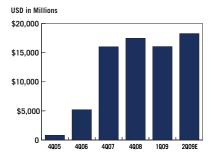
# rafi fundamentals



Robert D. Arnott

# RAFI® Managed Assets\*



\*Includes RAFI assets managed or sub-advised by Research Affiliates® or RAFI licensees.



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# TOO FAR, TOO FAST?

The tremendous comeback in financial assets that began in March and extended through the second quarter of 2009 has proved a welcome relief to investors of all types, a blessed batch of showers for our drought-ridden portfolios. The classic 60/40 stock (S&P 500 Index) and bond (BarCap Aggregate) mix advanced 10.2%, experiencing its third best quarter since 1988. As we predicted coming into 2009, in a broadly diversified GTAA context, some of the most dislocated credit categories from last fall-high-yield, emerging market bonds, convertibles, and bank loans- were some of the biggest winners in the first six months of 2009 as all four dramatically outperformed mainstream stocks and bonds.

Undoubtedly, most portfolios are still well underwater (60/40 is still down 21% from its October 2007 high) and likely have many years of catch up. But the respite has allowed investors to assess their portfolios and begin to make asset allocation decisions with an eye toward the future. A thorough exercise of asset class valuations reveals that many once beleaguered asset classes may have come too far, too fast in this recent rally. Accordingly, now is likely a time to take profits and to resume our cautious vigilance of 2008.

## Stage 5 of Recent Markets—The "ABT" Comeback

In one of our favorite graphics, Figure 1 illustrates the benefits and

opportunities of a widely diversified GTAA program. Last year saw three distinct asset allocation stages: (1) the traditional equity bear market [Jan through August], (2) the takeno-prisoners free fall [September and October], and (3) sorting through the carnage [November and December]. The first and last periods witnessed opportunities to add value through active asset allocation as roughly half the asset classes were positive despite moderate losses in the equity market. There was no such luxury in September and October - every asset class was down!

The first two months of 2009 bore an eerily similar pattern to the second stage of 2008: straight down. With nowhere to hide, the equally weighted portfolio fell 8.3%. Only three asset classes were in the black. The last four months, however, have been a welcome—and polar—opposite with 15 of 16 asset classes posting gains. Only long Treasuries lagged in the market rebound, confirming our call in *Barron's* in late December that 2009 was likely to be an ABT ("Anything But Treasuries") market.<sup>1</sup>

The figure illustrates an important point about the relative performance of the more diversified 16 asset class portfolio compared to the normal 60/40 mix. The equally weighted 16 asset class portfolio outperforms in *four of the five stages*, trailing only in the September/ October panic. We've seen this

Stage 1: Jan thru Aug Stage 2: Sep thru Oct Stage 3: Nov thru Dec Stage 4: Jan thru Feb Stage 5: Mar thru Jun 25.0% 19.0% 20.0% 16.6% 15.0% 10.0% 5.0% 1.5% 0.0% -0.9% -2.2% -5.0% -6.1% -10.0% -8.3% -11.6% -15.0% -16.3% -20.0% -20.2% -25.0% 7 of 16 Asset Classes 0 of 16 Asset Classes 8 of 16 Asset Classes 3 of 16 Asset Classes 15 of 16 Asset Classes Positive Positive Positive **Positive** Positive S&P 500 = -11.39% S&P 500 = -24.21% S&P 500 = -6.19% S&P 500 = -18.18% S&P 500 = +26.8% Leaders: TIPS, Emerging Markets 13 of the 16 asset classes lost Leaders: Long Treasury, Long Leaders: Bank Loans, High-Yield Leaders: Equities, High-Yield **Local Currency** more than 10%, half lost more Credit, and EM Bonds than 20%! ■ Equal Weight 16 Asset Classes ■ 60% S&P 500 / 40% BarCap Aggregate Bond

Figure 1. Stocks vs. Corporate Bonds: Then (September 1929–June 1932) and Now (November 2007–March 2009)

Notes: The Equally —weighted portfolio is comprised of the following indexes, rebalanced monthly: ML US Corporate & Government 1-3 Year; BarCap US Aggregate Bond TR; BarCap US Treasury Long TR; BarCap US Corporate High Yield TR; Credit Suisse Leveraged Loan; JPM EMBI + Composite TR; JPM ELMI + Composite; ML Convertible Bonds All Qualities; BarCap Global Inflation Linked US TIPS TR; FTSE NAREIT All REITS TR; DJ AIG Commodity TR; S&P 500 TR; MSCI Emerging Markets TR; MSCI EAFE TR; Russell 2000 TR.

Source: Research Affiliates, based on data from Bloomberg.

before: diversification will occasionally disappoint in crisis episodes as investors tend to flee niche markets—TIPS, emerging market bonds, convertibles, etc.—en masse, swapping these for more liquid "safe havens." But, did diversification "fail" in this take-no-prisoners market crash? Or did diversification help us with a lag?

As we noted in January, whenever diversification "failed" to deliver in the past, it more than made up for the underperformance in the subsequent recovery. This trend appears to be holding once again, with the equally weighted 16 asset portfolio delivering 240 bps over the 60/40 mix in the rebound of the last four months, and by a whopping 800+bps since diversification "failed" last September and October. Since the financial crisis started in July 2007, diversification as measured by the 16 asset class mix has delivered measurably better results than traditionally structured portfolios with a cumulative loss of –10.7% versus –18.4% for 60/40, a premium of almost 800 bps.

This impressive advantage could have been widened further by tactically managing the asset mix to move into dislocated markets presenting the greatest opportunities. In the fall, equities experienced a "four-sigma event," but many assets, especially high-quality alternative bond categories, experienced "eight-sigma" sell-offs. Emerging market bonds, convertible bonds, high-yield, and TIPS all reached yield levels indicative of a Great Depression, while equity prices only reflected a recession (albeit a nasty one). This appeared a relatively easy "heads you win and tails you don't lose" decision. If a Great Depression did occur, bonds would hold up

while stocks would sell off. If we averted a depression but found a severe and lasting recession, bonds would rally but stocks, already priced on such a scenario, would remain roughly flat. As 2009 has brought more "r" word references than "d" word references, these higher quality alternative bonds have far outpaced stocks as shown in **Table 1**. Though, to look at the economic data, we marvel at the "d" word vanishing from the scene, when the "green shoots" repeatedly appear to be weeds.

#### Careful What You Wish For

This lock-step rebound across asset classes has been wonderful. A 16–19% bounce from market lows in late February/early March is an ample reward for those disciplined enough to rebalance to their long-term portfolio targets and an even better bonus for those that tactically shifted into the most distressed areas of the capital markets. But now is not the time to be complacent. Most assets are no longer the bargains they were a few short months ago. As we have stated many times, tactical asset allocation is about taking risks when they are compensated and backing away when they are not. In some cases, the snapback has led risky asset classes like equities and high yield bonds to be susceptible to further price declines.

A handy, simple metric for the valuation of the overall equity market is today's price divided by the last 10 years of earnings. Developed by Robert Shiller of *Irrational Exhuberance* fame, this methodology smoothes the cyclical effect of wild swings in shorter term earnings to produce a more stable measure for historical comparison purposes. What does it reveal about today's prices? In

Table 1.Credit and Alternative Bond Categories Lead the Way

Asset Class	Index	6-30-09 YTD Return 36.2%		
Emerging Markets Equity	MSCI EM GR USD			
High Yield	BarCap US Corporate High Yield TR USD	30.4%		
Bank Loans	Credit Suisse Leveraged Loan USD	23.8%		
Convertibles	ML Convertible Bonds All Qualities	19.6%		
Emerging Market Bonds	JPM EMBI Plus TR USD	12.7%		
TIPS	BarCap Gbl Infl Linked US TIPS TR USD	6.2%		
Large Company US Stocks	S&P 500 TR USD	3.2%		
Core Bonds	BarCap US Agg Bond TR USD	1.9%		
REITs	FTSE NAREIT All REITs TR	-10.5%		
Long Treasuries	BarCap US Treasury Long TR USD	-12.0%		

Source: Research Affiliates, based on data from Bloomberg.

short, despite all of the pain of the past two years (previous four months excluded), we stand very near the historical *average* valuation level. As **Figure 2** shows, the "Shiller P/E" of 15.8 at mid-year, up from its low of 11.8 in March, is approaching the long-term historical average of 16.4.

Mohamed El-Erian and Bill Gross at PIMCO have done an excellent job of spelling out the many uncertainties confronting today's investors as we journey to a "new normal"—re-regulation, de-globalization, and de-leveraging.<sup>2</sup> Given these headwinds, we find it hard to become enthusiastic about "average" market valuations.

A similar story can be found in high-yield bonds that have enjoyed a massive comeback in 2009. On a total return basis, junk bonds, as measured by the BarCap High Yield Index, now stand at only 6% off of their May 2007 peak. As seen in **Figure 3**, the spread over five-year Treasuries is now 9.9%, almost half of what it was at the end of November.<sup>3</sup> This spread level is equivalent to the peak spreads of the milder recessions of 1990 and 2001; but, it's also comparable to the average spread during the Great Depression. Spread levels, equivalent to recessionary peaks rather than the unprecedented peaks of a few months ago, indicate that fear has abruptly and aggressively eased. Buyer beware at these prices, unless you believe that economic recovery is at hand (we don't!).

#### Conclusion

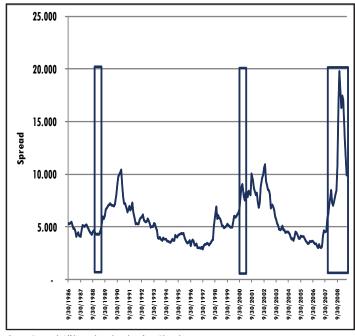
The massive price dislocations of last fall provided significant opportunity for a quantitative, model-driven GTAA process to add value by scooping up high-quality

Figure 2. Price/Trailing 10-Year S&P Composite Earnings, 1881-2009



Source: Robert J. Shiller, http://www.irrationalexuberance.com/index.htm

Figure 3. Merrill Lynch High Yield Master II Spread Over Five-Year Treasuries



Source: Research Affiliates, based on data from Bloomberg.

assets that were being liquidated at wholesale prices and provided ample risk premiums for just about any economic scenario short of Armageddon. The window did not stay open for very long and was considerably shorter than the decision-making process for large carve-outs in pension and endowment portfolios.

Alas, this target rich environment is already fast becoming a thing of the past. The same process that moved into risk last fall is pointing to lower risk exposure after this blessed rally. A capital market system adjusting to a new world of "fair" risk premiums institutions, providing a further rationale for tactical is not the environment to assume additional hefty gains from risky assets trading at average valuations.

#### **Endnotes**

- 1. Lawrence Strauss. (2008). "How to Play a 'Take-No-Prisoners' Market." Barron's (December 22): 36. http://online.barrons.com/article/SB122973300556423035.html
- 2. See http://media.pimco-global.com/pdfs/pdf/Viewpoints%20El-Erian%206-15-09%20US.pdf?WT.cg n=PIMCO-US&WT.ti=Viewpoints El-Erian 6-15-09 US.pdf.
- 3. The spreads in Figure 3 are calculated as the yield to worst on the Merrill Lynch High Yield Master II less the yield on the five-year Treasury bond. Data is from Bloomberg.

### Performance Update

TOTAL RETURN AS OF 6/30/09	BLOOMBERG TICKER	YTD	12 MONTH	ANNUALIZED 3 YEAR	ANNUALIZED 5 YEAR	ANNUALIZED 10 YEAR	ANNUALIZED 10 YEAR VOLATILITY
FTSE RAFI® 1000 Index <sup>A</sup>	FR10XTR	10.32%	-21.55%	-8.20%	-0.93%	2.07%	17.20%
S&P 500 <sup>B</sup>	SPTR	3.16%	-26.21%	-8.22%	-2.24%	-2.22%	16.03%
Russell 1000 <sup>c</sup>	RU10INTR	4.32%	-26.69%	-8.20%	-1.85%	-1.75%	16.28%
FTSE RAFI® US 1500 Index <sup>D</sup>	FR15USTR	15.24%	-20.15%	-7.99%	0.30%	7.76%	21.56%
Russell 2000 <sup>E</sup>	RU20INTR	2.64%	-25.01%	-9.89%	-1.71%	2.38%	21.40%
FTSE RAFI® Developed ex US 1000 Index <sup>F</sup>	FRX1XTR	15.58%	-26.00%	-4.80%	5.05%	5.34%	18.62%
MSCI EAFE <sup>G</sup>	GDDUEAFE	8.42%	-30.96%	-7.51%	2.79%	1.56%	17.80%
FTSE All World Series Developed ex US <sup>H</sup>	FTS5DXUS	10.48%	-30.58%	-6.46%	3.82%	2.53%	18.01%
FTSE RAFI® Developed ex US Mid Small¹	FRSDXUS	23.68%	-19.66%	-5.95%	4.17%	NA	NA
MSCI EAFE Small <sup>j</sup>	MCUDEAFE	19.39%	-30.04%	-11.86%	0.51%	NA	NA
FTSE RAFI® Emerging Markets <sup>K</sup>	TFREMU	37.40%	-22.45%	8.58%	21.41%	NA	NA
MSCI Emerging Markets <sup>L</sup>	GDUEEGF	36.22%	-27.82%	3.27%	15.08%	NA	NA
FTSE RAFI® Canada <sup>M</sup>	FRCANTR	24.52%	-12.22%	2.27%	8.18%	NA	NA
S&P/TSX 60 <sup>N</sup>	TX60AR	18.27%	-24.64%	1.26%	8.30%	NA	NA
FTSE RAFI® Australia Index <sup>0</sup>	FRAUSTR	8.34%	-13.72%	-2.40%	6.56%	8.19%	12.01%
S&P/ASX 200 Index <sup>P</sup>	ASA51	9.08%	-20.14%	-3.82%	6.86%	7.40%	12.85%
FTSE RAFI® Japan <sup>a</sup>	FRJPNTR	13.44%	-25.56%	-12.04%	-0.84%	NA	NA
MSCI Japan <sup>R</sup>	GDDLJN	9.28%	-29.93%	-15.00%	-2.91%	NA	NA
FTSE RAFI® UK Index <sup>s</sup>	FRGBRTR	2.79%	-15.31%	-6.41%	2.84%	NA	NA
MSCI UK <sup>t</sup>	GDDUUK	-1.28%	-20.46%	-6.48%	2.52%	NA	NA

Definition of Indices: (A) The FTSE RAFI® 1000 comprises the 1000 largest companies selected and weighted using our Fundamental Index methodology; (B) The S&P 500 Index is an unmanaged market index that focuses on the large-cap segment of the U.S. equities market; (C) The Russell 1000 Index is a market-capitalization-weighted benchmark index made up of the 1,000 highest-ranking U.S. stocks in the Russell 3000; (D) The FTSE RAFI® 1500 comprises the 1001st to 1500th largest companies selected and weighted using our Fundamental Index methodology; (E) The Russell 2000 is a market-capitalization weighted benchmark index made up of the 2,000 smallest U.S. companies in the Russell 3000; (F) The FISE RAFI® Developed ex US 1000 Index comprises the largest 1000 non US-listed companies by fundamental value, selected from the constituents of the FTSE Developed ex US Index; (6) MSCI EAFE (Morgan Stanley Capital International Europe, Australasia, Far East) is an unmanaged index of issuers in countries of Europe, Australia, and the Far East represented in U.S. dollars, and (H) The FTSE All World ex-US Index comprises Large and Mid-Cap stocks providing coverage of Developed and Emerging Markets excluding the United States. It is not possible to invest directly in any of the indexes above; (I) The FTSE RAFI® Developed ex US Mid Small Index tracks the performance of small- and mid-cap equities of companies domiciled in developed international markets (excluding the United States), selected based on the following four fundamental measures of firm size: book value, cash flow, sales, and dividends. The equities with the highest fundamental strength are weighted according to their fundamental scores. The Fundamentals Weighted® portfolio is rebalanced and reconstituted annually. Performance represents price return only; (1) The MSCI EAFE Small Cap Index targets 40% of the eligible small-cap universe (companies with market capitalization ranging from USS200 to USS1,500 million) in each industry group of each country in the MSCI EAFI Index; (K) The FTSE RAFI® Emerging Markets Index comprises the largest 350 companies selected and weighted using the Fundamental Index® methodology; (L) The MSCI Emerging Markets Index is an unmanaged, free-float-adjusted cap-weighted index designed to measure equity market performance of emerging markets; (M) The FTSE RAFI® Canada Index comprises the Canadian stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (N) The S&P/Toronto Stock Exchange (TSX) 60 is a cap-weighted index consisting of 60 of the largest and most liquid (heavily traded) stocks listed on the TSX, usually domestic or multinational industry leaders; (0) The FTSE RAFI® Australia Index comprises the Australian stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (P) The S&P/ASX 200 Index, representing approximately 78% of the Australian equity market, is a free-float-adjusted, cap-weighted index; (Q) The FTSE RAFI® Japan Index comprises the Japanese stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (R) The MSCI Japan Index is an unmanaged, free-float-adjusted cap-weighted index that aims to capture 85% of the publicly available total market capitalization of the Japanese equity market; (S) The FTSE RAFI® UK Index comprises the U.K. stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (1) The MSCI UK Index is an unmanaged, free-float-adjusted cap-weighted index that aims to capture 85% of the publicly available total market capitalization of the British equity market

Source: All index returns are calculated using Total Return data from Bloomberg except for the FTSE RAFI Developed ex US Mid Small (FRSDXUS) and the MSCI EAFE Small (MCUDEAFE) which uses price return data.

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