we do not rely on such metrics for our valuation work, the reasonable current levels provide some additional comfort that any moderate near-term earnings disappointments might be handled without much disruption.

⁸ This composite metric gives equal weight to three theoretical index-earnings levels, and divides current share prices by the resulting earnings to determine the composite P/E. The three earnings results are trend-line earnings, Shiller earnings that incorporate a ten-year real average level, and return on equity-adjusted earnings that “penalize” trailing earnings during periods of elevated profit margins and boost trailing earnings during cyclical low points. Our longest-horizon Shiller P/E history, which uses a different index dataset than the Shiller P/E chart shown on Exhibit 18 and extends back to 1880, indicates that U.S. equity P/Es remain nearly 1 standard deviation above average. The Shiller P/E multiple and the other normalized metrics are more divergent today than they typically are. In part, this divergence stems from very large negative earnings swings in recent years driven by financial stocks, including AIG’s \$99 billion loss in 2008, which have depressed trailing ten-year GAAP earnings.

⁹ For the majority of index components that have not yet reported fourth quarter earnings, 2011 earnings per share (EPS) are estimated and represent three quarters of reported earnings, together with consensus fourth quarter 2011 EPS estimates.

Despite outperforming during 2011, we believe that large-cap and mega-cap firms remain significantly better values than smaller-cap names (Exhibits 20 and 21).

Investors evaluating growth and value styles will find that Russell 1000® Growth Index shares are trading at a 43% premium to value shares based on our normalized composite P/E, which is right below the average premium over the past 33 years (Exhibit 22), implying that the two styles have similar relative valuations.

We believe that large-cap growth is a reasonable proxy for the high-quality equity style that we continue to favor.¹⁰ In a strong updraft, quality stocks (or their large-growth proxy) would likely underperform, as financials snapped back. However, we believe they will be at least modestly defensive in the event of continued turmoil, while maintaining exposure to fast-growing consumer markets outside of the developed world.

Best Days for Bonds Are Behind Them

Treasury bonds offer asymmetric levels of risk given their prospective reward, and Treasury yields are well below what we would consider fair value (Exhibit 23). The single-best return prediction that we can make for Treasury bonds is provided by their initial yield; thus, it is likely that Treasuries will provide long-term returns below the levels of inflation that investors have become accustomed to over the past century. Investors that target a modest allocation to long-term Treasuries as a deflation hedge or a buffer against flight-to-quality risk should continue to keep part

¹⁰ By high quality, we refer to firms that have low financial leverage and have delivered consistently strong profitability across the business cycle. This strategy tends to eschew financials and cyclicals and favor consumer staples, health care stocks, technology stocks, etc.

of that targeted holding in cash rather than all of it in bonds. While we cannot be certain that higher rates are coming, the upside from any further decline in yields is likely to be modest given the low starting level of yields (witness the meager Japanese government bond returns in recent years, including that for crisis-ravaged 2011).

Investment-grade corporate bonds have wide spreads compared to historical norms, but of course those spreads are calculated versus extraordinarily skinny Treasury yields, so the resulting corporate yields are still somewhat meager (Exhibit 24). The high spreads are probably more than adequate for the lower liquidity and downgrade risk¹¹ of these securities, but they are not cheap, as they were in 2008. Further down the credit spectrum, high-yield bonds and leveraged loans are among the more attractive bond categories, although in terms of return patterns and risk they are perhaps somewhat closer to equities than to bonds. As we wrote in our third quarter edition of *Market Update*, low-quality credit investments can provide a defensive alternative to equities. Issuers are generally lower quality, but balance sheets have improved in recent years. If the economy worsens, high-yield bonds will suffer, but historical precedent suggests that they will suffer less than equities. Active management is important within the high-yield space, with passive issuance-weighted indices skewed to the highest-volume issuers (which tend to be heavily indebted, naturally). This is particularly important for those seeking a relatively defensive investment.

U.S. taxable investors are traditionally drawn to municipal bonds instead of corporate or Treasury bonds, and valuations at this point are certainly on their side. Yields of high-quality municipal bonds are *above* those of Treasuries at most

¹¹ And occasionally default risk, à la Lehman Brothers.

points on the yield curve, despite the inherent tax advantages municipal bonds (Exhibit 25). This yield premium is certainly not unheard of in recent years, but it will not persist forever. Municipal bonds in general are overvalued, but less so than Treasuries. At the unpopular multi-decade end of the yield curve, municipal bonds still offer some value (though they are not nearly as attractive as they were last March when we first recommended considering an overweight to them).¹²

Non-Agency residential mortgages are a niche investment, and while few managers have the expertise and infrastructure to successfully invest in distressed mortgages, some are finding attractive opportunities for unlevered investments in securities with low prices, yet some ongoing cash flow. While mortgage strategies entail political risk and may be exposed to any further steep falls in home prices, strong returns are not necessarily contingent on rising home prices or sharply declining delinquencies. Liquidity can be low and lumpy, particularly at the middle and lower portions of the capital stack, so investors should be prepared for a very volatile ride and ensure that they will not find themselves paying a liquidity toll for investors with weaker stomachs that might be permitted to redeem.

Concluding Thoughts: Are Reasonable Returns Possible Amid Economic Stagnation?

We do not dispute the consensus view that growth may remain sluggish in the United States in the near term. However, that does not imply that equities and credit investments are dead money. Equity investors have often prospered during blasé periods of economic growth, as we

¹² Please see our March 2011 Market Commentary *Long Muni Bonds: Unloved, Orphaned and Perhaps Safer Than You Think*.

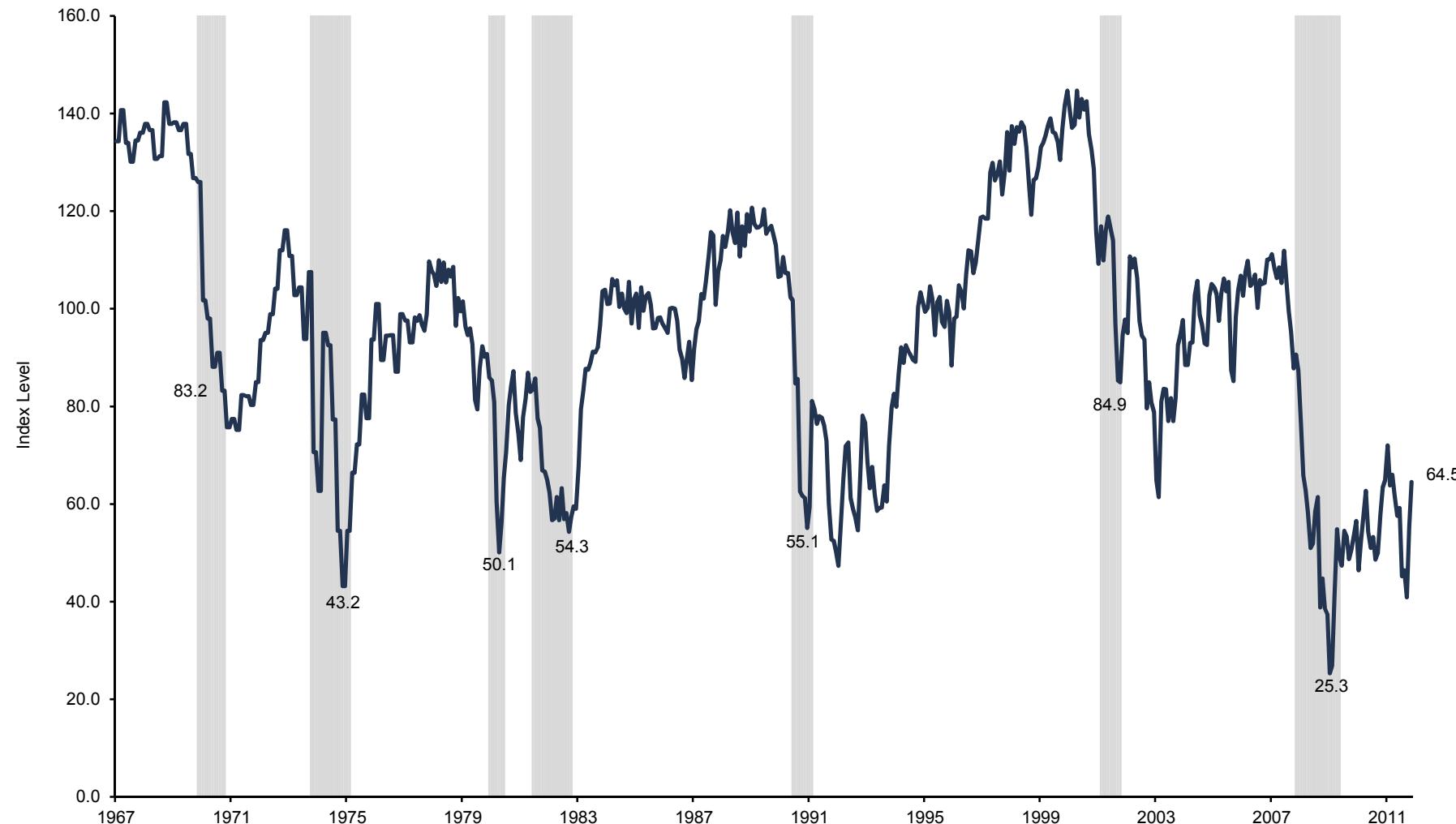
described earlier. Historically, the key has been to pay reasonable or even attractive prices for those equities. Today, we would characterize price multiples as moderately elevated versus normalized earnings, but within our fair value range.

While today's reasonable valuations counsel staying the course with continued reliance on equities and equity-like strategies to deliver long-term returns, the high level of uncertainty (both within the United States and, of course, in Europe and China) suggests a defensive approach remains important. To that end, we would lean toward high-quality equities, and we see a place for high-yield bonds as well. Defensive does not mean bulletproof, of course, and nearly all risk assets would be expected to decline somewhat amid periods of extreme stress. Such periods of stress are likely to be recurring features of the current environment, so investors should position their risk assets defensively¹³; however, provided that investors have a long-term horizon and can afford to look *through* short-term havoc, they should not walk away from risk and its attendant compensation. ■

¹³ When would a more aggressive approach be warranted? The most likely cause of such a shift would be more compelling valuations, rather than some magical removal of uncertainty.

Exhibit 1
Consumer Confidence

February 28, 1967 – December 31, 2011



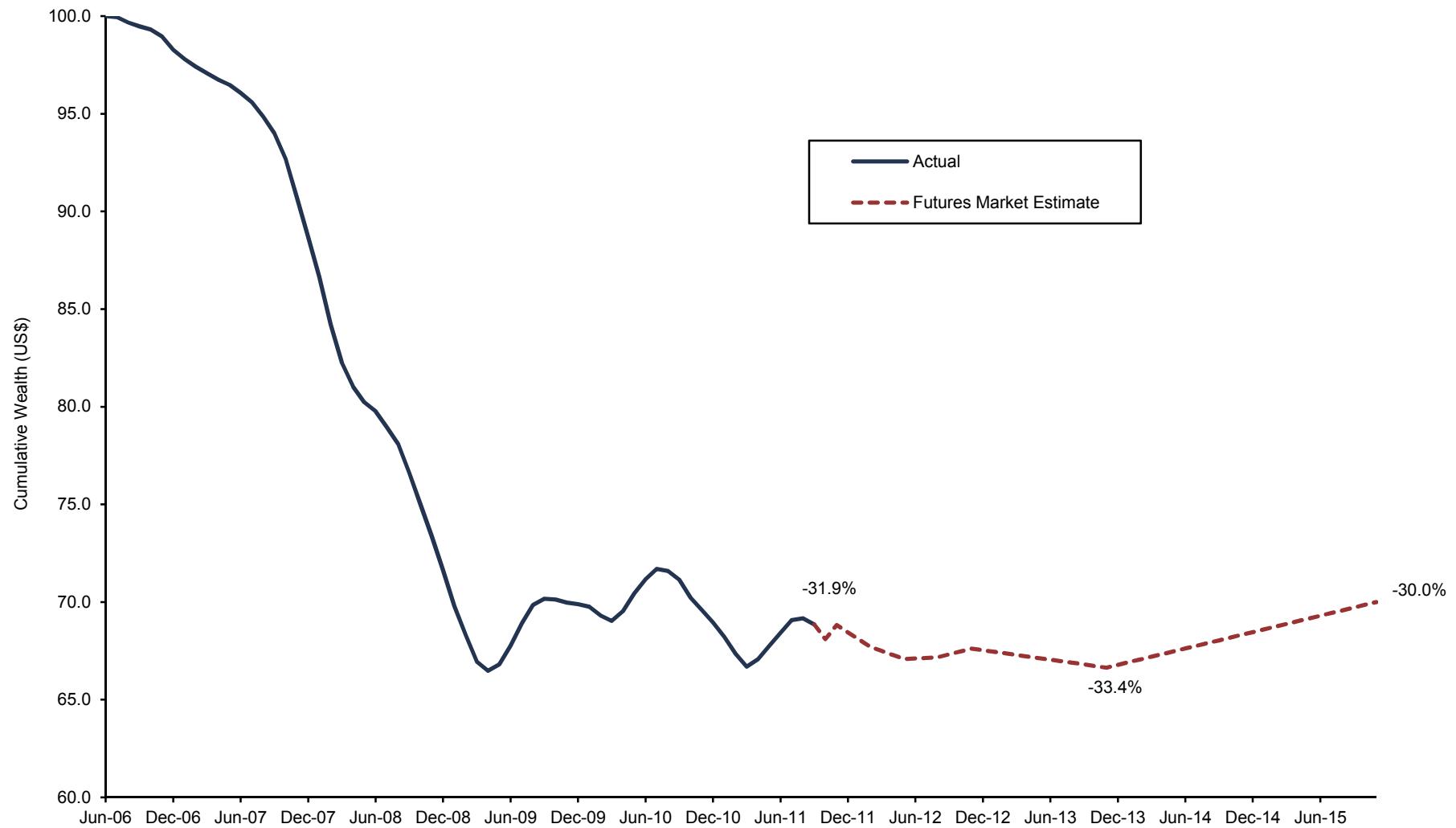
Sources: National Bureau of Economic Research and Thomson Datastream.

Notes: Data are monthly. Gray bars indicate recession periods as determined by the National Bureau of Economic Research. Data points on graph represent trough values during each recession.

Exhibit 2

S&P/Case-Shiller Composite 10 Index

June 30, 2006 – November 30, 2015 • Rebased to 100 as of June 30, 2006



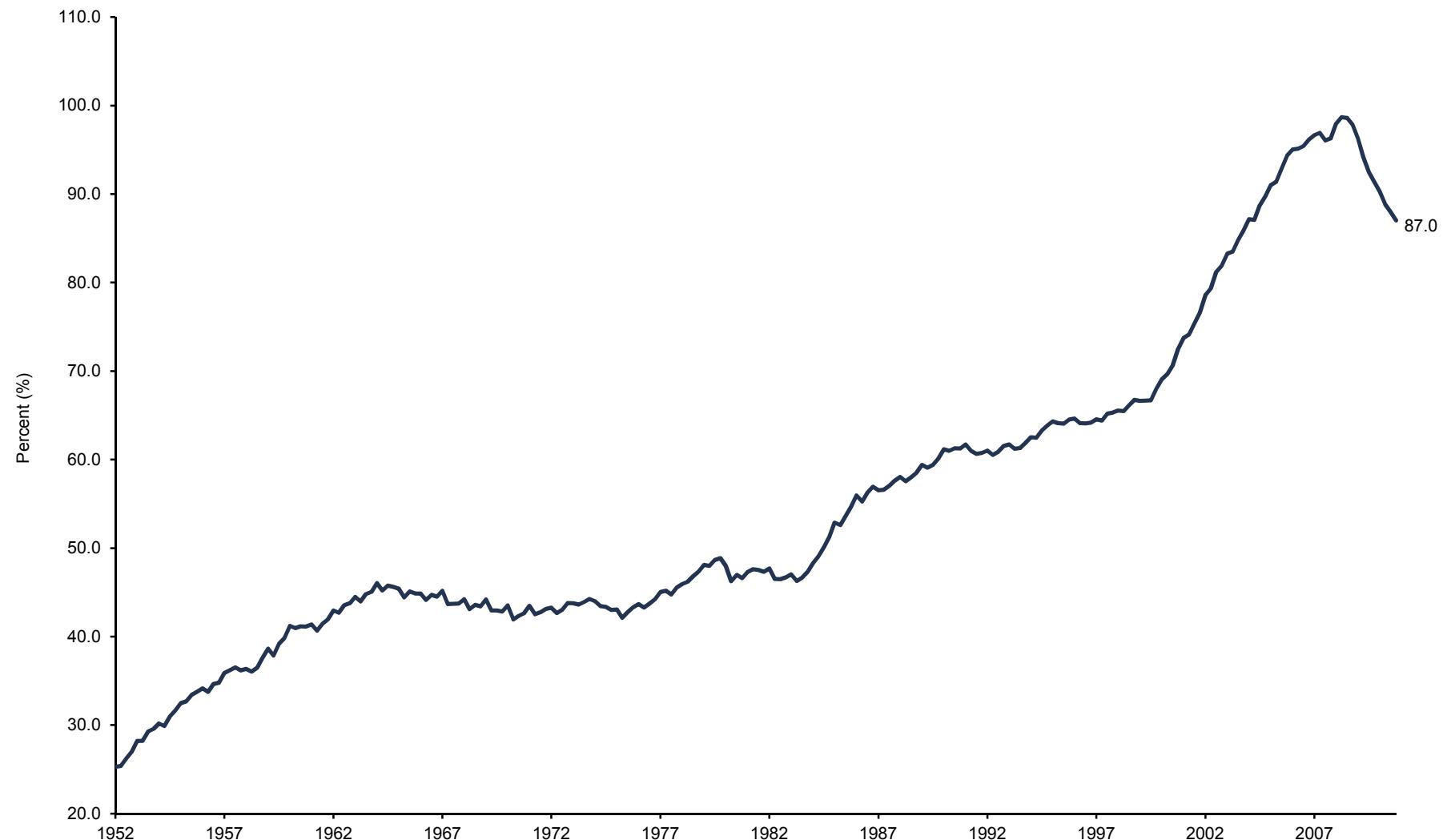
Source: Thomson Datastream.

Notes: Futures data are derived using property derivatives listed on the Chicago Mercantile Exchange. Actual data are through October 31, 2011, and futures data are as of January 2012.

Exhibit 3

Household Debt as a Percent of GDP

December 31, 1952 – September 30, 2011



Source: Thomson Datastream.

Exhibit 4

U.S. Household Debt Service Ratio

First Quarter 1980 – Third Quarter 2011



Source: Federal Reserve.

Notes: The household debt service ratio is an estimate of the ratio of debt payments to disposable income. Data are quarterly.

Exhibit 5

U.S. Personal Savings as a Percentage of Disposable Income (Rolling Three-Month Average)

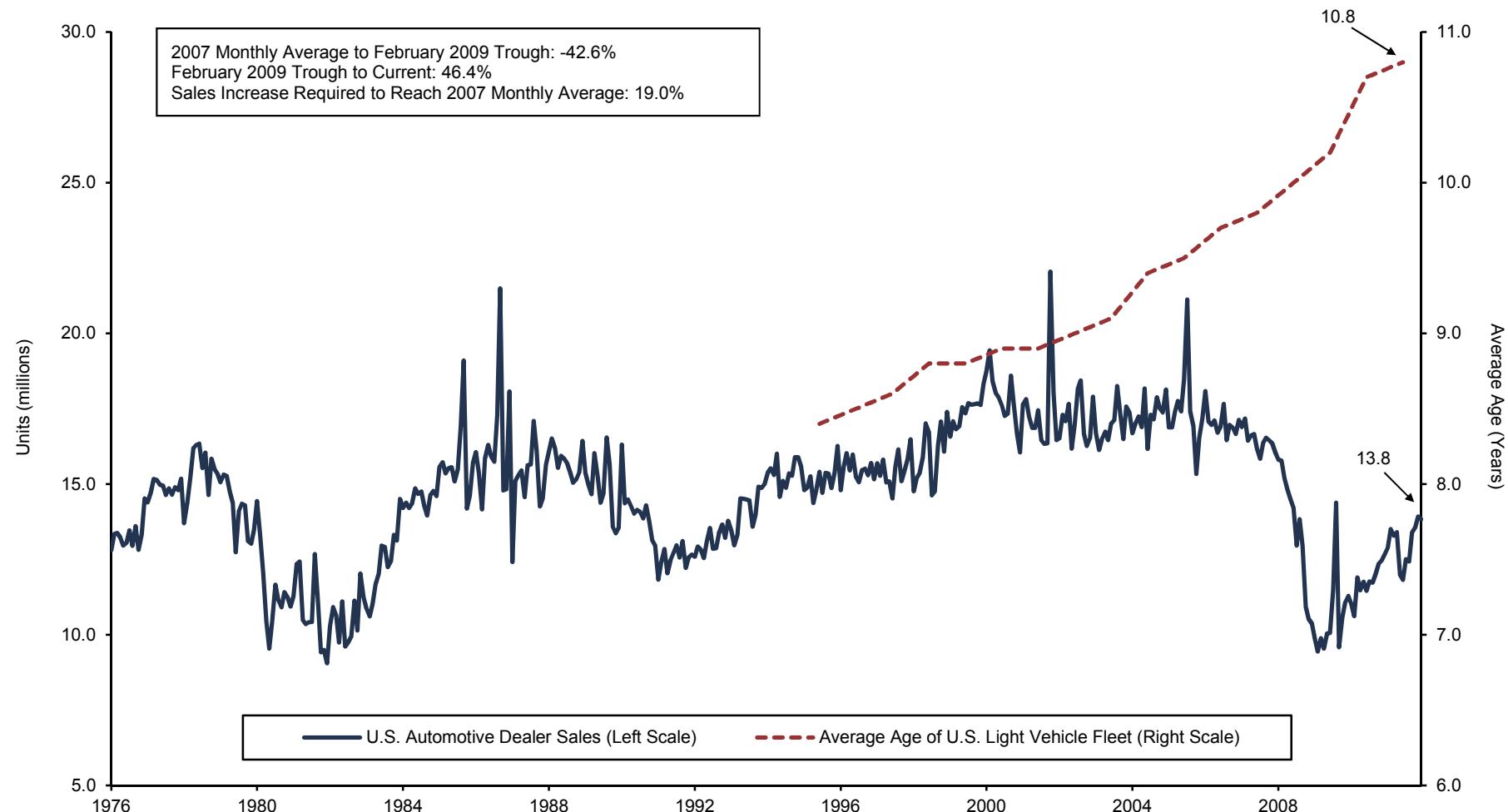
March 31, 1959 – November 30, 2011



Source: Thomson Datastream.

Exhibit 6**U.S. Automobile Dealer Sales**

January 31, 1976 – December 31, 2011

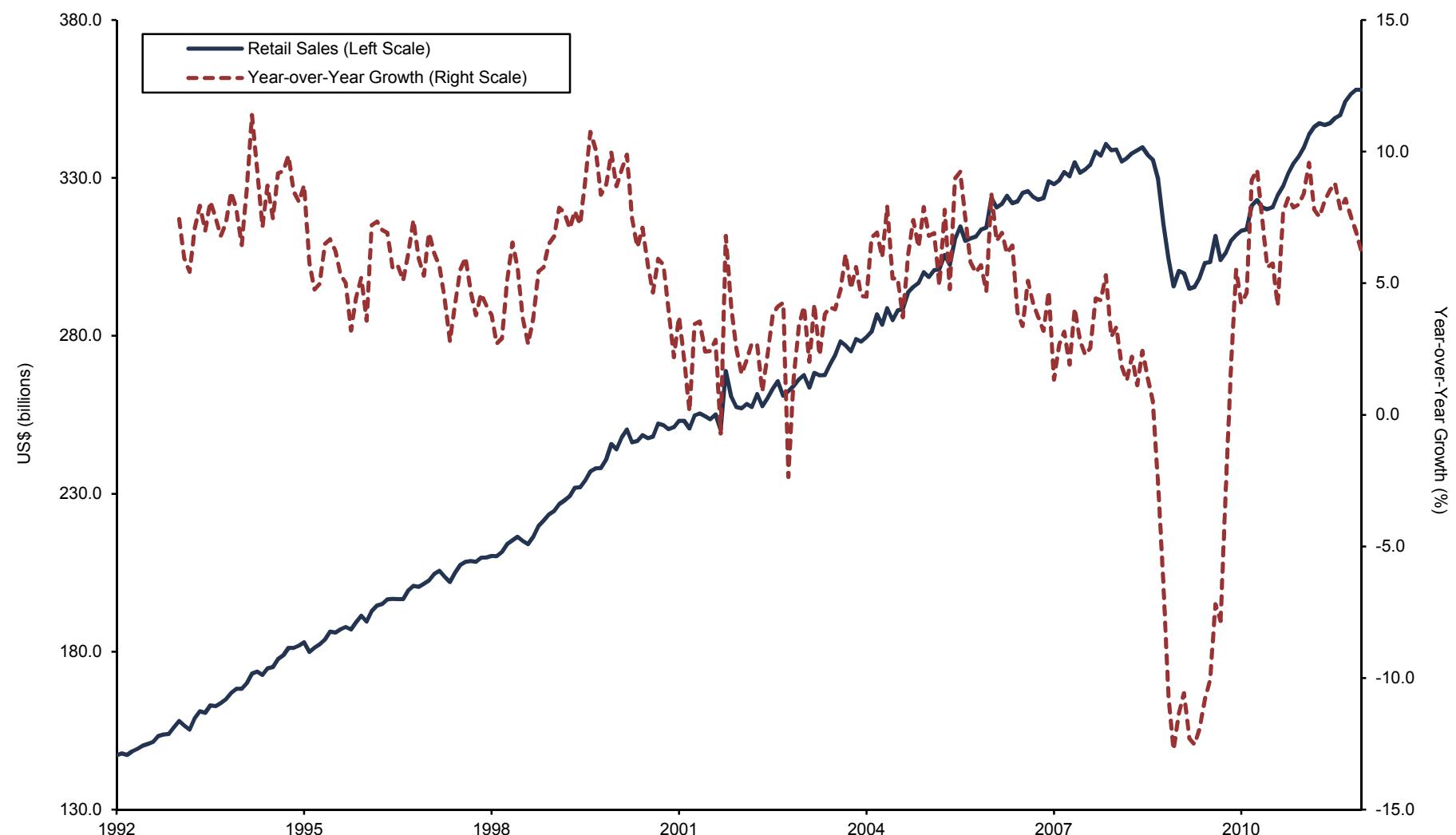


Sources: J.P. Morgan Securities, Inc., R.L. Polk & Co., and Thomson Datastream.

Notes: Sales data are monthly. Average vehicle age data are annual, monthly values have been interpolated. Average vehicle age data start in June 1995 and are through June 2011.

Exhibit 7 U.S. Retail Sales

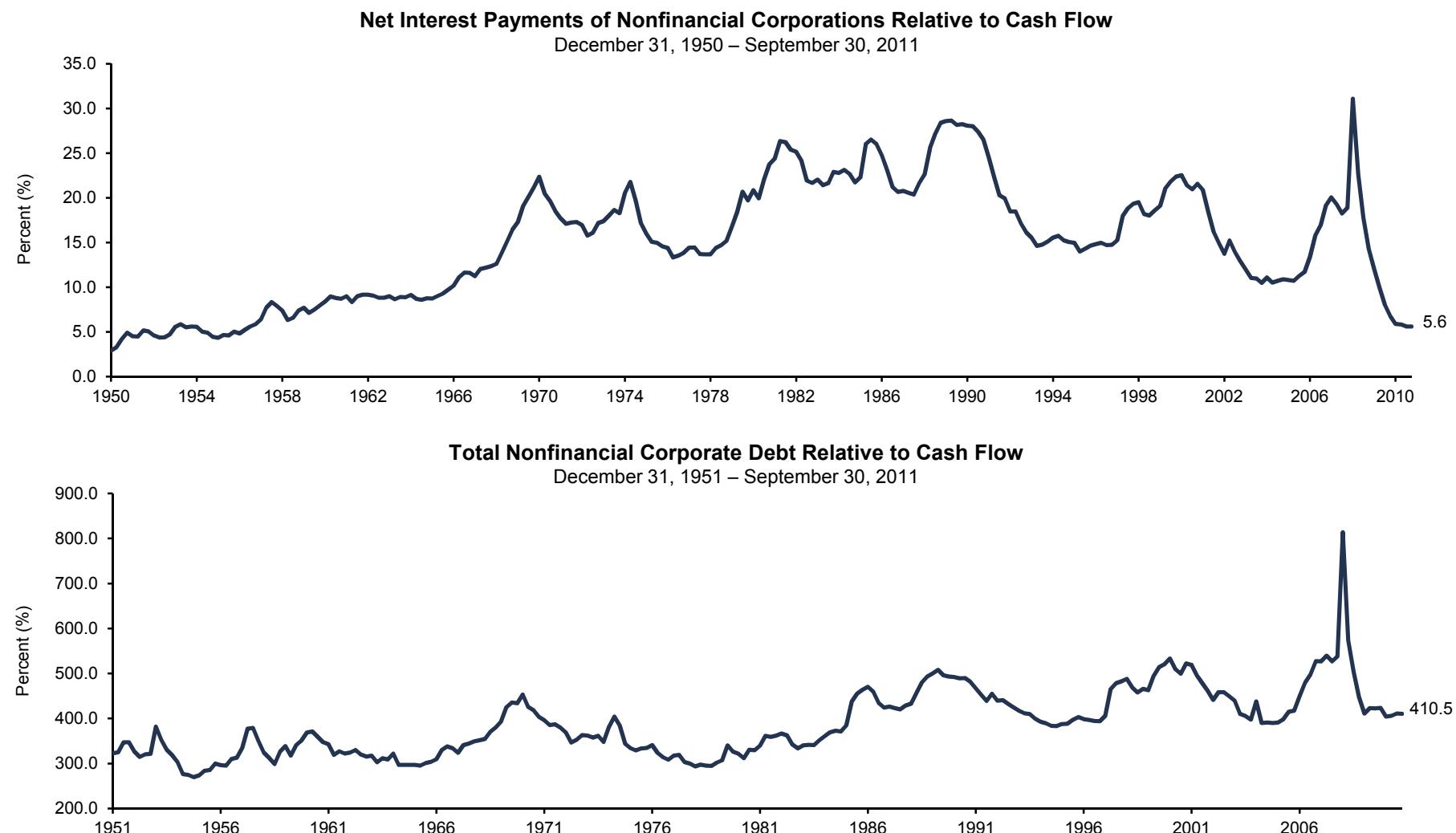
January 31, 1992 – December 31, 2011



Source: Thomson Datastream.

Note: Data are monthly.

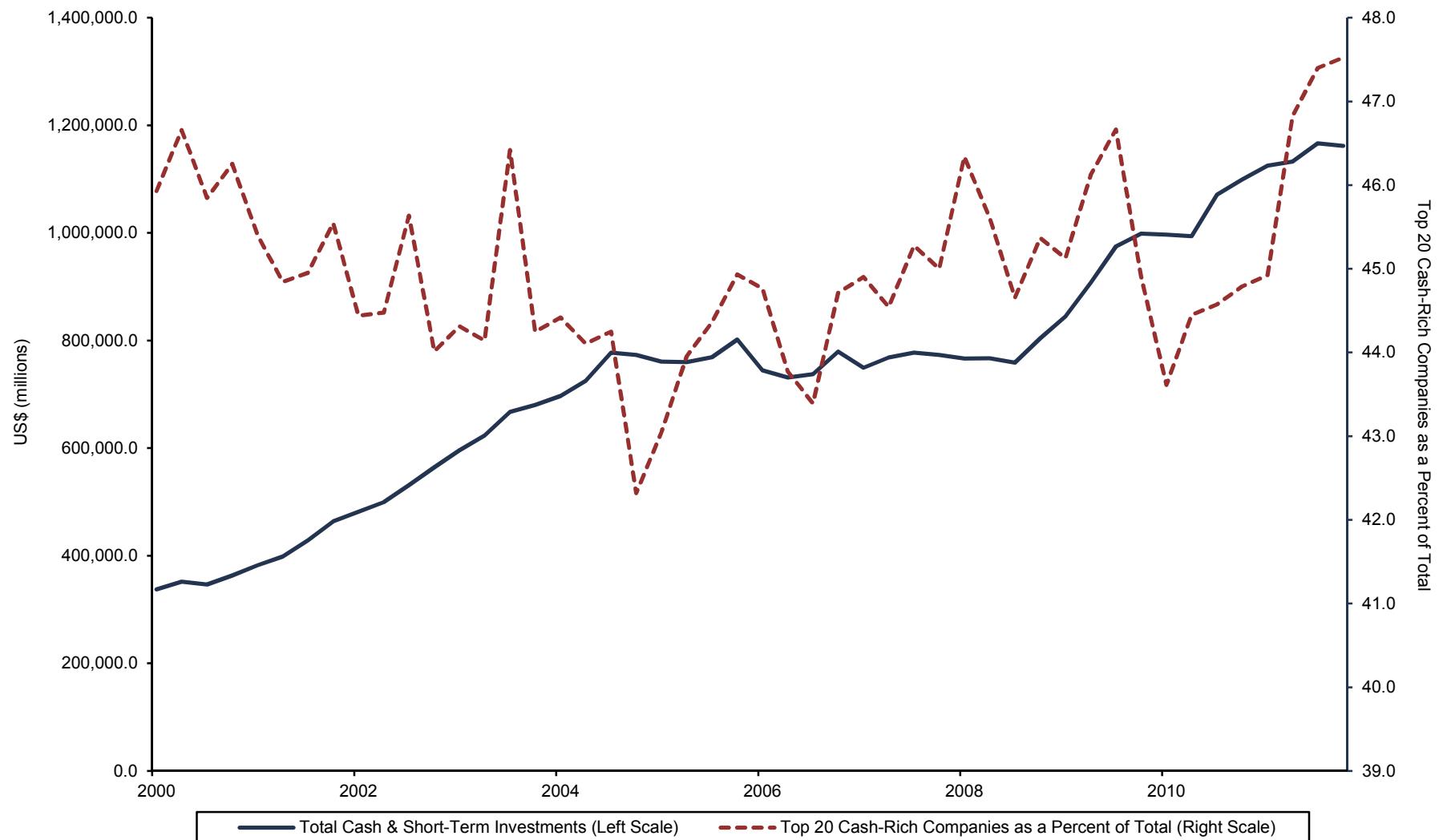
Exhibit 8
Corporate Debt



Source: Thomson Datastream.

Exhibit 9**S&P 500 ex Financials: Cash & Short-Term Investments**

First Quarter 2000 – Fourth Quarter 2011



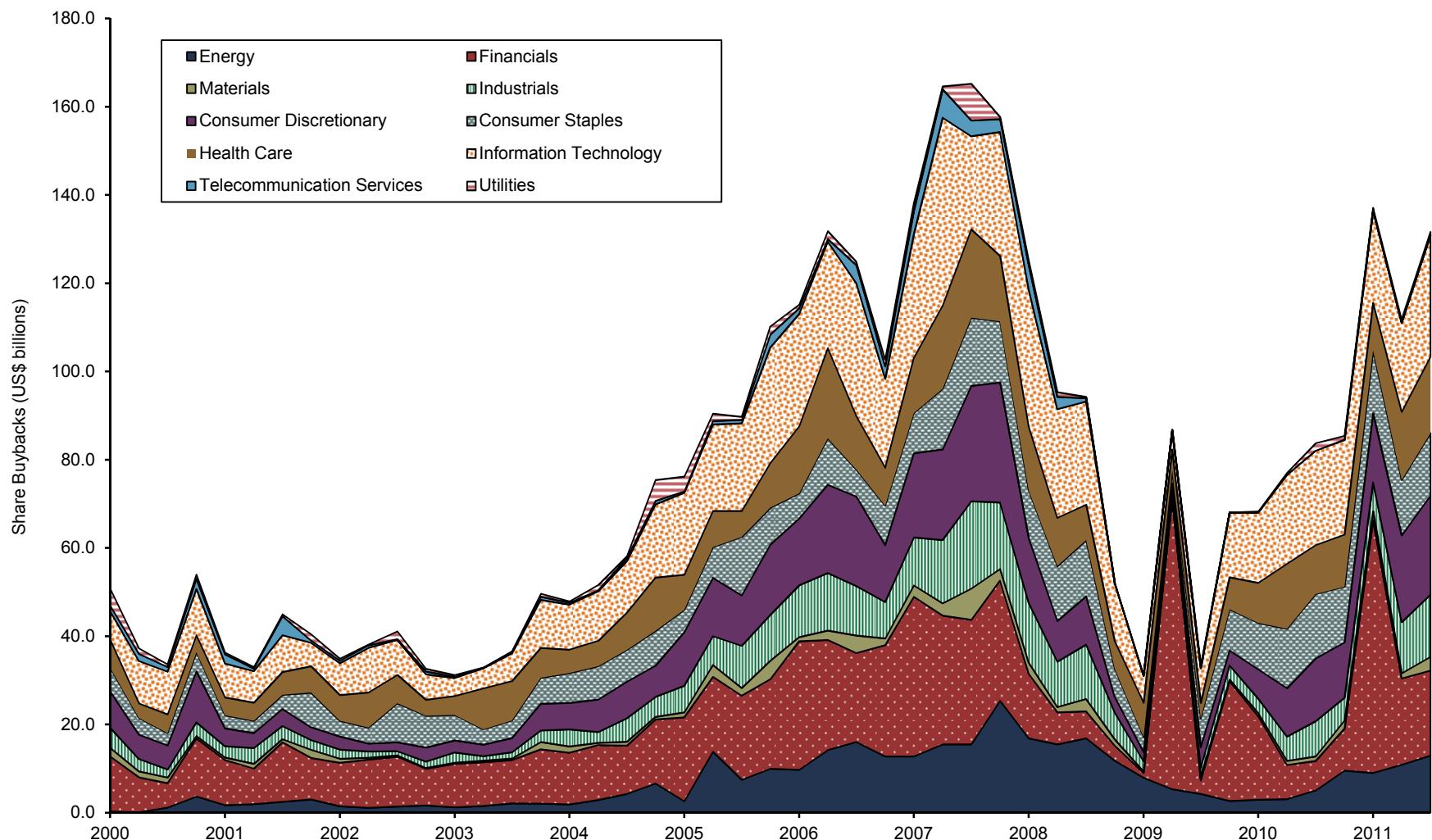
Sources: FactSet Research Systems and Standard & Poor's.

Note: Data are quarterly.

Exhibit 10

Dollar Value of Share Repurchases Made by S&P 500 Constituent Companies

First Quarter 2000 – Third Quarter 2011

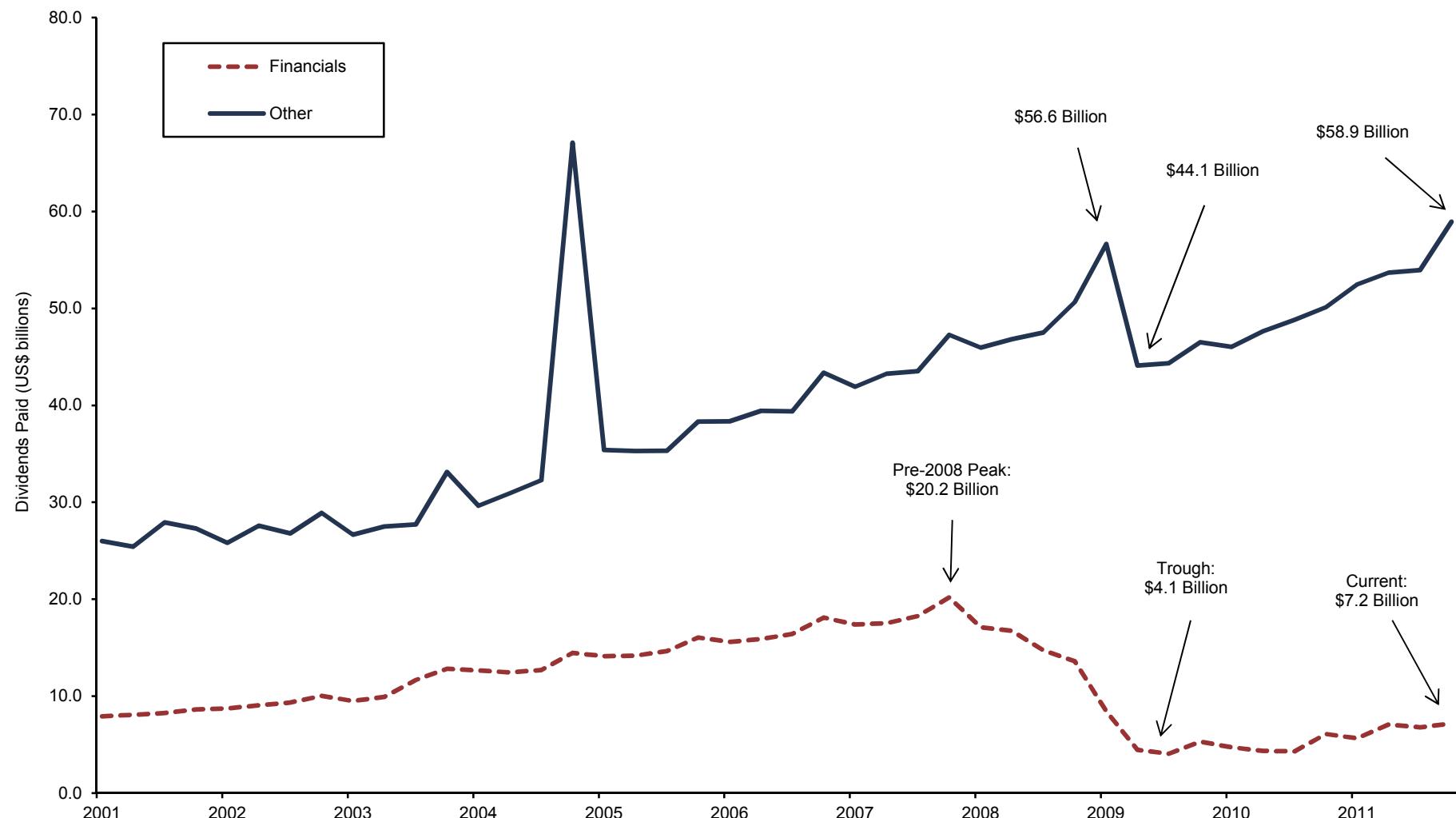


Sources: FactSet Research Systems and Standard & Poor's.

Exhibit 11

Dollar Value of Dividends Paid by S&P 500 Constituent Companies

First Quarter 2001 – Fourth Quarter 2011



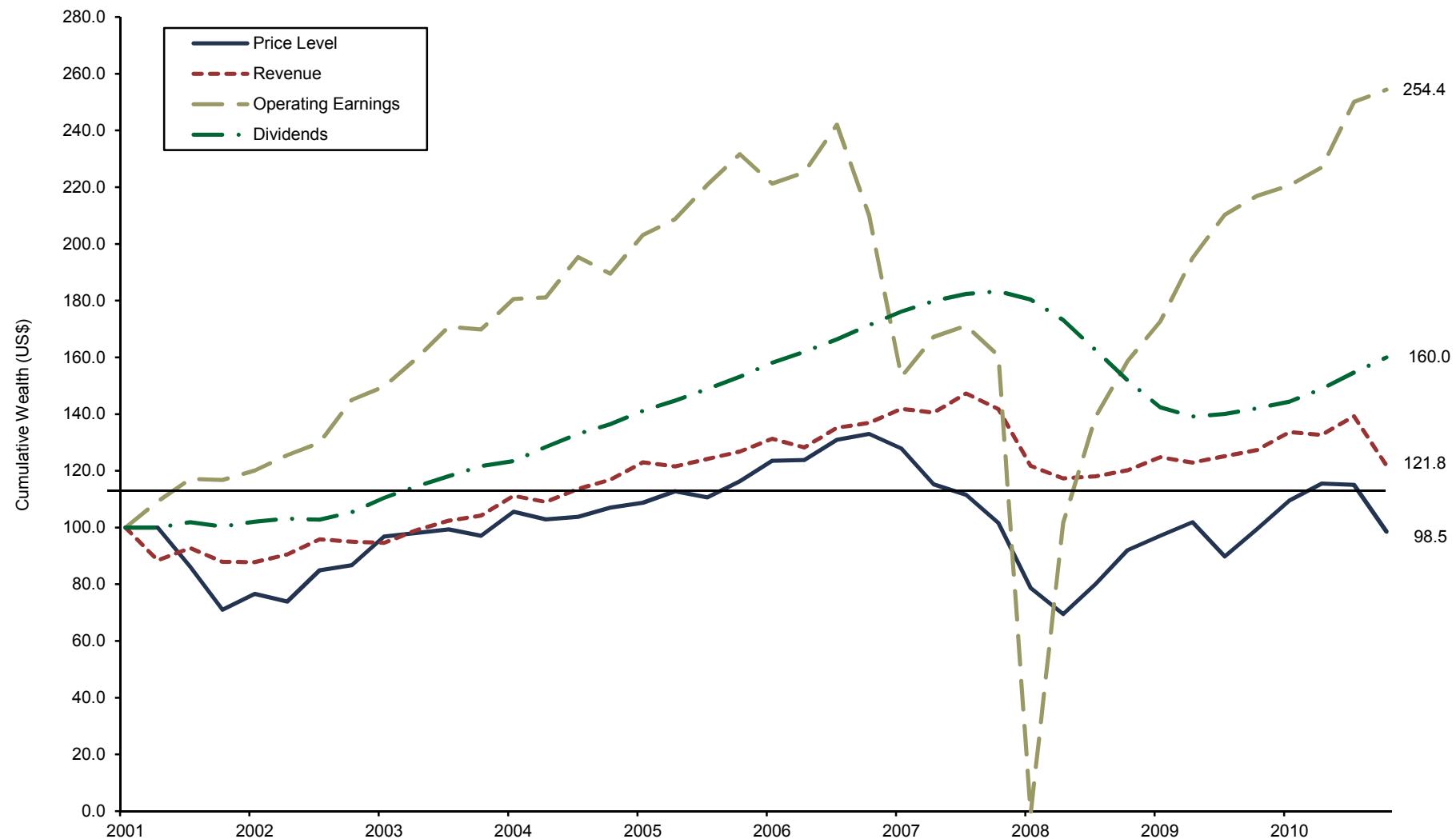
Sources: FactSet Research Systems and Standard & Poor's.

Note: Although fourth quarter 2004 was the true peak for nonfinancials, it is considered anomalous for this analysis because the data are heavily influenced by \$33.4 billion in dividends paid by Microsoft Corp.

Exhibit 12

Cumulative Wealth of S&P 500 Price, Revenue, Operating Earnings, and Dividends

December 31, 2001 – September 30, 2011 • Rebased to 100 as of December 31, 2001



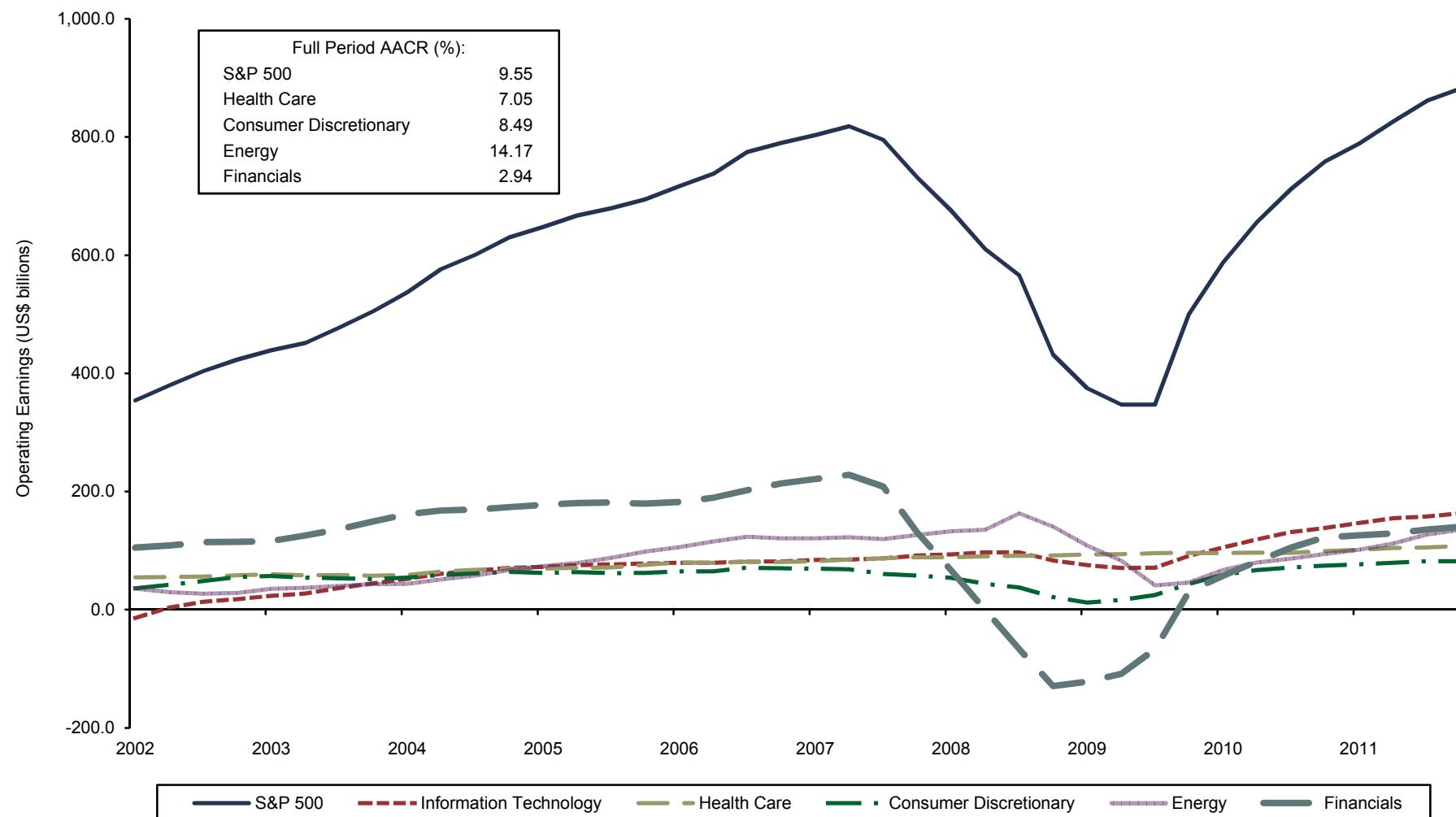
Sources: Standard & Poor's and Thomson Datastream.

Note: Dividends are trailing 12-month totals.

Exhibit 13

S&P 500 Operating Earnings

First Quarter 2002 – Fourth Quarter 2011

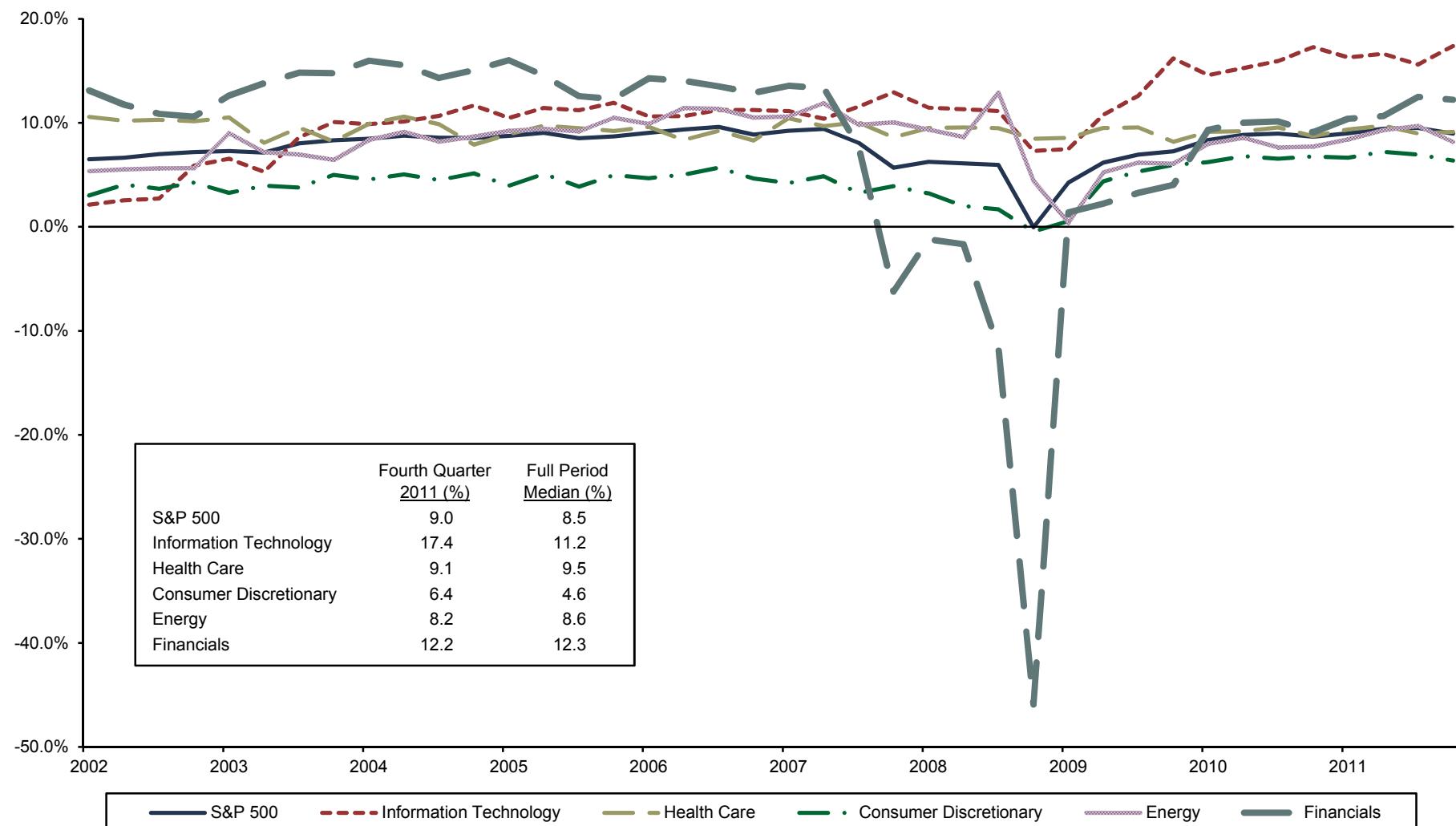


Sources: Standard & Poor's and Thomson Datastream.

Notes: Revenue and earnings data for fourth quarter 2011 are estimates. Earnings are trailing 12-month totals. The annualized full-period growth for information technology could not be calculated due to a negative starting value.

Exhibit 14
S&P 500 Sector Operating Profit Margin

First Quarter 2002 – Fourth Quarter 2011



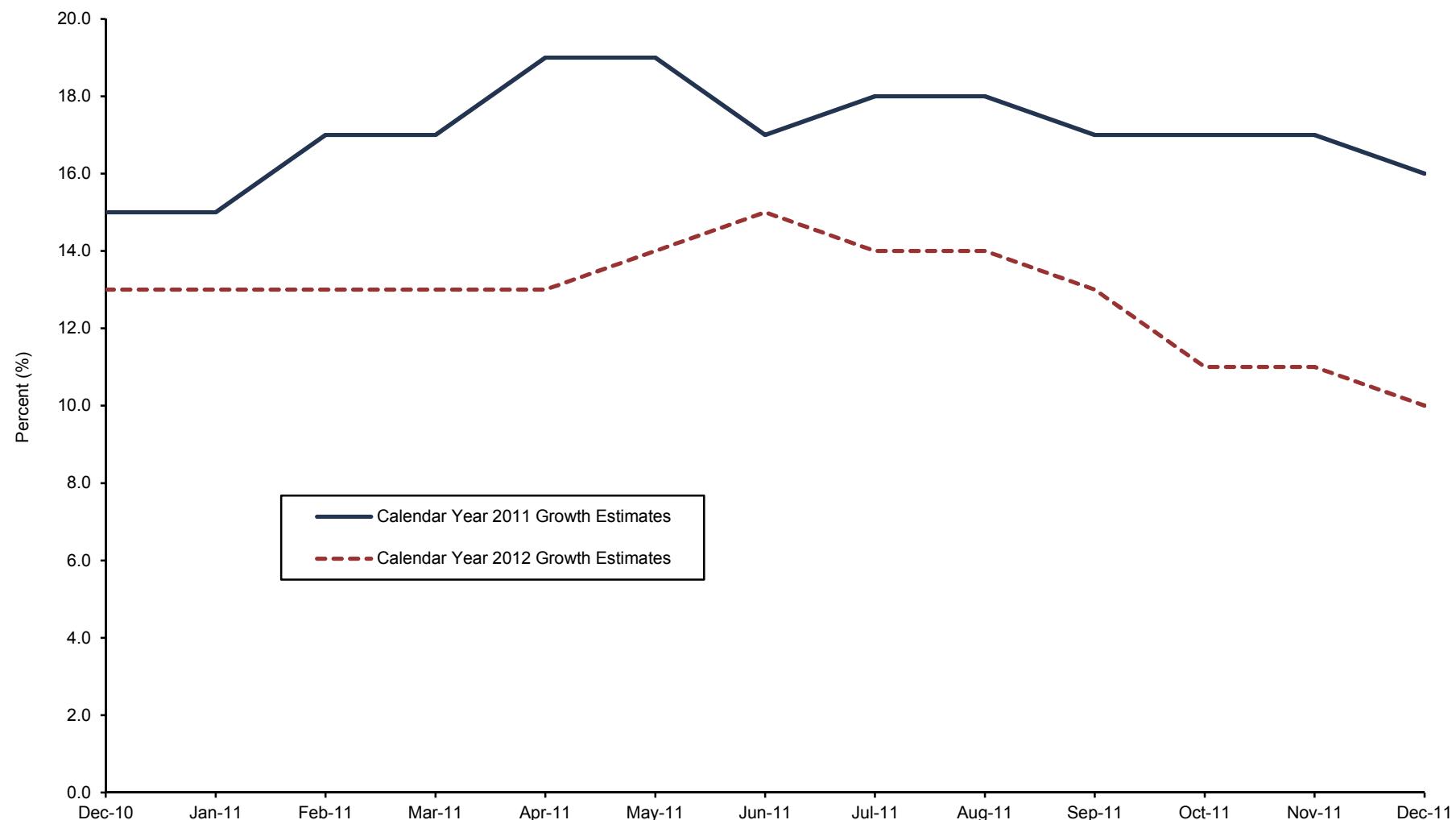
Source: Standard & Poor's.

Note: Earnings data for fourth quarter 2011 are estimates.

Exhibit 15

Analysts' Changing Consensus Operating EPS Growth Expectations for the S&P 500

As of December 31, 2011



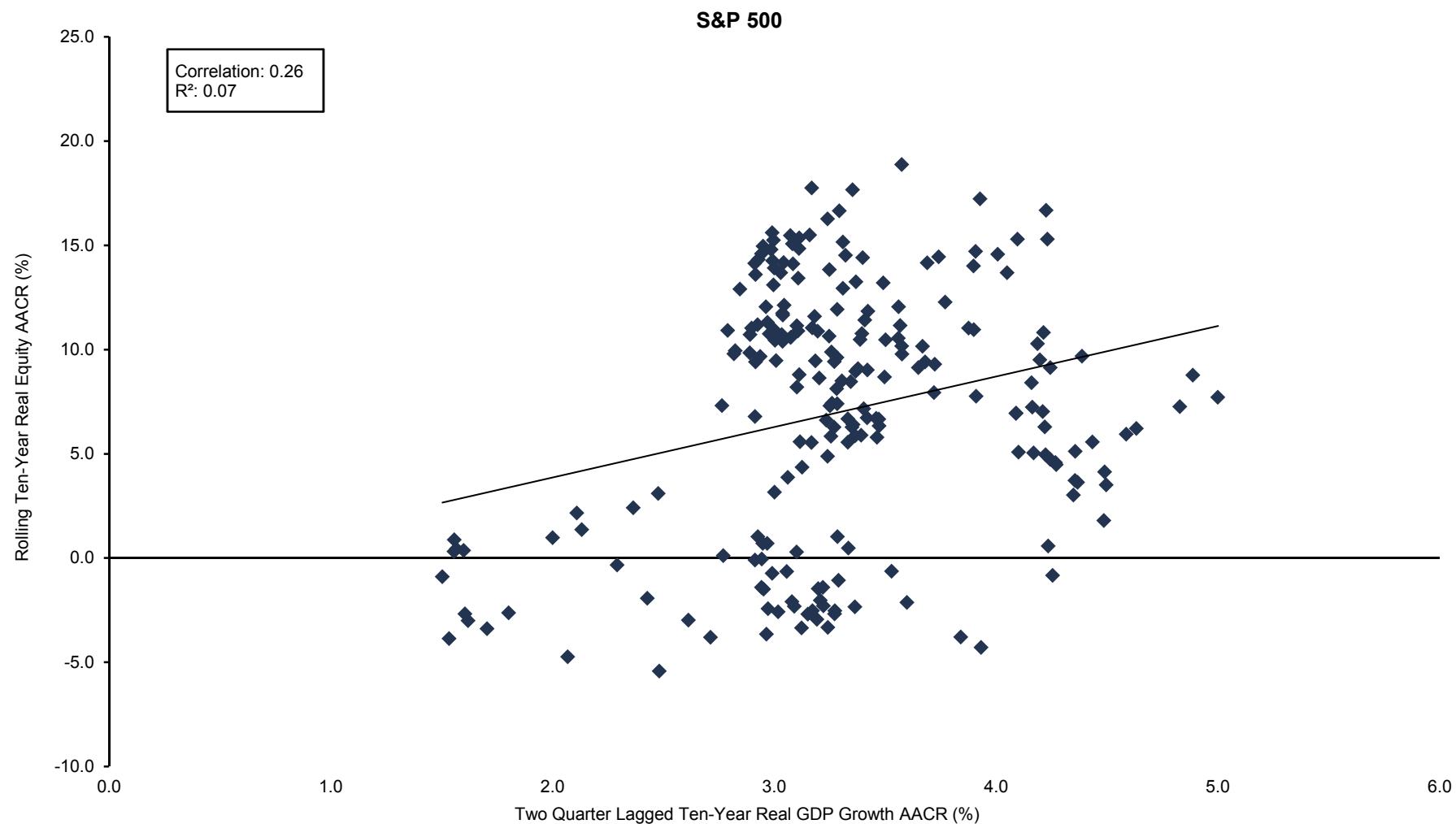
Source: Goldman Sachs Global ECS Research.

Notes: Growth expectations are based on month-end, or near month-end, consensus estimates. Data are bottom-up estimates of year-over-year growth in operating earnings per share, on a calendar year basis.

Exhibit 16

Relationship Between Rolling Ten-Year Real AACR and Ten-Year Real GDP Growth AACR

Second Quarter 1947– Fourth Quarter 2011



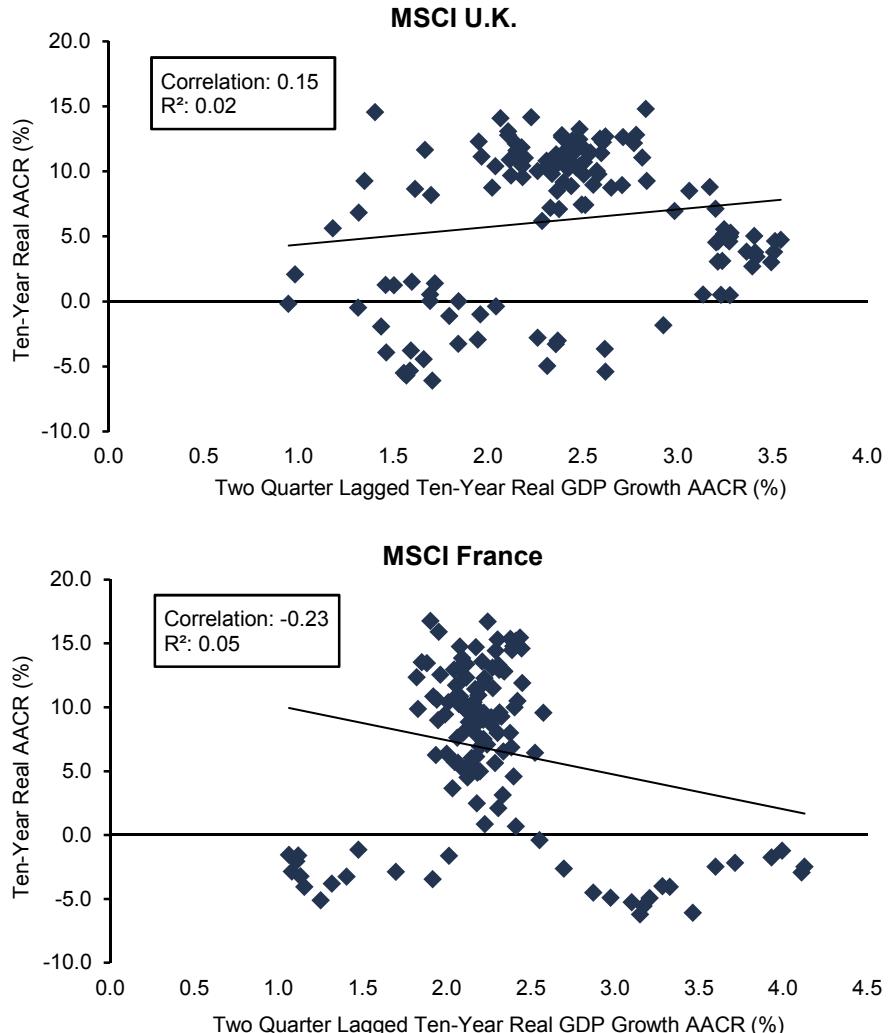
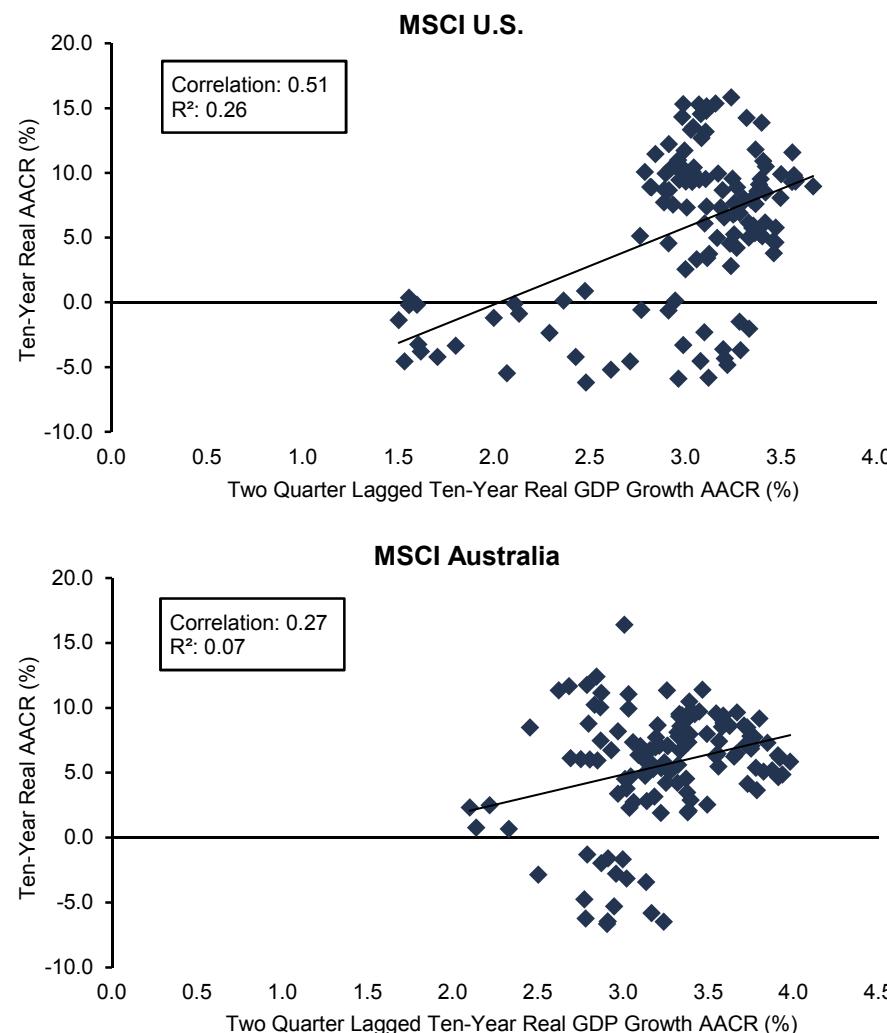
Sources: Global Financial Data, Inc., Robert J. Shiller, Standard & Poor's, Thomson Datastream, U.S. Department of Commerce - Bureau of Economic Analysis, and U.S. Department of Labor - Bureau of Labor Statistics.

Notes: Data are quarterly. Real ten-year GDP growth lags S&P 500 AACR by two quarters, which exhibits a stronger relation to equity returns within the United States.

Exhibit 16 (continued)

Relationship Between Rolling Ten-Year Real AACR and Ten-Year Real GDP Growth AACR

First Quarter 1970 – Fourth Quarter 2011



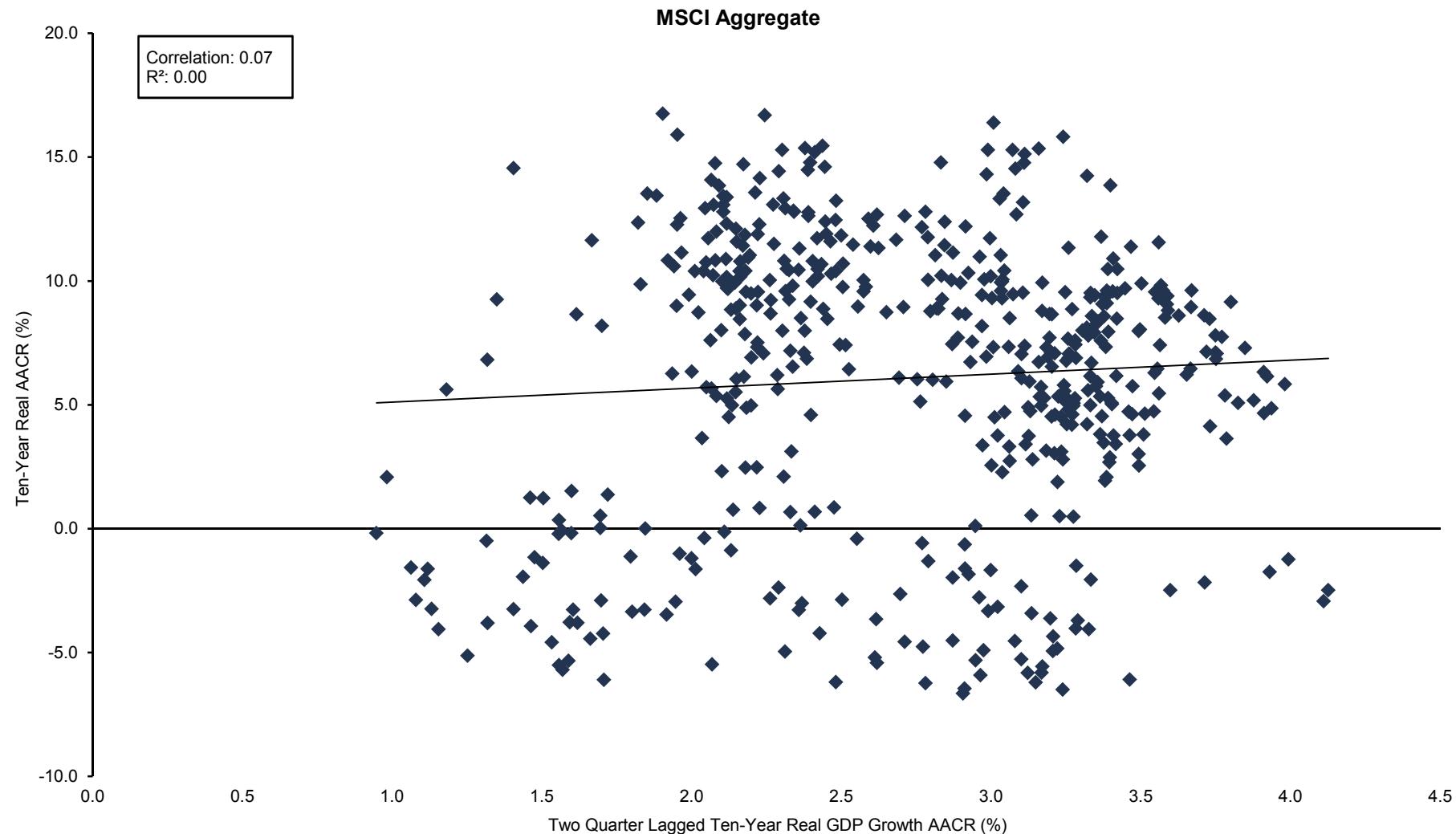
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Data are quarterly. French equity returns are nominal through first quarter 1972. Australian CPI data are as of September 2011. Real ten-year GDP growth lags MSCI AACR data by two quarters, which exhibits a stronger relation to equity returns.

Exhibit 16 (continued)

Relationship Between Rolling Ten-Year Real AACR and Ten-Year Real GDP Growth AACR

First Quarter 1970 – Fourth Quarter 2011



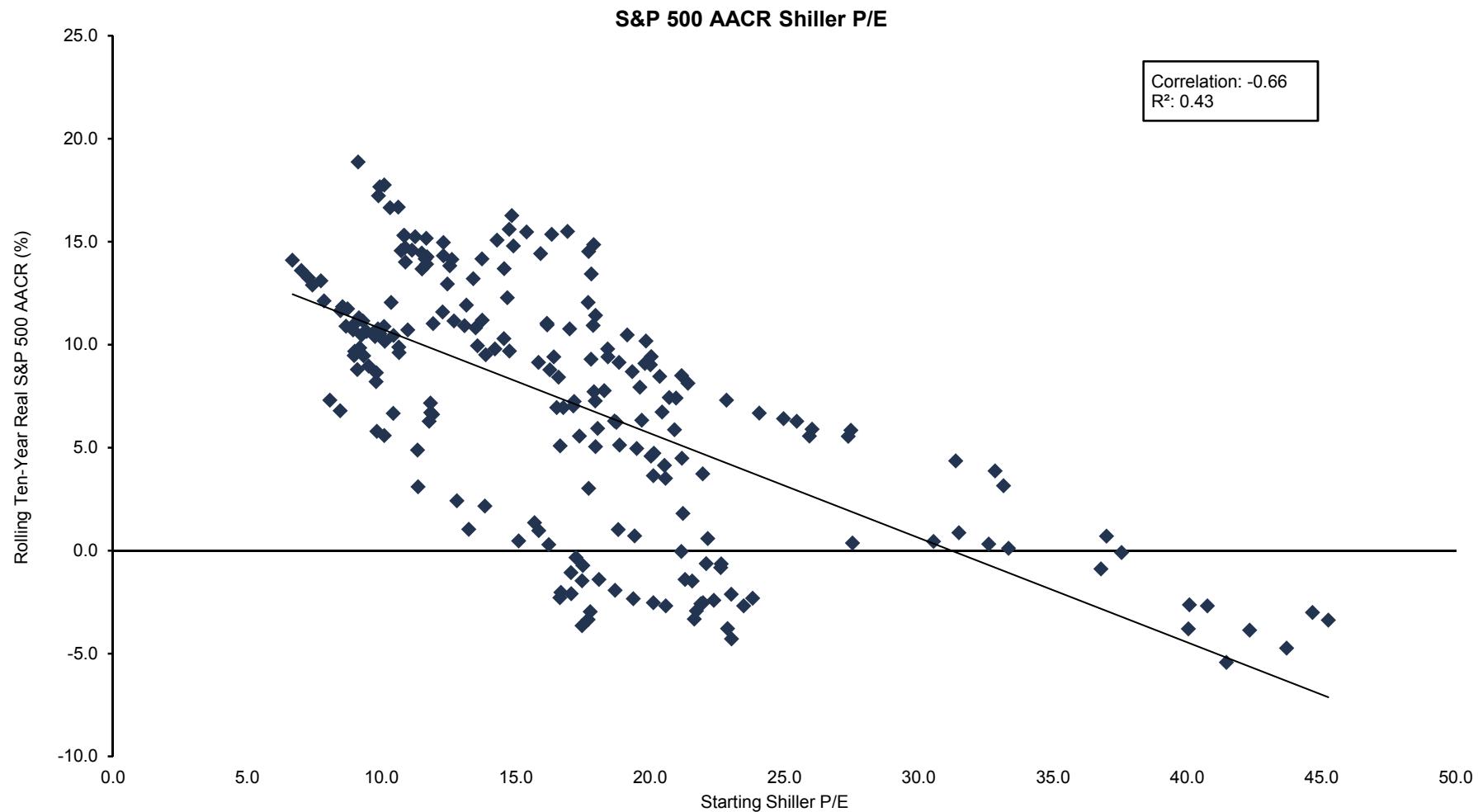
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Data are quarterly. Data set consists of Australia, France, the United Kingdom, and the United States. French equity returns are nominal through first quarter 1972. Real ten-year GDP growth lags MSCI AACR data by two quarters, which exhibits a stronger relation to equity returns.

Exhibit 17

Relationship Between Rolling Ten-Year AACR and Starting P/E

Fourth Quarter 1947 – Fourth Quarter 2011



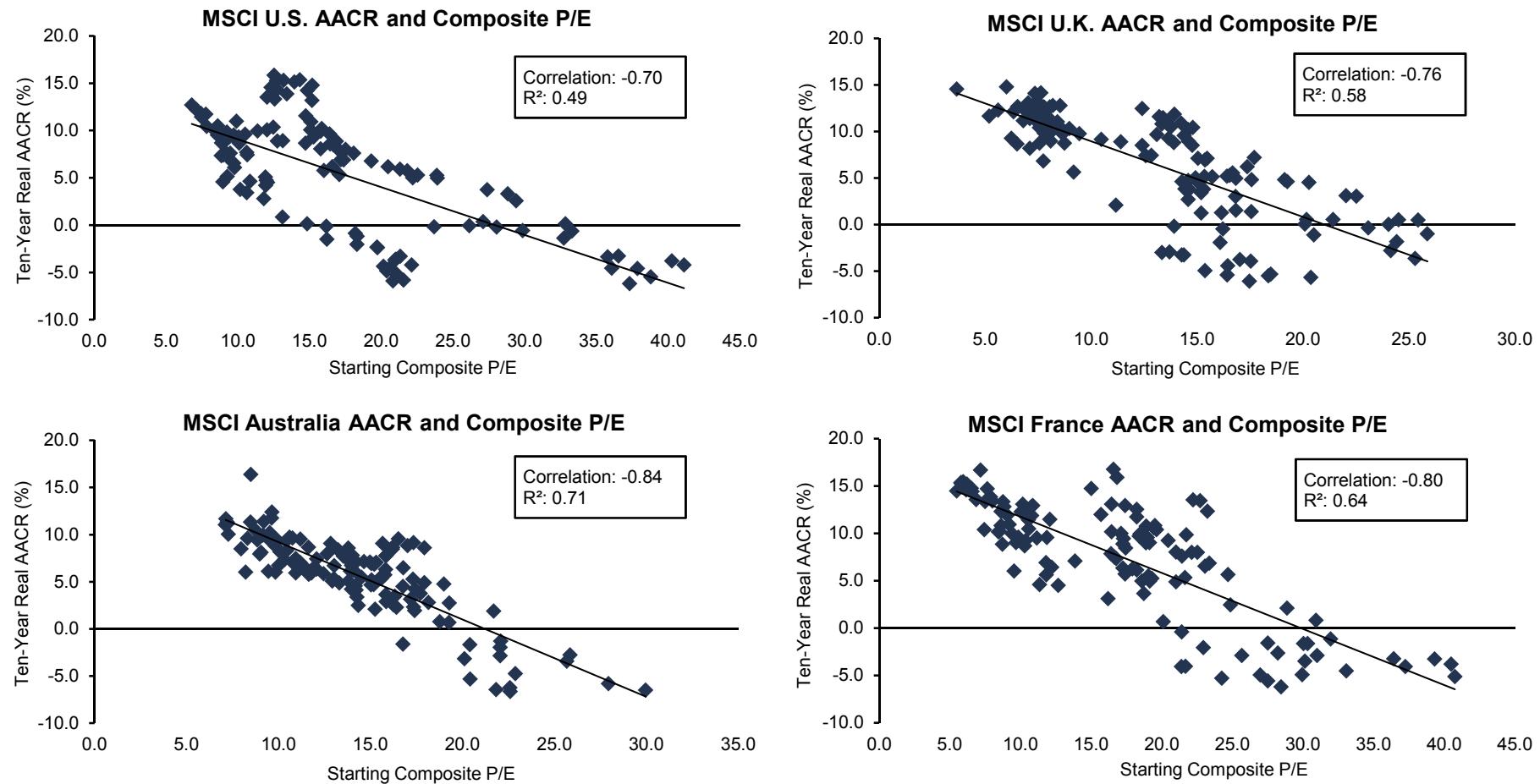
Sources: Global Financial Data, Inc., Robert J. Shiller, Standard & Poor's, Thomson Datastream, U.S. Department of Commerce - Bureau of Economic Analysis, and U.S. Department of Labor - Bureau of Labor Stats.

Notes: Data are quarterly. Shiller price-earnings data for the S&P 500 are calculated by dividing the current index value by the rolling ten-year average of inflation-adjusted earnings. Real earnings are deflated in terms of December 31, 2011, dollars.

Exhibit 17 (continued)

Relationship Between Rolling Ten-Year Real AACR and Starting P/E

Fourth Quarter 1970 – Fourth Quarter 2011



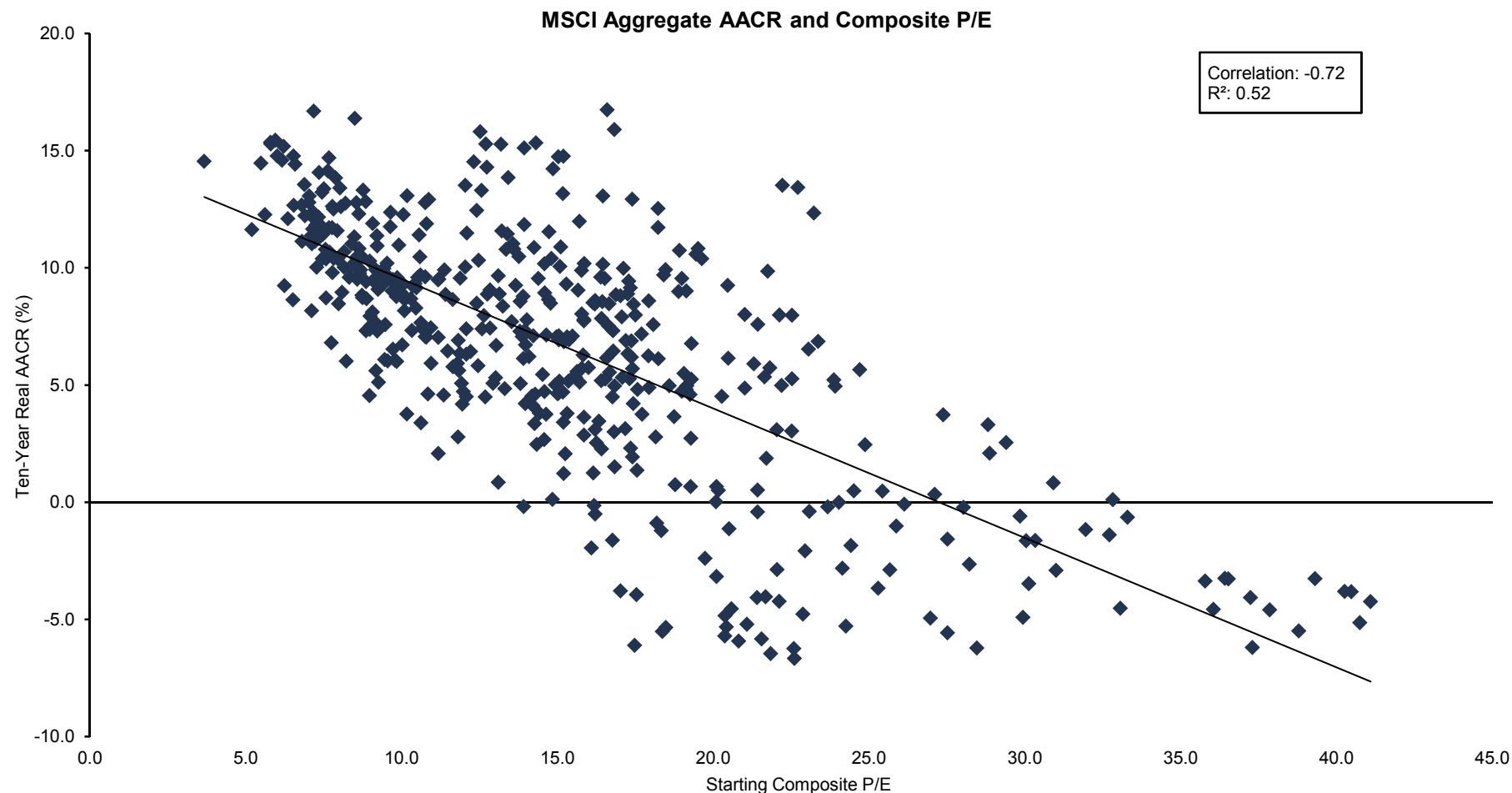
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Data are quarterly. The composite normalized price-earnings (P/E) ratio is calculated by dividing the inflation-adjusted index price by the simple average of three normalized earnings metrics: ten-year average real earnings (i.e., Shiller earnings), trend-line earnings, and return on equity (ROE)-adjusted earnings. 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. Shiller P/E is calculated by dividing the current price level by the ten-year average of 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. Data for France begin third quarter 1971. French equity returns are nominal through first quarter 1972. Real earnings are deflated in terms of December 31, 2011, dollars. Australian CPI data are as of September 2011.

Exhibit 17 (continued)

Relationship Between Rolling Ten-Year Real AACR and Starting P/E

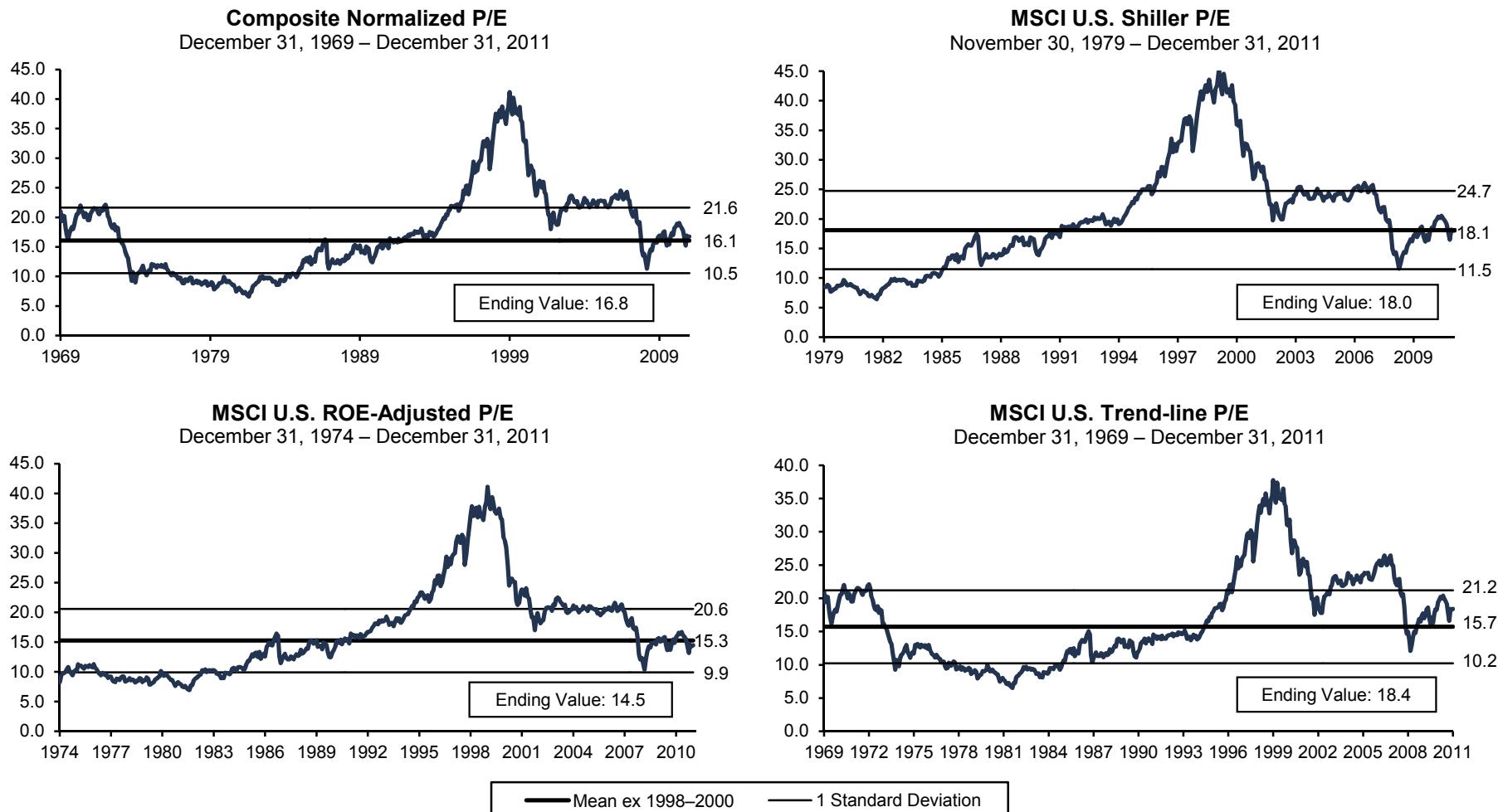
Fourth Quarter 1971 – Fourth Quarter 2011



Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Data are quarterly. Data set consists of Australia, France, the United Kingdom, and the United States. The composite normalized price-earnings (P/E) ratio is calculated by dividing the inflation-adjusted index price by the simple average of three normalized earnings metrics: ten-year average real earnings (i.e., Shiller earnings), trend-line earnings, and return on equity (ROE)-adjusted earnings. 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. Shiller P/E is calculated by dividing the current price level by the ten-year average of 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. French equity returns are nominal through first quarter 1972. Real earnings are deflated in terms of December 31, 2011, dollars.

Exhibit 18
U.S. Price-Earnings Valuations



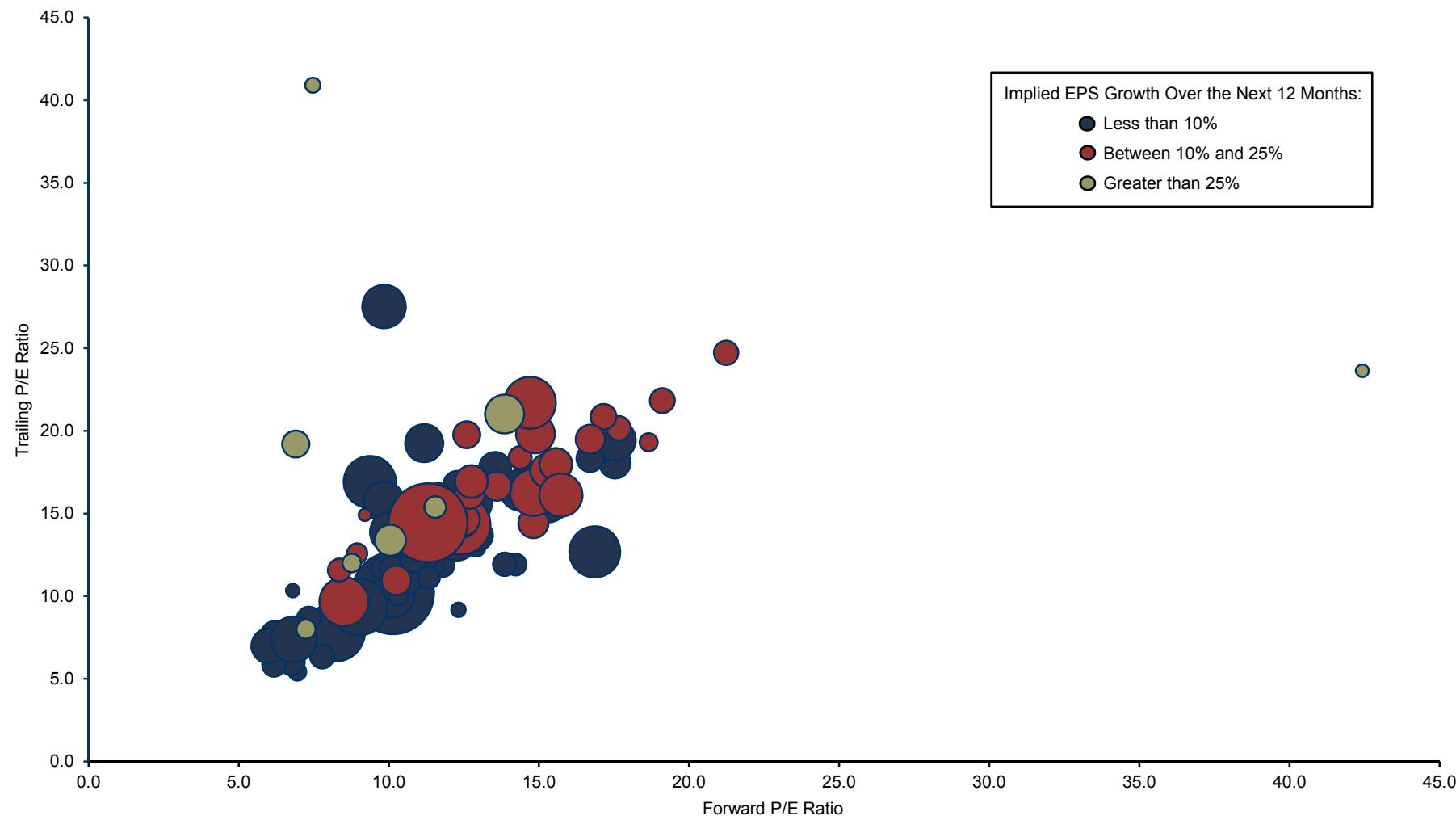
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: The composite normalized price-earnings (P/E) ratio is calculated by dividing the inflation-adjusted index price by the simple average of three normalized earnings metrics: ten-year average real earnings (i.e., Shiller earnings), trend-line earnings, and return on equity-adjusted earnings. To minimize the impact of bubble periods on valuations, we have excluded the years 1998–2000 from our historical average and standard deviation calculations. Graphs based on monthly data. CPI data is as of November 30, 2011.

1880m

Exhibit 19**Trailing and Forward Price-Earnings Multiples for S&P 100 Index Components**

As of December 31, 2011



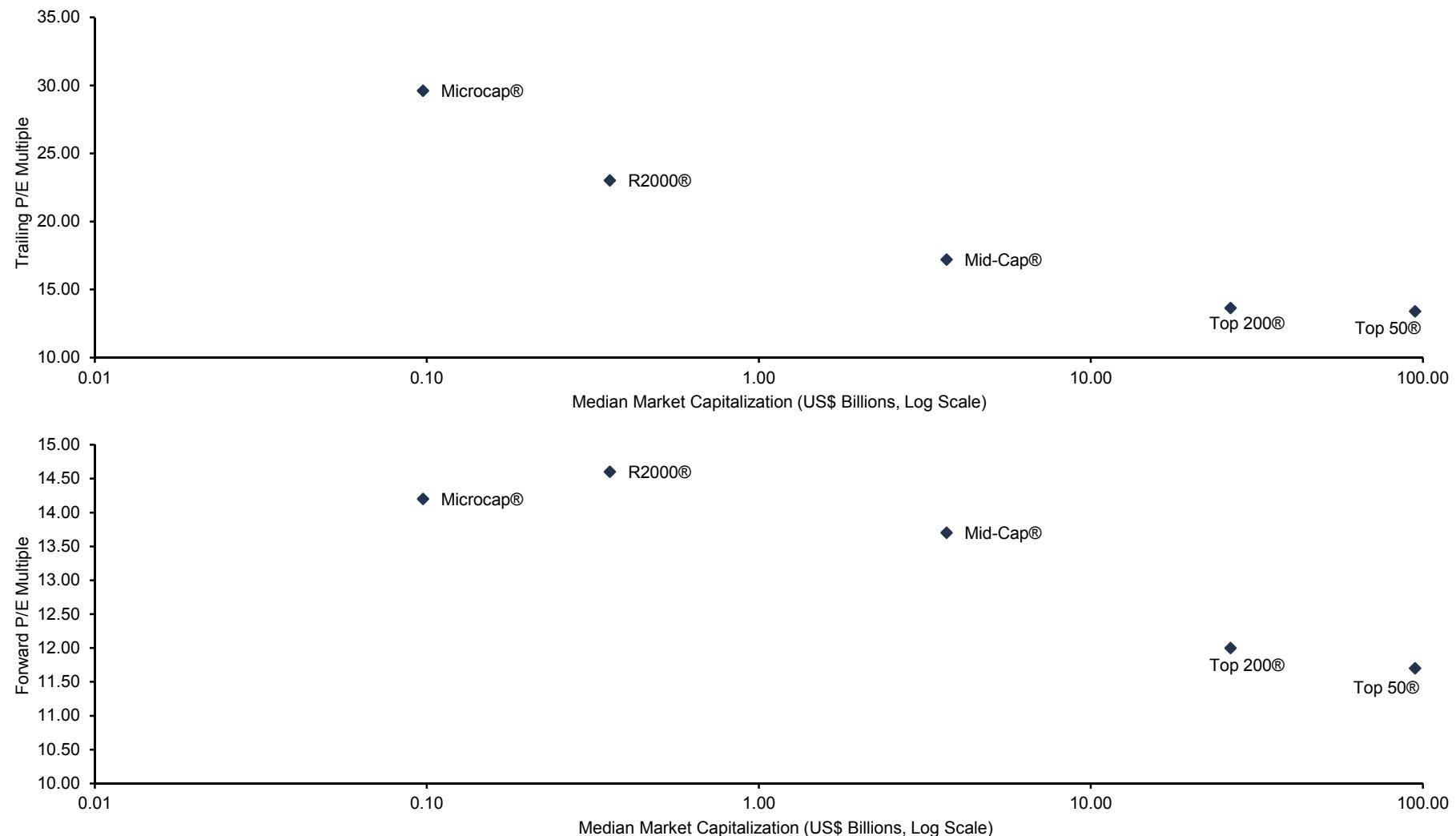
Source: I/B/E/S, FactSet Research Systems, and Standard & Poor's.

Notes: Amazon.com, Inc. has been removed for graph scaling purposes due to outlier trailing and forecast price-earnings (P/E) ratios of 89.7 and 86.1, respectively. Bank of America Corp. and Sprint Nextel Corp. have been excluded due to incomplete data. Implied earnings per share (EPS) growth is calculated using calendar year 2011 and 2012 I/B/E/S consensus EPS figures. Y-axis shows trailing 12-month P/E ratios. X-axis shows calendar year 2012 I/B/E/S consensus P/E estimates. Size of bubble determined by constituent market capitalization.

Exhibit 20

Comparison of Forward and Trailing P/E Multiples for Russell Indices Across Capitalization Ranges

As of December 31, 2011

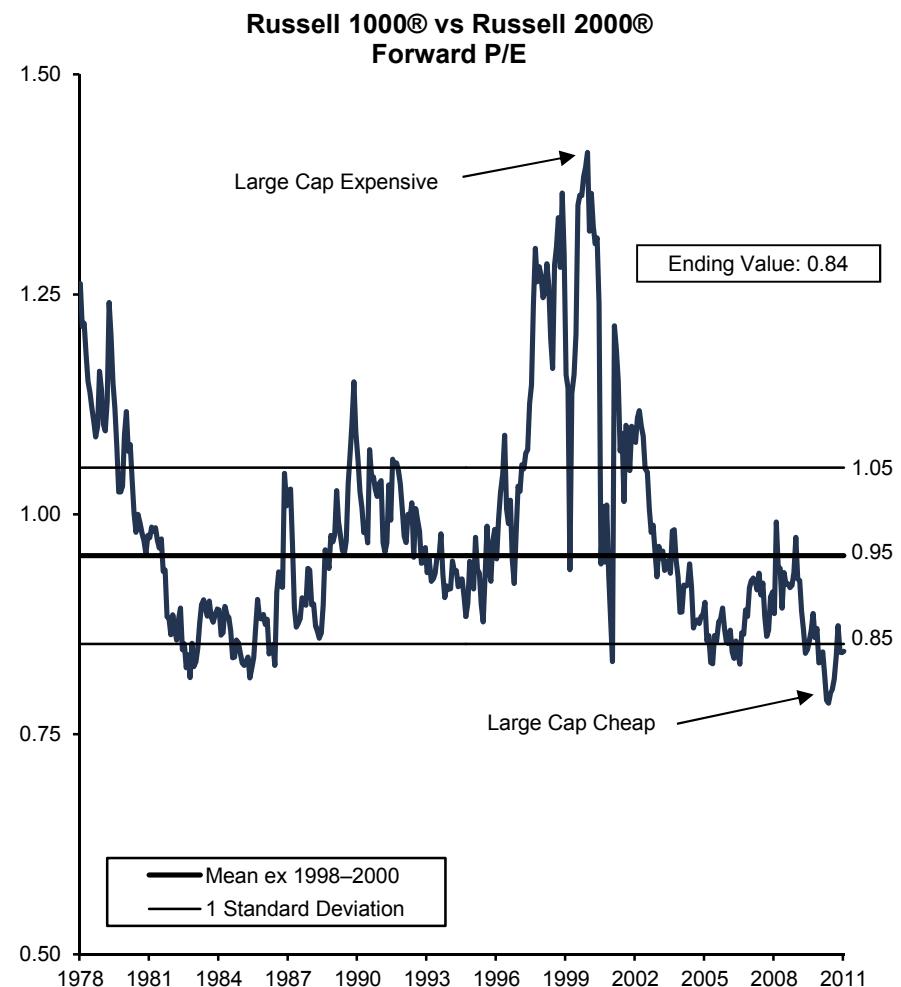
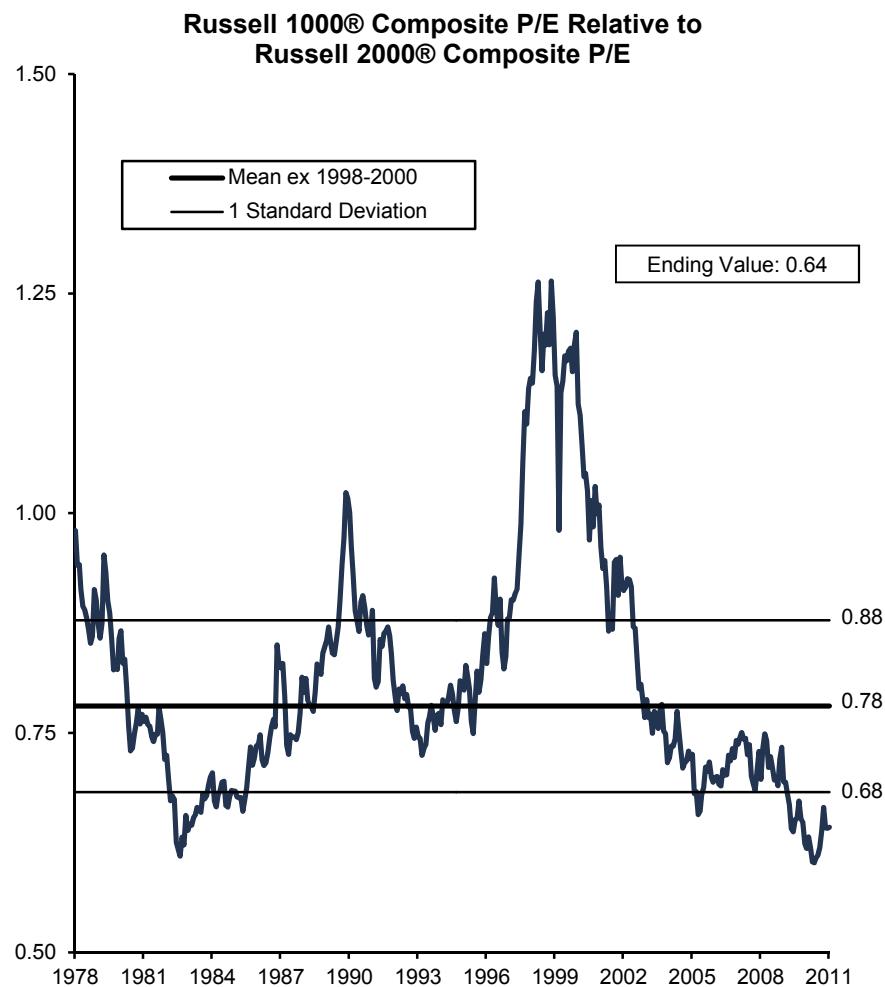


Sources: FactSet Research Systems and Frank Russell Company.

Exhibit 21

Large Cap Versus Small Cap: Composite Normalized and Forward Price-Earnings Ratios

December 31, 1978 – December 31, 2011



Sources: Frank Russell Company and Thomson Datastream.

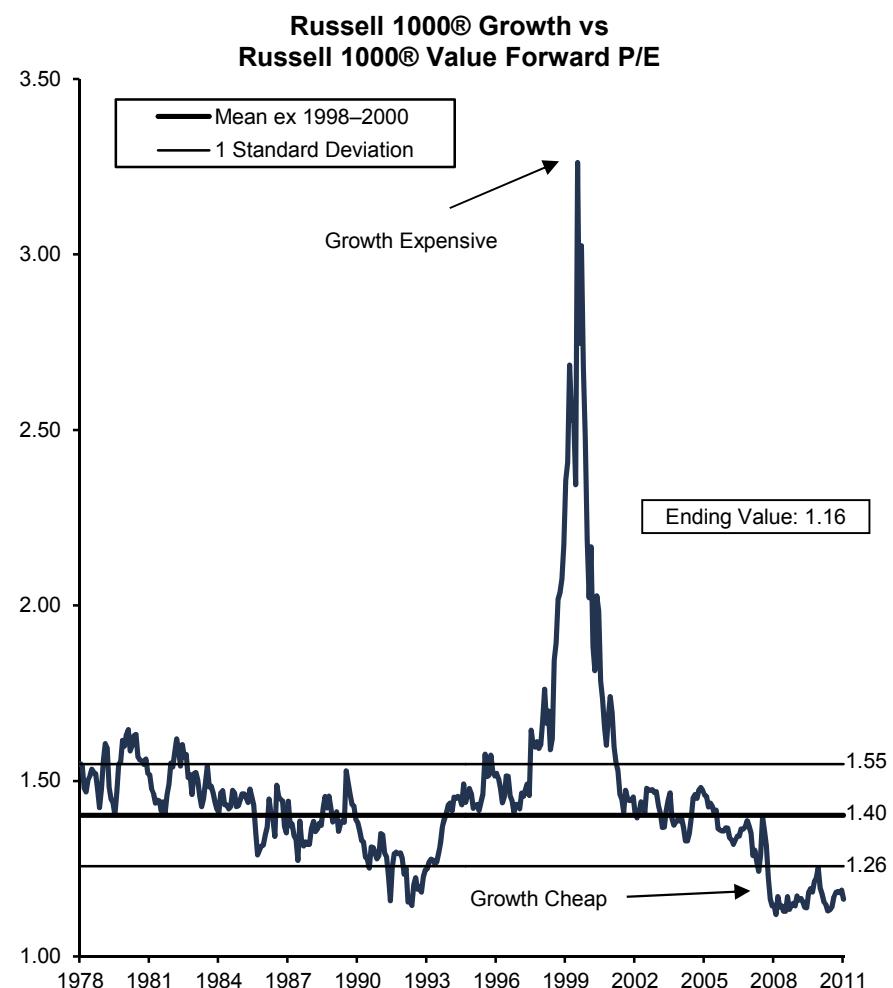
Notes: The composite normalized price-earnings (P/E) ratio is calculated by dividing the inflation-adjusted index price by the simple average of three normalized earnings metrics: ten-year average real earnings (i.e., Shiller earnings), trend-line earnings, and return on equity-adjusted earnings. We have removed the bubble years 1998–2000 from our mean and standard deviation calculations for the bottom P/E graphs. All data are monthly.

1856m

Exhibit 22

Large-Cap Growth Versus Large-Cap Value: Composite Normalized and Forward Price-Earnings Ratios

December 31, 1978 – December 31, 2011

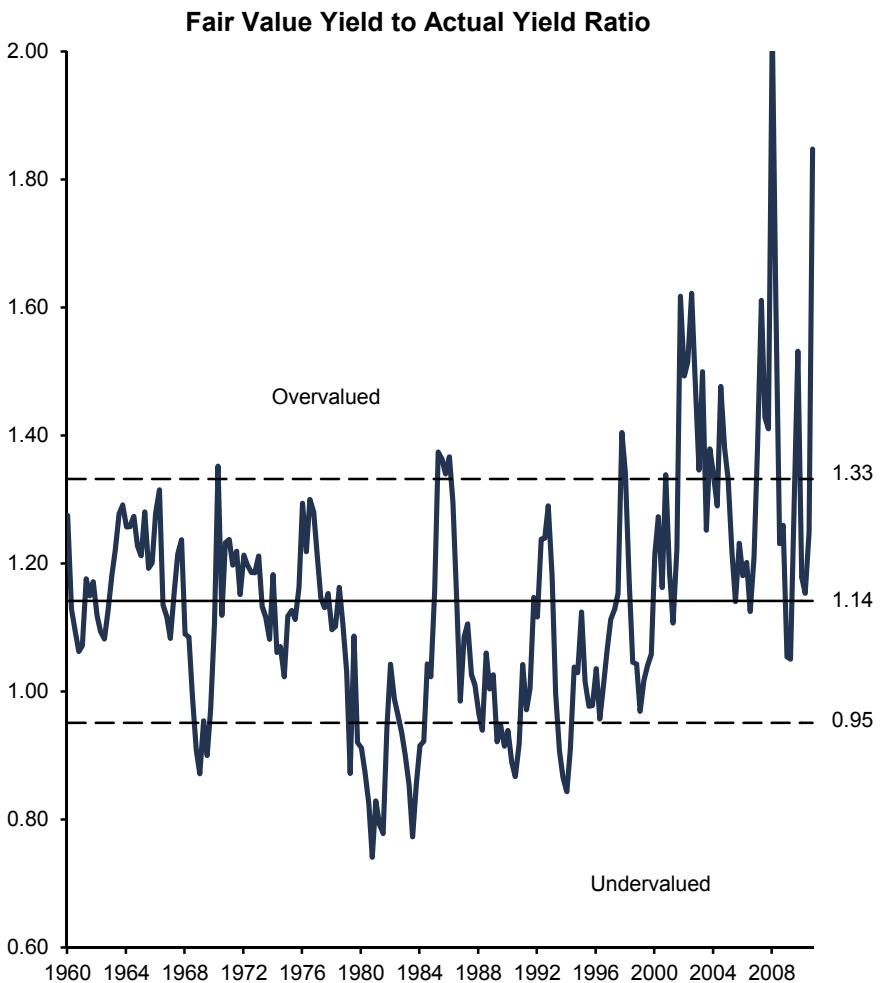
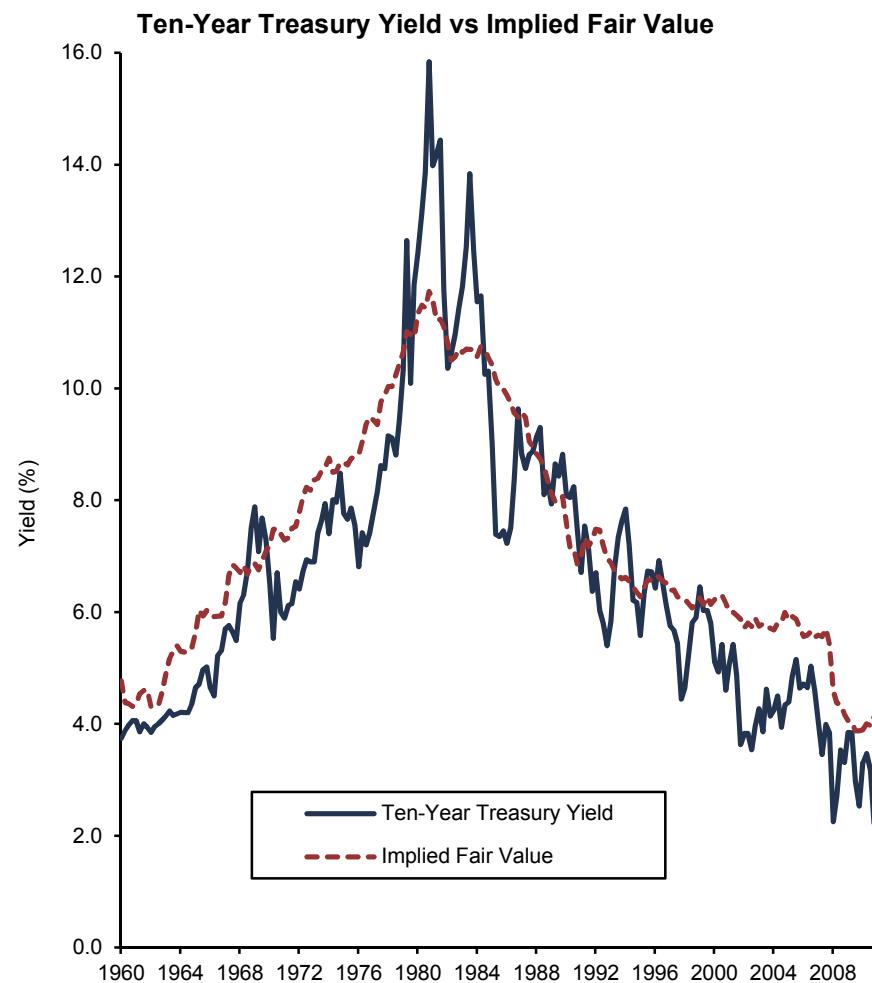


Sources: Frank Russell Company and Thomson Datastream.

Notes: The composite normalized price-earnings (P/E) ratio is calculated by dividing the inflation-adjusted index price by the simple average of three normalized earnings metrics: ten-year average real earnings (i.e., Shiller earnings), trend-line earnings, and return on equity-adjusted earnings. We have removed the bubble years 1998–2000 from our mean and standard deviation calculations for the bottom P/E graphs. All data are monthly.

1857m

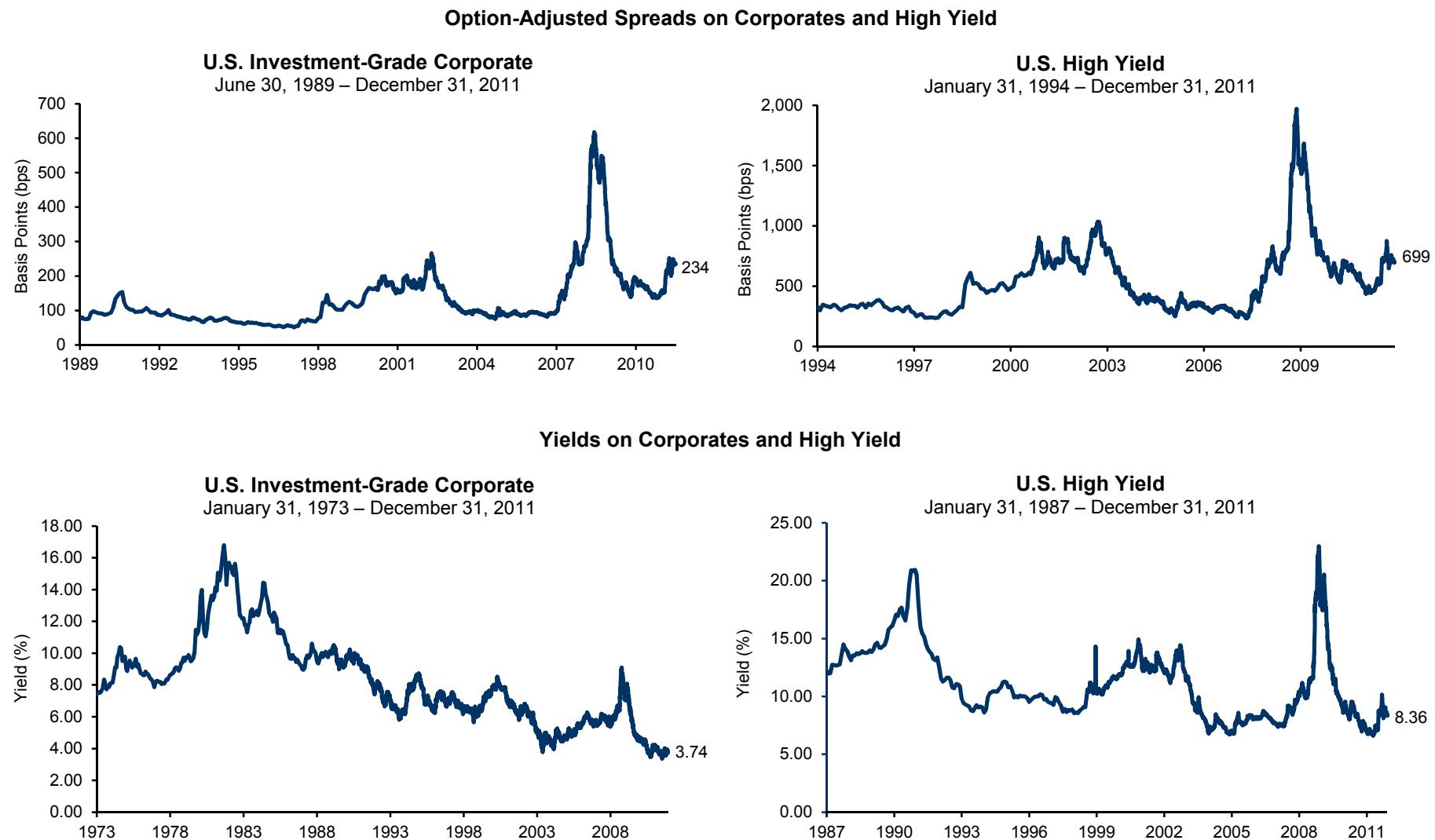
Exhibit 23
Treasury Valuations
 Fourth Quarter 1960 – Third Quarter 2011



Sources: Global Financial Data, Inc., Thomson Datastream, and U.S. Department of Labor - Bureau of Labor Statistics.

Notes: For more information on how this is calculated and interpreted, please see our March 2009 Market Commentary *The Trouble With Treasuries*. Implied fair value is ten-year average CPI growth plus ten-year average GDP growth. Current GDP and CPI-U data points based on Consensus Economics forecasts for 2011. All data are quarterly.
 1872m

Exhibit 24
U.S. Credit Spreads

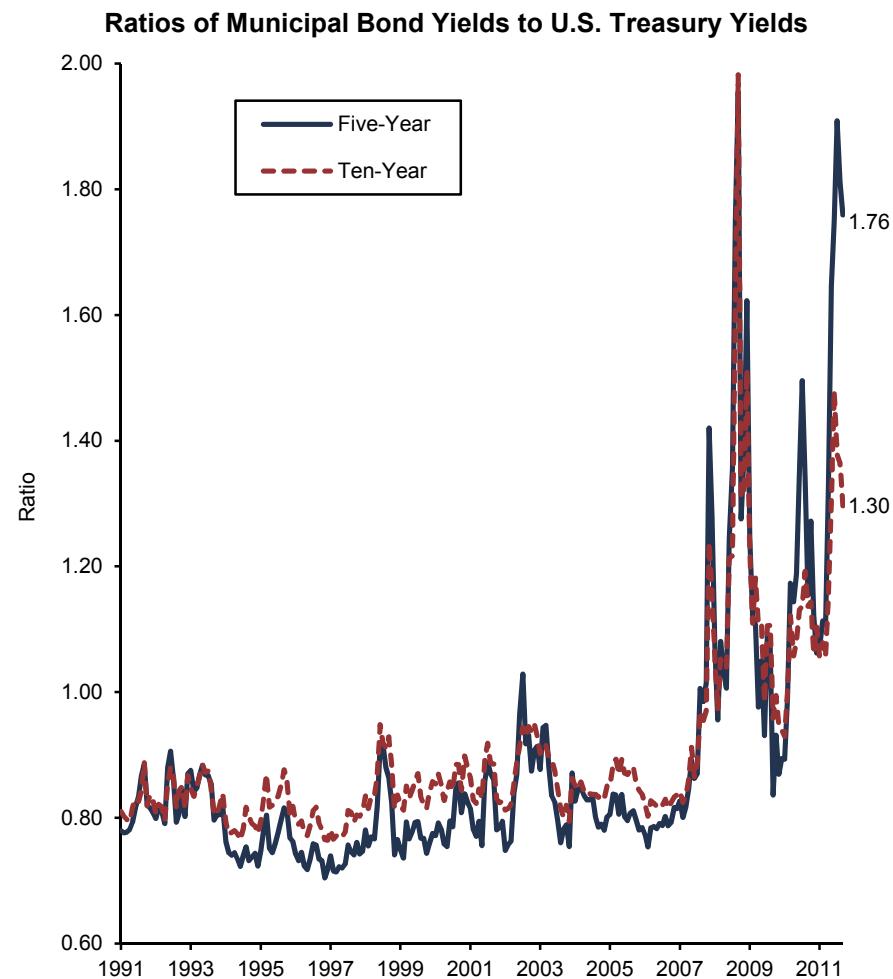
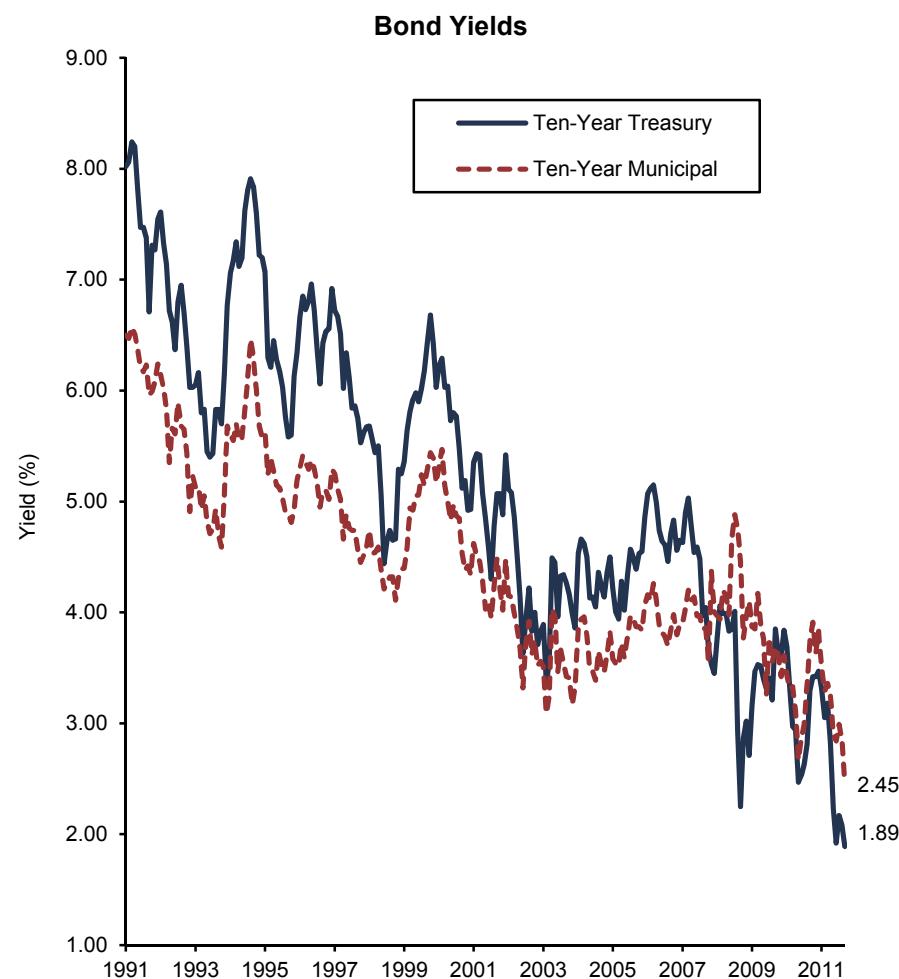


Source: Barclays Capital.

Note: Daily data for option-adjusted spreads graphs begin September 1, 2000. Daily data for investment-grade yields begin February 1, 1989. Daily data for high-yield yields begin September 1, 1998.

Exhibit 25
Municipal Bonds Versus U.S. Treasuries

April 30, 1991 – December 31, 2011



Sources: Barclays Capital and Thomson Datastream.

Note: Municipal bonds are shown as the five- and ten-year Barclays Capital municipal bond indices.

923m