

# Ibbotson Quarterly Market and Investment Strategy Commentary



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## Overall View

A continued deep correction in the U.S. housing market is propelling the U.S. economy into recession. Two quarters of negative growth are predicted during 2008, with a moderate recovery during 2009. For emerging economies, the picture is different. Their challenge will come not from recessionary forces, but rather from rising inflation and upward pressure from food and energy prices. Even in developed countries, inflation has continued to climb in the face of decelerating growth.

The Fed, recognizing the implications of a listless economy and a potential credit crunch, has been pumping liquidity into the credit market since last summer. It is taking all possible measures to stabilize the situation, including aiding the bailout of Bear Stearns. Looking ahead, there is still great uncertainty surrounding these events. Some signs in recent weeks suggest that the credit market is regaining its footing, perhaps averting a credit crunch. The Fed's aggressive intervention seems to be working.

This environment has important investment implications. First, investors must continue to maintain a disciplined, long-term perspective when making investment decisions amid the recent market volatilities and poor performance. Second, with the Fed's resolute actions, we think equity is likely to do well in the near future, especially given the low yields on U.S. Treasury bonds. Finally, we seem to be entering a period of escalating inflation; investors should consider strategies that help hedge inflation risks, such as TIPS.

## Market Commentary

### U.S. Macro Conditions

In response to ominous signs within the financial markets during the quarter, the Federal Reserve eased the federal funds rate from 4.25% to 2.25% in three steps. One of these rate cuts occurred during a holiday, following news that a single trader representing a French bank had allegedly accumulated and concealed catastrophic losses.

The Federal Reserve also engineered the takeover of investment bank Bear Stearns, which was overwhelmed by a disastrous liquidity crisis despite appearing to have been reasonably capitalized. The Fed extended a \$29 billion loan (against \$30 billion collateral) to allow JP Morgan Chase to purchase Bear Stearns at a heavy discount. This rescue was remarkable both because Bear Stearns is not a depository institution, and therefore not supervised by the Federal Reserve, and because the Fed disclosed only limited information about the collateral offered for the loan.

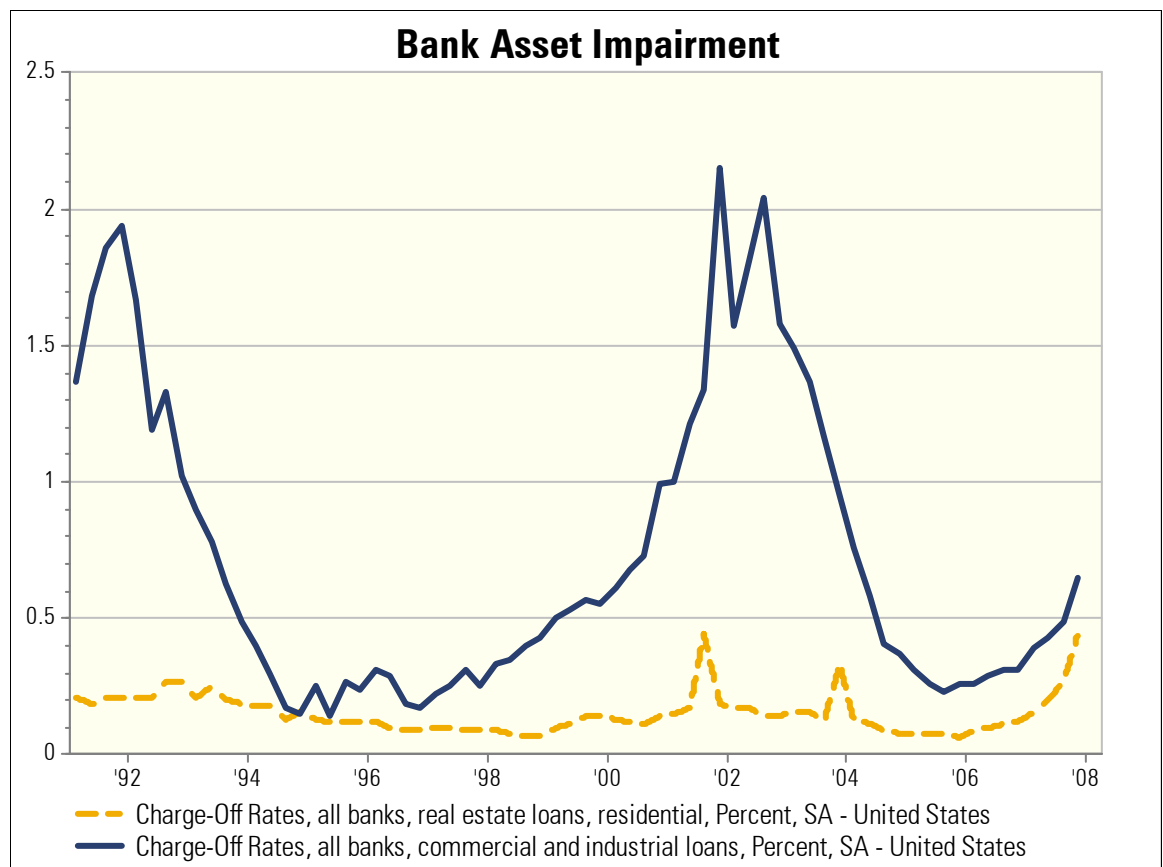
Other U.S. banks watched their stock prices dwindle as the subprime calamity unfolded. The following chart reveals that the historically low rate of charge-offs for residential real-estate loans has nearly caught up with the rate of charge-offs for commercial and industrial loans since 2006.



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*Source: FactSet*

Consumer confidence has plunged. The continuing crisis in the housing market and an up-tick in unemployment have subdued consumer spending, slowing sales of big-ticket items such as cars.

We expect volatile unemployment data in the coming months, since most statistical models cannot accommodate cyclical turns well. For example, the true unemployment rate is likely to be understated because those who become disheartened and give up looking for a job are no longer counted among the ranks of the unemployed. It stands to reason that the number of discouraged workers increases during hard times.

Inflation remains above the informal target zone. Some market observers expect a recession to curb inflation, but most decline to predict a time horizon. Commodity prices remain high, and the cost of imported energy is unlikely to fall in the short term.

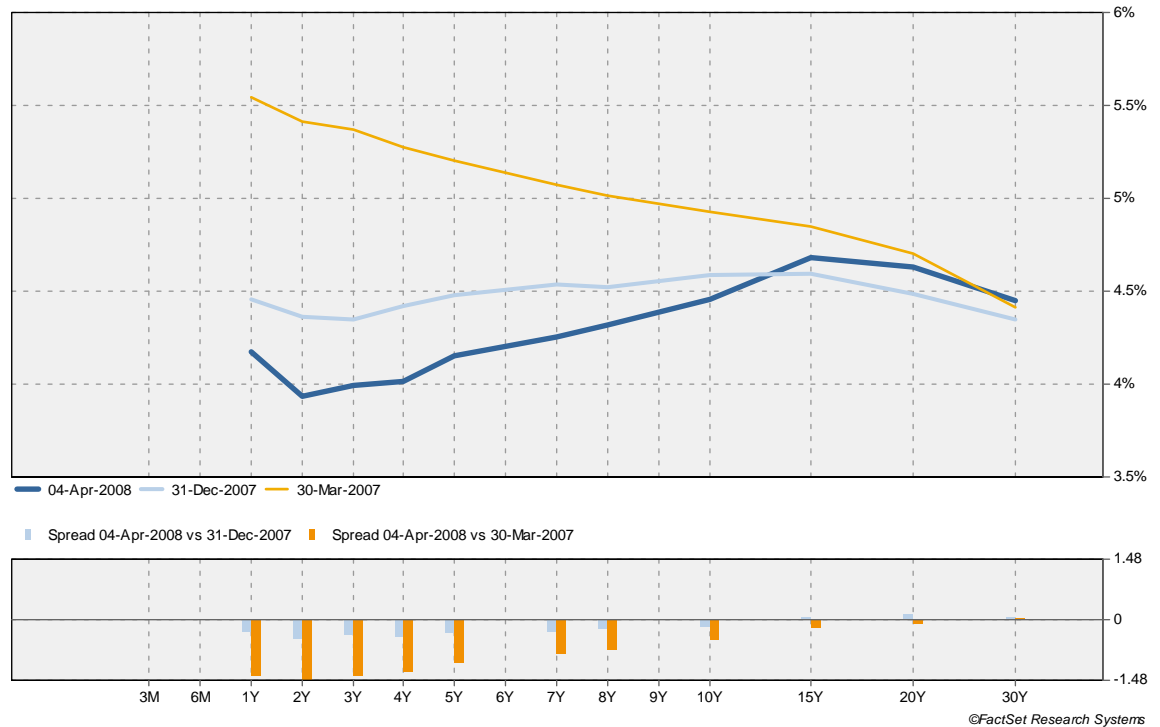
### **G7 Macro Conditions**

Japan remains mired in political and economic turmoil. Squabbling factions within the ruling party have been very slow to appoint the next governor of the central bank. Both of Mr. Koizumi's successors lacked his finesse, and investors miss his creative leadership. Fortunately, brisk exports have buoyed the economy.

The dismal financial conditions that began in the U.S. are mirrored throughout Western Europe. One reason is that several European countries had real estate booms like that in the U.S., even if they did not indulge in the same lending excesses. The Euro Zone economy has struggled against the head wind of an overvalued euro, but a handful of countries, including Germany, have shown good export performance, thanks to highly specialized products.

Great Britain's competitive financial markets behaved like those of the U.S. Countries whose regulations did not permit banks to take as much risk in the real estate market have been less affected. The Bank of England, like the Fed, has been in a tightening cycle to limit inflation and housing prices, and Great Britain may suffer accordingly.

### U.K. Government Yield Curve



The chart above depicts the dramatic flight to quality in the U.K. yield curve. While the March 2007 curve (*gold line*) had the typical (for Great Britain) downward slope, by the end of the year it had flatlined (*light blue line*). The April 2008 curve shows a distinct upward trend (*dark blue line*), demonstrating that investors have taken refuge in short-term, conservative assets.

### Emerging Markets Macro Conditions

Emerging markets consist of two broad categories. The first is commodity exporters, who have benefited from current export prices. Some of these countries have prudently reduced their debt, corrected their fiscal balance, and accumulated reserves to sustain them in future emergencies. Others have accelerated spending at a pace that may prove unsustainable if commodity prices soften in an international business downturn or other adverse circumstance. Venezuela, Argentina, and to some extent Russia have pursued expansive fiscal policies with their commodities proceeds and sometimes with the additional windfall gained by nationalizing industries or by levying excess-profit taxes. Such policies may be appreciated by citizens, but they impede foreign direct investment, which generally introduces new technologies and increases productivity. A recent Bloomberg report of a South American arms race offers a classic example of an unproductive initiative fueled by vigorous commodity prices.

The second category of emerging markets comprises transformational economies, such as China and India, in which raw materials and intermediate products are imported and finished goods exported. As commodity prices have climbed, profit margins have eroded and inflation has taken hold. We expect restrictive monetary policies to curtail this inflation gradually. The logical side effects will be stronger currencies and slower internal growth attributable to rising interest rates, both of which limit investment and consumption, and higher exchange rates, which limit export growth.

**U.S. Bond Market**

U.S. bond markets have experienced a pronounced flight to quality since August 2007; short-term Treasury securities, which are in great demand for their safety during periods of instability, have increased in price, driving yields down to 1.39% for the 3-month T-Bill. With inflation hovering around 4%, the real yield nears a negative 2%. Longer maturities offer more favorable yields, of course, but the expectation of a recession, which would limit inflation, may reduce maturity premia.

Several segments of the bond market have come to a standstill for lack of liquidity: Investors simply will not buy at any price. While this attitude is understandable for leveraged securities linked to mortgages (CDOs), we believe that the market may be overreacting in other areas. However, market demand is unlikely to grow in the short term.

Risk premia on corporate bonds have stabilized. Yields appear to incorporate fairly the default risks expected during a recession. High-yield spreads have increased about fourfold since last July, while defaults have edged up only recently.

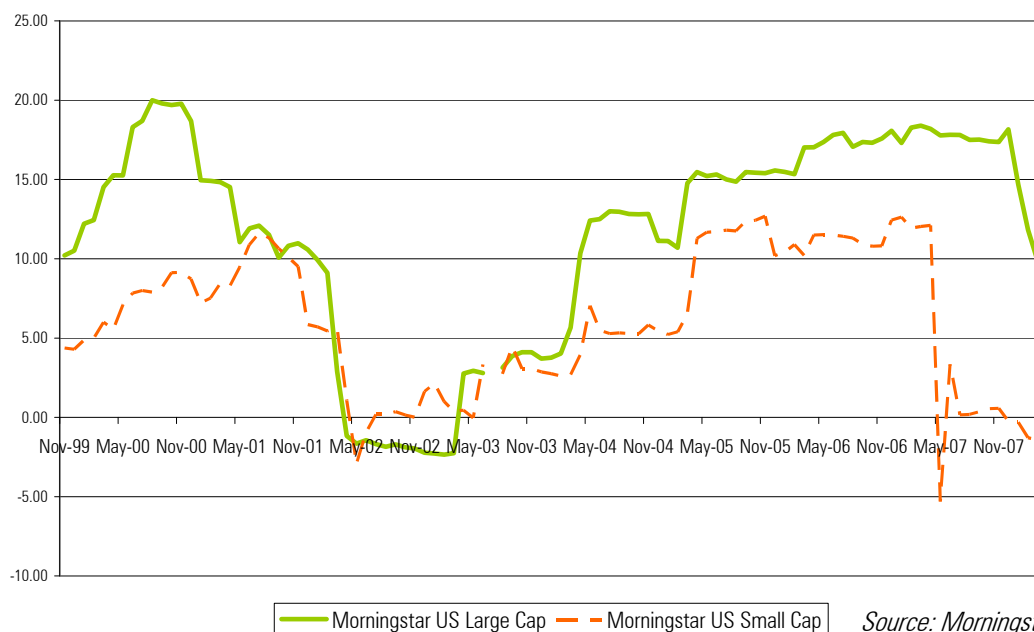
**U.S. Stock Market**

The quarter was strongly negative for U.S. equities. Anxiety about the business cycle intensified apprehension that the crisis was spreading from housing and finance to the wider economy. Two concerns dominate the thoughts of many investors: asset impairment in financial institutions and profitability erosion in non-financial corporations. We have already discussed the issue of bank asset impairment caused by an unprecedented upswing in charge-off rates for residential housing loans. Now let us examine the second concern.

The following chart shows trailing (historical) earnings growth for two U.S. equity indexes, namely, the Morningstar Large Cap and Small Cap Indexes. Earnings growth for small-cap companies appears to have declined sharply beginning in the first half of 2007, while large caps have taken an abrupt but less dramatic dive. This performance is consistent with the idea that large companies are more diversified, perhaps with operations outside the U.S., and have been able to compensate for slipping U.S. sales with a healthy infusion of non-dollar revenues.

A comparison with 2001–2002 shows that today there is a wider gap in earnings growth between the two indexes.

## Historical Earnings Growth



As we discussed in the first few sections of this commentary, macroeconomic data is bleak; as a result, anemic earnings growth is unlikely to rebound in the short run. In fact, until the housing market reaches a firm bottom, the prospect of a lasting recovery may remain beyond our grasp.

### U.S. REITs

U.S. REITs generated a positive return this quarter and out-performed the stock market, which posted a loss of more than 9%. The earnings yield of the FTSE/NAREIT Equity REITs Index was nearly 5 percent, which exceeded the 30-year Treasury yield (4.3%) but was less robust than the Lehman Aggregate Credit Yield (5.5%).

Sagging retail sales and troubling news from other sectors of the economy suggest that REITs earnings may cool as occupancy rates slacken during the remainder of 2008.

### Global Equity Markets

When the ill winds of the subprime storm began to sweep through the U.S. economy, observers had expected the damage to be confined to U.S. markets. Instead, many financial institutions outside the U.S. were exposed to assets such as CDOs, which were battered by the crisis. Consequently, developed countries posted negative stock returns for the quarter, with the financial sector typically lagging along the rest of the economy.

The MSCI EAFE Index slid 8.9 percent, while the MSCI Emerging Markets Index tumbled nearly 11 percent. Only the Latin American markets, which list several commodity producers, were able to contain the losses, dipping a modest 1.4 percent.

### Global Bond Markets

Non-U.S. bond markets experienced a flight to quality similar to the U.S. Government bonds which performed well, while corporate bonds, particularly the speculative (high yield) segment, had negative returns due to increases in spreads that led to capital losses.

The JP Morgan EMBI Global Index of emerging-market bonds posted a positive return (+0.6%) for the quarter. From our observation, emerging-market bond spreads seem to move more in sync with developed-market sovereign bonds than with high-yield bonds. This conclusion is reasonable given that the fiscal and financial situation in these countries has become much more stable than it was ten years ago, and therefore spreads reflect a diminished credit risk.

### Spotlight On: Market Timing

In the ninth edition of his acclaimed book *A Random Walk Down Wall Street*, Princeton University professor Burton Malkiel observes that market gains tend to occur in “infrequent large sprints” and that if an investor tries to time the market and has his money in a conservative portfolio during such a market burst, he risks forfeiting the gains. In fact, says Malkiel, 95 percent of large gains in the U.S. stock market between 1965 and 1995 occurred on just 90 of the 7,500 total trading days in that 30-year period. If an investor missed those crucial 90 days, his portfolio would have had very low returns.

Nevertheless, when economic storm clouds gather, it is tempting to take shelter. And make no mistake--the market tempest that began raging in August 2007 has developed into what the International Monetary Fund has called “the largest financial shock since the Great Depression,” inflicting heavy damage on markets and financial institutions, symbolized by the dramatic collapse of Bear Stearns.

Timing the market, that is, correctly guessing whether equity market prices will increase or decrease in the near future, is a tricky art. If an investor could do so, either with the gift of clairvoyance or with the aid of a very accurate econometric model, she would be immensely wealthy. It is fair to say that nobody possesses such acumen. We believe the investor is better off maintaining their long-run asset allocation rather than trying to outguess the market.

Investors appear to use concentrated funds either to time the market as a whole or to time particular market segments (for instance, the technology sector or Australian stocks). A study by Catherine Sanders, Julie Austin, and Michelle Swartzentruber of Morningstar, published in the 2007 *Journal of Performance Measurement*, finds that “average investor returns have generally lagged total returns over the past decade, suggesting that investors’ trading habits have been hazardous to their financial health, particularly among higher-volatility funds.” This means that more diversified funds (which have less volatility than concentrated funds) are more suitable for non-psychic investors because they suppress the temptation to jump in and out of specific market segments at the wrong time.

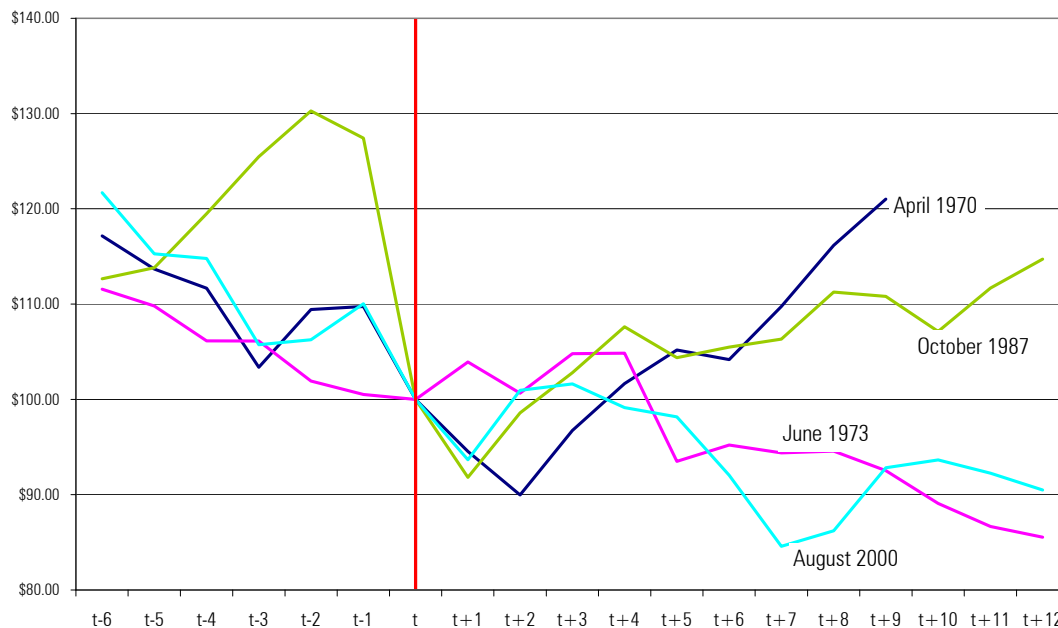
The S&P 500 Index lost more than 10 percent during the six months ending March 31, 2008. Since 1969, this is only the fourth such event (if we exclude bear markets where several months in a row had valuations in excess of 10% less than six months earlier). The first occurrence was in April 1970, followed by episodes in June 1973, October 1987, and August 2000.

The market downturns of 1970, 1987, and 2000 occurred after several periods of extraordinary gains, and each event looked like a re-pricing of stocks after a stretch of excessive investor optimism. The 1973 episode coincided with the serious economic downturn caused by the first oil crisis.

The market returned to its initial valuation within 9 months of the 1970 episode and within 12 months of the 1987 episode. The market continued its slide for many months following the 1973 and 2000 episodes, taking 33 and 68 months, respectively, to return to its previous valuation.

These data are summarized in the following chart, in which the numbers have been normalized so that the portfolio would be worth \$100 at time  $t$ , indicated by the vertical red line (the labels on the lines represent time [ $t$ ] in months).

### When the S&P 500 Index Lost over 10% in 6 Months



Source: Morningstar

Where will the market go this time? Will it recover promptly, as it did in 1970 and 1987, or will it limp along for months or years, as it did in 1973 and 2000? No one knows for sure.

However, at Ibbotson we build portfolios based on the observation of long time series, thus taking into account many different market events and scenarios. Our first pillar is diversification: while all stock markets have atrophied in the last six months, a portfolio invested in the S&P 500 Index would have lost 12.5% between October 1, 2007, and March 31, 2008, but a portfolio invested in an aggressive mix of stocks and bonds would have slipped less than 8 percent.<sup>1</sup> In the past, diversified portfolios have been less vulnerable to volatility, just as economic theory predicts.

Moreover, we perform limited market timing, and only after extensive research. We are long-term investors and prefer to build wealth based on a solid philosophy that translates academic concepts into practice. Our goal is to avoid chasing the “flavor of the day”: we were investing in commercial real estate and emerging markets well before years of sustained gains made them fashionable. We continue to search for asset classes and strategies that will reward our clients with superior, risk-adjusted returns.

<sup>1</sup> The sample portfolio below was computed as follows: S&P 500 40%, Russell 2000 10%, MSCI EAFE 20%, MSCI Emerging Markets 5%, FTSE NAREIT Equity REITs 5%, Lehman Brothers Aggregate Bond 15%, and JP Morgan Non-U.S. 1+ Year Government 5%. This is only an example for informational purposes only as Indexes cannot be invested in directly.

**Total Returns to Select Indexes for the First Quarter of 2008**

U.S. STOCK INDEXES		FTSE NAREIT All REIT	-0.42%
Russell 3000	-9.52%	FTSE NAREIT Equity REIT	1.40%
Russell 3000 Growth	-10.39%		
Russell 3000 Value	-8.55%	INTERNATIONAL STOCK INDEXES (in U.S.\$)	
Russell Top 200	-9.29%	MSCI EAFE	-8.91%
Russell Top 200 Growth	-9.83%	MSCI EAFE Growth	-8.16%
Russell Top 200 Value	-8.74%	MSCI EAFE Value	-9.66%
S&P 500	-9.44%	MSCI Emerging Markets	-10.99%
Russell Mid Cap	-9.98%	MSCI EM Emerging Europe	-13.27%
Russell Mid Cap Growth	-10.95%	MSCI EM Emerging Latin America	-1.43%
Russell Mid Cap Value	-8.64%		
Russell 2000	-9.90%	US BOND INDEXES (Total Return)	
Russell 2000 Growth	-12.83%	LB U.S. Aggregate	2.17%
Russell 2000 Value	-6.53%	Lehman U.S. Government Long	3.75%
U.S. Stock Sectors (S&P 500)		Lehman U.S. Government 1–3 Yr	2.97%
S&P 500 / Information Tech.	-15.37%	LB U.S. Corporate High Yield	-3.02%
S&P 500 / Consumer Staples	-2.78%	3-Month Treasury Bill	

Source: Morningstar

The above commentary is for informational purposes only. The data and/or information noted are from what we believe to be reliable sources, but we cannot guarantee their accuracy or completeness. The opinions and estimates noted herein are as of a certain date and are subject to change. The indices referenced are unmanaged and cannot be invested in directly.

All charts are sourced from FactSet.

**Appendix: Index Definitions**

**FTSE NAREIT All REIT Index:** Capitalization-weighted index representing the full universe of publicly traded U.S. REITs, including those companies that do not meet the minimum size rule, liquidity criteria, or free float adjustments.

**FTSE NAREIT Equity REIT Index:** Market-capitalization-weighted index that includes healthcare and net lease REITs but excludes real estate operating companies. There is no minimum size or liquidity requirement for an equity REIT to be included in this index.

**FactSet U.S. Real Estate Investment Trusts Aggregate:** Market-capitalization-weighted index of U.S. REITs stocks, not limited to equity REITs but including mortgage and hybrid REITs as well.

**Morningstar U.S. Market Index:** Diversified broad market index that targets 97% market capitalization coverage of the investable universe.

**Morningstar U.S. Large Cap Index:** Diversified index that targets the top 70% market capitalization coverage of the investable universe.

**Morningstar U.S. Small Cap Index:** Diversified index that targets the fourth through the 10<sup>th</sup> percentiles of market capitalization coverage within the U.S. investable universe.

**MSCI EAFE Index:** This index tracks non-U.S. stock funds (EAFE refers to Europe, Australasia, and Far East). The EAFE Index is an aggregate of 21 individual country indexes that collectively represent many of the world's major markets.

**MSCI EAFE Growth Index:** Capitalization-weighted index tracking companies within the MSCI EAFE index classified by MSCI/BARRA as growth.

**MSCI EAFE Value Index:** Capitalization-weighted index tracking companies within the MSCI EAFE index classified by MSCI/BARRA as value.

**MSCI Emerging Markets Index:** Capitalization-weighted index measuring the total returns of stocks from a number of emerging markets across the world.

**MSCI EM Emerging Europe Index:** Capitalization-weighted index measuring the stock market's performance in mainly Eastern European emerging markets.

**MSCI EM Emerging Latin America Index:** Capitalization-weighted index measuring the performance of the stock market in Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

**Russell 3000 Index:** Market-capitalization-weighted index that includes the 3,000 largest U.S. companies based on total market capitalization. The Russell 3000 Index represents 98% of the investable U.S. equity market.

Russell 3000 Growth Index: Market-weighted total return index that measures the performance of companies within the Russell 3000 Index having higher price-to-book ratios and higher forecasted growth values.

Russell 3000 Value Index: Market-weighted total return index that measures the performance of companies within the Russell 3000 Index having lower price-to-book ratios and lower forecasted growth values.

Russell Top 200 Growth Index: Market-weighted total return index that measures the performance of companies within the Russell 200 Index having higher price-to-book ratios and higher forecasted growth values.

Russell Top 200 Index: includes the 200 firms from the Russell 3000 Index with the largest market capitalizations.

Russell Top 200 Value Index: Market-weighted total return index that measures the performance of companies within the Russell 200 Index having lower price-to-book ratios and lower forecasted growth values.

Russell Mid Cap Growth Index: Market-weighted total return index that measures the performance of companies within the Russell Mid Cap Index having higher price-to-book ratios and higher forecasted growth values.

Russell Mid Cap Index: Capitalization-weighted index including firms 201 through 1000, based on market capitalization, from the Russell 3000 Index.

Russell Mid Cap Value Index: Market-weighted total return index that measures the performance of companies within the Russell Mid Cap Index having lower price-to-book ratios and lower forecasted growth values.

Russell 2000 Index: A capitalization-weighted index including the 2000 firms from the Russell 3000 Index with the smallest market capitalizations.

Russell 2000 Growth Index: Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having higher price-to-book ratios and higher forecasted growth values.

Russell 2000 Value Index: Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having lower price-to-book ratios and lower forecasted growth values.

Standard & Poor's 500 Index: Market-capitalization-weighted index of 500 widely held stocks. Member companies are chosen based on market size, liquidity, and industry group representation. Included are the stocks of industrial, financial, utility and transportation companies.

S&P 500 / Energy Index: Capitalization-weighted index measuring the performance of companies within the Standard & Poor's 500 Index that are classified in the Energy sector.

S&P 500 / Materials Index: Capitalization-weighted index measuring the performance of companies within the Standard & Poor's 500 Index that are classified in the Materials sector.

Lehman Brothers Aggregate Index: Market-value-weighted performance benchmark for investment-grade fixed-rate debt issues, including government, corporate, asset-backed, and mortgage-backed securities, with maturities of at least one year.

Lehman Brothers U.S. Aggregate Government Long Index: Serves as a measure of total return of all public-issued nonconvertible investment-grade corporate debts that have a maturity of 10 years or more.

Lehman Brothers U.S. Aggregate Government 1-3 Yr Index: Total returns index comprised of both the Treasury Bond Index (all public obligations of the U.S. Treasury, excluding flower bonds and foreign-targeted issues) and the Agency Bond Index (all publicly issued debt of U.S. Government agencies and quasi-federal corporations and corporate-debt guaranteed by the U.S. Government). These bonds must have maturities of one to three years.

Lehman Brothers U.S. Corporate High Yield Index: Index measuring returns of the high yield bond market. The Index includes issues rated BB and below by S&P or Moody's.

LIBOR: London Inter-Bank Offered Rate. Besides being an interbank short-term lending rate, it is one of the most common benchmark interest rate indexes used to determine the variable rate of adjustable rate mortgages.

3 Month T-Bill Index: Represents the average of T-bill rates for each of the prior three months.

JP Morgan EMBI+ is an index of external-currency-denominated bonds from emerging markets.

Return on equity (ROE): Ratio of total net earnings (profits) to shareholders' equity. It measures the profitability of a company.

Price-earnings (P/E) ratio: Ratio of market price of a share of a company to the earnings per share of the same company. It measures how many dollars of price one has to pay per dollar of earnings that the share brings. It is used to compare stocks and determine which look cheaper and which look more expensive.

## Appendix: Term Definitions

Asset Allocation: The process of dividing investments among different kinds of assets, such as stocks, bonds, real estate and cash, to optimize the risk/reward tradeoff based on an individual's or institution's specific situation and goals.

Balanced Portfolio: A portfolio that balances investments in stocks and bonds to provide growth and income benefits through modest exposure to market volatility.

## Appendix: Disclosures

Individual index performance is provided for informational purposes only, and composition of an index may change over time. Each index is unmanaged and it is not possible to invest directly in an index. Although index performance data is gathered from reliable sources, Ibbotson Associates cannot guarantee the accuracy, completeness or reliability of such data. Because indexes are unmanaged, the performance data shown does not reflect the deduction of any investment advisory, management or other fees.

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All economic and performance information is historical and is not indicative of future results. Past performance does not guarantee future results.

Additional risks are associated with international investing, such as currency fluctuations, political and economic stability, and differences in accounting standards.

All investments involve risk. Individual investors should carefully consider whether an investment is appropriate based on their experience, objectives, financial condition and other circumstances. Please consult with your financial advisor before making any investment decisions.

Diversification does not ensure a profit or guarantee against a loss.