## DIVERSIFICATIDN: WHATISITGODDFDR? <br> SEPTEMBER 2ロ13

Sometimes the questions we receive say more about the investment environment than anything else. Of course we have been talking a lot about interest rates and Fed policy over the last few months. But one question that has come up more and more concerns portfolio diversification. To paraphrase, the question is typically "Why don't I just invest in the S\&P 500?" If you look at the chart to the right you can see why this question arises. Since the end of 2010 the S\&P is up almost $+42 \%$ while international equities are up only $+5 \%$. Imbedded in the above question are two assumptions:

1) Many seem to believe that you can be diversified simply by investing in an index such as the S\&P 500 that holds a lot of stocks.
2) Past performance predicts future returns.

In the following piece we lay out the case as to why both assumptions are incorrect. But first some background on what diversification really means.

## Why Diversify?

Diversification in our mind is the key to long-term investment success. By including asset classes with investment returns that move up and down under different market conditions (what's called low correlation between asset classes) an investor can smooth out a portfolio's returns. The highs are less high, but the lows are less low, and ultimately the average investor is much more likely to stick to such a diversified allocation. In our experience, one of the biggest mistakes individual and professional investors make is giving up on a strategy at exactly the wrong time. We believe diversification can help prevent this error.

A way of illustrating this example is highlighted in the table below. Here we show three portfolios. The first portfolio (Portfolio A) is simply the S\&P 500. Since December $31^{\text {st }} 1976$ the S\&P has grown at a compounded 11.29\% per year. The index's standard deviation is 15.20. Standard deviation is a measure of risk and illustrates how far from the average returns

| Sample Portfolio Risk/Retum Characteristics 12/31/1976 to 8/31/2013 |  |  |
| :---: | :---: | :---: |
|  | Annual Retum | Standard Deviation |
| Portfolio A | 11.29\% | 15.20 |
| Portfolio B | 10.85\% | 12.44 |
| Portfolio C | 11.00\% | 11.88 |
| Portfolio A-10 <br> Portfolio B-80\% <br> Portfolio C-55 <br> Source-Mormin | ndex <br> \%MSCI Em | 20\% Barclays A |


normally fall. A low standard deviation means returns in any particular year cluster tightly around the average. A large standard deviation number means returns in any particular year can vary widely from the average. For example, the S\&P's standard deviation number implies that returns in any year will fall between $-3.91 \%$ and $+26.49 \%$ the majority of the time.

Portfolio B highlights the diversification benefits of combining $20 \%$ fixed income with the S\&P index. Returns fall modestly (from $+11.29 \%$ to $+10.85 \%$ ) but risk falls significantly. The standard deviation drops over $18 \%$.

Finally, Portfolio C shows the benefit of adding international stocks. It is made up of $50 \%$ S\&P 500, $20 \%$ international stocks, $5 \%$ emerging market equities (from 12/31/87 forward), and 20\% fixed income. This is a very simplified asset allocation portfolio, but it makes the point that more diversification can actually improve returns and reduce risk. Portfolio C's returns are better than the $80 / 20$ portfolio while risk is modestly lower ( 11.88 versus 12.44 ). Returns are comparable with the S\&P but risk is almost $22 \%$ less. This improved risk/return profile is achieved in large part by holding assets that have a low correlation with each other - their moves up and down are not synchronized. If we were to add real estate stocks (REITs), value and small-caps the returns would improve further while risk would fall.

## How do you diversify?

That is all well and good in theory, but how do you diversify? In their recent book, 'The Elements of Investing', Burton Malkiel and Charles Ellis outline three dimensions of diversification to improve your chances of long-term investing success. They are:

1) Diversify across time. We won't dwell on this point, but the idea is simple. It is better to invest as early in your career as possible to give yourself more time to compound returns. It is also preferable to invest over time, that is dollar-cost-average throughout your working life so that you are never investing a lump sum in a market that happens to be overvalued.
2) Diversify across companies. This means investing in stocks or bonds of many different companies. Individual stock or bond ownership represents diversifiable risk - that is risk that can be mitigated by spreading your portfolio across a lot of different investments in the same asset class. The extreme example of how not to diversify is the employee at Enron who held Enron in their retirement account. Not only did they lose their job when Enron went bankrupt, but their retirement savings were wiped out as well. Adding even just one or two other stocks or mutual funds to the retirement portfolio would have made a big difference. To achieve this level of diversification is relatively simple. Don't put a lot of your portfolio in one stock or mutual fund, don't allow your company stock to dominate your portfolio, etc.
3) Diversify across asset classes. Now we take the idea of diversification to a different level. To diversify across capital markets is to own different types of stocks or bonds that are not tightly correlated. In the equity space this would include large-cap stocks, small-cap stocks, international equities, growth stocks and value stocks. The point of doing this is twofold:
a) Returns for different sectors of the market are often less correlated. For example, the large-cap growth index has a correlation of 0.71 to the REIT index. Anything less than 1 implies that the two assets do not move in sync, meaning when one asset zigs the other asset may zag. 2001 is a good example when the growth index was down $-13 \%$ while the REIT index was up $+12 \%$. The chart to the right shows a stylized example. If you blend stock A (blue line) with stock B (red line), you end up with a portfolio (pink line) that has similar return characteristics but far

b) Secondly, at times different sectors of the equity or fixed income markets can be priced to deliver very different return streams. Going back to our large-cap growth and real estate example, at the beginning of 2000 real estate stocks were unloved and sold at a huge discount to both their historic averages and the market as a whole. Investors clamored for tech stocks and wanted nothing to do with 'boring' real estate stocks. However, this presented a huge opportunity for the diversified investor to add undervalued REITS to their portfolio. Over the subsequent 10-years REITs delivered compound annual returns of $+10.6 \%$ while the large-cap growth lost an annualized $-5.8 \%$ per year.

In reality, identifying these opportunities is tough. Just look at the Callen Periodic Table of Investment Returns attached to this paper. If you think it looks confusing, you are right, it is. The point is that a winner in one year can very easily be a loser the next. In 2012 emerging market equities were at the top. In 2011 they were at the bottom, as they are this year. Does this mean that emerging market equities will be at top or the bottom in 2014? Past performance means absolutely nothing about future returns, but you can be sure that buying last year's winners will prove to be a losing game over time.

So the idea of diversifying across multiple asset classes is that you spread your bets across a number of different assets that do not move in sync. In any particular year you will own some of the best and worst asset classes, but the blended returns over time will prove to be higher and more stable than just a single asset class. Just look at the table on the previous page. This leads us to the next logical question. What drives the swings in relative performance and how do you identify opportunities?

## $\underline{\text { Key Metrics }}$

A core tenant of our investment process is diversify, diversify, diversify. All of our portfolios are diversified globally across both stocks and bonds. However, over the years we have found that there can be times when tilting in one direction or another can augment returns for a globally diversified portfolio. Holding an underweight allocation in growth companies while overweighting value, small-caps and REITS proved profitable in 2000. Overweight emerging equities and natural resources served us well from 2003 till 2007. Today we are seeing valuation discrepancies that could make for another interesting
investment environment in the years to come.

We would contend that two forces drive relative asset class returns over long periods of times:

1) Starting valuations
2) Growth prospects

The Valuation Landscape

The classic example from the Callen chart attached to this report concerns the S\&P Growth index in 2000. An investor at the beginning of that year would have seen that large-cap growth was at or near the top of the table from 1994 until 1999, an unprecedented run. Investors were pouring money into large growth funds because they had done so well and the hoopla around the internet revolution confirmed their existing bias. However, what many didn't think about at the time was the valuation question. The chart above shows the valuation of both the S\&P growth and value indices from 1994 until 2001. As you can see, at the peak of the bubble growth stocks sold at a trailing price-earnings (PE) ratio of roughly 50 - value stocks traded at less than 20. At the time we received numerous questions about why own boring value stocks when growth was the future (not too dissimilar to today when no one wants international stocks)?

In retrospect the answer was clear - valuation ultimately matters. From the beginning of 2000 (roughly the peak of growth stock overvaluation) through the end of 2004 value stocks earned a 5-year compound annual return of $+2.4 \%$. Growth stocks lost $-6.9 \%$ per year over the same period.

Looking at Today's Market

Today in the US there is no clear valuation advantage for growth stocks versus value stocks or large-caps versus small-caps. Dividend paying stocks and income plays have been very popular the last few years and this has led to pockets of overvaluation in such sectors, but in general


However, we shouldn't lose sight of the fact that past returns mean nothing about future returns and valuations ultimately matter. European stocks are so much cheaper today then their US counterparts that they are priced to deliver very interesting returns in the years to come. Certainly there are problems in the Euro area, that is why the stocks are cheap today. But all an investor needs in Europe is for things to
turn out less bad than expected to profit.
It is a similar story for emerging market (EM) equities. EM equities have also seriously lagged the last few years. From the beginning of 2010 through the end of July EM equities are actually down $-1 \%$ versus the gain of $+55 \%$ for US equities, with serious underperformance this year. EM stocks are also cheap today. The average EM stock market now trades at 9.5 times forward earnings and 1.5 times book value, both significant discounts to US stocks.

## Growth Prospects

However, what keeps us from overweighting EM equities today is the second factor driving relative returns - the growth prospects. If you think back to 2000, the growth prospects for large-cap growth companies (think Cisco, Microsoft, etc.) appeared limitless and the stocks were priced for such unrivaled opportunities. However, trees don't grow to the sky, and when it turned out that sales and profit growth would be somewhat less than originally thought, the stocks suffered dramatic falls.

The ideal situation for asset allocators like us is an asset class or region moving from recession to growth while selling at very discounted valuations. We have this situation in Europe. Today the euro zone is on the mend. The region emerged from its recession in the $2^{\text {nd }}$ quarter and growth could average $1 \%$ in the second half of this year. A recent Reuters poll of 30 economists shows quarterly growth estimates running around $+0.5 \%$ per quarter through 2014. This works out to roughly 2\% GDP growth in 2014 - a decent number by developing world standards if it proves to be the case.

What keeps us cautious on EM equities over the next few months are the growth prospects. Those countries such as India, Indonesia, and Turkey that are running large current account deficits are being forced to raise interest rates to defend their currencies. Such moves in the midst of a weak global economy will only serve to slow growth over the short-term. Ideally we want to overweight an asset class when growth is accelerating and the market has yet to fully price in this scenario.

This is far from the case in the emerging world today, although eventually we will reach such a point.

## Summary

The value of diversification is a difficult investment lesson to learn because it isn't intuitive. We want to believe we can look at the past and use it to predict the future. In most professions this works. For example, in medicine or engineering, if something works you do more of it. If the bridge doesn't fall down you use the same construction methods again. The investment world is often very different. Just as you shouldn't drive with the rearview mirror, you shouldn't pick investment vehicles solely based on what has worked.

We write this today because we are seeing investors flocking into what has worked in the past. Up until lately it has been bond funds. More recently it is largecap US equities. Many think because they buy the S\&P 500 they are diversified. We would argue that they are not. S\&P companies as a group have very high correlations to each other and valuations in general fall within a narrow band. Further, US equities have been in a multi-year period of outperformance, but like all asset classes that have had their day in the sun, this too shall end.

Over the next 3-to-5 years there is a good chance that the performance of the overseas markets, particularly in Europe, and possibly in the emerging world, begin to surpass those of the US market. This isn't to say that we are bearish on US equities. Far from it. We would only contend that the overseas markets have very different valuation and growth characteristics that will provide important diversification benefits going forward, and investors should be cautious about chasing past returns. We shouldn't lose sight of the fact that diversification is about as close to a free lunch as you can get in the investing world. And with the valuations overseas where they are today, now is a good time to make sure you are diversified.

## Charles Blankley, CFA Chief Investment Officer

## The Callan Periodic Table of Investment Returns

## Annual Returns for Key Indices (1993-2012) Ranked in Order of Performance

| 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MSCI Markets 74.84\% | MSCI EAFE 7.78\% | S\&P 500 Growth 38.13\% | S\&P 500 Growth <br> 23.97\% | S\&P 500 Growth 36.52\% | S\&P 500 Growth <br> 42.16\% | MSCI Marke $66.42 \%$ | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & \text { Value } \\ & 22.83 \% \end{aligned}$ | Russell 2000 Value 14.02\% | Barclays Agg <br> 10.26\% | MSCI Emerging Markets 56.28\% | MSCI Markets 25.95\% | MSCI Emerging Markets 34.54\% | MSCI Markels $32.59 \%$ | MSCI Emerging Markels $39.78 \%$ | Barclays Agg <br> 5.24\% | MSCI Emerging Markets 79.02\% | Russell 2000 Growth $29.09 \%$ . | Barclays Agg <br> 7.84\% | MSCI Emerging Markets 18.63\% |
| MSCI EAFE <br> 32.57\% | S\&P 500 Growth 3.13\% | $\text { S\&P } 500$ <br> 37.58\% | S\&P 500 <br> 22.96\% | S\&P 500 <br> $33.36 \%$ | S\&P 500 $28.58 \%$ |  | Barclays Agg <br> 11.63\% | Barclays Agg <br> 8.43\% | MSCI Emerging Markets $-6.00 \%$ |  |  | MSCI <br> EAFE <br> 13.54\% | MSCI <br> EAFE <br> 26.34\% | MSCI <br> EAFE <br> 11.17\% | Russell 2000 Value $-28.92 \%$ |  | $\begin{gathered} \text { Russell } \\ 2000 \\ \mathbf{2 6 . 8 5 \%} \end{gathered}$ | S\&P 500 Growth 4.65\% |  |
| Russell 2000 Value <br> 23.77\% | S\&P 500 <br> 1.32\% | S\&P 500 Value <br> 36.99\% | S\&P 500 Value <br> 22.00\% | Russell 2000 <br> Value $31.78 \%$ <br> $31.78 \%$ | MSCI EAFE <br> 20.00\% | S\&P 500 Growth <br> 28.24\% | S\&P 500 Value 6.08\% | Russell 2000 <br> 2.49\% | Russell 2000 Value <br> -11.43\% | Russell 2000 <br> 47.25\% | MSCI EAFE <br> 20.25\% | S\&P 500 Value 5.82\% | $\begin{gathered} \text { Russell } \\ 2000 \\ \text { Value } \\ \mathbf{2 3 . 4 8 \%} \end{gathered}$ | S\&P 500 Growth 9.13\% | $\begin{gathered} \text { Russell } \\ 2000 \\ -33.79 \% \end{gathered}$ | MSCI EAFE <br> 31.78\% | Russell 2000 Value $\mathbf{2 4 . 5 0 \%}$ | S\&P 500 <br> 2.11\% | S\&P 500 Value <br> 17.68\% |
| Russell 2000 <br> 18.88\% | S\&P 500 Value -0.64\% | Russell 2000 Growth 31.04\% | $\begin{gathered} \text { Russell } \\ 2000 \\ \text { Value } \\ 21.37 \% \end{gathered}$ | S\&P 500 Value <br> 29.98\% | S\&P 500 Value <br> 14.69\% | MSCI EAFE 26.96\% | Russell 2000 <br> -3.02\% | MSCI Emerging Markets $-2.37 \%$ | MSCI EAFE $-15.94 \%$ | Russell 2000 Value 46.03\% | Russell 2000 <br> 18.33\% | S\&P 500 <br> 4.91\% | S\&P 500 Value <br> 20.81\% | Russel 2000 Growth $7.05 \%$ 7.05 | S\&P 500 Growth -34.92\% | S\&P 500 Growth <br> $31.57 \%$ | MSCl Emerging Markets 19.20\% | S\&P 500 Value <br> -0.48\% | MSCI EAFE <br> 17.32\% |
| S\&P 500 Value 18.61\% | $\begin{gathered} \text { Russell } \\ 2000 \\ \text { Value } \\ -1.54 \% \end{gathered}$ | Russell 2000 <br> 28.45\% | $\begin{aligned} & \text { Russell } \\ & 2000 \end{aligned}$ $16.49 \%$ | Russell 2000 <br> 22.36\% | Barclays Agg <br> 8.70\% | $\begin{gathered} \text { Russell } \\ 2000 \\ 21.26 \% \end{gathered}$ | S\&P 500 $-9.11 \%$ | Russel 2000 $-9.23 \%$ | Russell 2000 <br> -20.48\% | MSCI EAFE <br> 38.59\% | S\&P 500 Value <br> 15.71\% | Russell 2000 Value $4.71 \%$ | Russell 2000 <br> 18.37\% | Barclays Agg <br> 6.97\% | S\&P 500 <br> $-37.00 \%$ | Russell 2000 <br> 27.17\% | S\&P 500 Value <br> 15.10\% | Russell 2000 Growth -2.91\% | Russell 2000 <br> 16.35\% |
| $\begin{aligned} & \text { Russell } \\ & \text { 2000 } \\ & \text { Growth } \\ & 13.37 \% \end{aligned}$ | $\begin{gathered} \text { Russell } \\ 2000 \\ -1.82 \% \end{gathered}$ | Russell 2000 Vaiue 25.75\% | $\begin{aligned} & \text { Russell } \\ & \text { 2000 } \\ & \text { Growth } \\ & 11.26 \% \end{aligned}$ | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & \text { Growth } \\ & 12.95 \% \end{aligned}$ | Russell 2000 Growth $1.23 \%$ | $\begin{aligned} & \text { S\&P } 500 \\ & 21.04 \% \end{aligned}$ | MSCI EAFE <br> -14.17\% | S\&P 500 Value <br> -11.71\% | S\&P 500 Value <br> -20.85\% | S\&P 500 Value <br> 31.79\% | Russell 2000 Growth | $\begin{gathered} \text { Russell } \\ 2000 \\ 4.55 \% \end{gathered}$ | $\begin{aligned} & \text { S\&P } 500 \\ & 15.79 \% \end{aligned}$ | $\begin{gathered} \text { S\&P } 500 \\ 5.49 \% \end{gathered}$ | $\begin{aligned} & \text { Russell } \\ & \text { Growth } \\ & -38.54 \% \end{aligned}$ | S\&P 500 <br> 26.47\% | $\begin{gathered} \text { S\&P } 500 \\ 15.06 \% \end{gathered}$ | Russell 2000 <br> -4.18\% | $\begin{gathered} \text { S\&P } 500 \\ 16.00 \% \end{gathered}$ |
| S\&P 500 <br> 10.08\% | Russell 2000 Growth -2.43\% | Barclays Agg <br> 18.46\% | MSCI EAFE 6.05\% | Barclays Agg <br> 9.64\% | Russell 2000 <br> -2.55\% | S\&P 500 Value <br> 12.73\% | S\&P 500 Growth <br> -22.08\% | S\&P 500 <br> $-11.89 \%$ | S\&P 500 <br> -22.10\% | S\&P 500 28.68\% | S\&P 500 $10.88 \%$ | Russell 2000 Growth 4.15\% | Russell 2000 Growth 13.35\% | S\&P 500 Value <br> 1.99\% | S\&P 500 Value -39.22\% | S\&P 500 Value <br> 21.17\% | S\&P 500 Growth 15.05\% | Russel 2000 Value -5.50\% | S\&P 500 Growth <br> 14.61\% |
| Barclays Agg <br> 9.75\% | Barclays Agg <br> -2.92\% | MSCI EAFE <br> 11.21\% | MSCI Emerging Markets $6.03 \%$ | MSCI EAFE 1.78\% | Russell 2000 -6.45\% | Barclays Agg <br> -0.82\% | $\begin{aligned} & \text { Russell } \\ & 2000 \\ & \text { Growth } \\ & -22.43 \% \end{aligned}$ | S\&P 500 Growth <br> -12.73\% | S\&P 500 Growth <br> -23.59\% | S\&P 500 Growth <br> 25.66\% | S\&P 500 Growth 6.13\% | S\&P 500 Growth 4.00\% | S\&P 500 Growth 11.01\% | $\begin{gathered} \text { Russell } \\ 2000 \\ -1.57 \% \end{gathered}$ | MSC EAFE <br> -43.38\% | Russell 2000 Value $20.58 \%$ | MSCI EAFE <br> 7.75\% | $\begin{gathered} \text { MSCI } \\ \text { EAFE } \\ -12.14 \% \end{gathered}$ | Russell 2000 Growth 14.59\% |
| S\&P 500 Growth 1.68\% | MSCI Markets $-7.32 \%$ | MSCl <br> Emerging <br> Markets -5.21\% | Barclays Agg <br> $3.64 \%$ | MSCI Emerging Markets $-11.59 \%$ | MSCI Emerging Markets $-25.34 \%$ | $\begin{gathered} \text { Russell } \\ 2000 \\ \text { Value } \\ -1.49 \% \end{gathered}$ | Emerging Markets $-30.61 \%$ -30.61\% | MSCI EAFE $-21.44 \%$ | Russell 2000 Growth $-30.26 \%$ | Barclays Agg <br> 4.10\% | Barclays Agg <br> 4.34\% | Barclays Agg <br> 2.43\% | Barclays Agg 4.33\% | $\begin{gathered} \text { Russell } \\ 2000 \\ \text { Value } \\ -9.78 \% \end{gathered}$ | MSCI Markets -53.18\% | Barclays Agg <br> 5.93\% | Barclays Agg <br> 6.54\% | MSCI Emerging Markets $-18.17 \%$ -18.17\% | Barclays Agg <br> 4.21\% |

 ence on the Index performance directly proportional to that company's market value.

 average growth orientation. The indices are market-capitalization-weighted. The constituent securities are not mutually exclusive.
 the NYSE, AMEX, and NASDAQ.


 constituent securities are not mutually exclusive.

- MSCI EAFE is a Morgan Stanley Capital International Index that is designed to measure the performance of the developed stock markets of Europe, Australasia, and the Far East.
- MSCI Emerging Markets is a Morgan Stanley Capital International Index that is designed to measure the performance of equity markets in 21 emerging countries around the world.
- Barclays Aggregate Bond Index (formerly the Lehman Brothers Aggregate Bond Index) includes U.S. government, corporate, and mortgage-backed securities with maturities of at least one year.


## The Callan Periodic Table of Investment Returns 1993-2012

The Callan Periodic Table of Investment Returns conveys that the case for diversification across asset classes (stocks vs. bonds), investment styles (growth vs. value), capitalizations (large vs. small), and equity markets (U.S. vs. international) is strong

While past performance is no indication of the future, consider the following observations:
E. The Table highlights the uncertainty inherent in all capital markets. Rankings change every year. Also noteworthy is the difference between absolute and relative performance. For example, witness the variability of returns for large cap growth, when it ranked second from last for the six years from 2001 to 2006, or the variability in the ranking for fixed income over the last 10 years while returns remained bound in a relatively narrow range.

E Stock markets around the world rebounded smartly in 2012 after suffering through incredible volatility in 2011. Global economic growth remained subdued and policy uncertainty persisted in Europe and the U.S., unnerving investors. Nonetheless, equity markets broadly outperformed long-term averages and notched solid gains in the $15 \%$ to $20 \%$ range. The U.S. stock market generated $16 \%$, with much of the gain recorded in a strong third quarter, and the developed markets overseas did even better ( $+17.32 \%$ ). Emerging markets notched the highest return ( $+18.63 \%$ ) among all asset classes displayed in the table during 2012, after suffering the worst loss in 2011 (-18.17\%). After underperforming in four of the previous five years, large cap value $(+17.68 \%)$ led the way in the U.S. large cap market, outperforming growth $(+14.61 \%)$ by $3.07 \%$.
E. Reverting to long-term trends, small cap (+16.35\%) beat large cap ( $+16.00 \%$ ) stocks in 2012, the 11 th time in the past 14 years. Small cap value (+18.05\%) bested small cap growth (+14.59\%) for the first time in four years
E. Fixed income $(+4.21 \%)$ generated the lowest return among asset classes in 2012 after leading the pack in 2011. While muted, fixed income gains surprised on the upside, just as in 2010 and 2011. At the start of the 2012, yields remained exceptionally low ( $2.24 \%$ for the Barclays Aggregate). Economic growth was expected to lead to inevitably higher interest rates, and therefore weak performance for fixed income. However, investor confidence in the economic recovery wavered during the first half of 2012. Interest rates declined into the third quarter, with the yield on the Aggregate falling to $1.56 \%$ at the end of September, driving up bond prices and total returns. Yields backed up modestly in the fourth quarter, tempering total return for the year. The stage remains set for weak bond market performance should interest rates begin to rise.

E The Table illustrates several sharply distinct periods for the capital markets over the past 20 years. First, note the unique experience of the 19951999 period, when large cap growth significantly outperformed other asset classes and the U.S. stock market in general enjoyed one of its strongest five-year runs.
E. The subsequent three years (2000-2002) saw consecutive declines in large cap stocks for the first time since 1929-1932. The S\&P 500 suffered its largest loss since 1974, declining 40\% from its peak in March 2000 through the end of 2002.

E Stocks recorded five years of gains from 2003-2007, led by particularly strong growth in emerging markets. Then the bottom fell out in 2008, and the U.S. stock market sustained its worst drubbing since the 1930s. Large cap stocks suffered the second-worst annual decline ( $-37.00 \%$ ) since 1926

This analysis assumes that market indices are reasonable representations of the asset classes and depict the returns an investor could expect from exposure to these styles of investment. In fact, investment manager performance relative to the different asset class indices has varied widely across the asset classes during the past 20 years.

## Callan

Callan Associates Inc. was founded in 1973, Callan Associates Inc. is one of the largest independently owned investment consulting firms in the country. Headquartered in San

Francisco, Calif., the firm provides research, education, decision support and advice to a broad array of institutional investors through four distinct lines of business: Fund Sponsor Consulting, Independent Ad-
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offices located in Denver, Chicago,
Atlanta, and Summit, N.J.

Corporate Headquarters
San Francisco 800.227.3288

Regional Consulting Offices Atlanta 800.522.9782 Chicago 800.999.3536 Denver 855.864.3377
Summit 800.274.5878

Note: A printable copy of The Callan Periodic Table of Investment Returns s available on our website at

