

U.S. Small & Mid Cap Strategy

# Gearred to Recovery



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- **We are launching on U.S. Small & Mid Cap Strategy. Despite the Russell 2000's (R2) stellar 26% rally YTD, we are constructive on small-cap stocks and believe that R2 ex-Financials will appreciate 4-6% over the next 12 months.** This year's rally has been driven by expanding multiples which have more than offset decreasing earning growth. Yet, current valuations are in line with those during previous periods of economic expansions.
- **Rather than valuations, we believe the key driver for small-cap returns will be earnings growth, which we expect to be modestly positive as fiscal tightening drag wanes and economic growth picks up in 2014.** Fed tapering is unlikely to be a major obstacle for small caps, which have historically outperformed large caps during rate hike cycles. Small caps also stand to benefit from abating domestic policy uncertainty and from lower international exposure at a time when China is slowing.
- **Currently, small caps have higher-than-usual gearing to a potential economic recovery, and thus the risk to our base case is to the upside.** Small caps have not been as conservative as large caps with their debt and capex profiles during this cycle, and are thus likely to benefit more from a rebound in growth.
- **From a long-term perspective (since 1926), small caps have outperformed large caps though they have also experienced many years of underperformance across multiple business cycles.** On average, small caps underperform leading into recessions, outperform as recovery begins, and continue to outperform as the Fed starts hiking rates.
- **Historically, with margins that are typically half those of large caps, small caps are much more fragile.** Historical small cap debt and capex loads appear consistent relative to their revenues but high relative to earnings. The margin for error is thus quite low for these stocks, leading to negative earnings during recessions.
- **Traditionally, despite this fragility, small caps have traded rich on a P/E basis, modestly rich on EV/EBITDA, and mostly cheap on a P/B basis relative to large caps.** This appears to be driven by a significant number of stocks with negative/low earnings whose expected growth does not materialize in aggregate. In the hunt for the next "ten-bagger", the market apparently overpays for small-cap growth stocks.
- **On the other hand, the market is overly pessimistic about small-cap value stocks, which has led to substantial outperformance versus small-cap growth stocks.** On a price-to-book basis, small cap valuations were in line with large caps from 1985-2000 (when R2 underperformed) but have traded at a discount since (when R2 outperformed). Importantly, we show that small caps have a higher probability of delivering large, positive returns and have more idiosyncratic risk, making them more suitable for active management.
- **Small cap dividend payers are underappreciated, in our view, and represent an attractive entry point given their recent underperformance.** They have consistently outperformed (even during periods of rising interest rates) not only the broader R2 and R1 indices, but also the dividend payers within R1. We identify sustainable dividend payers from the Barclays SMid-Cap equity coverage universe and from non-financial R2 stocks outside of Barclays' coverage universe using a series of sector-customized dividend sustainability metrics.

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## OVERVIEW

## The Anatomy of Small-Cap Stocks

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### Small Cap Performance: A (Very) Long-Term View

Historically, over the very long term (since 1926) small-cap stocks have outperformed large-cap stocks. However, this outperformance is not consistent through time and small caps can underperform for many years spanning multiple business cycles. In particular, over the medium term, small caps underperformed beginning in the early-1980s through 2000, but have since largely caught up.

On average, small caps tend to outperform during periods of expansion and underperform during recessions, and appear to be leading indicators at the onset of recessions. Coming out of recessions, small caps do not recover as quickly as large caps initially, but then catch up once the expansion starts. Contrary to popular belief, small caps outperform large caps after the start of rate hiking cycles. The substantially different sector weights and associated performances for R1 and R2 do not explain the long-term relative performance of the two indices.

### The Small Cap Income Statement: Living on the Edge

Historically, aggregate operating margins for non-financial, small-cap stocks are much lower and more volatile relative to large caps. The margins are lower across sectors and worsen monotonically with market cap.

Despite their much lower margins, the debt and capex loads as a percentage of revenue for small caps are comparable to large caps. The lower margins thus cause interest and capex coverage ratios to be much lower for small caps, leaving them with a much lower margin of safety. As a result, while EBIT still stays positive during recessions, net income can easily tip into negative territory.

### The Small Cap Valuation Challenge

Historically small caps have traded rich on a P/E basis, moderately rich on EV/EBITDA, and cheap on a Price to Sales and P/B basis relative to large caps. The richness in earnings yield is probably due to a significant number of companies with negative/low earnings which are expected to grow in the future. Since operating incomes (EBITDA) are relatively positive, the premium of EV/EBITDA multiple for small caps over large caps is much less. However, small cap earnings yields are much more stable during expansions as compared to their other metrics and those of R1. However, growth at the aggregate level in small caps is not sufficiently higher to justify the lower earnings yields. Thus, in the hunt for the next “ten-bagger” stock, the market appears to be overpaying for growth in small-cap stocks.

On the other hand, the market is overly pessimistic about small-cap value stocks, which has led to their substantial outperformance versus small-cap growth stocks. On a price to book basis, small cap valuations were in line with large caps from 1985-2000 (when R2 underperformed) but have traded at a discount since (when R2 outperformed). The distinct value bias in small-cap indices partially explains their long-term outperformance.

### Can Active Management Add Value for Small Caps?

We show that small caps have a higher probability of delivering large, positive returns and have more idiosyncratic risk, making them more suitable for active management. Small-cap price returns are relatively more positively skewed and have much lower intra-stock correlations (higher idiosyncratic risks). As a result, a portfolio of top versus bottom performing stocks (i.e., a perfect foresight strategy) significantly outperforms in the small cap universe, attesting to the value of active managers with stock picking skills.

## Market View: Geared to Recovery

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Despite the Russell 2000's stellar 26% rally YTD, we are constructive on small-cap stocks and believe that the R2 ex-Financials will appreciate 4-6% over the next 12 months. While much of the equity rally from 2008-12 was supported by strong earnings growth, the rally this year has been driven by valuation expansion, which has more than compensated for the slowdown in earnings growth. Current valuations are in line with those during previous periods of economic expansions.

Rather than valuations, we believe the key driver for future small-cap returns will be earnings growth, which we expect to be modestly positive as fiscal tightening drag wanes and economic growth picks up in 2014. Fed tapering is unlikely to be a major obstacle for small caps, in our view. Historically, an increase in rates does not lead to significant absolute and relative underperformance for small caps. The effect on equities will ultimately depend on whether the equity market believes that the Fed is choking off the recovery, and we believe the Fed will tread carefully on this front. The U.S. public policy uncertainty which was a prominent cause of volatility over the past few years appears to have abated.

Currently, small caps have higher-than-usual gearing to potential economic recovery, and thus the risk to our base case is to the upside. Small caps have not been as conservative as large caps with their debt and capex profiles during this cycle, and are thus likely to benefit more from a rebound in growth.

On the international front, a potential global China-led slowdown which is a major headwind for multinationals is less of a concern for the more domestic small caps. Although Europe continues to struggle, the ECB's Outright Monetary Transactions (OMT) program appears to have put a credible put under the market and so Europe is unlikely to be major source of risk.

We use an EV/EBITDA methodology to gauge the upside potential for R2 ex-financial stocks. We believe the median multiple of 11 during 2003-08 should be representative at this stage of the business cycle. Since consensus growth numbers for R2 have historically been and continue to be overly optimistic, we constructed a simple regression model relating SPX EPS projected growth to R2 EBITDA growth. We estimate R2 ex-Financials EBITDA should grow by 3% or 5% depending on whether we use Barclays or consensus forecasts for SPX earnings growth. This translates into a 4-6% price return for R2 ex-Financials.

## Small Cap Dividend Payers: Attractive After Recent Sell-Off

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Small cap dividend payers are underappreciated, in our view, and represent an attractive entry point given their recent underperformance. Over the long term, small cap dividend payers have consistently outperformed not only the broader R2 and R1 indices but also the dividend payers within R1. Importantly, the outperformance has also occurred during past periods of rising interest rates. However, in the recent past, R2 dividend payers have underperformed the R2 index on the back of tapering concerns making it an attractive entry point, in our view.

Sustainability of dividends paid by dividend payers is crucial to gauge their total return potential. We identify 24 small cap sustainable dividend payers from our Barclays Small and Mid Cap equity coverage universe by using criteria customized for each industry. We also identify 22 non-financial stocks outside our coverage universe within R2 using a set of broad criteria for dividend sustainability.

## THE ANATOMY OF SMALL-CAP STOCKS

### Small Cap Performance: A (Very) Long-Term View

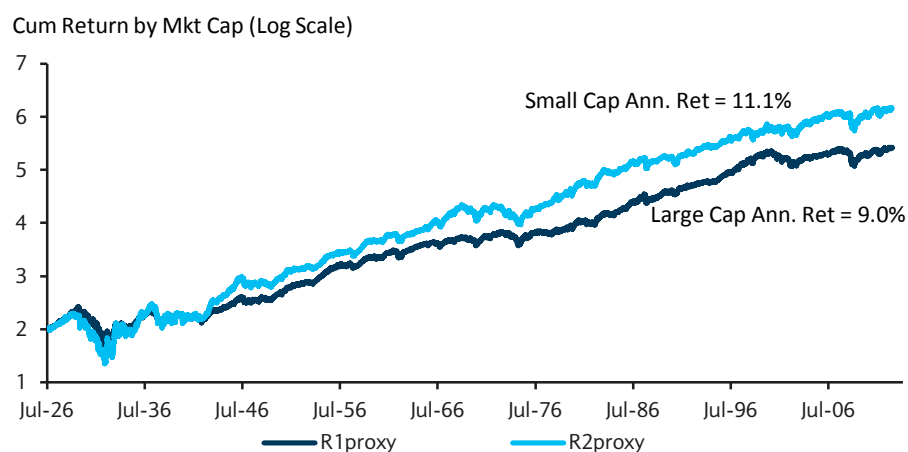
- **Historically, over the very long term (since 1926) small-cap stocks have outperformed large-cap stocks.** However, this outperformance is not consistent through time and small caps can underperform for many years spanning multiple business cycles. In particular, over the medium term, small caps underperformed beginning in the early-1980s until 2000, but have since largely caught up with large caps.
- **On average, small caps tend to outperform during periods of expansion and underperform during recessions,** and appear to be leading indicators at the onset of recessions. Coming out of recessions, small caps do not recover as quickly as large caps initially, but then catch up once the expansion starts. Contrary to popular belief, small caps outperform large caps after the start of rate hiking cycles. The substantially different sector weights and associated performances for R1 and R2 do not explain the long-term relative performance of the two indices.

*Contrary to popular belief, small caps outperform large caps after the start of rate hiking cycles.*

### Small-Cap Stocks Have Outperformed Large Caps over the (Very) Long Term

Extensive academic research over the past three decades has demonstrated that over the long term, small-cap stocks have generated substantially higher returns compared to large-cap stocks. As shown in Figure 1, since 1926, small-cap stocks have outperformed large-cap stocks by 2.1% per annum, which translates into a significantly higher cumulative performance. Thus, a \$100 investment in July 1926 would have grown to ~\$1.4mn by Dec 2012 for a small-cap portfolio versus \$0.2mn for a large-cap portfolio.

FIGURE 1  
Small Caps Have Outperformed Large Caps over the Long Term



Source: Barclays Research, Kenneth French Data Library

Note: Indices normalized to 100 as of July 1, 1926. Long-term proxies for Russell 1000 and 2000 indices constructed using the Fama-French market cap portfolios. R1 proxy = Top 30% market cap bucket, R2 proxy = 3<sup>rd</sup> and 4<sup>th</sup> market cap deciles. Universe is all US firms listed on NYSE, AMEX and NASDAQ and are part of the Compustat database. Market Cap breakpoints based on Fama-French methodology and uses only NYSE listed firms. Prices as of 28 Dec 2012.

*Small cap outperformance is not a consequence of the higher beta of small-cap stocks, but one of the several genuine anomalies which cannot be explained within the traditional CAPM framework.*

There is vast academic literature on the nature and drivers of this long-term performance which still remain controversial. It is important to emphasize that this outperformance is not simply a consequence of the higher beta of small-cap stocks, but one of the several genuine anomalies which cannot be explained within the traditional CAPM framework. These anomalies include, for example, the outperformance of stocks with high dividend yield, low Price to Book, low PE, and high leverage. In a series of seminal papers, Fama & French showed that several of these anomalies can be subsumed within a simple model, which in

addition to the traditional market beta calculates the exposures of each stock to the size and value factors (the so called Fama-French model).

Even though the S&P 500 Index is a more popular benchmark for large-cap stocks, its return and fundamental metrics are virtually indistinguishable from R1. Since we have a much longer history for the latter, we primarily use R1 as a benchmark for large-cap stocks in our analysis in this report.

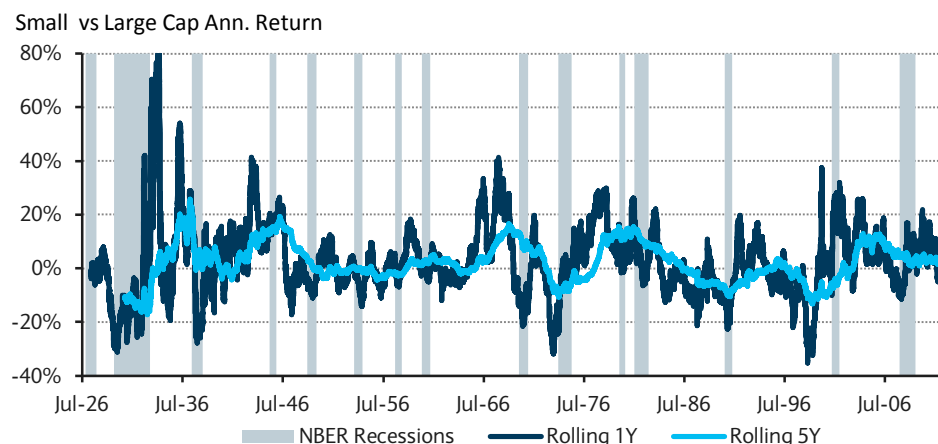
### Small Cap Outperformance Is Not Consistent Over Time

As shown in Figure 2, the magnitude of small cap outperformance has varied quite dramatically over time. In fact, there have been several historical time periods when small caps have underperformed for several years. Moreover, a full 48% of the rolling 1Y returns and 47% percent of the 5Y returns are negative over this time period, attesting to the volatility of this factor.

*The magnitude of small cap outperformance has varied quite dramatically over time.*

FIGURE 2

#### Small Cap Outperformance Is Not Consistent Through Time



Source: Barclays Research, Kenneth French Data Library

Note: 1Y returns during the 1930s were higher than 100% but are not shown for clarity. Data as of 12/31/2012.

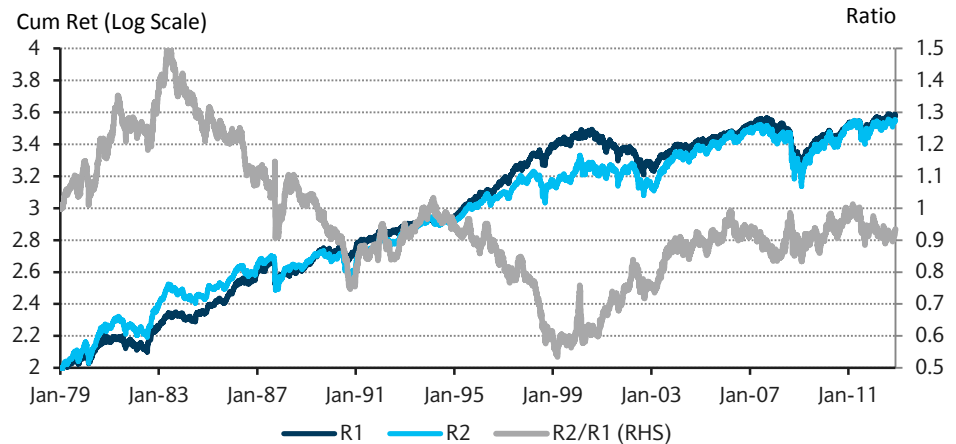
*Small caps underperformed for almost two decades during the '80s and '90s. However, since 2000, small caps have made back most of their earlier underperformance.*

More recently (Figure 3), small caps underperformed for almost two decades during the '80s and '90s almost immediately after the first academic papers highlighting the anomalies were published. This prompted concerns that either the previous results were spurious or that the effect had been arbitrated away. The underperformance in the late-1990s during the dot-com bubble was particularly stark. As we discuss in more detail in later sections, this was a consequence of the heady valuations of large caps which were not shared by small-cap stocks. However, since 2000, small caps have almost made back their earlier underperformance. As a result, over their entire history since 1979, the cumulative performance of the Russell 1000 and 2000 indices is (co-incidentally) not that different.



FIGURE 3

Since Mid-80s R2 Underperformed R1 but Made Up the Losses after 2000



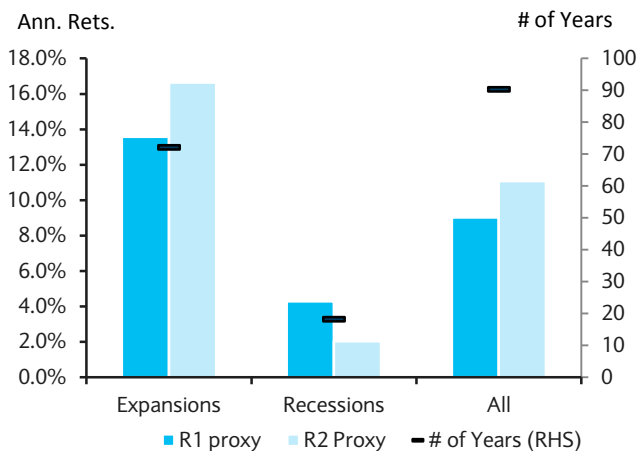
Source: Barclays Research, Bloomberg  
 Note: Data as of 12/31/2012

### Performance during Different Phases of the Business Cycle

The underperformance discussed in the previous section spans multiple business cycles. However, it is also evident from Figure 2 that small caps underperform during recessions. Figure 4 quantifies this hypothesis by calculating the cumulative performance of small cap versus large cap portfolio returns during periods of economic recessions and expansions. We see that while during periods of expansion, small caps outperform by 2.7%, they underperform by roughly the same amount during recessions. From this perspective, their long term outperformance is a consequence of the (fortunate) fact that over the past 90 years, the U.S. economy has only been in a recession for 18 of those years.

FIGURE 4

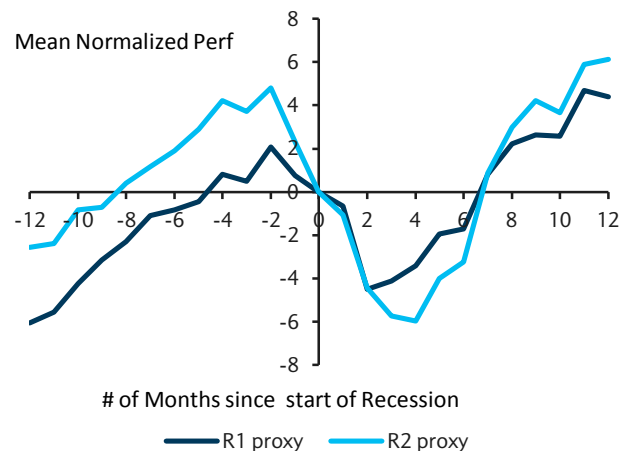
Small Caps Underperform During Recessions



Source: Barclays Research, Kenneth French Data Library  
 Note: Data from July, 1926 to Dec, 2012. Recessions are as defined by NBER

FIGURE 5

Small Caps Underperform During Start of Recessions

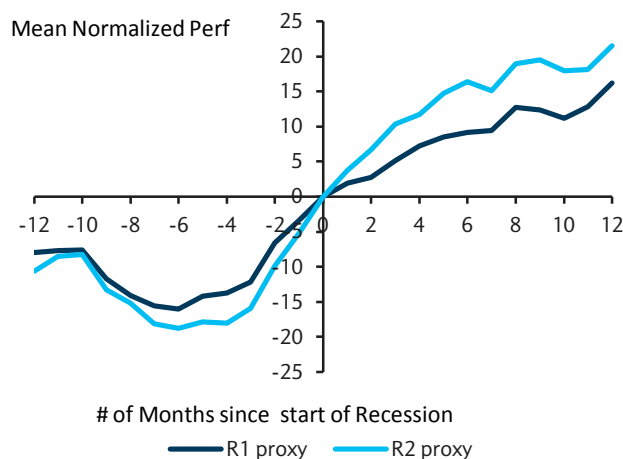


Source: Barclays Research, Kenneth French Data Library  
 Note: Data from July, 1926 to Dec, 2012. Recessions as defined by NBER

Besides the aggregate performance across the business cycle, it is also interesting to examine the outperformance during its different phases. Thus, Figure 5 calculates the average performance of our R1 and R2 proxies, one year before and after the start of the National Bureau of Economic Research (NBER) recessions. Figure 6, does a similar analysis before and after the end of a recession (or the start of an expansion). Finally, Figure 7

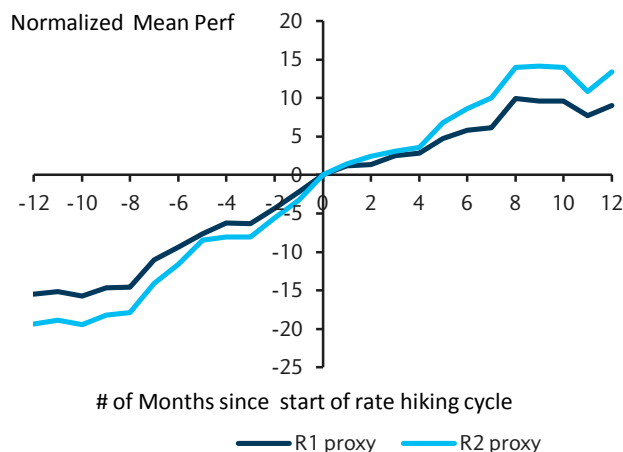
examines the performance around the start of Fed interest rate hiking cycles, which typically occur in the middle of economic expansions.

**FIGURE 6**  
Small Caps Outperform Substantially as the Economy Recovers



Source: Barclays Research, Kenneth French Data Library  
Note: Data from July, 1926 to Dec, 2012. Recessions as defined by NBER

**FIGURE 7**  
Small Caps Outperform after the Start of Fed Hikes



Source: Barclays Research, Kenneth French Data Library  
Note: Data from July, 1926 to Dec, 2012. Average across 10 hiking cycles assumed to start on 6/30/1954, 8/29/1958, 7/31/1967, 1/4/1973, 8/15/1977, 8/7/1980, 5/2/1983, 12/16/1986, 2/4/1994, and 6/30/2004.

These graphs demonstrate several interesting aspects of small-cap stock dynamics across a typical business cycle:

- First of all, on average, equities anticipate the onset of a recession by several months. However, Figure 5 demonstrates the interesting fact that the underperformance of small caps appears to accelerate and thus, small cap versus large cap returns are to some extent a better predictor of recessions than pure equity returns alone.
- Figure 6 also shows that equity markets anticipate the end of a recession by around six months. However, during the recovery phase small caps do not turn around as quickly, but once they do they rapidly start outperforming.
- Finally, when the Fed does start hiking rates roughly midway during periods of expansion, the rally slows down. On average going into the start of a cycle, equities have already rallied by 20%. The strength of the rally slows down to around 10% a year after the Fed starts hiking. However, through all this, small caps continued to outperform.

### Different Sector Weights Not a Major Factor in Performance Differential

One possible reason for the difference in small and large cap performance could be the differing sector allocations across the two stock universes. Figure 8 shows the median (since 1985) and current weights for R1 and R2. We see that small caps have a higher allocation to Consumer Discretionary, Financials, and Industrials and are underweight Consumer Staples, Energy, and Telecommunication Services. As an aside, note that while the current weights of R2 are broadly closer to the longer term median sector weights, those for R1 are quite different with a much higher weight in Energy, Financials, and Information Technology.

Over this entire time period, we see that for all sectors except for Financials, Materials and Utilities, large caps have outperformed small caps. Thus, the outperforming sectors do not cleanly line up with the overweight sectors for small caps and are unlikely to be the explanation for the overall underperformance of small caps.

FIGURE 8

## Substantial Differences in Sector Weights and Returns between R1 and R2

Sector	R2			R2-R1		
	Median Weight	Current Weight	Annual Returns	Median Weight	Current Weight	Annual Returns
ConsDisc	15%	14%	8.4%	3.5%	1.2%	-1.9%
ConsStap	4%	4%	11.4%	-6.9%	-5.6%	-3.4%
Energy	5%	5%	9.1%	-3.8%	-4.4%	-3.2%
Finance	21%	23%	10.6%	5.9%	5.6%	0.6%
HlthCare	12%	13%	11.1%	0.4%	-0.1%	-2.5%
Indust	14%	14%	9.1%	3.3%	3.4%	-1.8%
InfoTech	17%	18%	7.9%	1.7%	0.2%	-1.3%
Material	5%	5%	11.4%	1.1%	1.3%	1.0%
Telecom	1%	1%	3.4%	-5.1%	-1.6%	-5.6%
Util	4%	3%	10.8%	0.4%	-0.1%	1.1%
<b>Index</b>			<b>10%</b>			<b>-0.9%</b>

Source: Barclays Research, FactSet, Reuters

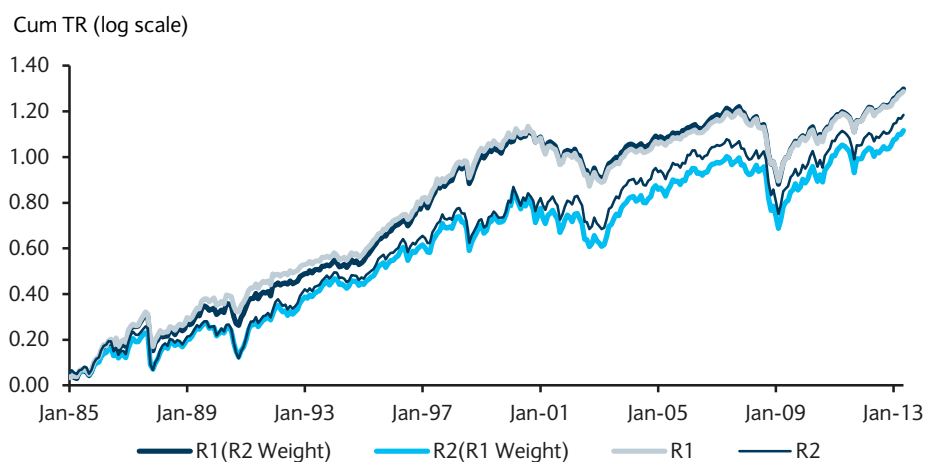
Note: Based on data from Jan 1985 to May 2013. Current weights are as of 07/31/2013.

*Looking from 1985-2013, we see that sector weight adjustments do not materially affect cumulative returns.*

In Figure 9 we make this hypothesis more precise by calculating hypothetical sector adjusted returns for R1 and R2. Thus, the index labelled R1 (with R2 weights) is simply calculated by weighting monthly sector returns of R1 with R2 weights. We see that over this history, the sector weight adjustments do not materially affect cumulative returns. In fact, the sector adjusted returns for R2 are now lower, widening the discrepancy between small and large cap returns. Using R1 sector weights with R2 securities causes a decrease in returns compared to R2 (9.4% to 9.0% annualized), while using R2 sector weights with R1 securities causes an increase in returns (10.3% to 10.0% annualized).

FIGURE 9

## Differences in Sector Weights Do Not Explain Small versus Large Cap Performance



Source: Barclays Research, FactSet, Bloomberg, Reuters

Note: Prices as of 05/31/2013

## The Small Cap Income Statement: Living on the Edge

- **Aggregate operating margins for non-financial small-cap stocks are much lower and more volatile relative to large caps.** The margins are lower across sectors and worsen monotonically with market cap.
- **Despite their lower margins, the debt and capex loads as a percentage of revenue for small caps are comparable to large caps.** As a result, interest and capex coverage ratios are much lower for small caps, leaving them with a much lower margin of safety. Hence, while EBIT still stays positive during recessions, net income can easily tip into negative territory.

*Interest and capex coverage ratios are much lower for small caps. During recession periods, net income can easily tip into negative territory.*

### Lower Margins the Key Driver

Figure 10 and Figure 11 show the aggregate income statement for small and large caps across two recessionary years and two expansionary years. We also show a few cash flow and balance sheet items.

A few details about the methodology used for construction of these tables (for more details see the Appendix on Data Methodology):

- The universe is ex-Financials across both indices (we also exclude GE for R1).
- All the line items are pulled directly from FactSet or from Compustat before 2003.
- For consistency, we restrict ourselves to stocks for which Total Sales, Gross Income, EBIT, Pre-Tax Income, and Net Income are available in FactSet/Compustat. This ensures that the arithmetic works out down the income statement. Typically, enforcing this means we drop roughly ~15% of the stocks in R2 but their market value is only ~12% of the entire universe.
- In line with standard market practice, the aggregation for all line items is done using Russell Index shares. Since Russell uses float adjusted shares, the reported market cap is lower than the actual market cap.
- To get a picture across business cycles, we show the data for two recessionary and two expansionary years.
- Besides the absolute dollar numbers, we also show each line item as a percent of revenue to get a more normalized view across time periods and across the two indices.

FIGURE 10

## The Small Cap Income Statement: Net Income Tips Over into Negative Territory during Downturns

Period Ending:	12/1/2001 (Recession)		12/1/2005 (Expansion)		6/1/2009 (Recession)		5/1/2013 (Expansion)	
	\$Bn	% of Sales	\$Bn	% of Sales	\$Bn	% of Sales	\$Bn	% of Sales
Total Sales	658		884		961		1066	
COGS	494	75.1%	640	72.4%	710	73.8%	790	74.0%
Gross Income	164	24.9%	243	27.6%	252	26.2%	277	26.0%
Operating Expenses	138	21.0%	190	21.5%	213	22.1%	207	19.4%
EBIT	26	3.9%	54	6.1%	39	4.0%	70	6.6%
Interest Paid	16	2.4%	15	1.6%	17	1.8%	20	1.9%
Non-Operating Expense	-1	-0.1%	-6	-0.7%	-3	-0.4%	-4	-0.3%
Unusual Items Expense	22	3.3%	10	1.1%	57	6.0%	16	1.5%
PreTax Income	-12	-1.8%	35	3.9%	-33	-3.4%	36	3.4%
Tax Paid	9	1.3%	16	1.8%	10	1.1%	16	1.5%
Net Income bef Unusual	-5	-0.8%	26	3.0%	-3	-0.3%	32	3.0%
Net Income	-20	-3.1%	19	2.2%	-44	-4.6%	19	1.8%
EBITDA	58	8.9%	89	10.1%	81	8.5%	118	11.1%
Capex	35	5.3%	44	5.0%	61	6.4%	77	7.2%
Debt	201	30.5%	225	25.5%	265	27.5%	326	30.6%
Mkt Cap	495	75.3%	819	92.7%	531	55.2%	947	88.8%
D&A	32	4.9%	35	4.0%	43	4.4%	48	4.5%

Source: Barclays Research, FactSet, Reuters. Note: Data for ex-Financials. See text for calculation methodology.

FIGURE 11

## The Large Cap Income Statement: Has More Buffer due to Higher Margins

Period Ending:	12/1/2001 (Recession)		12/1/2005 (Expansion)		6/1/2009 (Recession)		5/1/2013 (Expansion)	
	\$Bn	% of Sales	\$Bn	% of Sales	\$Bn	% of Sales	\$Bn	% of Sales
Total Sales	3792		5787		7458		8890	
COGS	2684	70.8%	3954	68.3%	5137	68.9%	6167	69.4%
Gross Income	1108	29.2%	1834	31.7%	2324	31.2%	2721	30.6%
Operating Expenses	750	19.8%	1178	20.4%	1444	19.4%	1589	17.9%
EBIT	358	9.4%	656	11.3%	875	11.7%	1130	12.7%
Interest Paid	64	1.7%	90	1.6%	116	1.6%	122	1.4%
Non-Operating Expense	-17	-0.5%	-75	-1.3%	-65	-0.9%	-87	-1.0%
Unusual Items	175	4.6%	57	1.0%	309	4.1%	150	1.7%
PreTax Income	131	3.4%	589	10.2%	511	6.9%	947	10.7%
Tax Paid	92	2.4%	198	3.4%	227	3.0%	274	3.1%
Net Income bef Unusual	162	4.3%	448	7.7%	510	6.8%	762	8.6%
Net Income	39	1.0%	409	7.1%	286	3.8%	654	7.4%
EBITDA	551	14.5%	920	15.9%	1246	16.7%	1585	17.8%
Capex	249	6.6%	337	5.8%	501	6.7%	632	7.1%
Debt	1096	28.9%	1756	30.3%	2176	29.2%	2788	31.4%
Mkt Cap	6453	170.2%	8253	142.6%	6867	92.1%	12222	137.5%
D&A	193	5.1%	265	4.6%	371	5.0%	455	5.1%

Source: Barclays Research, FactSet, Reuters. Note: Data for ex-Financials. See text for calculation methodology.

The most striking difference between the income statements of the two indices is that net income can turn negative for small stocks. The primary drivers for this, in our opinion, are the much lower operating (EBIT or EBITDA) margins for small cap stocks.

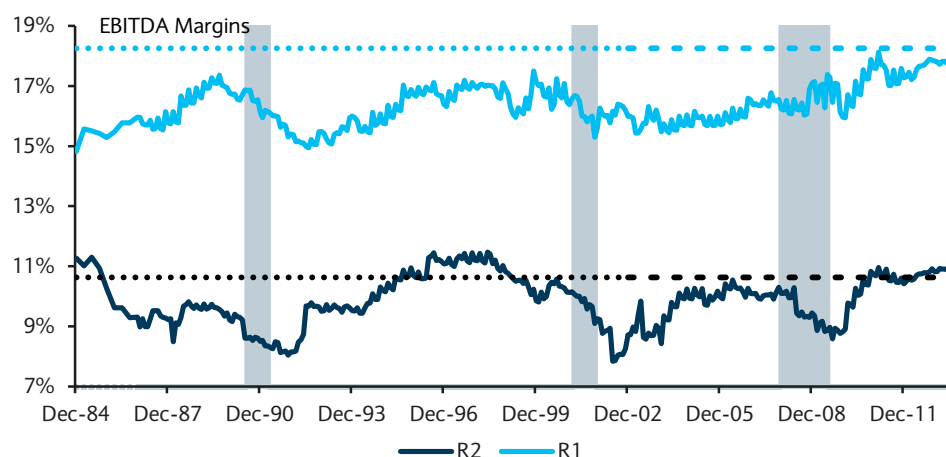
*Even during expansionary times, the EBIT margins for small caps are almost half those of large caps (~6% versus ~12%, respectively).*

Thus, even during expansionary times, the EBIT margins for small caps are almost half those of large caps (~6% versus ~12%, respectively). Similarly, small cap EBITDA margins are also consistently lower through time by around 7% (Figure 13). More importantly, small cap margins are more volatile compared to the more stable margins of large caps. For example, during the 2008 crisis, while EBITDA margins for R1 did not drop appreciably, margins for R2 dropped by nearly 150bp from a much lower base.

These lower margins in turn appear to be driven by a much higher cost-of-goods-sold line item. The likely reason for this is that small-cap companies have much less pricing power: both in terms of setting the prices of their products and securing attractive terms for their raw materials. Large-cap companies are much more able to leverage their scale to secure better prices. Finally, large caps also enjoy significant economies of scale, which allows them to further control their costs.

FIGURE 12

#### Small Cap EBITDA Margins are Significantly Lower and More Volatile



Source: Barclays Research, FactSet, Reuters, Compustat

Note: EBITDA margins defined as the ratio of aggregate EBITDA and revenue for ex-Financial stocks in each index. Shaded areas indicate NBER recessions. Data is as of 7/31/2013.

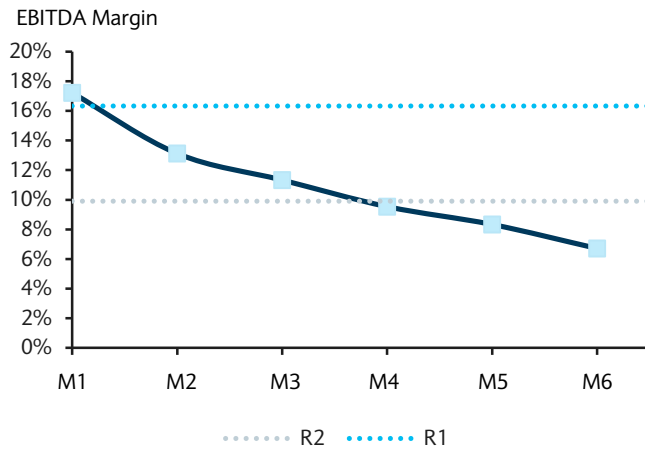
*The margin differential between R1 and R2 is sector agnostic, with almost every large-cap sector having substantially better margins.*

As shown in Figure 14, this margin differential between R1 and R2 is sector agnostic for the most part with almost every sector having substantially better margins for large caps. Figure 13 shows that the margins systematically decrease across market cap buckets, indicating that this is a true market cap-related effect.

As we discuss in more detail in our market outlook section later, one reason for the strong earnings growth in large caps during the current recovery since 2009 has been their unusually high profit margins. As Figure 12 shows, although small-cap margins are also elevated they are not at all-time highs, unlike large caps.

FIGURE 13

### Operating Margins Decline Consistently with Decreasing Market Cap

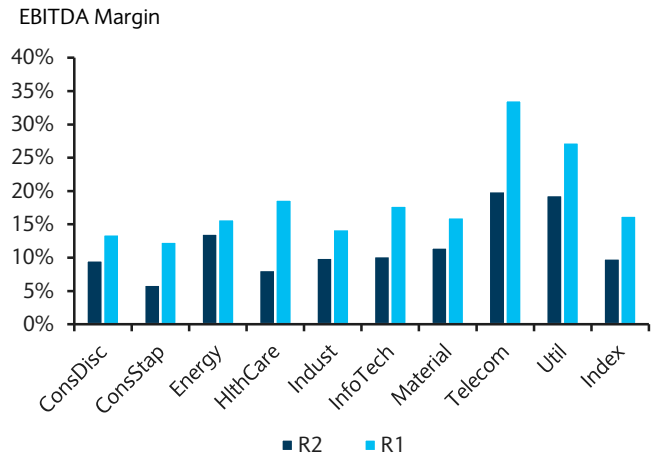


Source: FactSet, Reuters, Barclays Research, Compustat

Note: M1-M6 divides the R3000 into 6 portfolios with equal security counts (~500 securities). The portfolios are sorted in descending order by market cap, with M1 containing the largest securities and M6 the smallest. Data is as of 7/31/2013. Ex-Financials only.

FIGURE 14

### Margins Across Most Sectors are Higher for Large Caps vs Small Cap



Source: FactSet, Reuters, Barclays Research, Compustat

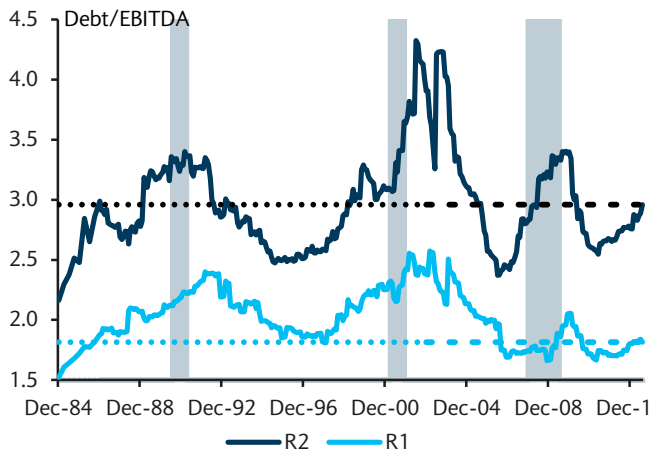
Note: Data is as of 7/31/2013. Ex-financials only.

## Small Caps Have Lower Interest and Capex Coverage Ratios

As shown in Figure 10 and Figure 11, as a percent of revenue, the debt levels for small caps are marginally lower relative to large caps. However, the much lower margins imply small caps are more highly levered relative to their income producing capacity. This in turn means that small caps also have much lower interest coverage (EBIT/Interest Expense) ratios (Figure 16). In contrast, as shown in Figure 17, Debt/Equity levels are not significantly higher.

FIGURE 15

### Leverage is Much Higher for Small Caps than Large Caps ...

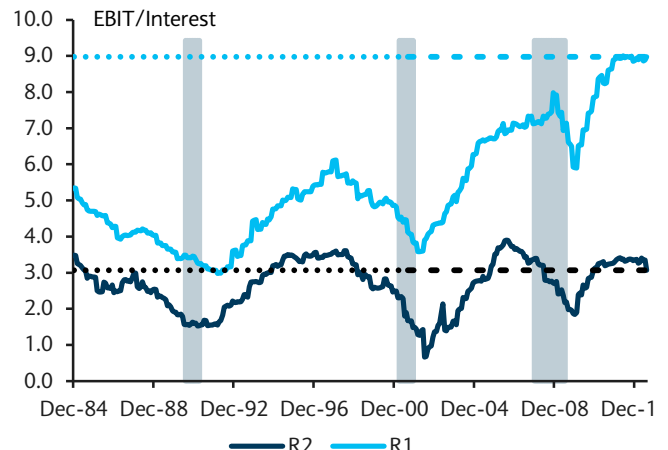


Source: FactSet, Reuters, Barclays Research, Compustat

Note: Data is as of 7/31/2013. Ex-financials only

FIGURE 16

### ... Along with a Much Lower Interest Coverage Ratio

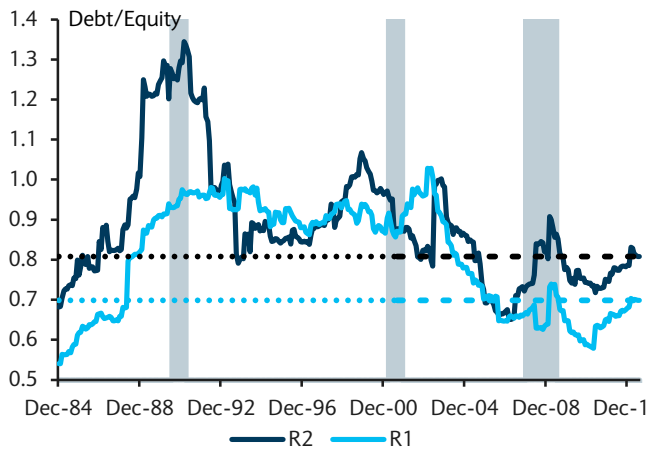


Source: FactSet, Reuters, Barclays Research, Compustat

Note: Data is as of 7/31/2013. Ex-financials only.

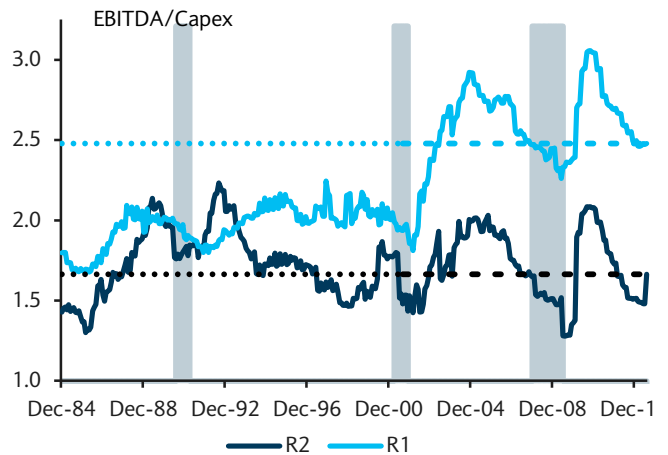
Similarly, we see that although as a percent of sales small caps spend a slightly lower amount on capex, given the lower margins, their capital expenditure is a much higher percentage of their EBITDA (i.e., they have much lower capex coverage ratios). A similar conclusion can be reached by looking at the D&A line item as a percentage of EBITDA (although this is perhaps not as clean a number).

FIGURE 17

**Balance Sheet-Based Leverage is Similar**

Source: FactSet, Reuters, Barclays Research, Compustat  
 Note: Data is as of 7/31/2013. Ex-financials only.

FIGURE 18

**Capex Coverage Ratio is Much Lower for Small Caps**

Source: FactSet, Reuters, Barclays Research, Compustat  
 Note: Data is as of 7/31/2013. Ex-financials only.

In summary, the debt and capex loads for small-cap companies appear to be more consistent with their revenue and relative to their book value, and not with their earning capacity. This higher interest rate load along with other non-operating expenses can cause aggregate net income to easily slip into negative territory during recessionary periods. In other words, small-cap companies are much more fragile relative to large-cap companies.

As we discuss in more detail in the market outlook section, the current levels of debt and capex for small caps paint an interesting picture. Overall it appears that large caps have been relatively more conservative compared to small caps in their leverage and capital expenditure since the 2008 crises. Thus, large caps' Debt to EBITDA is at all-time lows, interest coverage ratio is at all-time high. Similarly, Debt/Equity is historically low and capex coverage ratio is relatively high. An incremental factor driving large caps' low interest expenses is of course that they have been able to refinance their debt more easily. This implies that small-cap companies are better primed for a potential recovery relative to large caps.

*Small-cap companies are better primed for a potential recovery relative to large caps.*

## The Small Cap Valuation Challenge

- **Historically, small caps have traded rich on a P/E basis, moderately rich on EV/EBITDA, and cheap on a Price to Sales and P/B basis relative to large caps.** The richness in earnings yield is probably due to a significant number of companies with negative/low earnings which are expected to grow in the future. Since operating incomes (EBITDA) are relatively positive, the premium of EV/EBITDA multiple for small caps over large caps is much less. However, growth at the aggregate level in small caps is not sufficiently higher to justify the lower earnings yields. Thus, in the hunt for the next "ten-bagger" stock, the market appears to be overpaying for growth in small-cap stocks.
- **On the other hand, the market is overly pessimistic about small-cap value stocks, which has led to their substantial outperformance versus small-cap growth stocks.** On a price to book basis, small cap valuations were in line with large caps from 1985-2000 (when R2 underperformed) but have traded at a discount since (when R2 outperformed). The distinct value bias in small-cap indices partially explains their long-term outperformance.

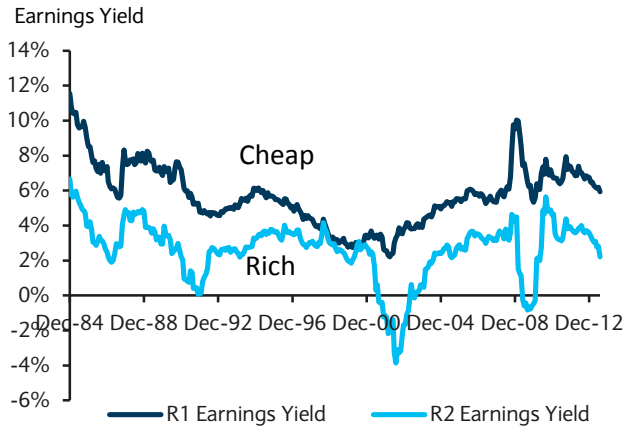


## Valuation Multiples: A Mixed Picture

Figure 19 to Figure 22 compare four standard valuation multiples for R1 and R2: Earnings Yield (EY = Net Income/Market Cap); EBITDA/EV; Sales Yield (SY = Sales/Market Cap); and Book/Price (BP). These are the inverse of the way most multiples are quoted but we are forced to keep market value in the denominator since earnings for R2 can become negative.

FIGURE 19

### Small Caps Consistently Rich Using Earnings Yield

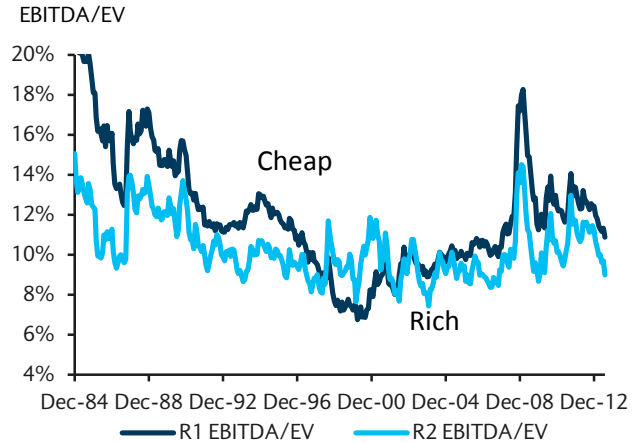


Source: Barclays Research, FactSet, Reuters, Compustat.

Note: Low earnings yield indicates a richer valuation. Data as of 7/31/2013

FIGURE 20

### And Marginally So in Terms of EBITDA/EV

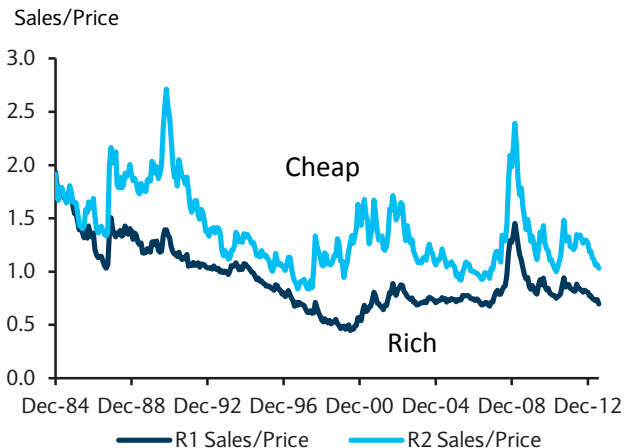


Source: Barclays Research, FactSet, Reuters, Compustat

Note: Low EBITDA/EV indicates a richer valuation. Data as of 7/31/2013

FIGURE 21

### Small Caps Are Cheap in Terms of Sales Yield



Source: Barclays Research, FactSet, Reuters, Compustat

Note: Data for ex-Financials for which market cap and sales are available. Low Sales/Price reflects a richer valuation. Data as of 7/31/2013

FIGURE 22

### And in Terms of Book/Price Beginning in Mid-90s



Source: Barclays Research, FactSet, Reuters, Compustat

Note: Data for ex-Financials for which market cap and book value are available. Lower Book/Price reflects a richer valuation. Data as of 7/31/2013

Some broad trends that are apparent are that on an earnings yield basis R2 appears consistently more expensive relative to R1. The premium decreases substantially when looking at EV/EBITDA. The much higher operating margins for R1 imply that based on Sales/Price, R2 appears cheap. Finally, the Book/Price implies that R2 is cheap relative to R1. We delve into each of these metrics in more detail.

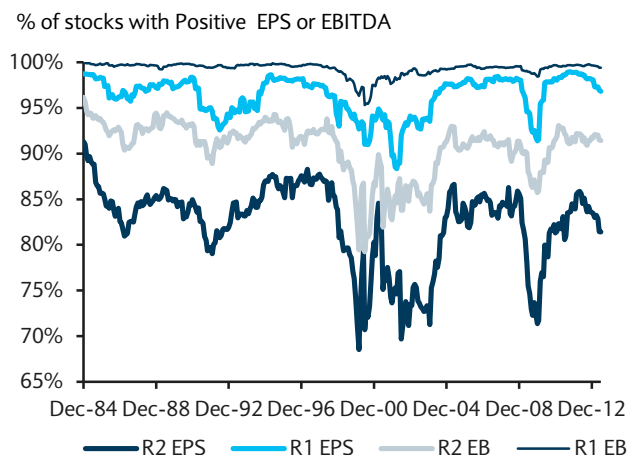
### Earnings Based Multiples: Negative/Low Earnings a Potential Issue

The significant dip in earnings yield for R2 during recessions is expected given that their earnings tend to tip into negative territory. However, even during periods of expansions, R2's

earnings yield is lower (PE is higher) relative to R1. The earnings yields only briefly converged, leading into the 2000 tech boom but that was clearly driven by a drop in the earnings yields for large-cap stocks while the small-cap EY stayed relatively steady all through the 90s. Thus, at least based on this metric, small-cap stocks are consistently overpriced which appears at odds with their strong outperformance at least since 2000.

A key reason for the lower earnings yield is simply that a significant number of companies in R2 have negative/low earnings. As shown in Figure 23, a full 15% of ex-Financial stocks have negative earnings even during expansionary periods.

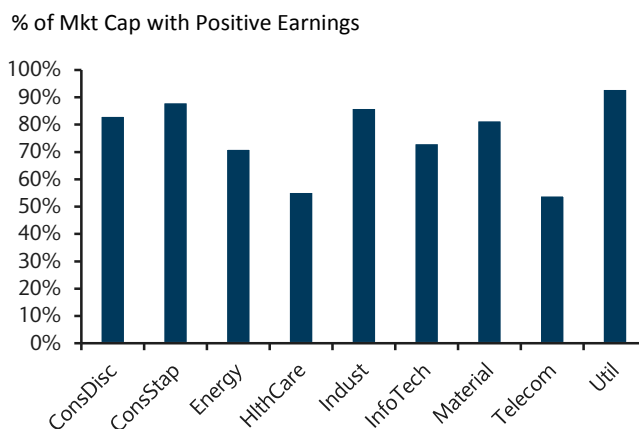
**FIGURE 23**  
**Percent of Positive Earnings and EBITDA (Mkt Cap Weighted)**



Source: Barclays Research, FactSet, Reuters, Compustat  
Data as of 7/31/2013

Note: Percentage calculated on a market cap basis. Only ex-Financials

**FIGURE 24**  
**Majority of Negative Earnings Are in Healthcare and Telecom**



Source: Barclays Research, FactSet, Reuters, Compustat  
Note: Data as of 7/31/2013 ex-Financials only

By the same token, at an aggregate level, EBITDA has so far remained positive for small caps. In addition, as shown in Figure 23, the number of companies with negative EBITDA itself is much lower. Still, as seen in Figure 20, R2 has consistently traded at a premium to R1 on an EBITDA/EV basis. The only period where R1 has higher valuations is the tech boom of the late-90s. However, the extent of the valuation premium is not as large as with earnings yield.

A popular “fix” for the negative earnings issue is to simply drop the names with negative earnings (the so called PE with positive earnings approach). However, this approach is somewhat flawed, in our opinion, if we were to view the entire index as a single asset. First of all, an investor who buys the entire index is paying a positive value for a negative earnings company which should be incorporated in the valuation. From this perspective, a very small positive earnings number would have the same issue. As an analogy: if a company has some unprofitable divisions, it would not be appropriate to simply exclude those from the analysis of the entire company.

In general, the earnings yield for a stock can be negative or low if the market expects the company can grow out of its current travails (which could be linked to a broad economic downturn or be company-specific in that the company is a young company with limited operating history or is temporarily distressed). To the extent that the market correctly anticipates future growth, this “payment for growth” is then fully justified. Similarly, at an index level, we then need to see if future growth is justified whenever the earnings yields are low.

FIGURE 25

**Earnings Growth for R2 is Not Consistently Higher Than That for R1**

Source: Barclays Research, FactSet, Reuters, Compustat  
Data as of 7/31/2013. Ex-Financials only

*It appears that large caps are more susceptible to valuation expansions and contractions than small caps.*

Figure 25 plots the EBITDA growth for R1 and R2, and we see that as expected during periods of recessions the growth slowdown is much more significant for small caps. Small caps also tend to rebound much faster after the end of a recession (consistent with their price outperformance discussed in the previous section). However, the mid-cycle performance does not appear as consistent. During the mid-90s and the first half of the mid-2000s, small caps grew faster than large caps but their growth was much lower beginning in 2006. Interestingly, after the 2008 crisis, the two indices have moved in lock-step.

Finally, it is interesting that despite its apparent flaws the earnings yield for R2 is remarkably stable compared to that of R1 during expansionary periods. Thus, while the earnings yields for R1 dropped from around 8% in the high-inflation mid-80s to nearly 2% at the peak of the dot-com bubble, for R2 it has been relatively stable during expansionary periods. Thus, it appears that large caps are more susceptible to valuation expansions and contractions relative to small caps.

*Using top line revenue metrics small caps appear cheap; using middle of the income statement metrics, the valuation difference is much narrower; and using net income-based metrics small-cap stocks appear expensive.*

Figure 21 shows that in terms of Sales/Price ratio, R2 stocks appear to be cheap. This is a direct consequence of the much lower margins for small caps. Thus, we see an interesting pattern as we move up the income statement. Using top line revenue metrics small caps appear cheap; using middle of the income statement metrics such as EBITDA, the valuation difference is much narrower; and finally using net income-based metrics small-cap stocks appear expensive.

## Resolving the Small Cap Performance, Fundamentals, and Valuation Conundrum

A careful read of the discussion so far raises an interesting conundrum. To summarise: relative to large caps, small caps:

- Have outperformed over the long term
- Have much weaker fundamental metrics
- Do not have a substantially higher earnings growth in aggregate
- Have more expensive earnings based valuations

*In our mind, within the small cap universe, one has to clearly distinguish between growth and value stocks.*

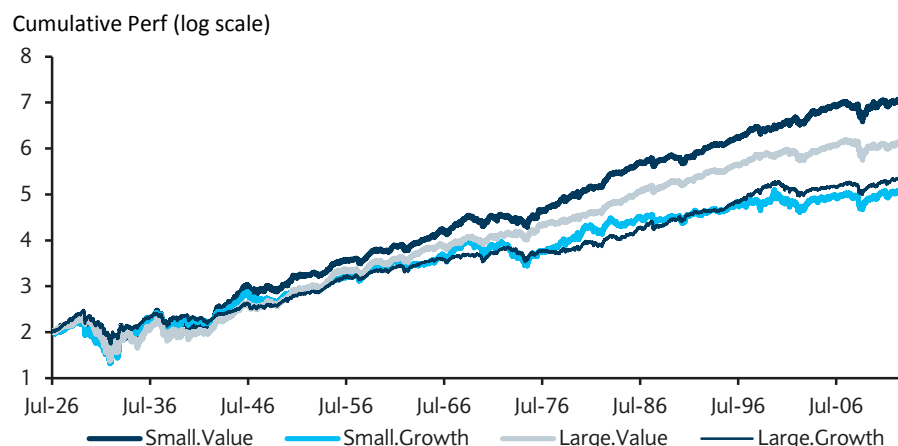
*Over an extended time period, small-cap growth stocks have significantly underperformed small-cap value and large-cap growth and value benchmarks.*

These observations clearly appear to be at odds with each other. Thus, price outperformance is consistent with poor fundamentals if valuations are excessively cheap. Similarly, higher valuations are consistent with price outperformance if the actual future growth is much higher.

One possible explanation could simply be that our analysis for fundamentals and valuations is only since 1984. The long-term performance is over a much longer time period and the performance since 1984 is mixed. Thus, although the weaker fundamentals probably have always existed, perhaps the valuations were much cheaper prior to 1984. However, as we discussed above, the premium in earnings yields and EBITDA/EV existed during the mid-1990s and mid-2000s. In our view, there are deeper factors at work here.

In our mind, the key way to resolve this conundrum is that within the small cap universe, one has to clearly distinguish between growth and value stocks. As is well known, over the long term, value stocks (low PB ratio) outperform growth stocks. However, the difference between the returns of value vs. growth stocks is starker when comparing small-cap stocks to large-cap stocks as shown in Figure 26. We see that over this time period, small-cap growth stocks have significantly underperformed small-cap value and large-cap growth and value benchmarks. Note that this is on a log scale, so the cumulative performance of small-cap value stocks is more than 100x time that of small-cap growth stocks.

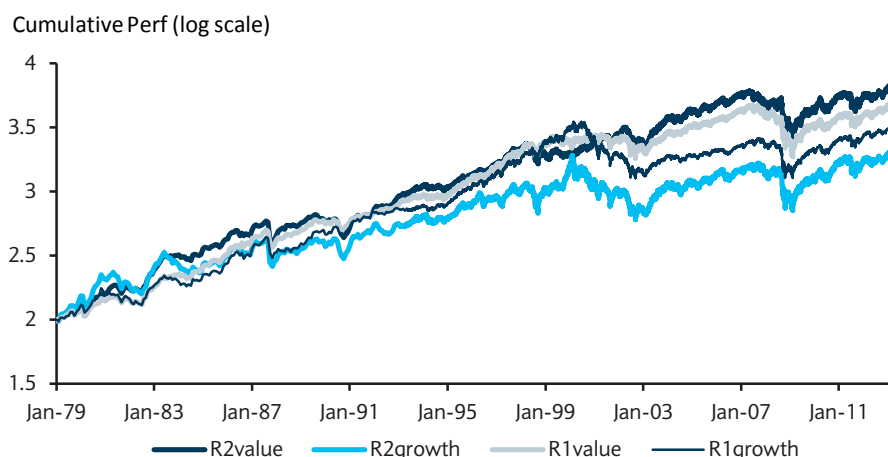
FIGURE 26  
Value Beats Growth over the Long Term



Source: Barclays Research, Kenneth French Data Library  
Note: Prices as of Dec 28, 2012.

Figure 27 confirms that using the Russell growth and value indices leads to the same conclusions.

FIGURE 27

**The Outperformance of Small-Cap Value Stocks is Also Evident Using Russell Indices**

Source: Barclays Research, Bloomberg

Note: Prices as of Dec 28, 2012.

*Small-cap stocks have the potential for providing outsized positive returns.*

As we discuss in the next section, small-cap stocks do have the potential for providing outsized positive returns. However, the above analysis indicates that a naïve passive allocation in small-cap growth stocks is not advisable. One simple hypothesis for this sustained underperformance of small-cap growth stocks is that too many investors chase small-cap growth stocks, leading to heady valuations. Said differently, market values of stocks with negative/low current earnings are still substantial and reflect the expectation that the future earnings will turn out to be positive. This presumably bleeds into higher valuation based on earnings-based metrics at the aggregate level. In other words, while small-cap stocks are a fertile ground for finding stocks with outsize return potential, it is best left to managers with stock picking skills.

On the other hand, small-cap value stocks are an entirely different story. Their long-term outperformance indicates that they should be ideal as a passive investment. In fact, part of the long-term outperformance of small-cap stocks can be attributed to their value tilt. As discussed in the previous section, in aggregate small caps have poor fundamental metrics. However, as the adage goes, a bad company does not mean it is a bad stock. Investors apparently shy away from stocks with poor fundamentals and as a result buying these stocks even using passive vehicles can provide superior long-term returns.

Indeed Figure 22 shows some interesting trends for the Book/Price ratio. We see that prior to the mid-90s, the BP ratio for R2 and R1 were essentially on top of each other. With the onset of the dot-com bubble, R2 became cheap according to this metric and this valuation mismatch has persisted since. Recall from Figure 3 that small caps underperformed beginning in the early-1980s until the mid-90s, and thus lines up very nicely with their relative richness during this period.

*We believe small-cap value stocks' long-term outperformance indicates that they should be ideal as a passive investment.*

## Can Active Management Add Value for Small Caps?

- **An ostensible reason to invest in small caps is the temptation to find “a diamond in the rough” or the next “ten-bagger” stock.** We show that this can be a double-edged sword.
- **On the one hand, small cap price returns are relatively more positively skewed and have much lower intra-stock correlations (higher idiosyncratic risks).** As a result, a portfolio of top versus bottom performing stocks (i.e., a perfect foresight strategy) significantly outperforms in the small cap universe, attesting to the value of active managers with stock picking skills.

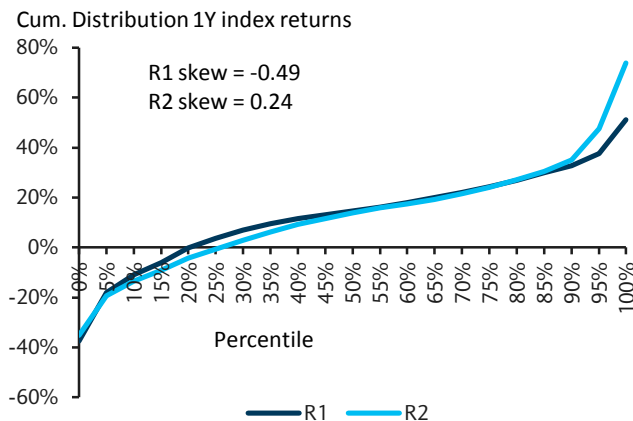
- **On the other hand, the tendency of investors to chase growth in the small-cap space means that ironically, as a group, small-cap growth stocks fare quite poorly relative to small-cap value and large-cap value/growth benchmarks.** In other words, while finding the next ten-fold returning stock should be best left to managers with stock picking skills, a passive investment in small-cap value stocks does provide superior long-term returns.

### Can Active Managers Add More Value in Small-Cap Stocks?

One of the popular reasons why investors are attracted to the small-cap arena is the temptation in finding the next (to use the term popularized by Peter Lynch) “ten-bagger” stock. The logic being: while a \$100mn market-cap stock could become a \$1bn market-cap stock, it is much harder for a \$10bn stock to perform the same feat. In addition, key characteristics of the small-cap space are of course the paucity of information given; the limited sell side coverage; and news flows in general. This makes it tempting to believe that one could find more diamonds in the rough. This fact is sometimes used to argue that active managers can add more value. In this section, we attempt to put some rigor around this hypothesis.

First of all, a simple way to verify the ten-fold nature of small-cap stocks is to examine the skewness of their returns. Note that what we are looking for is not necessarily higher volatility but a distribution of returns which has more of a right hand tail or a higher probability of positive returns.

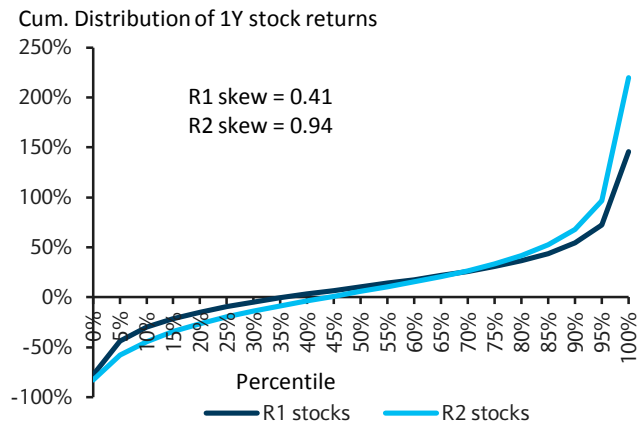
**FIGURE 28**  
Distribution of Small Cap Index is Much More Positively Skewed Compared to Large Caps



Source: Barclays Research, Bloomberg

Note: Returns are 1Y daily rolling index returns. To control for outliers, we drop the top and bottom 1% returns. Daily data from Jan 31, 1979 to July 11, 2013.

**FIGURE 29**  
Same Results Hold at a Single Stock Level



Source: Barclays Research, FactSet

Note: Returns are 1Y daily rolling stock returns in the respective indices. To control for outliers, we drop the top and bottom 1% returns. Monthly data from Dec 1984 to June 2013.

In Figure 28, we plot the cumulative distribution of rolling one-year returns for R1 and R2. We see that while the two distributions converge for negative returns, there is a significant deviation for positive returns. For example, while the 5-percentile returns for R1 and R2 returns are -18% and -19%, respectively; the 95-percentile returns are 37% and 47%, respectively. The same figure also shows the skew for the two indices. Interestingly, while the skew for R1 is negative as expected, for R2 it is actually positive.

One possibility for this deviation could simply be that the positive returns are driven by the much stronger snapback of the R2 Index post-recessions. In any case, to evaluate the value-add, we need to calculate the distribution of single stock returns. Figure 29 provides another

perspective by calculating the distribution of single stock returns in the two indices. To be clear, we pool the 1Y returns across stocks and across time. Once again, we see a distinct difference in the distribution for negative and positive returns. Since these are stock returns, the skew is now positive for both indices but is much higher for R2.

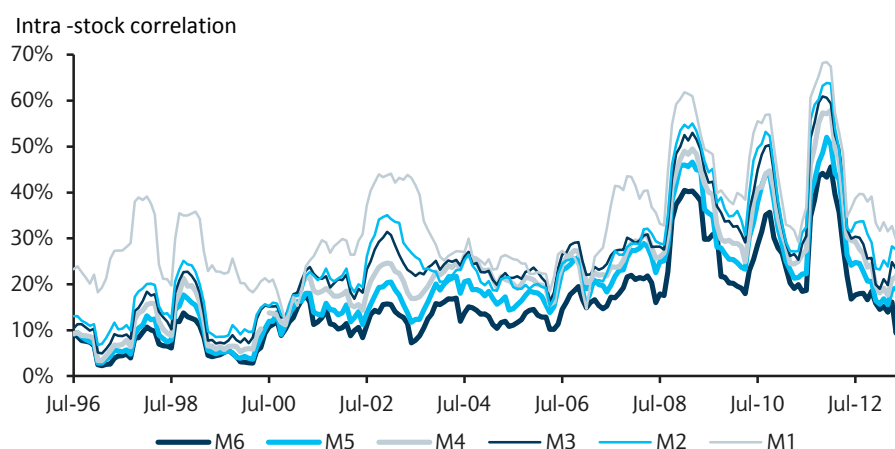
While the above analysis focused on the distribution of returns, as intuitively expected, small-cap stocks have much more idiosyncratic risk. We demonstrate this in Figure 30 by calculating the pair-wise correlations for six market cap buckets for the Russell 3000 universe. A lower pair-wise correlation for a group of securities implies a greater likelihood to apply superior stock selection. If all securities move in tandem, it is more difficult to differentiate winners from losers or to capitalize on the differences in their fundamentals.

We see that lower market-cap stocks (M6) tend to have significantly lower correlation compared to large-cap stocks (M1). As most active managers were painfully aware, intra-stock correlations increased quite dramatically since the 2008 credit crises and have tended to spike during each crisis period in 2008, 2010, and 2011. However, besides the change after the 2008 crises, we also see a systematic increase in the correlation for small cap buckets. For instance, the correlation for the lowest market cap bucket increases from around 5% to nearly 15%. During the three risk-off episodes after 2008, these increased to unprecedented levels. Thus, much of the rally in small caps over the past few years appears to have been a beta rally.

*Over the past year, correlations across market cap buckets have dropped especially in the lowest market cap bucket, allowing for more stock picking opportunities.*

Over the past year, correlations across market cap buckets have dropped especially in the lowest market cap bucket, allowing for more stock picking opportunities. Another change has been that while historically the correlations for all buckets, except for the largest 500 were clustered together; there is much uniform distribution at the current time. Assuming we return to a more normalized environment, the correlations in the mid-cap segment should drop.

**FIGURE 30**  
**Intra-Stock Correlation Decreases Substantially for Lower Market Cap Buckets**



Source: Barclays Research, FactSet, OptionMetrics

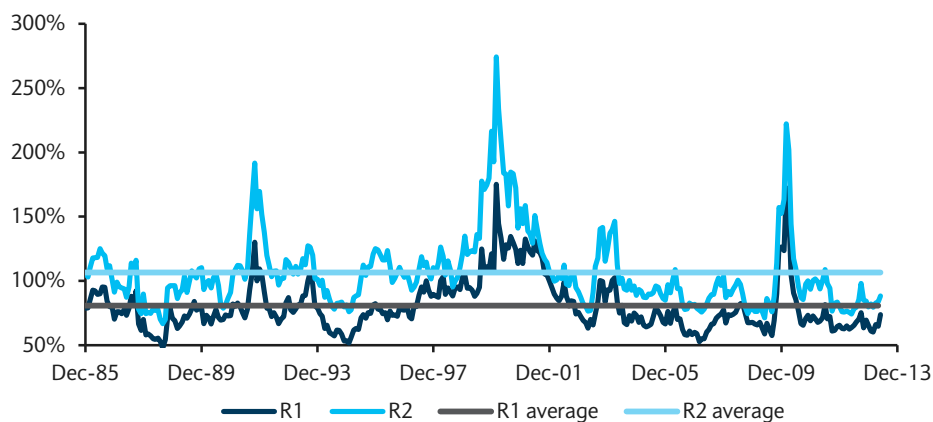
Note: Market cap-weighted correlation calculated using daily returns over rolling 6M window. We divide Russell 3000 stock universe into six market cap buckets (M6: bottom 500, M1: top 500).

The above discussion is admittedly somewhat abstract. To translate the above insights into more practical terms, we calculate the returns of a hypothetical manager who has “perfect foresight”. In other words, let us assume (a big assumption) that a manager knows which stocks within R2 are likely to have returns in the top and bottom quartile over the next year. Figure 31 tracks the performance of two market-neutral portfolios which go long the top-quartile and short the bottom-quartile stocks for both R1 and R2 stocks. The stocks within each portfolio are market cap weighted.

FIGURE 31

**Hypothetical Manager with Perfect Foresight Would Do Much Better within R2 Stocks**

Perfect Foresight strategy returns



Source: Barclays Research, FactSet, Reuters

Note: Strategy returns calculated as the returns of top – bottom quartile subsequent 1Y returns. Top and bottom portfolios are market cap weighted.

*We see that the higher skewness and lower correlation of small-cap stocks allows a manager with superior stock picking skills to add more value compared to the large-cap arena.*

By construction, the returns of these strategies are positive but we see that the returns for R2 are higher by 26% per annum over the entire time frame. A more realistic assumption would be that the manager has a higher probability of selecting outperforming stocks rather than have perfect foresight. However, the results of this more sophisticated model are likely to be qualitatively similar.

In summary, we see that the higher skewness and lower correlation of small-cap stocks allows a manager with superior stock picking skills to add much more value compared to the large-cap arena.



## MARKET VIEW: GEARED TO RECOVERY

- **Despite the Russell 2000's stellar 26% rally YTD, we are constructive on small-cap stocks and believe that R2 ex-Financials will appreciate 4-6% over the next 12 months.** While much of the equity rally from 2008-12 was supported by strong earnings growth, the rally this year has been driven by valuation expansion, which has more than compensated for the slowdown in earnings growth. Current valuations are in line with those during previous periods of economic expansions.
- **Rather than valuations, we believe the key driver for future small-cap returns will be earnings growth, which we expect to be modestly positive as fiscal tightening drag wanes and economic growth picks up in 2014.** Fed tapering is unlikely to be a major obstacle for small caps, in our view. Historically, an increase in rates does not lead to significant absolute and relative underperformance for small caps. The effect on equities will ultimately depend on whether the equity market believes that the Fed is choking off the recovery, and we believe the Fed will tread carefully on this front. The U.S. public policy uncertainty which was a prominent cause of volatility over the past few years appears to have abated.
- **Currently, small caps have higher-than-usual gearing to a potential economic recovery, and thus the risk to our base case is to the upside.** Small caps have not been as conservative as large caps with their debt and capex profiles during this cycle, and are thus likely to benefit more from a rebound in growth.
- **On the international front, a potential global China-led slowdown which is a major headwind for multinationals is less of a concern for the more domestic small caps.** Although Europe continues to struggle, ECB's Outright Monetary Transactions (OMT) program appears to have put a credible put under the market and so Europe is unlikely to be major source of risk.
- **We use an EV/EBITDA methodology to gauge the upside potential for R2 ex-financial stocks.** We believe the median multiple of 11 during 2003-07 should be representative at this stage of the business cycle. Since consensus growth numbers for R2 have historically been and continue to be overly optimistic, we constructed a simple regression model relating SPX EPS projected growth to R2 EBITDA growth. We estimate R2 ex-Financials should grow by 3% or 5% depending on whether we use Barclays or consensus forecasts for SPX earnings growth. This translates into a 4-6% price return for R2 ex-Financials.

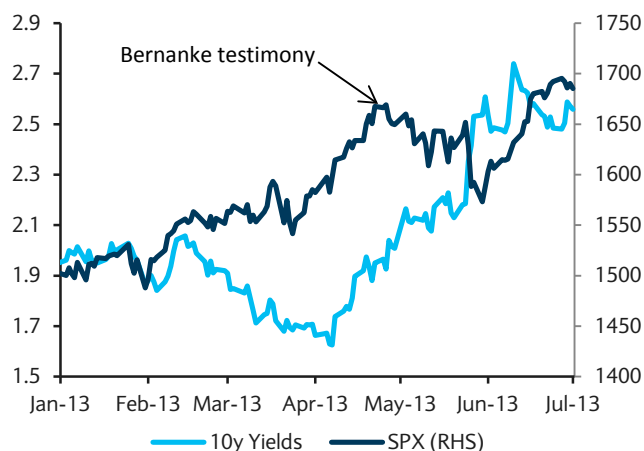
*We estimate a 4-6% price return for R2 ex-Financials.*

### Equity Market Recovers from a "Taper Tantrum"

Clearly, the prospect of the Fed tapering its asset purchases earlier-than-expected was the dominant driver of asset prices over the past few months. As shown in Figure 32, 10-year treasury yields increased by a remarkable 60 bp since May 21 after Chairman Bernanke first introduced this possibility. Initially, the market assumed that this also meant that the timetable of the hiking cycle has been moved up as indicated by the rise in shorter-term rates. However, the Chairman and other Fed officials have gone to great lengths to de-link the two scenarios which resulted in two-year yields retreating partially. Fed officials have also indicated that the decision to taper will primarily be driven by the improvement in labor markets and less so by growth. Barclays' economists' baseline scenario is that the Fed will decrease their monthly purchases from \$85bn to \$70bn beginning September of this year. While their projection for 2H13 growth is less sanguine relative to the Fed's, they believe that the labor participation rate is unlikely to increase, and hence expect the unemployment rate will likely breach the Fed's threshold.

As shown in Figure 33, this backup in rates also had a severe impact on carry trades which are directly or implicitly linked to U.S. rates. These include various fixed income spread assets (e.g., U.S. corporate bonds, emerging market bonds, and mortgages); carry currencies (e.g., AUDUSD); and income-producing equity indices (e.g., high dividend payers, defensive sectors).

**FIGURE 32**  
Rates Have Spiked since May 21 When 2013 Taper Possibility Was Mentioned by Chairman Bernanke



Source: Barclays Research, Bloomberg  
Note: Data as of July 24, 2013

*Small caps have historically outperformed large caps after the start of the Fed hiking cycles, which is incrementally bullish for small cap indices.*

Interestingly, after bottoming in late-June, most equities have staged a remarkable comeback with the broader indices now making new highs. Apparently, the equity market is no longer worried about a potential tapering. Note that the tapering is not actually tightening but is simply a decrease in the amount of monetary easing (an analogue would be that instead of continuing to cut rates by 50 bp the Fed were to cut by 25 bp) and perhaps equity investors are reassured by the fact that the hiking timetable has not necessarily been moved up.

From a broader perspective, as we discussed earlier (Figure 7), while the start of the hiking cycle does slow down the equity rally on average it need not necessarily be bad for equities. What really matters is whether the equity market believes that the Central Bank is ahead of the curve and likely to choke off growth. Given the sensitivity that the current Fed has demonstrated to the wealth effect channel, we think it will tread cautiously in this regard. In any case, as Figure 7 shows small caps have historically outperformed large caps after the start of the Fed hiking cycles which is incrementally bullish for small cap indices.

As we discussed in our recent report (*Whither Equity-Rate Correlation?*) the interest rate-equity correlation is systematically inversely related to the level of interest rates (Figure 34). This is driven by the fact that when interest rates are low, equity investors are more concerned about deflation and so higher inflation (which lead to higher rates) is considered a good outcome by equity investors. On the other hand, when interest rates are already high, higher rates are a signal of destabilizing inflation, which lowers equity returns. Indeed, we find that over the long term in the U.S., rate-equity correlation has been highly dependent upon the level of interest rates and find a similar pattern across a cross-section of different emerging and developed countries (Figure 35). In both cases, we find that the critical level of rates above which the equity-rate correlation switches from being negative to positive is around 4%. Clearly, we are quite far from this level for U.S. rates. As a result, although the correlation has been low recently, we expect it turn positive, and thus higher rates should on average lead to higher equity prices.

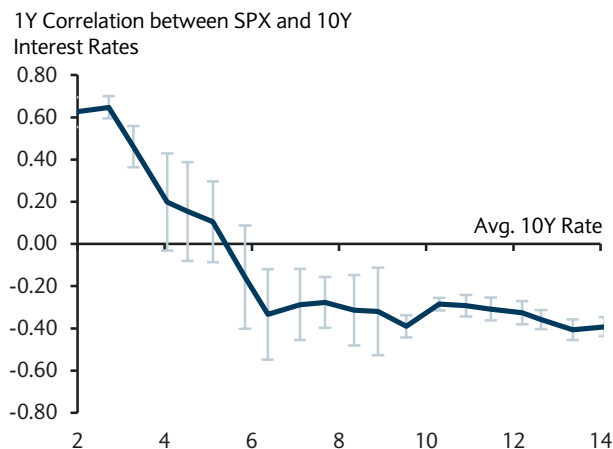
**FIGURE 33**  
Equity Assets Have Rebounded but Fixed Ones Have Not

Ticker	Description	Ret since 5/21	Ret since 6/24
SPY	SPX	1.5%	7.5%
XLP	Cons Staples	0.6%	5.8%
VIG	Dividend Stocks	1.0%	6.9%
XLU	Utilities	-1.6%	7.2%
HYG	HY Bonds	-2.1%	4.7%
EEM	EM Equities	-7.5%	9.6%
CEW	EM Currencies	-3.2%	1.8%
TLT	20+ Treasuries	-8.5%	-1.2%
IYR	Real Estate	-9.3%	7.1%
PFF	Preferreds	-4.4%	2.2%
LQD	IG Bonds	-4.4%	2.9%
EMB	EM Bonds	-6.4%	7.2%
EMCB	EM Corp Bonds	-5.6%	4.4%

Source: Barclays Research, Bloomberg  
Note: Data as of July 24, 2013

FIGURE 34

**In the U.S., Correlation between Interest Rates and Equities Is Strongly Related to the Level of Rates**



Source: Barclays Research, Bloomberg

Note: The above plot uses data from 1962-2013. It shows average value of correlation for average value of 10Y interest rates. Error bars show the standard deviation around the average.

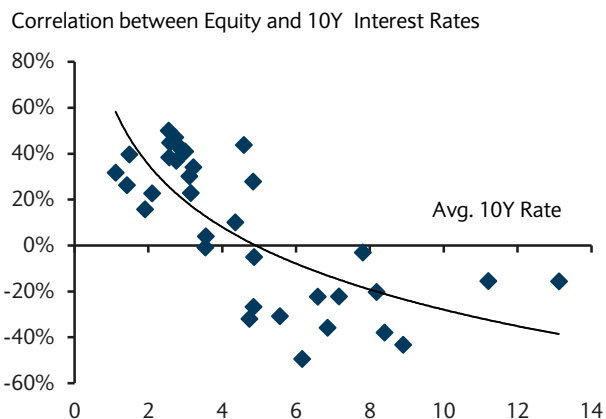
*The impact of political uncertainty was more severe on small-cap stocks, as is evident from their revenue and EBITDA growth which has been broadly in line with that of large cap, and is unusual at this point in the business cycle.*

However, we do admit that the current monetary easing is both quantitatively and qualitatively unprecedented and the probability of missteps in this uncharted territory is non-negligible.

A major driver of volatility since 2011 has been the political brinkmanship and the resulting public policy uncertainty. As of now, the Republican Party appears to have abandoned its strategy of using the debt-ceiling as a negotiating tool to advance its agenda of longer-term fiscal restraint. This removal of uncertainty has also been a significant driver of equity returns during 2013, in our opinion. Arguably, the impact of the political uncertainty was much more severe on small-cap stocks, as is evident from the fact that their revenue and EBITDA growth has been broadly in line with that of large cap, which is unusual at this point in the business cycle. Hence, we expect the removal of this political uncertainty to provide more of a tailwind.

FIGURE 35

**Across Countries the Relationship Holds With High Rates Leading to Negative Correlation**



Source: Barclays Research, Bloomberg

Note: Each data point refers to the correlation between rates and equities over the last five years. The universe is 35 developed and emerging market countries.

## Domestic Small Caps Less Affected by a China Slowdown

From an international perspective, over the past few years, asset prices have been dominated by the European crises. Although, the region is not completely out of the woods and growth is likely to be lackluster over the medium term, the ECB has put a reasonably credible put under the markets via its LTRO program earlier in 2012 and the OMT program in the later half. As a result, we do not expect Europe to be a major source of tail risk in the near future.

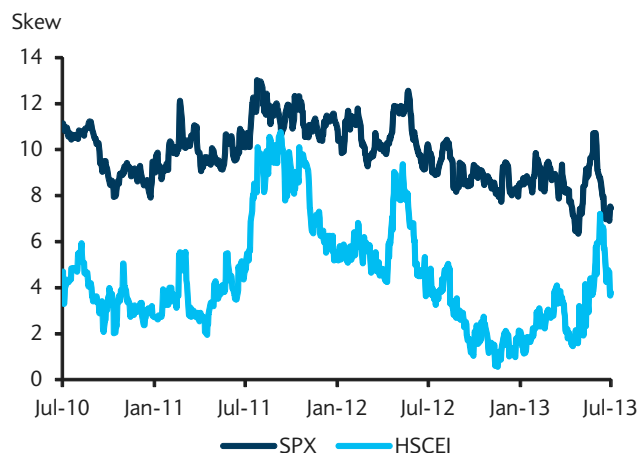
The markets' concerns around a Chinese hard-landing has also waxed and waned over the past few years. It does appear that the days of heady 8% plus growth are a thing of the past and importantly the Chinese policymakers are comfortable with this scenario. This slowdown has had a significant impact on commodity markets which arguably have not really fully recovered after the 2008 crises. Emerging market equities have shown a similar pattern in that they have essentially been range-bound since 2011.

More recently, fears of a China hard-landing have again come to the forefront. This can be most clearly seen by looking at the option skew (or the difference between put and call implied volatility) for the HSCEI index (Figure 36), which is once again at levels similar to 2011 when China hard-landing fears were high. The latest episode appears to have been

precipitated by an apparently radical change in the policy path by the new Chinese government (*What to expect from Likonomics*). Their new policy puts much less emphasis on stimulus and focuses on deleveraging and structural reform. The first shot across the bow on this front was when Chinese authorities allowed short-term rates to spike in an attempt to reign in rapid growth in credit (Figure 37). Since then, the authorities have taken pains to emphasize that a floor for growth and employment needs to be maintained which has eased some of the concerns allowing the markets to normalize to some extent.

FIGURE 36

High HSCEI Option Skew Indicates Heightened Concerns of a Chinese Hard-Landing



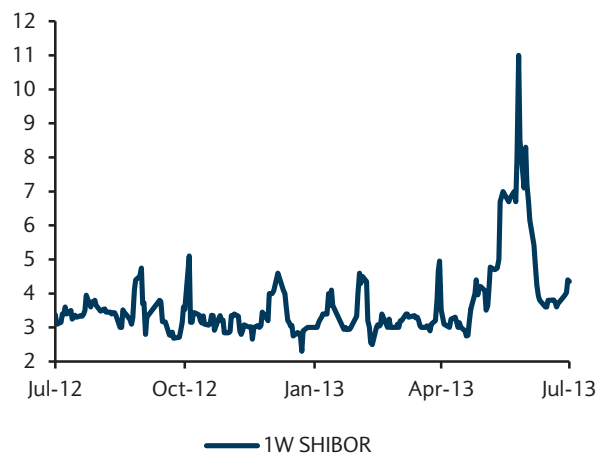
Source: Barclays Research

Note: Skew = Difference between 3M 90% and 110% Implied Volatilities

Data as of July 24 2013

FIGURE 37

Chinese Authorities Allowed Short-Term Rates to Spike in a Bid to Reign in the Rapid Growth in Credit

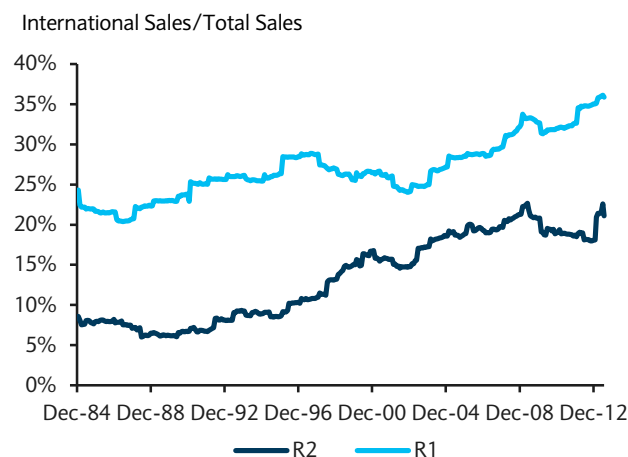


Source: Bloomberg

Clearly, the situation remains fluid and the contagion from this risk could have a major impact on U.S. equities. However, **small caps have a consistently lower proportion of their sales coming from international sources** (Figure 38) and as such this tail risk is less of a concern. Figure 39 shows that over the past two years, companies with a higher proportion of international sales in R2 have underperformed those with a lower proportion of international sales, and as such their performance is more consistent with that of emerging market equities.

FIGURE 38

**Large Caps Have Much Higher Percentage of International Sales ...**

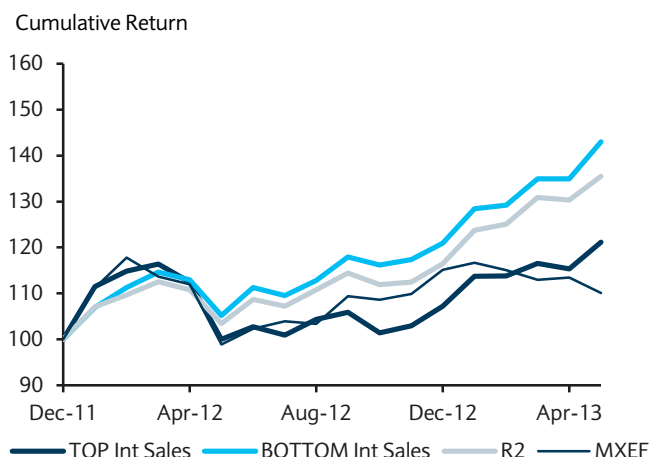


Source: Barclays Research, FactSet, WorldScope, Reuters  
Data as of 7/31/2013

*Except for the P/E and P/E positive metrics, current valuations for R2 are in line with those during the 2003-07 expansion.*

FIGURE 39

**... which Has Hurt Them Recently with a Weakening EM**



Source: Barclays Research, FactSet, WorldScope, Reuters, Bloomberg  
Note: Data as of 07/31/2013. TOP and BOTTOM are the Top and Bottom quintiles of International Sales as a % of Total Sales within the R2. MXEF is the MSCI emerging markets index.

## Earnings Growth, Not Valuations Key Driver for Future Returns

Given the absence of any major tail risks on the immediate horizon, we believe it is reasonable to use valuations over similar mid-cycle time periods. In Figure 40, we show the median values of the four multiples over the Dec 2003 to Dec 2007 period and compare them to their current levels (since we are looking at TTM values this incorporates earnings during 2003). Note that the Fed started to hike rates in early 2004 and so this period does incorporate the effect of tightening monetary conditions.

We see that overall except for the P/E and P/E positive metrics, current valuations for R2 are in line with those during the 2003-07 expansion. However, we do note that the valuations for R1 are cheap relative to this benchmark and the fuller valuations for R2 reflect some of the positive factors we highlighted in the previous section. As an aside, a careful inspection of the P/E ratio time series reveals that the ratio jumped after the annual index rebalance at the end of June this year. The P/E ratio using the previous constituents does not show a similar jump, indicating that perhaps a larger number of companies with negative/low earnings have now entered the R2 index.

FIGURE 40

## Valuation Metrics Are Consistent with Previous Expansion Periods

R1 Index				R2 Index			
	Current	2003-2007	1985-Present		Current	2003-2007	1985-Present
P/E	16.9	18.6	17.9	P/E	45.3	36.5	34.2
P/E Positive	16.2	17.6	16.7	P/E Positive	19.9	18.5	17.8
Fwd PE	15.2	17.4	17.2**	Fwd PE	24.7	24.2	23.0**
EV/ EBITDA	9.2	10.0	8.7	EV/ EBITDA	11.1	11.0	10.0
P/B	3.1	3.1	2.8	P/B	2.5	2.5	2.3
P/S	1.4	1.4	1.2	P/S	1.0	0.9	0.8

Source: Barclays Research, FactSet, Reuters, Compustat

Note: Data as of 07/31/2013. Historical values are medians across the respective periods. Ex-Financials only.

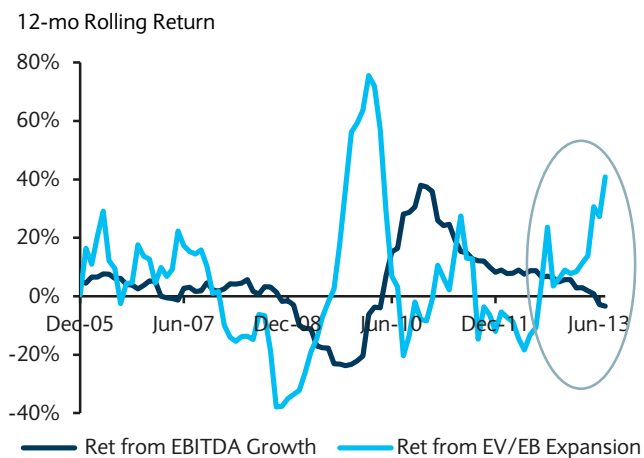
\*\* Long term Fwd PE median calculated using data from July 1998 – Present.

*The key driver for price appreciation over the next year is likely to be earnings growth for small caps.*

We note that equity valuations have been increasing over the past year. Indeed, much of the equity rally after the 2008 crises was driven by solid earnings growth but has begun to lose momentum since the end of 2012. However, valuation expansion has more than compensated for the decrease in earnings growth. We demonstrate this in Figure 41 by decomposing the price returns of R2 into earnings growth and a residual which is driven by changes in the multiple. Given the reasonably full valuations, the key driver for price appreciation over the next year is likely to be earnings growth for small caps.

FIGURE 41

## Rally Until 2013 Was Driven by Earnings Growth and Then by Multiple Expansion

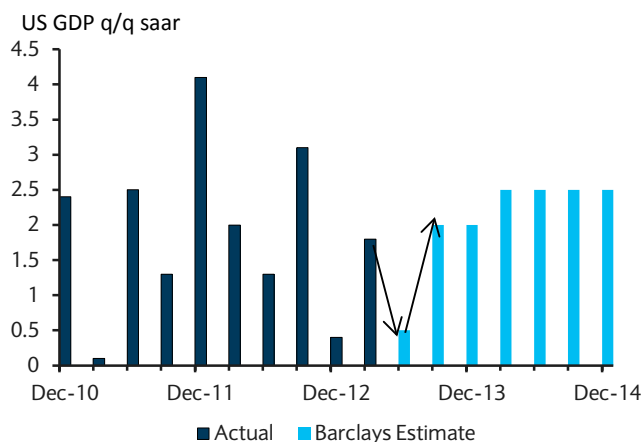


Source: Barclays Research, FactSet,

Note: Return from Multiple expansion = Y/Y Price Return – EBITDA Growth for R2 ex-Financials for which EBITDA is available. Data as of 07/31/2013

FIGURE 42

## GDP Slowdown Driven by Fiscal Tightening but Is Expected to Pick Up Later in the Year



Source: Barclays Research, Bloomberg

From this perspective, the rapidly slowing earnings growth is a source of concern. Indeed, while SPX earnings growth has slowed to 2.7%, R2 (ex-Financials) EBITDA growth has actually slipped into negative territory to -3.7%. Part of the reason for the slowdown in earnings growth is the effect of fiscal tightening as a result of the fiscal cliff and sequester earlier this year which has resulted in a slowdown in economic growth (Figure 42). The key issue is whether economic growth will pick up as the effects of the fiscal tightening wane. Our economists expect the growth to rebound from an estimated 0.5% for 2Q13 to 2% for the 2H and then pick up to 2.5% during 2014.

*While the profit margins for small caps are elevated, they are consistent with previous cycle values. Thus, margin compression is less of a risk for small caps.*

*We believe EV/EBITDA is the best approach to gauge potential returns for R2 ex-Financial stocks.*

We believe a key driver for the strong earnings growth for large-cap stocks was the fact that their margins were at all-time high levels (Figure 12). As a result, even if revenue growth were to continue, a potential worry is that margin compression could slow earnings growth. In contrast, while the profit margins for small caps are elevated, they are consistent with previous cycle values. Thus, margin compression is less of a risk for small caps.

As we discussed earlier, the current levels of debt and capex for small caps paint an interesting picture. Overall it appears that large caps have been relatively more conservative compared to small caps in their leverage and capital expenditure since the 2008 crises. Thus, large caps' Debt to EBITDA is at all-time lows while interest coverage ratio is at an all-time high. Similarly, Debt/Equity is historically low and capex coverage ratio is relatively high. An incremental factor driving their low interest expense is that large caps have been able to refinance their debt more easily. This implies that small-cap companies are better primed for a potential recovery relative to large caps.

As we discussed above, using consensus earnings for small caps is fraught with peril. However as a benchmark, for the S&P 500, the current bottom up consensus indicates a 9% EPS growth over the next twelve months. However, Barclays Equity Strategists believe this is too optimistic and believe 6% is more reasonable given the slowing growth. In the next section, we use these two projections to estimate the range for possible upside for R2 ex-Financial stocks.

## Modest Upside Is Our Base Case; Risks Are to the Upside

We use an EV/EBITDA methodology to gauge potential returns for R2 ex-Financial stocks. We discuss the reasons why we prefer this metric over other metrics.

### Why use EV/EBITDA for valuation?

- **P/E ratio:** As we discussed earlier, the P/E multiple is plagued by the significant number of stocks with negative earnings and the fact that the aggregate earnings can become negative during recessions. Importantly, since the aggregate earnings can become negative, it is very hard to get a read of earnings growth across business cycles.
- **P/E positive EPS:** A popular "fix" for the negative earnings issue is to simply drop the names with negative earnings (the so called PE with positive earnings approach). However, this approach is somewhat flawed, in our opinion, if we were to view the entire index as a single asset. First of all, an investor who buys the entire index is paying a positive value for a negative earnings company which should be incorporated in the valuation. From this perspective, a very small positive earnings number would have the same issue. As an analogy: if a company has some unprofitable divisions, it would not be appropriate to simply exclude those from the analysis for the entire company.
- **Forward P/E ratio:** An alternative would have been to use forward earnings estimates which should in principle factor in the future earnings growth of currently negative/low earnings stocks. However, historically, consensus estimates for small-cap stocks have been overly optimistic. Figure 43 and Figure 44 show the projected earnings yield versus the actual realized earnings yield through time for both SPX and R2. To be specific, for each month end, we calculate the projected earnings yield as the ratio of the bottom up earnings (for the stocks that the earnings is available) to the current market cap (for the same group of stocks). The realized earnings yield is the ratio of the actual earnings for the same group of stocks over the subsequent year to the current market cap. We see that the deviations for SPX earnings are not consistently biased. They are typically too low during economic expansions and are too optimistic during downturns. On the other hand, the forecasts for R2 are almost always too optimistic. We suspect that even though a significant portion of the companies in R2 have persistently negative earnings,



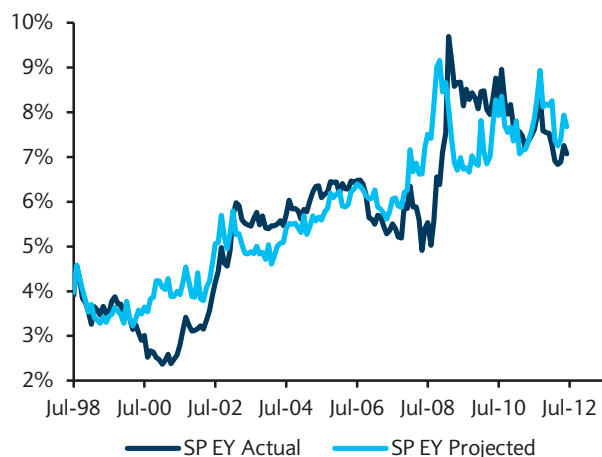
the consensus forecasts typically stay positive. For these reasons using a forward PE approach is also not advisable, in our view.

- **Price/Book:** While Price to Book has been a powerful metric to explain the cross-sectional stock returns, a key drawback is that the book value (for non-financial stocks) is a nominal value and not marked to market.

As a result, in our opinion, an EV/EBITDA framework is probably the most reasonable approach given these considerations. For valuation purposes, we will use an EV/EBITDA multiple of 11 which corresponds to the median level during the 2003-07 period.

FIGURE 43

#### Difference Between Consensus and Actual Earnings Not Biased for Large Caps

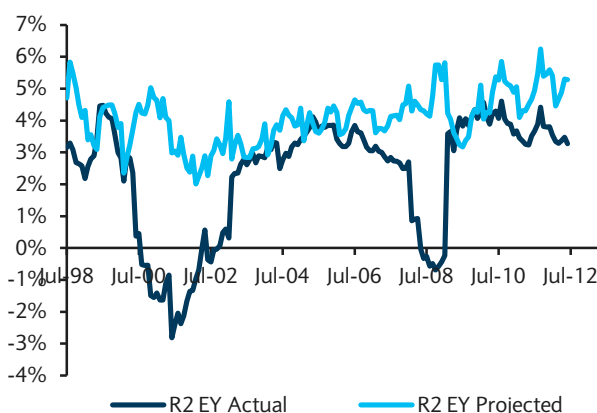


Source: Barclays Research, FactSet, Reuters

Note: Ex-Financials in SP500 for which consensus net income projections are available. Actual EY(t) = TTM NI (t+12)/MCap(t). Projected EY(t) = Consensus NTM NI(t)/MCap(t). Data as of 07/31/2013

FIGURE 44

#### While the Projections for Small Caps Are Consistently Very Optimistic



Source: Barclays Research, FactSet, Reuters

Note: Ex-Financials in R2 for which consensus net income projections are available. Actual EY(t) = TTM NI (t+12)/MCap(t). Projected EY(t) = Consensus NTM NI(t)/MCap(t). Data as of 7/31/2013

### Projecting EBITDA Growth

In order to gauge potential returns for small caps, we next need to project their EBITDA growth. To get a rough benchmark, we take the approach of relating the projected SPX earnings growth to R2 earnings and R2 EBITDA growth. Our methodology is as follows:

- We regress R2 ex-Financials EBITDA growth versus SPX earnings growth since 1984 to estimate the beta between the two variables. Since aggregate EBITDA does not become negative over this time period, this allows us to estimate a beta across the business cycle, which should provide a more robust estimate. Note that applying a similar methodology for calculating R2 earnings growth to valuation using earnings yield is problematic as index level earnings can become negative, leading to meaningless growth numbers.
- This calculated beta then allows us to translate a given projection for SPX earnings growth into a R2 ex-Financials EBITDA growth. For the projected SPX earnings growth, we use both the consensus and the more conservative Barclays estimate. We estimate R2 ex-Financials EBITDA growth to be 3% and 5% using Barclays and consensus projections, respectively.
- We next incorporate the impact of the most recent slowdown in growth. As discussed earlier, while the earnings growth for SPX has declined to a low positive number, for R2 that has actually turned negative. Thus, even though our base case is for a recovery next year, clearly small caps have to work harder relative to large caps to start growing solidly



again. Historically, the NTM growth does have a weak correlation with the TTM growth and so we think it is prudent to incorporate the current negative growth into our forecasts. Our final growth forecast is calculated weighting the raw forecast from the SPX forecast and the TTM R2 growth by 90% and 10%, respectively (Figure 45).

- We next combine the growth forecasts with our base case EBITDA multiple of 11 to arrive at a forecasted Enterprise Value over the next twelve months. We assume that the current difference between EV and Market Cap (which is basically the debt, cash, and minority shareholder stakes) remains constant.
- We can then calculate the value of market cap one year forward, and comparing it with the current market allows us to forecast returns of 4% and 6% for the two scenarios we are considering (Figure 45)

FIGURE 45

**Projected Upside Is Limited for Small Caps**

Index	Period	Metric	Value
SPX	Projected (NTM)	EPS Growth	6%-9%
R2 ex-Fin	Actual (TTM)	EBITDA Growth	-3.70%
R2 ex-Fin	Projected (NTM)	EBITDA Growth	3%-5%
<b>R2 ex-Fin</b>	<b>Projected (NTM)</b>	<b>Price Return</b>	<b>4%-6%</b>

Source: Barclays Research, FactSet, Reuters

Note: Data as of 07/31/2013. Lower and higher end of the ranges calculated using Barclays Equity Strategists' top down and bottom up consensus estimates for NTM SPX estimates, respectively.

*Our modest assumptions for growth indicate relatively limited upside for small-cap stocks; the risks to this baseline scenario are to the upside, as small caps are primed and ready for an eventual recovery.*

In summary, our modest assumptions for growth indicate relatively limited upside for small-cap stocks as our baseline scenario. However, we believe the risks to this baseline is to the upside given that relative to large caps, small caps are already primed and ready for any eventual recovery.

## THEMATIC IDEAS: ATTRACTIVE ENTRY POINT FOR SMID-CAP DIVIDEND PAYERS

- **Over the long term, small cap dividend payers have consistently outperformed not only the broader R2 and R1 indices, but also the dividend payers within R1.** Importantly, the outperformance has also occurred during past periods of rising interest rates.
- **However, in the recent past, R2 dividend payers have underperformed the R2 index on the back of tapering concerns making it an attractive entry point for investors, in our view.**
- **Sustainability of dividends paid by dividend payers is crucial to gauge their total return potential.** We identify 24 small cap sustainable dividend payers from Barclays Small and Mid Cap coverage by using criteria customized for each industry. We also identify 22 non-financial stocks outside our coverage universe within R2 using a set of broad criteria for dividend sustainability.

## Small Cap Dividend Payers: An Underappreciated Lot

As we show below, the universe of small cap dividend payers is an underappreciated group, in our opinion.

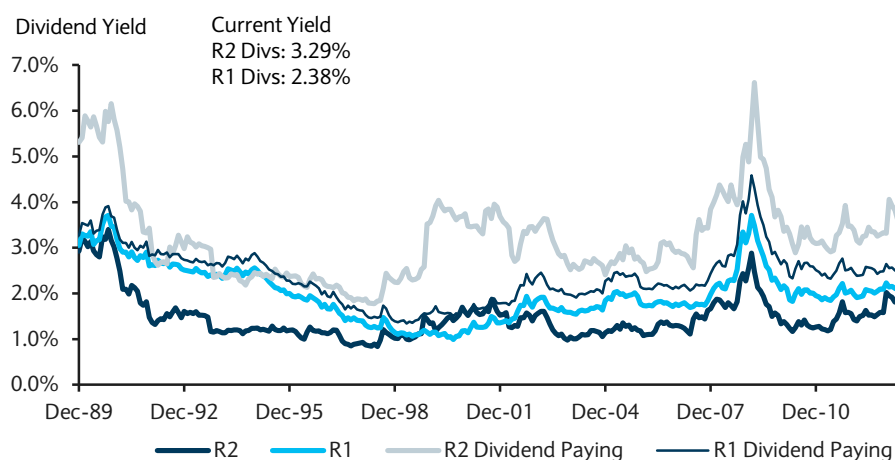
*If one were to only look at securities that pay dividends, then R2 would have a much higher yield than R1.*

## Small Cap Dividend Payers Have Consistently Higher Yields than Large Caps

Income within equities is often associated with large caps. We believe this is borne out of the fact that R1 has consistently had a higher dividend yield than R2. What is less understood is that this is not a result of small caps having lower yields, but that fewer small caps actually pay dividends. However, if one were to only look at securities that pay dividends, then R2 would have a much higher yield than R1 (Figure 46).

FIGURE 46

## Small Caps Have Higher Dividend Yield For Securities That Pay Dividends



Source: FactSet, Barclays Research

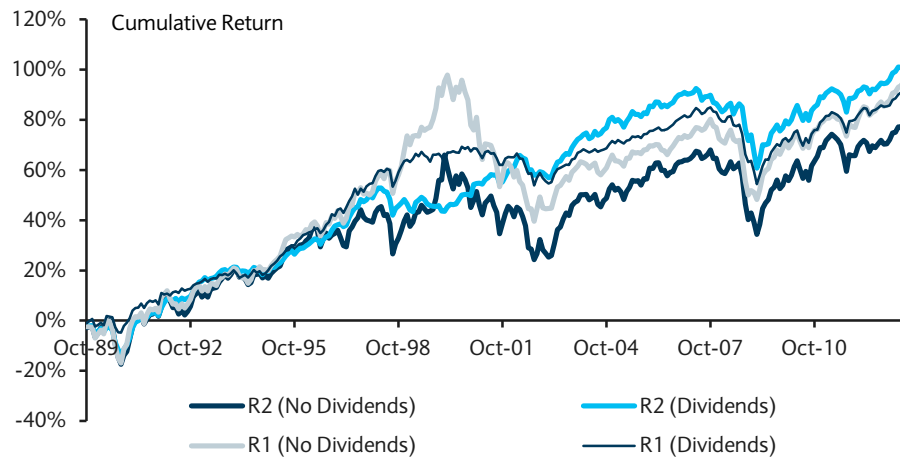
Note: Data is as of 7/31/2013

*The R2 dividend payers have performed much better than the R2 non-dividend payers over time.*

## Small Cap Dividend Payers Have Outperformed Over the Long Term

From a performance perspective, R1 dividend payers and non-dividend payers have similar performance over the long term (with the strongest divergence occurring during the tech boom). However, the R2 dividend payers have performed much better than the R2 non-dividend payers over time, with an annualized return difference of 10.33% vs. 7.84% for small cap dividend payers vs. non-dividend payers (Figure 47).

FIGURE 47

**Small Cap Dividend Paying Performs Much Better Than Non-Dividend Paying**

Source: FactSet, Barclays Research. Prices through 7/31/2013.

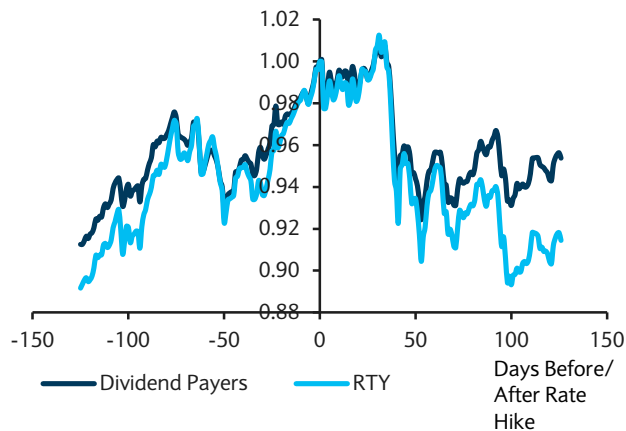
*Small Cap Dividend Payers Have Also Outperformed in Past Rising Interest Rate Periods*

Also, in light of the current uncertain interest rate environment, it is instructive to look at the relative performance of R2 dividend payers during past periods characterized by rising interest rates. As Figure 48 and Figure 49 show, in both rising rate environments of 1994 and 2004, R2 dividend payers outperformed the RTY.

FIGURE 48

**Dividend Paying Stocks Fared Better During the '94 Hike ...**

94 Period

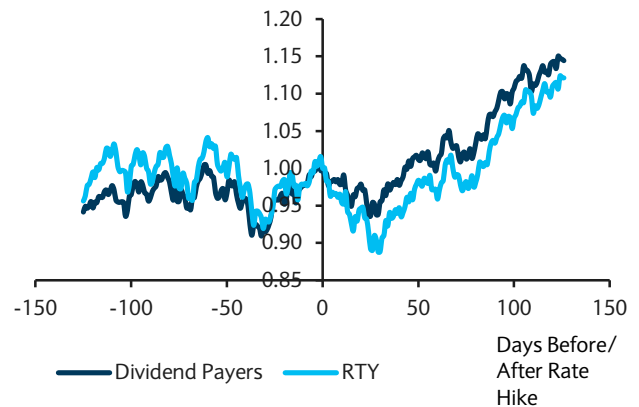


Source: FactSet, Barclays Research. The above chart shows the returns for 125 days before and after the rate hike.

FIGURE 49

**.. As Well As the '04 Rate Hike**

04 Period

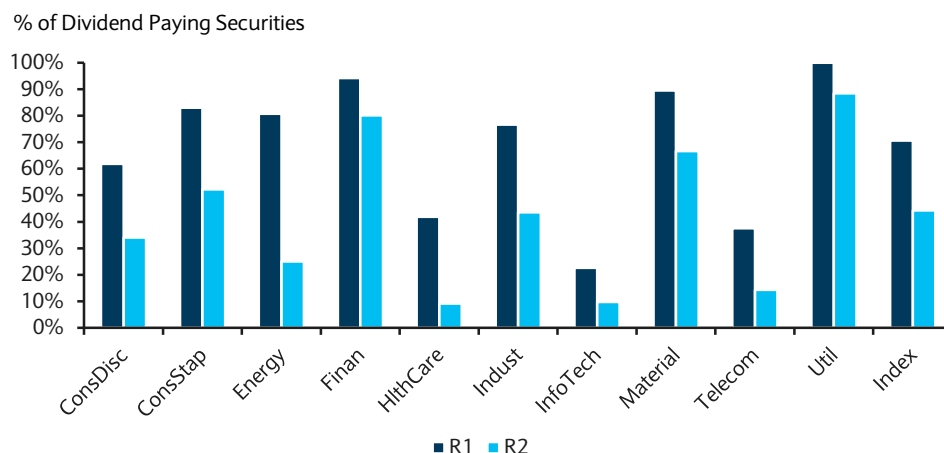


Source: FactSet, Barclays Research. The above chart shows the returns for 125 days before and after the rate hike.

*The Financials Sector Dominates Among Small Cap Dividend Payers*

We note that while the number of dividend paying companies is higher in R1, there are meaningful differences in the composition of dividend payers from various sectors across R1 and R2. Broadly, barring Utilities, in all other sectors the percentage of dividend payers is substantially lower in R2.

FIGURE 50

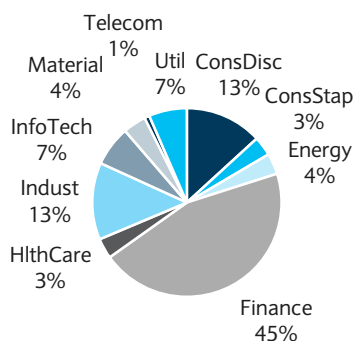
**R1 Has More Dividend Paying Securities in Each Sector**

Source: Factset, Barclays Research

Note: Data is as of 7/31/2013

In addition, the Financials sector in R2 accounts for a disproportionate share of dividend payers at 45% (Figure 51) compared to just 16% in R1. Moreover, the Financials sector's share of R2 dividend payers is even more telling given that it is the biggest contributor among R1 dividend payers (Figure 52).

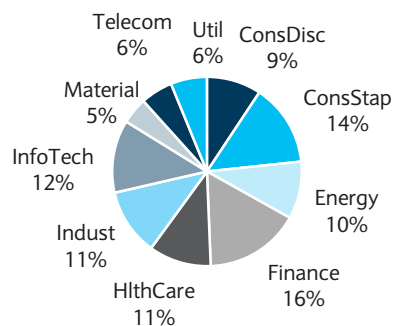
FIGURE 51

**A Very High Proportion of Dividends Come from Financials in the R2 ...**

Source: FactSet, Barclays Research

Note: Data is as of 7/31/2013

FIGURE 52

**... While the Nominal Amount of Dividends Paid in the R1 Is More Evenly Distributed**

Source: FactSet, Barclays Research

Note: Data is as of 7/31/2013

## Recent Underperformance due to Taper Concerns

In a rising interest rate environment, carry assets typically sell-off across the board. As we discussed in the market view section, in the aftermath of recent concerns around tapering of asset purchases by the Fed, carry assets were hit hard. However, most carry assets have recovered a fair bit over the past few weeks (Figure 33). Dividend paying stocks which benefitted from the low rate environment and consequent hunt for yield sold off meaningfully as well and have recovered, but to a lesser extent. In our opinion, while the rate environment is one driver of valuation, the underlying motivation for the Fed to step off

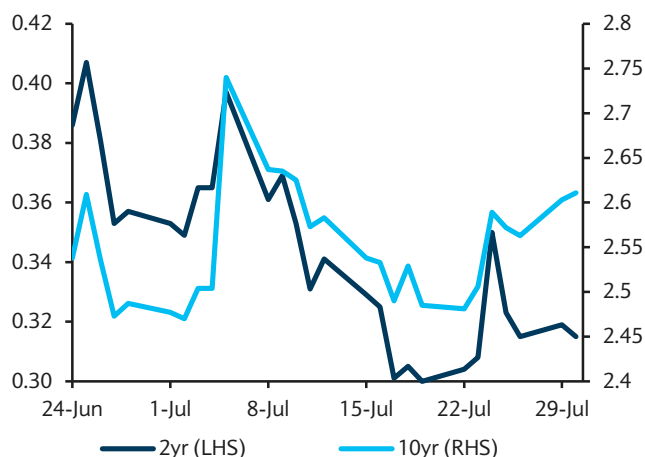
the pedal seems to be an incremental improvement in the macro environment. Yet, the sharp rebound in equities has been somewhat surprising as treasury yields have remained high and economic data has been mixed.

In recent commentary, the Fed chairman emphasized a relatively dovish stance pointing to the low level of inflation; the unemployment rate not adequately capturing the weakness in the labor market and that a 6.5% unemployment rate was a threshold and not a trigger. Our economists believe that while tapering is likely to start in September, this should not be taken as a signal that rates hikes will start sooner-than-expected. The market has also recalibrated its expectation of rate hikes with 2Y yields declining significantly even as the decline in 10Y yields have been more moderate (Figure 53).

*In our opinion, the underperformance of R2 high dividend payers presents an attractive opportunity.*

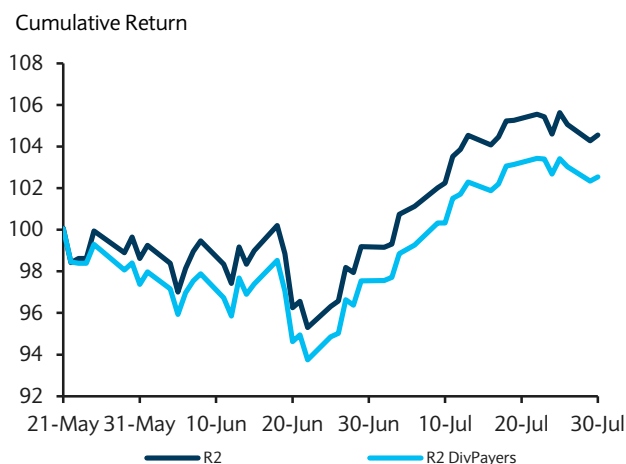
Thus, the low rate environment is likely to persist in the medium term. In our opinion, the underperformance of R2 high dividend payers presents an attractive opportunity (Figure 54). The longer-term outperformance of these stocks discussed in the previous section makes us incrementally more comfortable.

**FIGURE 53**  
**The 2Y Yield Decline Has Been Much Greater Than the 10Y Yield Decline**



Source: Bloomberg, Barclays Research  
Note: Data as of 07/30/2013

**FIGURE 54**  
**Small Cap, High Dividend Has Underperformed Since Taper Talks Began**



Source: Bloomberg, Barclays Research  
Note: Data as of 07/30/2013

## Identifying Sustainable Dividend Payers

The considerations of the previous two sections highlight that R2 dividend payers have outperformed their benchmarks in the long term and their recent underperformance offers an attractive entry point. In this section, we turn to constructing a practical way to implement this view. The simplest option would be to simply buy the dividend paying stocks in R2. However, this approach is not ideal since it ignores the fact that for the some of the stocks, the current level of dividends may not be sustainable. Indeed, there are several indices which apply a broad set of dividend sustainability metrics to select a more robust set of stocks. However, one drawback of these indices is that they apply the same set of criteria across the entire universe.

In this section, we draw upon the deep expertise within Barclays Equity Research to create a customized set of criteria for each sub-section within the SMid-Cap universe. From the small and mid cap stock universe covered at Barclays, we focused on the Financials and Utilities sectors which account for a high percentage of dividend payers. Recognizing that dividend sustainability metrics vary across sectors and within sub-sectors, we partnered with our equity analysts to identify relevant metrics for their coverage universe and chose names that met

their conviction threshold for dividend sustainability. In Figure 61 to Figure 66, we present 17 sustainable dividend payers across Small Cap Banks, REITs, Utilities, Business Development Companies (BDCs), and Mortgage REITs and 7 MLPs along with their relevant dividend sustainability metrics.

Finally, to obtain a broader representation, we also use a set of broad and robust criteria to identify stocks within R2 (ex-Financials and Utilities) with sustainable dividends. The criteria are summarized in Figure 55.

FIGURE 55

**Sustainable Dividend Criteria Used in Each Small and Mid Cap Sector**

Sector	Sustainable Dividend Payers	Criteria Used
Banks	BOH, CBSH, FMER, FNFG, WBS	1) Return on tangible common equity; 2) Projected dividend payout ratio; 3) Projected 5-yr EPS growth; 4) Tier 1 common ratio; 5) Commitment to dividends; 6) Dividend yield vs. group
REITs	HME, DFT, FUR, PPS	1) Current and projected dividend coverage; 2) Current and projected leverage; 3) Current and projected dividend growth; 4) Current and projected operating FFO growth
Utilities	EMA.CA, WR, PNM	1) Dividend growth; 2) Dividend yield vs. group; 3) EPS growth; 4) Relative P/E; 5) Percentage of business that is regulated
Mortgage REITs	CYS	1) Price to book; 2) Dividend yield vs. group; 3) Core return on equity; 4) Projected 3-yr core EPS growth; 5) Leverage
Business Development Companies	ARCC, PSEC, MCC	1) Leverage; 2) LTM and projected return on equity; 3) Dividend yield vs. group; 4) Price to book; 5) Dividend payout (cash and non-cash); 6) Availability of spillover income; 7) Projected net interest income growth
MLPs	SMLP, DPM, TRGP**, RRMS, TLLP, OILT, EQM, TEP	1) Dividend yield vs. group; 2) Projected 3-yr distribution growth; 3) Distribution per share; 4) Distribution coverage; 5) Projected EBITDA growth; 6) Projected leverage
R2 ex-Financials not covered by Barclays	See Figure 58	1) Dividend Cover 2) EBITDA growth 3) Dividend growth 4) Leverage 5) Dividend yield relative to R2 dividend yield

Source: Barclays Research.

Note\*\*: TRGP is a C-corp

- In addition to profitability and coverage metrics, our Banks analyst looked at Tier 1 common ratios as a measure of excess capital that could be used to support dividends and managements' stated commitments to dividends.
- Our REITs analysts focused on taking a comprehensive ranking approach across the metrics they established to make their selections.
- Our Utilities analyst kept an eye on total return potential while focusing on relative valuation, dividend and EPS growth, and the percentage of business that was regulated.
- Our MLP analysts also focused on total return potential in their traditional yield-oriented sector while relying on longer-term projections for distribution growth.
- In the case of BDCs, our analysts not only looked at the ability to pay long-term dividends (investment book and NI growth) but also for dividend sustainability by tracking historical dividend payouts on a reported and cash basis. Incrementally, they also believe that BDCs with access to significant undistributed income can serve as a cushion to support dividends through downturns.

- In the case of Mortgage REITs, our analysts evaluated the risk of book value erosion from rising rates and widening spreads (i.e., Libor OAS of their mortgage portfolios) and took the view that incremental risk on this front was limited compared to recent months, enabling mortgage REITs to focus on building dividends. However, they recognize that if interest rates continue to rise, attempts to preserve book values through additional hedging could reduce earnings potential and erode dividend paying ability. In addition, mortgage REITs may sell assets to maintain leverage, which will likely result in lower asset balances and earnings potential. At the same time, the recent widening of spreads was seen as a long-term positive allowing mortgage REITs to deploy capital at attractive yields and earn higher levered returns. Balancing these considerations, our analysts picked CYS as their only mortgage REIT selection. The company reduced its dividend to the run-rate on new invested capital while other REITs in the space have been lowering their dividends on a lagged basis. Wider spreads coupled with CYS' activity in the forward settling market should allow the company to maintain its dividend paying ability in the near term and possibly increase it over the longer term, despite recent large declines in book value.

We summarize the selections and a few key characteristics in Figure 55 and Figure 56. More detailed customized dividend sustainability metrics for each section are listed below.

FIGURE 56

**Sustainable Dividend Payers (ex-MLPs) from Barclays SMid-Cap Coverage: Total Return Potential**

Ticker	Company	Dividend Yield (%)	Current Price (\$)	Target Price (\$)	Total Return
ARCC	Ares Capital Corp.	8.636	\$17.63	\$17	5.06%
BOH	Bank of Hawaii Corp.	3.248	\$56.22	\$61	11.75%
CBSH	Commerce Bancshares Inc.	1.918	\$47.10	\$48	3.83%
CYS	CYS Investments Inc.	15.596	\$8.66	\$9	19.52%
DFT	Dupont Fabros Technology Inc.	4.083	\$24.45	\$27	14.51%
EMA-CA	Emera Inc. <sup>1</sup>	4.147	\$33.87	\$38	16.34%
FMER	FirstMerit Corp.	2.953	\$22.30	\$25	15.06%
FNFG	First Niagara Financial Group Inc.	3.010	\$10.71	\$12	15.06%
FUR	Winthrop Realty Trust	4.797	\$13.52	\$14	8.35%
HME	Home Properties Inc.	4.213	\$66.25	\$67	5.35%
MCC	Medley Capital Corp.	9.917	\$14.59	\$14	5.87%
PNM	PNM Resources Inc.	2.768	\$23.94	\$25	7.20%
PPS	Post Properties Inc.	2.654	\$49.49	\$50	3.68%
PSEC	Prospect Capital Corp.	11.971	\$11.10	\$12	20.08%
TRGP	Targa Resources Corp.	3.088	\$69.10	\$79	17.42%
WBS	Webster Financial Corp.	2.157	\$27.88	\$29	6.17%
WR	Westar Energy Inc.	4.034	\$33.81	\$37	13.47%

Source: FactSet, Barclays Research. Prices as of 07/30/2013. Note1: Currency for EMA-CA is CAD.

For full disclosures on each covered company, including details of our company-specific valuation methodology and risks, please refer to <http://publicresearch.barcap.com>

FIGURE 57

**Sustainable Dividend Payers (MLPs) from Barclays SMid-Cap Coverage: Total Return Potential**

Ticker	Company	Dividend Yield (%)	Current Price (\$)	Target Price (\$)	Total Return
DPM	DCP Midstream Partners L.P.	5.275	\$52.64	\$53	5.96%
EQM	EQT Midstream Partners LP	3.473	\$45.59	\$55	24.11%
OILT	Oiltanking Partners LP	3.534	\$47.84	\$53	14.32%
RRMS	Rose Rock Midstream L.P.	4.765	\$35.66	\$41	19.74%
SMLP	Summit Midstream Partners LP	4.967	\$33.84	\$39	20.22%
TEP	Tallgrass Energy Partners LP	2.537	\$22.49	\$27	22.59%
TLLP	Tesoro Logistics LP	3.791	\$53.47	\$68	30.97%

Source: FactSet, Barclays Research. Prices as of 07/30/2013.

For full disclosures on each covered company, including details of our company-specific valuation methodology and risks, please refer to <http://publicresearch.barcap.com>

*Sustainable Dividend Payers: Outside Barclays Coverage Universe*

While the previous section focused on Financial and Utility stocks using industry-specific criteria, in this section we screen for stocks in the broader R2 universe (ex-Financials and Utilities) using a wider set of criteria to establish a measure of dividend sustainability:

- **Dividend cover:** While the conventional metric is to look at dividend coverage in terms of net income, we look at dividend as a percent of free cash flows. In our opinion, this provides a better metric to gauge the ability of a company to continue dividend payments in the context of operating cash flows and other cash needs.
- **EBITDA growth:** This is an important criterion to consider as dividend coverage could fall in the future in case of a decline in earnings, which could make the sustainability of dividends questionable.



- **Dividend growth:** We use positive dividend growth rate as another indicator of the sustainability of dividends. Given that dividends are longer term in nature than other modes of returning cash to shareholders such as buybacks, we expect a positive dividend growth rate to be reflective of management's confidence in the underlying cash generation capacity of the business.
- **Leverage:** The low rate environment of the past few years has provided an incentive for companies to raise debt, at times to follow a levered buyback strategy. Given a potential end to the low rate environment, we seek to avoid names which have high leverage.
- **Dividend yield relative to benchmarks:** We look at the ratio of the dividend yield relative to the RTY dividend yield to enhance yield characteristics of our sustainable dividend yield payers.

We applied the above criteria to the R2 universe (ex-Financials and Utilities) that is currently not covered at Barclays to identify sustainable dividend payers in the small-cap space. Based on these criteria, we highlight 22 stocks that fit our sustainable dividend payer metrics in Figure 58.

FIGURE 58  
Sustainable Dividend Payers: Outside of Barclays Equity Coverage Universe

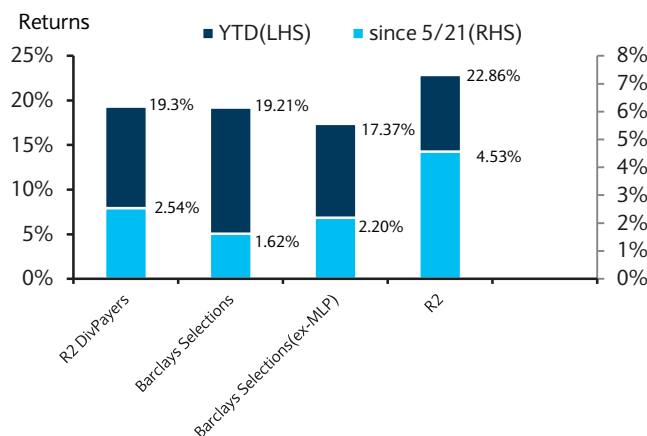
TICKER	Name	Market Cap (\$Mil)	Dividend Cover	LTM EBITDA Growth	LTM Dividend Growth	Debt/LTM EBITDA	Dividend Yield (%)
BLC	Belo Corp. Series A	1476	1.827	12%	39%	2.78	2.24
CBRL	Cracker Barrel Old Country Store Inc.	2308	1.659	18%	96%	1.47	3.06
DLX	Deluxe Corp.	2064	3.091	2%	0%	1.73	2.44
HI	Hillenbrand Inc.	1558	0.526	6%	1%	3.53	3.15
HNI	HNI Corp.	1740	1.265	1%	3%	1.49	2.52
IILG	Interval Leisure Group Inc.	1237	2.041	5%	300%	1.60	2.05
JCOM	j2 Global Inc.	2083	3.047	8%	45%	1.39	2.10
KNL	Knoll Inc.	795	1.618	6%	15%	1.81	2.91
KOP	Koppers Holdings Inc.	797	2.335	13%	8%	1.92	2.59
MDP	Meredith Corp.	2110	1.375	3%	22%	1.32	3.43
MYE	Myers Industries Inc.	660	1.878	10%	10%	1.21	1.85
NHC	National Healthcare Corp.	698	0.692	1%	83%	0.10	2.67
NP	Neenah Paper Inc.	631	2.594	17%	13%	1.71	2.02
NSP	Inspire Inc.	850	0.873	11%	13%	0.00	2.06
PDLI	PDL BioPharma Inc.	1140	1.814	6%	0%	0.86	7.39
RCII	Rent-A-Center Inc.	2093	1.250	2%	16%	0.63	2.10
SBCI	Sinclair Broadcast Group Inc. Cl A	2335	1.293	49%	19%	4.41	2.13
SCS	Steelcase Inc.	1880	1.197	17%	37%	1.35	2.62
SIX	Six Flags Entertainment Corp.	3529	0.692	7%	127%	3.77	4.89
SWM	Schweitzer-Mauduit	1711	4.977	8%	125%	0.81	2.22
UVV	Universal Corp.	1429	2.543	45%	2%	1.75	3.26
WDFC	WD-40 Co.	893	1.202	10%	7%	0.99	2.16
Mean		1546	1.808	12%	45%	1.67	2.81
Median		1517	1.638	8%	15%	1.48	2.48

Source: Factset, Barclays Research. Prices as of 07/30/2013.

Finally as shown in Figure 59 and Figure 60, the sustainable dividend payers we identified have not only lagged R2 but have also lagged the dividend payers within R2, providing investors a good entry point, in our view.

FIGURE 59

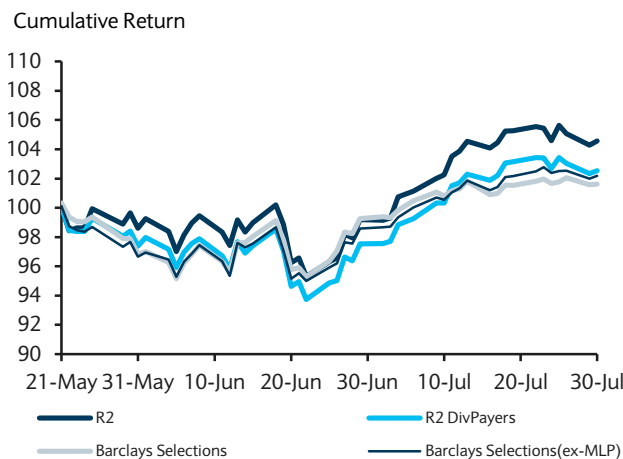
Small Cap Dividend Payers Haven't Performed Well YTD ...



Source: FactSet, Barclays Research. Prices as of 07/30/2013

FIGURE 60

... And Have Lagged Even More Since Taper Talks Began



Source: FactSet, Barclays Research Prices as of 07/30/2013

## Customized Dividend Metrics for Barclays Sustainable Dividend Payers

FIGURE 61

Sustainable Dividend Payers: Small Cap Banks

Ticker	Company	1Q13 ROTCE	2013E Dividend payout ratio (%)	Projected EPS growth	1Q13A Tier 1 common ratio (%)	Current Commit to dividends?	Current Dividend yield (%)
BOH	Bank of Hawaii Corp.	14.3%	54%	8%	16.1%	High	3.3%
CBSH	Commerce Bancshares Inc.	11.9%	32%	9%	13.6%	High	2.0%
FMER	FirstMerit Corp.	12.2%	49%	12%	12.4%	High	2.9%
FNFG	First Niagara Financial Group Inc.	13.6%	43%	11%	7.6%	Medium	3.0%
WBS	Webster Financial Corp.	11.2%	28%	9%	11.0%	Medium	2.2%
Coverage							
Mean		11.2%	40%	10%	12.4%		2.7%
Selection							
Mean		11.7%	53%	10%	12.4%		2.9%
Selection							
Median		12.1%	47.6%	9.2%	12.6%		2.9%

Source: Barclays Research. Prices as of 07/30/2013.

FIGURE 62

## Sustainable Dividend Payers: Small Cap REITs

Ticker	Company	Div Yield	2013 CAD/ Div	2014 CAD/ Div	2013 Net Debt/ EBITDA	2014 Net Debt/ EBITDA	2013 YoY Div Growth	2014 YoY Div Growth	2013 YOY Op. FFO Growth	2014 YOY Op. FFO Growth
FUR	Winthrop Realty Trust	5.0%	1.9x	1.8x	7.2x	6.4x	0.0%	7.5%	84.0%	3.6%
HME	Home Properties Inc.	4.3%	1.4x	1.4x	6.8x	6.5x	6.1%	5.0%	6.8%	5.6%
DFT	Dupont Fabros Technology Inc.	4.3%	1.5x	1.5x	3.0x	2.8x	56.5%	13.6%	28.4%	13.0%
PPS	Post Properties Inc.	2.8%	1.8x	2.1x	5.4x	5.3x	7.0%	5.0%	12.4%	9.4%
Coverage Mean		4.8%	0.9x	1.4x	6.6x	6.4x	8%	3%	9%	6%
Selection Mean		4.1%	1.6x	1.7x	5.6x	5.2x	17.4%	7.8%	32.9%	7.9%
Selection Median		4.3%	1.6x	1.7x	6.1x	5.8x	6.5%	6.3%	20.4%	7.5%

Source: Barclays Research. Prices as of 07/30/2013.

FIGURE 63

## Sustainable Dividend Payers: Small Cap Mortgage REITs

Ticker	Company	Price to Book			Core ROE		3Y Est Growth	Debt/ Equity
		03/31/2013	7/8/2013E	Div Yield	2012	2013E	Core EPS	
CYS	CYS Investments Inc	0.68x	0.78x	16.1%	11%	12%	4%	5.9x
Coverage Mean		0.77x	0.88x	15.0%	12%	13%	-1%	6.1x

Source: Barclays Research. Prices as of 07/30/2013

FIGURE 64

## Sustainable Dividend Payers: Small Cap Utilities

Criteria for Inclusion							
		Dividend	P/E	P/E	5yr	5yr	Mix
Ticker		Yield	Premium / Discount	2015	Dividend Growth	EPS Growth	% Regulated
EMA.CA	Emera Inc.	4.21%	1.8%	16.02	5.8%	5.6%	84.0%
PNM	PNM Resources Inc.	2.78%	-3.2%	14.49	12.0%	6.2%	100.0%
WR	Westar Energy Inc.	4.02%	-3.5%	14.54	3.1%	6.3%	100.0%
Coverage Mean		3.50%	0.14%	14.84	8.42%	5.22%	77.00%
Selection Mean		3.67%	-1.62%	15.02	6.97%	6.04%	94.67%
Selection Median		4.02%	-3.20%	14.54	5.80%	6.19%	100.00%

Source: Barclays Research. Prices as of 07/30/2013.

FIGURE 65

## Sustainable Dividend Payers: Small Cap BDCs

		Return on Equity			Valuation		Dividend Payout		Non Cash	Cash	Spillover Income		NII Growth
Ticker	Company	D/E	LTM	2013E	Dividend Yield	P/B	LTM	2013E	Income as % of NII	Dividend Payout	Available	% of 2013 NII	3 Year CAGR
ARCC	Ares Capital Corp.	0.51x	10.1%	10.0%	8.6%	1.11x	95%	95%	9.5%	97%	Yes	61%	3.5%
PSEC	Prospect Capital Corp.	0.55x	15.3%	11.9%	12.1%	1.02x	81%	108%	23.0%	101%	Yes	23%	5.3%
MCC	Medley Capital Corp.	0.57x	10.0%	10.2%	9.8%	0.98x	96%	98%	26.0%	121%	No	-	-6.4%
Coverage Mean		0.55x	9.7%		9.5%	1.10x				~112%			
Selection Mean		0.54x	11.8%	10.7%	10.2%	1.04x	91%	100%	19.5%	106%	-	-	0.8%
Selection Median		0.55x	10.1%	10.2%	9.8%	1.02x	95%	98%	23.0%	101%	-	-	3.5%

Source: Barclays Research. Prices as of 07/30/2013.

FIGURE 66

## Sustainable Dividend Payers: Small Cap MLPs

Company		Dividend Information		Distr. Growth		DCF per Unit		Distribution Coverage		EBITDA Growth YoY %		Debt / EBITDA	
Ticker	Company	Yield	Distrib.	3yr CAGR (2012-2015)	Total Return	2013e	2014e	2013e	2014e	2013e	2014e	2013e	2014e
SMLP	Summit Midstream Partners L.P.	4.94%	\$ 1.68	10.0%	15.0%	\$ 2.04	\$ 2.22	113%	114%	38%	34%	3.9x	3.8x
DPM	DCP Midstream Partners L.P.	5.41%	\$ 2.80	6.3%	11.7%	\$ 2.54	\$ 3.28	89%	107%	46%	49%	4.3x	3.9x
TRGP*	Targa Resources Corp	2.90%	\$ 1.98	27.9%	30.8%	\$ 2.44	\$ 2.94	110%	103%	28%	24%	4.0x	4.0x
RRMS	Rose Rock Midstream LP	4.67%	\$ 1.72	13.9%	18.6%	\$ 2.12	\$ 2.77	121%	136%	54%	72%	3.3x	4.1x
TLLP	Tesoro Logistics LP	3.64%	\$ 1.96	21.6%	25.3%	\$ 2.56	\$ 3.04	120%	116%	125%	54%	5.0x	4.2x
OILT	Oiltanking Partners L.P.	3.33%	\$ 1.62	12.9%	16.2%	\$ 1.99	\$ 2.23	118%	118%	32%	16%	2.7x	2.9x
EQM	EQT Midstream Partners, L.P.	3.09%	\$ 1.48	22.4%	25.5%	\$ 2.38	\$ 3.28	143%	154%	35%	52%	2.0x	2.6x
TEP	Tallgrass Energy Partners, L.P.	5.00%	\$ 1.15	9.1%	14.1%	\$ 1.34	\$ 1.71	125%	131%	-3%	28%	2.2x	3.3x
Coverage Mean		5.83%	n/a	6.9%	12.8%	n/a	n/a	109%	113%	n/a	n/a	3.9x	3.7x
Selection Mean		4.12%	n/a	15.5%	19.6%	n/a	n/a	117%	122%	44%	41%	3.4x	3.6x

Source: Barclays Research. Prices as of 07/30/2013.

\*TRGP is a C-corp

## APPENDIX

## Data Methodology and Assumptions

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### *Performance*

- All index/sector/market cap (MCAP) performance is calculated bottom up from individual security weights (source: Reuters) and 1-month forward returns (source: FactSet). Portfolios are constructed at month-end and then next month performance is calculated. If the weights of the securities do not sum to 100%, then the returns are scaled so the weights sum to 100%. Returns assume collection of dividends with no reinvestment.
- Exclusions: Since monthly returns are used, there is no accounting for intra-month exclusion or inclusions from an index (due to acquisition or bankruptcy). This causes a systematic overestimation of returns in most indexes. To resolve this issue, securities that do not appear in an index the following month will be excluded from return calculations. This adjustment is not done in June due to the annual Russell rebalance.
- Sector designations are not time dependent. The most recent sector designation for a security is used for the entirety of that security's history.
- MCAP baskets (separating the R3000 into 6 baskets of equal security count based on R3 weight) are rebalanced monthly. If a security is not in the R3000 on that month, it will not be placed into a basket. The R3 weight is based on a Russell-Float Adjusted MCAP, which may differ from MCAP-based on shares outstanding or other float calculations.

### *Rate Cycle and QE Assumptions*

- Rate cycle increase and QE announcement analysis uses the price change of an index as opposed to the total return of the index.
- QE cycles are determined by the announcement dates for QE, not the implementation dates.

### *Fundamental Items*

- All fundamental items are ex-Financials and GE.
- Fundamental data items are sourced from FactSet Fundamentals using non-restated items from December 31, 2003 to present. Prior to this time, the data from non-restated items becomes sparse (coverage varies by data item) so the data source is changed to Compustat Fundamentals for which LTM and quarterly items are restated, but have better coverage.
- Fundamental items are calculated using LTM data when available, otherwise with quarterly data. Enterprise Value information is calculated using annual data and most recent MCAP to have consistency with the FactSet Market Aggregate calculation.
- Index level summations use fundamental items that are adjusted by a ratio of the number of shares in the Index to the number of shares outstanding.
- Index level ratios (e.g., EBITDA margin or debt/assets) are calculated by taking the sum of the numerator and denominator across all index constituents. Only securities with both the numerator and denominator are included in the calculation. For example, when EBITDA margin is calculated only securities that have both an EBITDA and total sales values will be included in the summations.
- FactSet Fundamental data reports new data as of fiscal year end, not company report date. To prevent look ahead bias, all fundamental data is lagged by 45 days upon

extraction (since everything is on a monthly basis this effectively creates a 2-month lag). As an example, if IBM has a fiscal year end on December 31, 2012 then FactSet will show this data as being available on the same day (even if IBM reports at a later date). By applying a lag, the data will show as not being available until February 28, 2013.

- Any item that is pulled directly from FactSet (see below list) and returns a missing value will be assumed to be not reported. Any item that is used to compute other items (interest paid, tax paid, short term debt) will have missing values replaced with zero.
- List of items pulled directly from FactSet: net income, net income before unusual items, EBITDA (LTM), total assets (quarterly), total equity (quarterly), total cash (quarterly), total debt (quarterly), capex (LTM), total sales (LTM), BPS (quarterly), total dividends (LTM), gross income (LTM), EBIT (LTM), pretax income (LTM).
- List of items with replaced missing values: long-term debt (annual), short-term debt (annual), preferred stock (annual), minority interest (annual), total cash (annual), total stock purchased (LTM), dividends paid (LTM), tax paid (LTM), interest paid (LTM), non-operating income (LTM), and unusual expense (LTM).

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### Primary Stocks (Ticker, Date, Price)

Ares Capital Corp. (ARCC, 05-Aug-2013, USD 17.98), Equal Weight/Positive, C/J/K/M  
 Bank of Hawaii Corp. (BOH, 05-Aug-2013, USD 56.25), Equal Weight/Neutral, C/J/K/M/N  
 Commerce Bancshares, Inc. (CBSH, 05-Aug-2013, USD 46.46), Overweight/Neutral, C/J/K/M  
 CYS Investments Inc. (CYS, 05-Aug-2013, USD 7.82), Equal Weight/Positive, A/C/D/J/K/L/M  
 DCP Midstream Partners LP (DPM, 05-Aug-2013, USD 51.99), Overweight/Neutral, A/C/D/E/J/K/L/M/O  
 DuPont Fabros Technology, Inc. (DFT, 05-Aug-2013, USD 23.18), Overweight/Neutral, C/J/K/M/O  
 Emera Inc. (EMA.TO, 02-Aug-2013, CAD 32.44), Overweight/Positive, J  
 EQT Midstream Partners LP (EQM, 05-Aug-2013, USD 46.99), Overweight/Neutral, C/D/J/K/L/M/O  
 First Niagara Financial Group Inc. (FNFG, 05-Aug-2013, USD 10.98), Overweight/Neutral, C/J/K/M  
 FirstMerit Corporation (FMER, 05-Aug-2013, USD 22.93), Overweight/Neutral, A/C/D/J/K/L/M/N  
 Home Properties Inc. (HME, 05-Aug-2013, USD 61.93), Equal Weight/Neutral, J  
 Medley Capital Corp. (MCC, 05-Aug-2013, USD 14.45), Equal Weight/Positive, A/C/D/J/K/L/M  
 Oiltanking Partners LP (OILT, 05-Aug-2013, USD 48.76), Overweight/Neutral, C/D/J/L/N  
 PNM Resources (PNM, 05-Aug-2013, USD 24.04), Equal Weight/Positive, C/F/J  
 Post Properties Inc. (PPS, 05-Aug-2013, USD 46.82), Equal Weight/Neutral, C/J/O  
 Prospect Capital Corp. (PSEC, 05-Aug-2013, USD 10.93), Overweight/Positive, A/C/D/J/K/L/M  
 Rose Rock Midstream, L.P. (RRMS, 05-Aug-2013, USD 35.35), Overweight/Neutral, E/J/K/L/M/N  
 Summit Midstream Partners LP (SMLP, 05-Aug-2013, USD 34.05), Overweight/Neutral, A/C/D/J/K/L/M  
 Tallgrass Energy Partners, LP (TEP, 05-Aug-2013, USD 22.98), Overweight/Neutral, A/D/J/K/L/M  
 Targa Resources Corp. (TRGP, 05-Aug-2013, USD 68.20), Overweight/Neutral, A/C/D/F/J/K/L/M  
 Tesoro Logistics LP (TLLP, 05-Aug-2013, USD 52.86), Overweight/Neutral, A/C/D/J/K/L/M  
 Webster Financial (WBS, 05-Aug-2013, USD 27.79), Overweight/Neutral, A/C/D/J/K/L/M/O  
 Westar Energy (WR, 05-Aug-2013, USD 33.88), Overweight/Positive, A/C/D/J/K/L/M/O  
 Winthrop Realty Trust (FUR, 05-Aug-2013, USD 12.60), Equal Weight/Neutral, A/C/D/E/J/L/O  
**Non-covered Mentioned Stocks (Ticker, Date, Price)**  
 Belo Corp (BLC, 05-Aug-2013, USD 14.21) F/J  
 Cracker Barrel (CBRL, 05-Aug-2013, USD 101.39) C/J  
 Deluxe Corp (DLX, 05-Aug-2013, USD 42.09) C/J/O  
 Hillenbrand (HI, 05-Aug-2013, USD 24.60) C/J  
 HNI Corp (HNI, 05-Aug-2013, USD 38.85) C/J/O



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Interval Leisure (IILG, 05-Aug-2013, USD 21.85) C/D/J/K/L/M  
 J2 Global (JCOM, 05-Aug-2013, USD 47.68) C/J  
 Knoll Inc (KNL, 05-Aug-2013, USD 16.89) C/J  
 Koppers Holdings (KOP, 05-Aug-2013, USD 39.23) C/J/K/M/O  
 Meredith Corp (MDP, 05-Aug-2013, USD 48.62) J  
 Myers Industries (MYE, 05-Aug-2013, USD 19.51) C/F/J  
 National Healthcare Corp (NHC, 05-Aug-2013, USD 48.45) J  
 Neenah Paper (NP, 05-Aug-2013, USD 39.35) C/J  
 Insperity Inc (NSP, 05-Aug-2013, USD 33.41) C/J  
 PDL BioPharma Inc (PDLI, 05-Aug-2013, USD 8.23) C/J  
 Rent-A-Center Inc (RCII, 05-Aug-2013, USD 39.94) C/J  
 Sinclair Broadcast Group (SBGI, 05-Aug-2013, USD 28.16) A/C/D/J/K/L/M  
 Steelcase Inc (SCS, 05-Aug-2013, USD 15.35) C/J/N  
 Six Flags Entertainment (SIX, 05-Aug-2013, USD 37.46) A/C/D/F/J/K/L/M/O  
 Schweitzer-Mauduit (SWM, 05-Aug-2013, USD 57.65) C/J/O  
 Universal Corp (UVV, 05-Aug-2013, USD 63.36) C/J  
 WD-40 (WDFC, 05-Aug-2013, USD 58.72) C/J/K/M/N

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**Stock Rating**

**Overweight** - The stock is expected to outperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

**Equal Weight** - The stock is expected to perform in line with the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

**Underweight** - The stock is expected to underperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

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**Positive** - industry coverage universe fundamentals/valuations are improving.

**Neutral** - industry coverage universe fundamentals/valuations are steady, neither improving nor deteriorating.

**Negative** - industry coverage universe fundamentals/valuations are deteriorating.

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**North America Utilities**

Alliant Energy (LNT)	Ameren Corp. (AEE)	American Electric Power (AEP)
American Water Works (AWK)	Aqua America (WTR)	Canadian Utilities Ltd. (CU.TO)
CenterPoint Energy Inc. (CNP)	CMS Energy (CMS)	Consolidated Edison (ED)
Dominion Resources (D)	DTE Energy (DTE)	Duke Energy (DUK)
Edison International (EIX)	Emera Inc. (EMA.TO)	Fortis Inc. (FTS.TO)
Great Plains Energy Inc. (GXP)	Hawaiian Electric Inds (HE)	ITC Holdings (ITC)
National Grid Plc (NGG)	NiSource, Inc. (NI)	Northeast Utilities (NU)
NV Energy, Inc. (NVE)	OGE Energy Corp. (OGE)	Pepco Holdings (POM)
PG&E Corp. (PCG)	Pinnacle West Capital (PNW)	PNM Resources (PNM)
Portland General Electric Co. (POR)	SCANA Corp. (SCG)	Sempra Energy (SRE)
Southern Co. (SO)	TECO Energy (TE)	Westar Energy (WR)
Wisconsin Energy (WEC)	Xcel Energy (XEL)	

**U.S. Consumer Finance**

American Capital Agency (AGNC)	American Express (AXP)	Annaly Capital Management Inc. (NLY)
Apollo Investment Corp. (AINV)	Ares Capital Corp. (ARCC)	ARMOUR Residential REIT Inc. (ARR)
Astoria Financial (AF)	CapitalSource Inc. (CSE)	Chimera Investment Corp. (CIM)
CIT Group, Inc. (CIT)	CYS Investments Inc. (CYS)	Dime Community Bancshares (DCOM)
Discover Financial Services (DFS)	Fidelity National Financial (FNF)	Fifth Street Finance Corp. (FSC)
Fifth Street Senior Floating Rate Corp. (FSFR)	First American Financial (FAF)	Five Oaks Investment Corporation (OAKS)
Home Loan Servicing Solutions Ltd. (HLSS)	Hudson City Bancorp (HCBK)	Invesco Mortgage Capital Inc. (IVR)
Investors Bancorp Inc. (ISBC)	JAVELIN Mortgage Investment (JMI)	Medley Capital Corp. (MCC)
MGIC Investment (MTG)	New York Community Bancorp (NYCB)	Ocwen Financial Corp. (OCN)
OFS Capital Corp. (OFS)	Prospect Capital Corp. (PSEC)	Radian Group (RDN)
SLM Corp. (SLM)	TICC Capital Corp. (TICC)	Two Harbors Investment Corp. (TWO)
Whitehorse Finance Inc. (WHF)	ZAIS Financial Corp. (ZFC)	

**U.S. Diversified Natural Gas**

AGL Resources Inc. (GAS)	Atmos Energy (ATO)	Cheniere Energy (LNG)
Enbridge Inc. (ENB.TO)	Energen Corp. (EGN)	EQT Corporation (EQT)
Kinder Morgan Inc. (KMI)	Macquarie Infrastructure Co., LLC. (MIC)	MDU Resources Group (MDU)
National Fuel Gas (NFG)	New Jersey Resources (NJR)	ONEOK Inc. (OKE)
Piedmont Natural Gas Co. (PNY)	Questar Corp. (STR)	Southwest Gas Corp. (SWX)

**IMPORTANT DISCLOSURES CONTINUED**

Spectra Energy Corp. (SE)  
Williams Cos. (WMB)

Targa Resources Corp. (TRGP)

WGL Holdings (WGL)

**U.S. MLPs**

Access Midstream Partners LP (ACMP)  
Blueknight Energy Partners, L.P. (BKEP)  
Buckeye Partners, L.P. (BPL)  
Constellation Energy Partners LLC (CEP)  
CVR Refining LP (CVRR)  
Eagle Rock Energy Partners LP (EROC)  
Enduro Royalty Trust (NDRO)  
Enterprise Products Prtns LP (EPD)  
Ferrellgas Partners (FGP)  
Hi-Crush Partners LP (HCLP)  
Inergy Midstream, L.P. (NRGM)  
Legacy Reserves LP (LGCY)  
Markwest Energy Partners, LP (MWE)  
Niska Gas Storage Partners LLC (NKA)  
Oiltanking Partners LP (OILT)  
Pacific Coast Oil Trust (ROYT)  
QR Energy LP (QRE)  
Southcross Energy Partners LP (SXE)  
Summit Midstream Partners LP (SMLP)  
Susser Petroleum Partners LP (SUSP)  
TC Pipelines, LP (TCP)  
USA Compression Partners LP (USAC)  
Western Gas Partners LP (WES)

AmeriGas Partners, L.P. (APU)  
Boardwalk Pipeline Partners LP (BWP)  
Calumet Specialty Products Partners, L.P. (CLMT)  
Crestwood Midstream Partners LP (CMLP)  
DCP Midstream Partners LP (DPM)  
El Paso Pipeline Partners, L.P. (EPB)  
Energy Transfer Equity LP (ETE)  
EQT Midstream Partners LP (EQM)  
Genesis Energy, L.P. (GEL)  
Holly Energy Partners LP (HEP)  
Kinder Morgan Energy Prtnrs LP (KMP)  
Linn Energy LLC (LINE)  
Memorial Production Partners (MEMP)  
Northern Tier Energy LP (NTI)  
ONEOK Partners LP (OKS)  
Plains All American Pipeline (PAA)  
Regency Energy Partners LP (RGP)  
Spectra Energy Partners, LP (SEP)  
SunCoke Energy Partners, LP (SXCP)  
Tallgrass Energy Partners, LP (TEP)  
Teekay Offshore Partners LP (TOO)  
Vanguard Natural Resources (VNR)  
Williams Partners LP (WPZ)

Atlas Pipeline Partners LP (APL)  
Breitburn Energy Partners L.P. (BBEP)  
Cheniere Energy Partners LP (CQP)  
Crosstex Energy LP (XTEX)  
Delek Logistics Partners LP (DKL)  
Enbridge Energy Partners (EEP)  
Energy Transfer Partners LP (ETP)  
Exterran Partners LP (EXLP)  
Global Partners LP (GLP)  
Inergy L.P. (NRGY)  
KNOT Offshore Partners, LP. (KNOP)  
Magellan Midstream Partners, LP (MMP)  
MPLX LP (MPLX)  
NuStar Energy LP (NS)  
PAA Natural Gas Storage LP (PNG)  
PVR Partners (PVR)  
Rose Rock Midstream, L.P. (RRMS)  
Suburban Propane Partners (SPH)  
Sunoco Logistics Partners L.P. (SXL)  
Targa Resources Partners LP (NGLS)  
Tesoro Logistics LP (TLLP)  
Western Gas Equity Partners LP (WGP)

**U.S. REITs**

Alexandria Real Estate Equities Inc. (ARE)  
Avalonbay Communities Inc. (AVB)  
Brookfield Office Properties (BPO)  
CBL & Associates Properties Inc. (CBL)  
Digital Realty Trust Inc. (DLR)  
DuPont Fabros Technology, Inc. (DFT)  
Essex Property Trust Inc. (ESS)  
Home Properties Inc. (HME)  
Kimco Realty Corp. (KIM)  
Mack-Cali Realty Corp. (CLI)  
Post Properties Inc. (PPS)  
Regency Centers Corp. (REG)  
UDR, Inc. (UDR)

Apartment Investment & Management Co. (AIV)  
Boston Properties Inc. (BXP)  
Camden Property Trust (CPT)  
CBRE Group, Inc. (CBG)  
Douglas Emmett Inc. (DEI)  
Equity One Inc. (EQY)  
Excel Trust Inc. (EXL)  
Hudson Pacific Properties (HPP)  
Lexington Realty Trust (LXP)  
Newcastle Investment Corp. (NCT)  
Prologis (PLD)  
Simon Property Group Inc. (SPG)  
Vornado Realty Trust (VNO)

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Colonial Properties Trust (CLP)  
Duke Realty Corp. (DRE)  
Equity Residential (EQR)  
General Growth Properties Inc. (GGP)  
Jones Lang LaSalle Inc. (JLL)  
Macerich Company (MAC)  
Pennsylvania Real Estate Investment Trust (PEI)  
Public Storage Inc. (PSA)  
SL Green Realty Corp. (SLG)  
Winthrop Realty Trust (FUR)

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Commerce Bancshares, Inc. (CBSH)  
First Interstate BancSystem Inc. (FIBK)  
FirstMerit Corporation (FMER)  
Sterling Financial Corp. (STSA)  
Umpqua Holdings Corp. (UMPQ)

Bank of Hawaii Corp. (BOH)  
Cullen/Frost Bankers, Inc. (CFR)  
First Niagara Financial Group Inc. (FNFG)  
Fulton Financial Corp. (FULT)  
SVB Financial Group (SIVB)  
Webster Financial (WBS)

Capital Bank Financial Corp. (CBF)  
First Financial Bancorp (FFBC)  
First Republic Bank (FRC)  
People's United Financial (PBCT)  
Texas Capital Bancshares (TCBI)

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