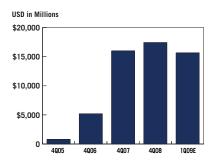
# rafi fundamentals



Robert D. Arnott

# RAFI® Managed Assets\*



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



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# IDTT: IT'S DIFFERENT THIS TIME

If there was ever a slogan that scares the heck out of seasoned investors, this is it. It is unarguably true—always—because, as Mark Twain observed, "history may not repeat, but it sure rhymes." It is just as arguably untrue in that things are rarely as "different" as the IDTT crowd wants us to believe. It has been uttered to support bubbles and investor euphoria, and to justify crashes and deeply depressed values, in the face of vast evidence that extremes don't persist.

How many times has reversion to the mean destroyed the wildly optimistic projections accompanying those four simple words? Upon entering the phrase into Google, the first link that pops up is to Amazon. com for "Dow, 30,000 by 2008—Why It's Different This Time" by Robert Zuccaro. In the midst of our current market environment, this treatise of unbridled optimism seems like something from a long buried time capsule, an archeological relic of a bygone era, not a work published seven years ago still available for purchase.

A lot can happen in seven years (although perhaps not Dow 30,000, at least not this time!). Perhaps most remarkable is how often, and in what contexts, the phrase "It's Different This Time" is used today. This time, it's used to justify extreme pessimism, the death of mean reversion, the folly of rebalancing, and the failure of diversification. Indeed, the second Google link takes you to an *LA Times* article from March 2008 detailing the parallels between the Great Depression and the then still blossoming financial crisis.<sup>2</sup>

The same four words plugged into a search engine spit out seemingly opposite headlines—seven years of unprecedented stock market gains and an indefinite period of economic disaster. To a contrarian, the irony could not be any thicker.

Pessimistic at the turn of the century, we soundly rejected the IDTT arguments of the day. Today, we find ourselves in an unaccustomed position: we're optimists in some markets, believing that now is an excellent time to take the long view and allow heightened risk premiums to accrue to investors' benefit.

Finding the "Walking Wounded" in the Carnage

The hoped-for rebound, following the "Take-No-Prisoners" market crash late last year, failed to materialize. Markets continued their slide in the first quarter of 2009, expanding the losses for investors in virtually all asset classes. Indeed, during February, 15 of the 16 major markets that we track in our Global TAA work fell; the equally weighted portfolio fell nearly 5%. How often had that happened before? Never... until 2008. This unprecedented event-15 out of 16 asset classes falling with a –5% average in a single month—happened for the first time ever in September 2008. And repeated in October and again in February—thrice in a six month span. If we exclude last fall, February 2009 would be comparable in breadth (number of positive assets classes) to August 1990 and severity (equally weighted decline) to September 2001; two months that preceded war and major financial uncertainty. Yet, February gets comparatively little attention because it pales next to the carnage of last September-October.

During the 21-month period of this financial crisis (measured July 2007 through March 2009), the equally weighted portfolio of 16 asset classes was not spared. With its expanded toolkit, broad diversification, and liberal use of ostensibly uncorrelated alternative markets, this naïve 16-asset-class portfolio cumulatively added 460 basis points of relative value versus the 60/40 mix (-21.4%)

versus –26.0%). Clearly, this diversified portfolio failed to keep investors in the black, and we are cognizant that many investors are growing increasingly frustrated that diversification hasn't helped more in this crisis. Indeed, it is remarkable in a historical context how relative value between asset classes—a key driver of correlation and diversification—has been thrown out the window.

Consider the performance of investment-grade corporate bonds versus stocks in **Figure 1** over two distinct time periods. The first covers September 1929 through June 1932, a period in which the S&P 500 Index cumulatively declined by 84%. We will label this period "The Great Depression." The second period, which some have called "The Great Recession," covers the most recent drawdown of the S&P 500 (–47%) from November 2007 through March 2009.

Remarkably, corporate bonds provided measurably better diversification during the first 17 months of the Great Depression versus the first 17 months of our current crisis—returning +11% then versus –4% now. If such data existed, we believe we would find similar results on the other asset classes in our broader toolkit (REITs, commodities, emerging markets, etc.)—i.e., more diversification benefit in the Great Depression than in the Great Recession of 2008–09 from assets that should structurally provide better down market protection.

Does that mean it is different this time? Certainly, a more intertwined global financial market in the midst of a massive deleveraging cycle may mean a period of higher correlations, rising risk premiums and a delinking from fundamental drivers of returns. So in the shorter term, yes, it is different this time. However, a true long-term (i.e., 10 years or more)<sup>6</sup> investor will not be dismayed and fall into the IDTT camp. Risk premiums will, and in many cases have, reached a point where investors are *rewarded* to take risk. After all, taking well compensated risks is what ultimately leads to significant long-term wealth creation. As Benjamin Graham once noted, "The essence of investment management is the management of risks, not the management of returns."

### Is It Different This Time?

Apart from the truism that it's always *somewhat* different, we don't think so. In time, valuations will adjust to the point that investors will be well-compensated for

taking risk. In many markets, we think that's already the case. When that happens, investors will gravitate to those markets and in so doing will drive asset class correlations to a level validating diversification. An examination of the TIPS market illustrates this point.

Our research indicates that long-term U.S. government bonds have provided real (after inflation) returns of 1.9% over the past 100 years. Last November, real yields on the 20-year TIPS peaked at 3.4%. Real yields hadn't been so lofty since mid-2000 when TIPS were still a relatively new and little understood asset class (and many investors preferred the 20–30% annual gains that they expected from their NASDAQ holdings!).

Historically, the biggest risk to the bond investor was inflation, but TIPS adjust for rising prices and eliminate this uncertainty. If we suppose that "insurance" is worth 0.3% per year, we can arrive at a fair real yield for a long TIPS investor of 1.6%, half of what they were yielding last November. As deleveraging slowed over the past four months, relative value investors swooped in on TIPS leading real yields to fall almost all the way back to our 1.6% fair yield. (The 20-year TIPS finished the quarter with a yield of 2.0%) Critically to the asset allocator, the performance of TIPS moved to a more historical and logical relationship to stocks as seen in Figure 2, which displays monthly returns over the past 6 months.

This return to normalcy will, in our opinion, progressively proceed down the roster of severely dislocated asset classes. And what a roster! **Figure 3** outlines various valuation measures for some key mainstream and alternative asset classes.

Most of these assets' current valuations are in the cheapest quintile of their historic profile. Fixed-income credit categories such as convertibles, investment-grade corporate, high-yield, and emerging market bonds are showing spreads over Treasuries rarely, if ever, witnessed before. Breakeven rates between TIPS and nominal Treasuries are still very low, even after the previously described dive in TIPS yields. REIT yields versus stock yields are in the cheapest quintile since 1980. Even dividend yields on the S&P 500 are starting to get to levels where stocks can (finally) be considered a reasonable risk/reward opportunity.

Does cheapness equate to value? Not always, of course. Will some of these asset classes be repriced to levels not

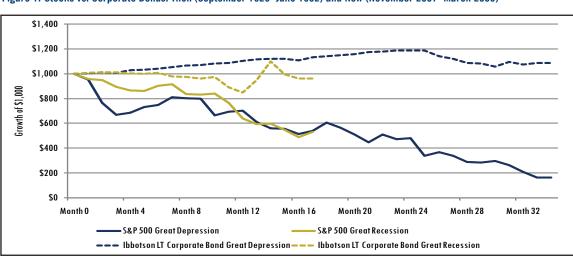


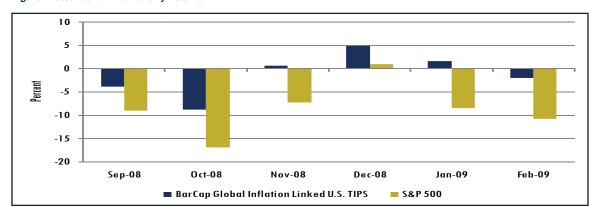
Figure 1. Stocks vs. Corporate Bonds: Then (September 1929–June 1932) and Now (November 2007–March 2009)

Sources: Research Affiliates

witnessed over the past 25-50 years? Probably, and in those cases it may be different this time. But what is not different is that risk premiums (today's for some asset classes and tomorrow's for others) will entice new investors once they come to grips with their recent results. These valueoriented entrants will cause differentiation among asset classes and, correspondingly, a reduction in correlations.

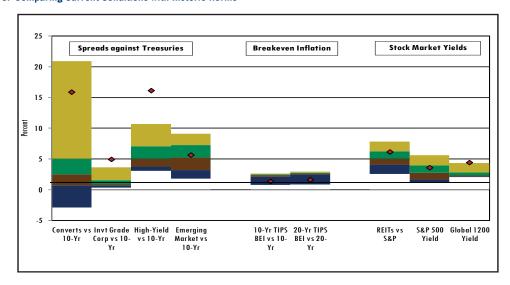
This adjustment will not be a smooth process and it will likely take some time, undoubtedly making some queasy along the way. But that's good news for those of us in the asset allocation business with strong stomachs, from the strategically oriented institutions to the tactically inclined managers like Research Affiliates. We know that what is comfortable is rarely profitable... and the most profitable opportunities are often the most uncomfortable investments to make. For this reason, contrarians form a disproportionate share of the world's all time greatest investors. Over the past 25 ebullient years, many contrarians have been labeled nothing more than doomsayers and reactionaries. How refreshing it is to be on "glass is half full" side of the room! But yet again, we see we have very little company—the contrarian's loneliness is never different this time.

Figure 2. Stocks and TIPS: Monthly Returns



Sources: Research Affiliates, LLC, Bloomberg, Merrill Lynch, and Barclays Capital. Indexes used (with start dates) were Barclays Capital U.S. Convertibles (Converts — 1/31/2003), Barclays Capital U.S. Intermediate Corporate (Investment-Grade Corp — 1/31/90), Merrill Lynch High Yield Master II (High Yield — 9/30/86), Merrill Lynch USD Emerging Market Sovereign Plus (Emerging Market — 12/31/91), NAREIT Total (REITs — 1/31/80), S&P 500 (1/31/80), and S&P Global 1200 (Globa 1200 = 7/31/04), 10-year Treasury (1/31/80), 10-year TIPS (1/31/03), and 20-year TIPS (1/31/03) all taken from the Federal Reserve Constant Maturity series. The boxes are from 2.5th to 20th percentile. 20th to 50th percentile. 50th to 80th percentile, and 80th to 97.5th percentile of historical observations. Spread versus Treasuries is calculated as option-adjusted spread for converts and yield to worst for investment-grade corp, high-yield, and emerging market

Figure 3. Comparing Current Conditions with Historic Norms



Sources: Research Affiliates

- 1. Robert Zuccaro. Dow, 30,000 by 2008: Why It's Different This Time. Palisade Press: New Jersey (http://www.amazon.com/Dow-2008-Different-This-Time/dp/1893958701).
- Michael A. Hiltzik. 2008. "A New Great Depression? It's Different This Time," Los Angeles Times: March 20 (http://www.latimes.com/business/careers/work/la-fi-depression20mar20,0,996017.story).
- Our research covers the years January 1988 through March 2009.
- 4. The 16 asset dasses include mainstream stocks and bonds, alternative bonds, and real return assets. The equally weighted portfolio is comprised of the following indexes, rebalanced monthly: Merrill Lynch (ML) U.S. Corporate & Government 1—3 Year; Lehman Brothers (LB) U.S. Aggregate Bond TR; LB U.S. Treasury Long TR; LB U.S. Long Credit TR; LB U.S. Corporate High Yield TR; Credit Suisse Leveraged Loan; JPMorgan (JPM) EMB! + Composite TR; JPM ELM! + Composite; ML Convertible Bonds All Qualities; LB Global Inflation Linked U.S. 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.
- 5. This recent period doesn't have as many months. Hence, the time series comes up short for this recent stretch. Alas, we don't have the clairvoyance to complete the graph!

  6. It should be noted that very few among us isn't a 10-plus year investor. Even those reaching retirement age will, according to the actuarial tables, require investments to provide income for 15—20 years.
- The breakeven inflation rate is calculated as the difference between the nominal Treasury and TIPS of the same maturity. A low break even rate implies that only modest inflation will allow the TIPS to outperform the nominal Treasury.

## Performance Update

TOTAL RETURN AS OF 3/31/09	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>	FRIOXTR	-13.91%	-42.72%	-15.42%	-5.44%	0.54%	16.14%
S&P 500 <sup>B</sup>	SPTR	-11.01%	-38.09%	-13.06%	-4.76%	-3.00%	15.80%
Russell 1000 <sup>c</sup>	RU10INTR	-10.45%	-38.27%	-13.24%	-4.54%	-2.57%	16.01%
FTSE RAFI® US 1500 Index <sup>D</sup>	FR15USTR	-15.44%	-42.82%	-18.32%	-5.29%	6.31%	20.03%
Russell 2000 <sup>E</sup>	RU20INTR	-14.95%	-37.50%	-16.80%	-5.24%	1.93%	21.06%
FTSE RAFI® Developed ex US 1000 Index <sup>F</sup>	FRX1XTR	-14.89%	-47.59%	-13.69%	-1.02%	2.88%	17.20%
MSCI EAFE <sup>G</sup>	GDDUEAFE	-13.85%	-46.20%	-14.07%	-1.75%	-0.46%	17.08%
FTSE All World Series Developed ex US <sup>H</sup>	FTS5DXUS	-12.82%	-45.89%	-13.25%	-0.97%	0.48%	17.26%
FTSE RAFI® Developed ex US Mid Small	FRSDXUS	-11.49%	-45.36%	-16.30%	-2.57%	NA	NA
MSCI EAFE Small <sup>j</sup>	MCUDEAFE	-10.22%	-50.29%	-21.04%	-5.10%	NA	NA
FTSE RAFI® Emerging Markets <sup>K</sup>	TFREMU	0.14%	-43.34%	-3.00%	12.06%	NA	NA
MSCI Emerging Markets <sup>L</sup>	GDUEEGF	1.02%	-46.90%	-7.88%	6.25%	NA	NA
FTSE RAFI® Canada <sup>M</sup>	FRCANTR	-3.47%	-29.54%	-7.47%	2.82%	NA	NA
S&P/TSX 60 <sup>N</sup>	TX60AR	-1.53%	-30.45%	-5.96%	4.38%	NA	NA
FTSE RAFI® Australia Index <sup>0</sup>	FRAUSTR	-0.57%	-25.57%	-5.23%	5.72%	7.65%	12.13%
S&P/ASX 200 Index <sup>P</sup>	ASA51	-1.98%	-29.52%	-7.25%	5.50%	6.48%	13.02%
FTSE RAFI® Japan <sup>Q</sup>	FRJPNTR	-9.67%	-34.84%	-20.10%	-5.02%	NA	NA
MSCI Japan <sup>R</sup>	GDDUJN	-16.57%	-35.89%	-17.36%	-5.28%	NA	NA
FTSE RAFI® UK Index <sup>s</sup>	FRGBRTR	-12.75%	-32.60%	-11.69%	0.02%	NA	NA
MSCI UK <sup>t</sup>	GDDUUK	-10.68%	-48.42%	-15.49%	-3.79%	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; (G) 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; (1) The FTSE RAFI® Developed ex US Mid Small Index tracks the performance of small- and mid-cap equities of companies domiciled in developed interrational 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 US\$200 to US\$1,500 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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