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Welcome to the third annual issue of the Investment Review. The residents of the Janes Financial Center have had another remarkable year. They have successfully defended their championship in the CFA Society Orange County Investment Competition for the second consecutive year. In the CFA Institute Research Challenge, the residents placed 1st in the written report segment and 2nd in presentation segment. The senior residents who graduated last year are establishing their careers with prestigious firms like Research Affiliates and NASDAQ.

In this issue, the residents share their investment selections for 2016, their economic outlook and allocation model, and announce their selection of the 2015 California top 40 public companies.

Additionally, our partners delineate their thoughts on volatility, global diversification and asset class diversification in today’s environment, the impact of deflation on performance, and reversion and cyclicality.

This publication and the Residency Program would not be possible without the continued support and generosity of David Janes – Chairman of the Board of Trustees at Chapman University, The Hoag Foundation, and Monex Precious Metals. We would like to thank our contributing partners at Research Affiliates, Hollencrest Capital Management, Beacon Pointe Wealth Advisors, Dimensional, and Wainright Economics, for sharing their expertise and insight.

I trust that you will find this issue informative and useful.

Fadel N. Lawandy
Director, C. Larry Hoag Center of Real Estate and Finance
Director, Janes Financial Center
Volatility is Your Friend… If Approached Correctly

Co-Authored by Graham Pierce, MBA, Partner and James Davenport, MBA, Associate Director

Most investment strategies make money when the market is going up - that’s easy. The great strategies, however, are those that avoid giving most of it back in down periods. It’s natural in times of market volatility to think about going to cash or increasing your allocation to bonds. However, increasing your allocations to equities surprisingly may give you the downside protection you seek while providing better growth potential over the long term, provided you have the right strategy.

Beacon Pointe’s recommended managers invest for stability and growth. They move beyond the constraints of index composition and rigid style characteristics, and focus instead on finding what they believe are the best investments for their clients. As a result, they tend to protect capital better than their peers when markets are negative, AND MORE IMPORTANT, in meaningful market downturns when most others are selling, they are able to put cash to work and buy stocks of great companies at prices well below their intrinsic value. Both of these investing traits allow them to compound growth faster than their peers over time.

Let’s look at an example that highlights the importance of protecting capital in down markets. Take a look at Investment A and Investment B below. Which investment made more money at the end of the two year period?

<table>
<thead>
<tr>
<th>Return in Year 1</th>
<th>Return in Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment A</td>
<td>-11%</td>
</tr>
<tr>
<td>Investment B</td>
<td>-38%</td>
</tr>
</tbody>
</table>
If you said Investment A, you’re right. If you chose B, then you need to understand the following explanation carefully. We are going to assume that each of these investments was made with an initial investment of $100.

<table>
<thead>
<tr>
<th></th>
<th>Beginning Investment</th>
<th>Return in Year 1 (%)</th>
<th>Value of Investment at End of Year 1</th>
<th>Return in Year 2 (%)</th>
<th>Value of Investment at End of Year 1</th>
<th>Total Return over 2 Years (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment A</td>
<td>$100</td>
<td>-11%</td>
<td>$89</td>
<td>20%</td>
<td>$107</td>
<td>7%</td>
</tr>
<tr>
<td>Investment B</td>
<td>$100</td>
<td>-38%</td>
<td>$62</td>
<td>60%</td>
<td>$99</td>
<td>-1%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>$100</td>
<td>-37%</td>
<td>$63</td>
<td>28%</td>
<td>$81</td>
<td>-19%</td>
</tr>
</tbody>
</table>

Yes, Investment B had a huge return in Year 2 of 60%, but that 60% return was on $62, because of the destructive loss it sustained in Year 1. However, that 60%, as you can see above, does not even get this investment back to break-even over the two year period! In contrast, Investment A returned just 1/3 of what Investment B returned (only 20%) in Year 2, but because it only lost 11% in Year 1, it returned a positive 7% over the two year period and outperformed Investment B by a total of 8%. The key here is the downside protection.

Think of negative returns like digging yourself a hole. The more negative the return, the deeper the hole you dig for yourself and the harder it is to get out. Another way to say this is that the more negative the return, the higher the return must be to get back to break even, and to continue growing your investment again. Such large losses disrupt the compounding mechanism. For example, the mathematical reality of capital destruction means that:

- If you lose 10%, you need to make 11% to get back to even;
- If you lose 25%, you need to make 33% to get back to even;
- If you lose 33%, you need to make 50% to get back to even; and
- If you lose 50%, you need to make 100% to get back to even.

Investment A represents that of a prudent investor. He uses flat to up markets (i.e. Year 2) to grow his portfolio. His portfolio during these periods will often not capture all of the upside of the market. Nevertheless, he outperforms his peers over a full market cycle (i.e., a bull market and a bear market), because he protects capital so well in down markets (i.e. Year 1). This is the type of investing we favor at Beacon Pointe. Not only does it grow capital over full market cycles, but it does so in a way that minimizes risk (and anxiety!) while allowing our clients to meet their investment goals. Most investment strategies can make money when the market is going up - that's easy. The few great strategies, however, are those that avoid giving most of it back in down periods.

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INVESTMENT REVIEW

Why Investing Feels Awkward, and What To Do About It

By Michael Ashley Schulman, CFA

There are numerous scholarly studies and articles about the benefits of maintaining a diversified portfolio, but understanding why maintaining diversification is so difficult is the crux of this article. An effective diversified investment portfolio will continuously have some outperformers and underperformers. The natural human inclination is to keep betting on the individual winning investments and sell the losers; however, over time, this would make for an unbalanced and risky portfolio.

A spect of effective professionally managed investing feel uncomfortable because they run contrary to how we achieve success elsewhere in our environment. One learns that success in business – as well as in sports and hobbies – is often achieved through focus and concentrated risks. If something works in a business, you pursue it further or expand it; if something doesn’t work, you drop or radically alter it. The principles of effective professional investing run contrary to this idea of concentration; hence the natural discomfort between efficient allocation of our investment portfolios versus how we’ve built success elsewhere in our lives.

There are numerous scholarly studies and articles about the benefits of maintaining a diversified portfolio, but understanding why maintaining diversification is so difficult is the crux of this article. An effective diversified investment portfolio will continuously have some outperformers and underperformers. The natural human inclination is to keep betting on the individual winning investments and sell the losers; however, over time, this would make for an unbalanced and risky portfolio.

Professionally, to achieve success and be lauded by our peers we learn to focus on our strengths, advance by doubling up and...
efforts on what works, and fix or nix what doesn’t perform. A tennis player improves by playing more tennis. A bakery that consistently sells out of butterscotch muffins and has leftover trays of cranberry muffins, should make more butterscotch and less cranberry. The bakery can also try to improve the cranberry recipe or extend the butterscotch line to bagels and cookies. Either way, a successful foray plows more energy into winning ideas and corrects or culls losers.

On the other hand, a diversified investment portfolio achieves long-term success by spreading investments across multiple asset classes – you may colloquially know of this as not putting all your eggs in one basket – since the top performing asset class one year is seldom the top performing asset class in the subsequent year. A good investment portfolio plays across the capital structure – with equity, fixed income (credit), real estate, and alternative exposures – both domestically and internationally. In other words, it is scattered, but in a balanced manner. If every week, one sold out of positions with declining prices (losers) and kept their positions with rising prices (winners) – i.e., bought high and sold low –soon there’d be few if any positions left. Cutting underperformers and concentrating solely on historical winners increases concentration risk too much. Instead, an investment portfolio usually should rebalance to trim winning asset classes and add to declining asset classes; however, this can be tough to accept. As expressed in a previous Chapman University, Investment Review: Markets perform better when things go from terrible to bad than from good to great: This is one of the hardest parts about investing. It rarely feels right to invest or rebalance into a cheaper investment class because usually things are cheap for a reason. You’ll never find a market on sale because things are great.¹

The elements that create success for a focused and ambitious person in business or personal pursuits do not naturally translate to most professionally managed investment portfolios. People tend to focus themselves and their businesses on what proves to be successful and either fix or nix what doesn’t work. On the other hand, a balanced investment portfolio will often sell winners and reallocate to laggards. Therefore, proper professional investment portfolios may feel unnatural because they often don’t focus on or double up on the winners. Over time, the uncomfortable diversification strategy tends to be the true winner, allowing one to apply themselves to their passions and legacy knowing they also succeeded in other aspects of life.

Portfolios of diversified funds that automatically rebalance and tax-loss harvest can help overcome the innate uncomfortableness with the up and down dynamics of diversification because tax-loss harvesting not only provides a tax benefit, but also visually disguises the loss by resetting an asset class’s cost basis. It does not eliminate losses, but it camouflages them so that one is less inclined to fret and change strategy over seeing a negative number. Investment


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The CFA Society of Orange County Foundation ("CFAOCF") reaches out to Southern California Business Schools annually with a request for proposal to manage the foundation scholarship fund. In November of 2015, the residents of the Janes Financial Center submitted a proposal to manage a portion of the CFAOCF scholarship fund for the 2016 calendar year.

The residents’ proposal offered an investment philosophy based on the 2016 JFC Economic Forecast and Asset Allocation Model, which are developed specifically for the CFAOCF RFP competition. With the forecast and model that follows, the JFC residents defended their first place ranking for the second consecutive year.
The themes for this year’s model are diversification, low correlation between holdings, and opportunistic investing. Other philosophies are the bird-in-hand approach to dividends and recognizing selloffs as buying opportunities. The model calls for no change in allocation in U.S. equity and fixed income from last year. The major changes to the allocation from the previous year are the decreased exposure to emerging markets, from 8% to 5%, no exposure to real assets ex-real estate, and an increased exposure to real estate from 5% to 10%. The allocation attempts to maximize potential risk-adjusted return given the economic outlook for 2016.

It is anticipated that in 2016 the U.S. and global economies will most likely contend with headwinds meaningfully impacting the slow and fragile global economic recovery and growth.

U.S. Real GDP is forecasted to grow within the range of 1.75% and 2.00% in 2016, with possible early indications of recessionary pressures by the end of the year.

The gridlock in Washington D.C. continues to hinder any meaningful legislation to assist in steadying economic growth. Seasonally adjusted unemployment (U3) have been gradually declining reaching a favorable rate of 4.8%. However, it is of concern that the U3 may be deceptively low.

Closely scrutinizing U6 unemployment number, labor force participation, and wage growth suggest that the favorable official unemployment number (U3) may not be the result of persistent addition of jobs to the economy.

Recent data indicates that the U6 unemployment number, which accounts for disfranchised labor and underemployed, is reaching a plateau within the 10% range, which is the historical pre-financial crisis high for U6.

Moreover, the spread between the U6 and U3 continues to exceed historical levels of under 4%, indicating disproportionately higher numbers of disfranchised and underemployed labor. Subsequently, this spread has caused downward pressure on the official unemployment number.

Further downward pressure is exerted by the continuing decline of labor force participation which is at an all-time low of 62.6%.

It appears that the low official unemployment number is
more likely to be the result of low labor force participation, underemployed, and disfranchised workers, than it is the result of persistent addition of jobs to the economy. This is evident by the wage growth rate stubbornly remaining under the 3.5% rate, which is the rate identified by the Federal Reserve as appropriate level of growth. The lack of meaningful wage growth coupled with the struggles of the employment market are mirrored in the reversion of the Consumer Sentiment Index.

Testing the 91.7 levels, the Consumer Sentiment Index has reverted to levels that historically signaled economic slowdown and possible recessions. Combined with personal consumption expenditures data, which has been flat for the past 18 months, it is reasonable to predict that consumers will not be expected to contribute to U.S. GDP at higher levels than that of 2015.

Both low wage growth and declining levels of consumer sentiment have had a significant impact on housing starts. Home price appreciation has significantly outpaced wage growth in 76% of the U.S. housing markets according to RealtyTrac. While U.S. median home prices have appreciated by 17.31% between 2012 and 2014, U.S. median weekly wages have appreciated by 1.30% for the same period. As a result, affordability continues to decline, and housing starts continue to remain subdued despite wage growth.

During this economic cycle, housing starts have offered a lackluster average of 778 starts in comparison to the previous economic cycle, which contributed on average more than double, at 1646 stats.

On another note, it is reasonable to expect that corporate spending would not significantly contribute to U.S. GDP growth in 2016. Corporate profitability has been compressed as a result of declining consumer sentiment, tamed consumer spending, and the U.S. Dollar maintaining its 18-months upward trend and strength. Further pressures on corporate profits have been a direct result of ongoing increases in corporate income taxes paid. Both lower profits and increased taxes are expected to dampen corporate expenditures in 2016.

In most recent recovery years, leading into and throughout the early years of the Modern Era Oil Glut, corporate expenditure has been fueled by U.S. oil exploration. At current oil prices and with rising debt levels by oil producers, these corporate expenditures have come to a halt and, in turn, so did the contribution to GDP growth.

It is estimated that for U.S. oil exploration to resume activities, WTI Oil must be at a minimum price of $40 per barrel. Utilizing a predictive model to examine the 1980’s Oil Glut and the most recent oil price movements, it is forecasted that WTI Oil will have a point of reversion at $35 per barrel with a high likelihood of testing higher and lower prices for brief and frequent periods.

Given the high correlation between oil prices and inflation and the aforementioned economic concerns, it is anticipated that inflation will continue to be suppressed below the Federal Reserve’s target in 2016.
Long-term interest rates are anticipated to remain unchanged as the yield on the 10-year treasury has been resistant to upward pressures by the Fed. This can be witnessed by the ongoing decline in the spread between the 10-year treasury and fed fund rate, which is anticipated to continue well into 2016. Furthermore, it is projected that the Federal Reserve may pursue a more dovish path to increasing interest rates with a very high likelihood of no interest rate hike in 2016.

It is foreseen that global growth will remain stagnant as similar or worsening economic factors to those in the U.S. continue to impact global productivity as illustrated by the global grade growth stubbornly remaining below the historical level of 10%.

Additionally, global commodity prices are expected to return and maintain values prevalent to pre-China hyper growth period with the exception of oil and precious metals. Oil continues to be influenced by the geopolitical motivations of oil producing countries. In terms of precious metals, as pessimistic global investors continue to allocate into these commodities, early signs of a bubble are manifesting.

The Master of Science in Accounting (MSA) program is designed to qualify graduates to sit for the California CPA exam while obtaining a master’s degree. Students will pursue the degree in a highly personalized learning environment. The 30-credit MSA program offers students:

- A keen understanding of the strategic role of accounting in business organizations
- The ability to apply ethical principles and responsibilities in accounting
- Expertise in the field using relevant academic and professional research
- The ability to communicate effectively and persuasively

The 10-month MSA program provides students with the flexibility to create their own schedule based on accounting courses completed. Students will have an opportunity to complete business courses offered in our AACSB accredited MBA program.
our philosophy for 2016 is “steady as she goes”. We intend to continue to be opportunistic investors, observing selloffs as great opportunities to acquire quality companies held for the long-run at favorable values, with a focus on high yields and dividends to accumulate cash reserves.

In U.S. Equity, returning from the 2015 Investment Picks are mobile providers AT&T (T) and Verizon Communications Inc. (VZ). Both companies continue to offer an attractive dividend yield of approximately 4.5%, low correlation to the market, and a value investment opportunity. We believe that both companies are undervalued given their control of two thirds of the mobile industry.

We continue to like tobacco as defensive investments in 2016. Last year’s picks, Reynolds American Inc. (RAI) and Philip Morris International (PM) delivered returns of 48.77% and 13.42% respectively. Given the significant appreciation in value over the past year and our concerns regarding the dollar impact on the companies’ revenue, we determined that a more appropriate selection for 2016 is Altria Group, Inc (MO). Altria offers similar return profile with limited exposure to foreign currencies.

Rounding up the U.S. equity stock selection are The Home Depot Inc. (HD), Costco Wholesale Corporation (COST), and Kimberly-Clark Corporation (KMB). These three selections of well-established defensive companies offer an opportunity to benefit from the economic conditions forecasted.

As for the 2016 U.S. Equity ETFs, we opted to exchange out the iShare Nasdaq Biotechnology ETF with Vanguard Consumer Discretionary ETF (VCR). While we benefited from the Biotechnology renaissance of 2015, we observe valuations reaching bubble territory, and we find it appropriate to exit the position.
Conversely, notwithstanding the slow wage growth, cooped up demand for consumer durables continues to materialize, fueled by continued low interest rates. Vanguard Consumer Discretionary ETF offered a broad exposure to the sector with limited exposure to individual investments within the sector.

In real estate, returning from the 2015 Investment Picks, is Apollo Commercial Real Estate Finance, Inc. With a dividend yield of 11.53%, low correlation to the market, and an established track record of performance, we continue to find Apollo very attractive for our portfolio.

In addition, we intend to include in the real estate allocation Schwab US REIT ETF (SCHH). The ETF provides investment opportunities in a diversified commercial real estate portfolio, which we believe will benefit greatly from the current favorable market conditions for the asset class. Moreover, the investment offers a counter balance to the 100% exposure to mortgage back securities with Apollo.

In emerging markets, we continue to look favorably on investment opportunities in India. The Indian economy is experiencing real GDP growth charged by internal consumption rather than net exports, high demand for both products and services, and high accessibly to capital supporting continued growth. The EGSares India Consumer ETF (INCO) is our pick for exposure to India. We do acknowledge that this investment selection is most likely a long-term investment rather than a one-year cycle.

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The 2015 JFC Residency asset allocation model and investment picks offered a superior return of 10.67% compared to the anemic 1.19% in total return of the S&P 500. Tobacco made the leader board with Reynolds American Inc. delivering 48.77% in total return, and Philip Morris International returning 13.42%. Real Estate Investment Trusts and Biotechnology followed closely with returns of 16.98% delivered by Apollo Commercial Real Estate, and 11.56% delivered by iShares NASDAQ Biotechnology. Telecommunication services rounded up the top performers with AT&T Inc. returning 8.33% and Verizon Communications Inc. returning 3.61%. The fixed income allocation to preferred securities paid off with a total return of 4.27%.

The 8% allocation in Emerging Markets and 2% oil exposure did not fare as well. It is observed that the calls on India, Philippines, and Indonesia where correct as demonstrated by recent returns. Unfortunately, being first movers into these emerging markets in 2015 did come at a cost.

As for the direct and indirect exposure to oil resulting from a bullish opinion on the commodity, it was simply a bad call. History has the tendency to repeat itself and in investments, it is called cycles. Historical oil events of the past were not given enough scrutiny in forecasting out oil performance, and the cost was commensurate.
EXAMINE KEY ECONOMIC INDICATORS TO ANSWER QUESTIONS LIKE:
What can power the economy forward?
Will the pace of job creation accelerate?

A. GARY ANDERSON CENTER FOR ECONOMIC RESEARCH FORECAST HIGHLIGHTS

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Greetings from the Cold

By Charles Aram and Jonathan Treussard, PhD

Key Points

1. Cyclicality is a feature of both atmospheric conditions and investment performance. The historical record promises that for value investors, summer will follow winter—the challenge is in weathering the passing blizzard of negative returns.

2. Both U.S. and developed-market RAFI™-based strategies have outperformed their cap-weighted value benchmarks over the long term and on a 1-, 3-, 5-, and 10-year trailing basis.

3. The largest and most persistent investment opportunity is long-horizon mean reversion, which explains the historical outperformance of RAFI and supports our expectation that the dynamic value tilt of fundamental-index-based strategies will generate future excess returns over the long term.

Both of us are European-born and have a particular appreciation for kitsch-y Americana and its sunny outlook, perhaps as a reaction to our more neutral (some might argue, existential and heavy) cultural heritage.1 High in the firmament of traditional Americana are the “Greetings from” postcards depicting cities and sights from around the United States—although we have noted the enthusiastic adoption of this quaint piece of memorabilia by other locales around the world. The one characteristic shared by all such postcards is the absence of the gloom and grey of winter!

Investors, like all Earth’s creatures, experience “winter”—sometimes as unseasonably long—in asset classes, sectors, strategies, and regions that can stay out of favour for months, years, and even decades. After years of living in Boston, New York City, Paris, and London we can attest that, whereas all four are exciting places to work and live, perfect blue skies and warm sunny days are not permanent features of these cities. While their winters can be unforgivingly harsh and cruelly demoralizing, they are also home to glorious springs, magical summers, and riotously colourful autumns. The same is true in investing. Just as surely as summer follows winter, so too do unpopular strategies and asset classes enjoy their day in the sun.

Investing Seasons

We at Research Affiliates are value investors with a long-term contrarian perspective. We seek securities, asset classes, sectors, and regions that are unloved and undervalued, investing in and overweighting them the more unloved and undervalued they become.
Greetings from the Cold
By Charles Aram and Jonathan Treussard, PhD

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Our strategy has a seasonality all its own, just like most reliable sources of long-term excess returns we’ve come across. Although seasons in investing may not conform as neatly to calendars as they do in the physical world, they are undeniably real, with excess returns oscillating between harsh winters and balmy summers.

Starting from a broad vantage point, let’s compare the cumulative excess returns of U.S. stocks versus U.S. bonds over the 215 years from 1801 to 2015, as shown in Figure 1. Stocks underperformed bonds for 15 years or more in three instances over this lengthy horizon: a 78-year period comprising most of the 1800s, the 20 years following the Stock Market Crash of 1929, and the last 15 years from 2000 to the present day. Nevertheless, we don’t believe most reasonable investors would argue that abandoning equities entirely as an asset class makes a lot of sense for a diversified long-term portfolio.

The same pattern is present in equity market strategies, a prime example being value-minded strategies whose cyclicality we’ve described in the past as “unreliably reliable”; thus, in our view, distinguishing between weather and climate is a worthy endeavour. Weather is atmospheric conditions over a short period of time, whereas climate is atmospheric “behaviour” over relatively long periods of time. Cyclicality is an inherent feature of investing (climate), with sometimes volatile swings in returns (weather) over each cycle. But none of this, on the face of it, suggests a strategy is good or bad. It just means staying the course will be more or less uncomfortable. Thus, to assess the intrinsic performance attributes of a strategy requires a long-range perspective.

Using data from the Fama–French online library to examine the ubiquitous HML series (long high book-to-market stocks and short low book-to-market stocks),2 we can illustrate just how long the value “winter” weather has been. But first let’s look at the value “climate.” The mean one-year rolling return since inception of the series in 1926 is nearly 5% and—to be conservative in the face of several extreme realizations to the upside (!)—the median of the series is still an impressive 3.7%. Furthermore, of the 1,063 monthly values for one-year rolling returns, 660 were positive (a “batting average” of more than 60%) despite streaks of negative prints as long as 29 consecutive months.3 In other words, value as defined by HML has been a reliable long-term winner, despite significant short-term disappointment along the way.

Over the shorter 1979–2015 period (1979 marking the launch of the Russell 1000 Value Index), “plain vanilla” capitalization-weighted value has faced massive headwinds, but in the same environment, fundamentally weighted, value-tilted strategies,
such as the RAFI™ Fundamental Index™ series, have withstood the headwinds to generate long-term excess returns. Table 1 compares the performance of the FTSE RAFI™ US 1000 Index and the Russell 1000 Value to the cap-weighted Russell 1000 Index over the 1979–2015 period. FTSE RAFI earned an excess return of 1.87% for the period compared to the 0.31% excess return produced by the Russell 1000 Value.

Let us look more closely at the “seasonality” of a U.S. equity value strategy. In order for a value strategy to generate excess returns, mean reversion in valuations must take place. Simply put, enough “expensive” stocks must get relatively cheaper and enough relatively “cheap” stocks must get at least a little less cheap. But the requirement is not that this happens uniformly and concurrently for every security, just for a sufficient fraction of the market; that said, the last two years or so have been characterised by somewhat extraordinary circumstances in which value has been punished across virtually all sectors on a global scale. In others words, it’s been winter everywhere for the value-oriented investor.

As Figure 3 shows, over the past two years as RAFI-based strategies began to experience significant performance challenges, in nearly every sector of the developed equity market expensive stocks—the top decile by price-to-book (P/B) ratio—beat cheap stocks—the bottom decile. The sole exceptions were the healthcare and telecommunications sectors.

In response to the recurring underperformance of value stocks over the last several years, RAFI-based strategies, relying on a disciplined rebalancing approach, have increased their active weight to the two worst performing developed-market sectors—energy and basic materials—the only two sectors to post negative returns. In 2013, after rebalancing, the active weight to these two sectors for the FTSE RAFI Developed 1000 Index was 2.29%, in 2014 the active weight rose to 3.60%, and in 2015 to 5.59%.

What Winter Looks Like

As if there is doubt in anyone’s mind, let us state unambiguously that we are writing this particular missive from the depths of a very painful winter in value-land. Table 1 shows this clearly. On a 1-, 3-, 5-, and 10-year trailing basis, Russell 1000 Value generated solidly negative excess returns, −4.74%, −1.93%, −1.17%, and −1.25%, respectively. In a parallel, though much milder manner, FTSE RAFI US 1000 posted negative excess returns on a 1-, 3-, and 5-year trailing basis. Last year’s performance was very painful indeed at −3.42%, which dragged down the trailing 3- and 5-year excess returns to near zero.

The long-term tracking error (1962–2015) of FTSE RAFI US 1000 relative to the S&P 500 Index was 4.2% annualised,4 not exactly an “extreme” concentrated deep-value strategy. And yet, pronounced cyclicality is a reality. In the warmest of summers, FTSE RAFI US 1000 may outperform by 20% or greater, as it did in the aftermath of the tech bubble or after the darkest hours of the global financial crisis. Nonetheless, even a 4.2% tracking error allows for deep pain, as exemplified by the negative return posted in 2015.

We must remember, however, that seasons come and seasons go. Eventually long winter nights will give way to seemingly endless summer days in which we can enjoy the ripened fruits of seeds.
planted much earlier. Our notes then will be sun-filled postcards reporting stupendous excess returns. But summer weeks, like their preceding wintry months, succumb to the passage of time—and anchoring on their lost splendour only makes the next winter that much more difficult to tolerate.

Global Winter—Not Just the Northern Hemisphere
The same performance pattern for value relative to cap-weighted indices realised over the last decade in the United States also holds for similar strategies beyond the United States. In the long term, RAFI-based international strategies produced meaningful value-add, outpacing cap-weighted benchmarks by 1.94% (developed equities), 2.35% (developed equities ex U.S.), and 3.43% (emerging markets), as reported in Table 2. Shorter-term horizons, however, reveal a different story.

For the three years ending December 2015, the FTSE RAFI Developed 1000 ex US Index underperformed the cap-weighted MSCI World ex US Index by a handful of basis points (−0.04%); by comparison, the MSCI World ex US Value Index underperformed by −2.42%. Over the same period, in emerging markets, where value has been most severely punished, the RAFI strategy more pronouncedly underperformed, down −4.82% versus the MSCI Emerging Markets Value Index underperformance of −3.08%, both relative to the cap-weighted benchmark. Indeed, the winter in value-land is being felt around the globe.

Last-Minute Winter Getaways
The long and unforgiving winter in value-land has left many investors understandably craving a little sunshine. We’ve been there—caught in the grip of a steely grey winter—desperately jumping on the internet to book a last-minute flight to an island paradise for a couple of days, only to return tired and poorer. Much like last-minute tickets to the Caribbean or Mediterranean have a nasty habit of being extremely expensive in the darkest days of February, the getaways available to investors seeking relief from their recent experience in value strategies may prove expensive and disappointing.

Consider the market darlings known by their acronym FANG5 (Facebook, Amazon, Netflix and Google, now Alphabet). Collectively, as illustrated in Figure 4, the stock prices of these four companies increased 200% from June 2012 to year-end 2015. In addition, the collective P/E of the four nearly doubled over the same period, indicating their stupendous returns are largely a result of their becoming more expensive, much like the cost of that last minute trip! The rise in the FANG stocks’ collective P/E is of particular note when compared to the P/E of the S&P 500 at year-end—approximately 42 vs. 20. For a few days in early February 2016, Google overtook Apple in terms of market capitalization, a dubious honour and not an encouraging sign for investors jumping into Google after such a run-up. This move, of course, isn’t all that has occurred in the early weeks of 2016. The market has seriously corrected, taking with it the prices of the FANG stocks, very possibly an early crack in growth stocks’ running the table.

Another perspective on cyclicality is a recent study by Arnott et al. (2016) that examines six common U.S. equity strategies—value, positive momentum, small cap, illiquid, low beta, and high gross
profitability—since 1967. A comparison of the relative valuation and subsequent relative performance for each indicates a strong link between the two: the market’s performance-chasing behaviour has created much of the factor’s return. This rise in relative valuation not only boosts past relative performance, it also opens the door for subsequent lower returns when valuations revert to historical norms. In fact, seeking a “return”-getaway in any of the five strategies (other than value) analysed in the study appears to invite an expensive one-way ticket to underperformance when valuations inevitably adjust.

Restorative Summer Holidays

Similar to the angst experienced by blizzard-trapped and drizzle-logged denizens of frozen and bitter climes, the pain felt by value investors is tangible. In the midst of the dreariest days, it’s all too easy to overlook the fact that these exact conditions presage a reversal in seasons and will eventually usher in a possibly extended span of strong returns for disciplined value investors. Mean reversion has shown itself to be a reliable and powerful force, and the most persistent investment opportunity for long-term investors.

Could we attempt to assess the “turn” in the weather by relying on our observations of past and current signals? Of course, but past is not prologue. Rather, we are taking shelter from the adverse elements in a disciplined value-oriented strategy. A boon of fundamental index–based strategies is their persistent ratchet-like moves to a deeper value posture whenever value rotates out of favour or further out of favour. Then, when the inevitable snap-back in mean reversion occurs, these strategies should recover significantly more than the losses they endured during the value winter. As time and experience has repeatedly proven, disciplined value investors, such as ourselves, will be rewarded—one day (we hope soon!) to be basking in long-awaited summer breezes.

We would like to believe that the first few weeks of 2016 are the beginning of the winter thaw, as expensive, growth stocks come under pressure. Are we experiencing an inflection point? Are summer days just ahead? Only time will tell. But we are confident enough in the coming warmer weather that we are perusing the book stand to choose our beach reading list and searching the attic to locate our luggage under the eaves.

Endnotes

1. This positive outlook may very well be why we both work for an American enterprise, and one of us made a home in the United States more than half a lifetime ago.

2. Kenneth R. French - Data Library

3. This exceptionally long episode (29 months) of poor performance in value stocks extended from September 1989 to January of 1992; the recent rut for value, according to the same data series, is in its 15th month.

4. Other FTSE RAFI Index strategies have exhibited annualised tracking error in the 4–6% range over the 1962–2015 period.

5. Being included in an acronym seems to be a highly contrarian indicator, at least based on the appearance of the now disgraced BRIC countries: Brazil, Russia, India, and China. These four nations went from beacons of hope to toxic waste in the eyes of global investors shortly after reaching acronym status. Keenly aware of the exaggerated mood swings of market participants, we trust the truth is somewhere in the middle—neither beacons of hope nor toxic waste.

References


Why Should You Diversify?

By Dimensional Fund Advisors

Equity markets have experienced a sharp decline to start 2016, leading some investors to reevaluate their asset allocation. As US stocks have outperformed developed ex US and emerging markets stocks over the last few years, some investors might consider reevaluating the benefits of investing outside the US. From January 1, 2010, through February 29, 2016, the S&P 500 Index had an annualized return of 11.66% while the MSCI World ex USA Index returned 2.26% and the MSCI Emerging Markets Index returned −2.28%. While there are many reasons a US-based investor may prefer a home bias in their equity portfolios, using return differences over the last few years as the sole input into this decision may result in missed opportunities that the global markets offer. We recognize that stocks in non-US developed and emerging markets have delivered disappointing returns relative to the US over the last few years. However, it is important to remember that:

1) International stocks help provide valuable diversification benefits.
2) Recent performance is not a reliable indicator of future returns.

THERE’S A WORLD OF OPPORTUNITY IN EQUITIES

The global equity market is large and represents a world of investment opportunities. As shown in Exhibit 1, nearly half of the investment opportunities in global equity markets lie outside the US. Non-US stocks, including developed and emerging markets, account for 48% of world market cap and represent more than 10,000 companies in over 40 countries. A portfolio investing solely within the US would not be exposed to the performance of those markets.

Exhibit 1:

As of December 31, 2015. Market cap data is free float adjusted from Bloomberg securities data. Many nations not displayed. Total may not equal 100% due to rounding. For educational purposes; should not be used as investment advice. China market capitalization excludes A-shares, which are generally only available to mainland China investors.
THE LOST DECADE

We can examine the potential opportunity cost associated with failing to diversify globally by reflecting on a recent period from 2000–2009. During this period, often called the “lost decade,” the S&P 500 Index recorded its worst ever 10-year performance with a total cumulative return of −9.1%. However, when you look beyond US large cap equities, conditions were more favorable for global equity investors as most equity asset classes outside the US generated positive returns over the course of the decade. Expanding beyond this period and looking at performance for each of the 11 decades starting in 1900 and ending in 2010, the US market outperformed the world market in five decades and underperformed in the other six.¹ This further reinforces why an investor pursuing the equity premium should consider a global allocation: By holding a globally diversified portfolio, investors are positioned to capture returns wherever they occur.

PICK A COUNTRY?

Are there systematic ways to identify which countries will outperform others in advance? Concentrating a portfolio in any one country can expose investors to large variations in returns. The difference between the best- and worst-performing countries can be significant. For example, since 1996, the average return of the best-performing developed market country was 37.5%, while the average return of the worst-performing country was −15.7%. Over the last 20 calendar years, the US has been the best-performing country twice, and the worst performing once. Diversification implies an investor’s portfolio is unlikely to be the best or worst performing, but diversification provides the means to achieve a more consistent outcome and most importantly helps reduce and manage catastrophic losses that can be associated with investing in just a small number of stocks or a single country.

A DIVERSIFIED APPROACH

Over long periods of time, investors can benefit from consistent exposure in their portfolios to both US and non-US equities. While both asset classes offer the potential to earn positive expected returns in the long term, they may perform quite differently over shorter cycles. While the performance of different countries and asset classes will vary over time, there is no reliable evidence that performance can be predicted in advance. An approach to equity investing that uses the global opportunity set available to investors can provide both diversification benefits as well as potentially higher expected returns.

¹ Source: Annual country index return data from the Dimson-Marsh-Staunton (DMS) Global Returns Data, provided by Morningstar, Inc.
The honor of California’s 2015 Top Corporation, in our ranking goes to Ligand Pharmaceuticals Inc. (LGND). It is of note that Ligand held this honor previously in 2013. Specializing in the development and acquisition of royalty revenue generating medications, Ligand is considered a Biotech Cash Cow. The company is constantly developing its partnerships to ensure an ongoing flow of resources supporting its R&D activity and its pipeline of product.

Ligand earned the top ranking by delivering a stellar performance for its investors. Ligand delivered a total return of 103.76%, return on equity (ROE) of 154.33%, a return on invested capital (ROIC) of 94.43%, and an impressive free-cash-flow margin (FCF margin) of 57.89%. The company also managed to grow its diluted earnings per Share (diluted EPS) by 88% to $1.14.

Coming in at #2 is Natural Health Trends Corp. (NHTC). Established in 1988 and headquartered in Rolling Hills Estate, Natural Health Trends has a portfolio of beauty, lifestyle, wellness, herbal, and home products. The company markets and sells its products globally through network marketing and a variety of e-commerce platforms. NHTC secured its second place ranking by delivering to its investors a total return of 194%, FCF margin of 30.44%, and managing to more than double its diluted EPS to $3.8.

The #3 spot is secured by Simulations Plus Inc. (SLP). Based in Lancaster, SLP develops pioneering technology and software that allows for modeling and simulation testing in drug discovery and development. Moreover, the company offers platforms to facilitate the transfer of data and record keeping necessary for drug development. SLP delivered a total return of 52.72%, with a free-cash-flow margin of 38.96%, and successfully increase its diluted EPS by 37.47% to $0.26.


Noticably absent from the Top 40 list this year are Apple Inc., Intuit Inc., Intel Corp., Jack In The Box, and Oracle Corp.

Two of our favorites on the list this year are Clorox Co (CLX) and WD-40 Co. (WDFC). What are the odds of tuning in to CNBC and catching a conversation on the investment opportunity in Clorox or WD-40 Co.? Almost non-existent. Yet, in our view, they offer great investment opportunity and very low correlation to the market. Clorox ranked 20th in this year’s Top 40. The company delivered a total return of 25%, a diluted EPS of $4.94, and a return on invested capital 26.60% over four times the company’s cost of capital. With a dividend yield of 2.47% and a beta of 0.31, Clorox offers a very unique investment opportunity for the right investor.

WD-40 Co. (WDFC) ranked 30th on the Top 40 list. The company delivered a total return of 17.46%, increased its diluted EPS from $2.86 to $3.14, and generated an ROE and ROIC of 29.36% and 17.83% respectively.
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<td>35</td>
<td>BOFI</td>
<td>BOFI HOLDING INC</td>
<td>8.21%</td>
<td>$1.56</td>
<td>$1.14</td>
<td>18.76%</td>
<td>8.42%</td>
<td>1.11</td>
<td>48.35%</td>
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<tr>
<td>36</td>
<td>JNPR</td>
<td>JUNIPER NETWORKS</td>
<td>25.51%</td>
<td>$1.58</td>
<td>$0.84</td>
<td>13.35%</td>
<td>10.58%</td>
<td>1.12</td>
<td>14.04%</td>
</tr>
<tr>
<td>37</td>
<td>KLAC</td>
<td>KLA-TENCOR CORP</td>
<td>2.04%</td>
<td>$3.59</td>
<td>$3.17</td>
<td>109.69%</td>
<td>16.86%</td>
<td>1.84</td>
<td>19.90%</td>
</tr>
<tr>
<td>38</td>
<td>ALGN</td>
<td>ALIGN TECHNOLOGY</td>
<td>17.78%</td>
<td>$1.77</td>
<td>$1.77</td>
<td>17.99%</td>
<td>18.16%</td>
<td>1.48</td>
<td>21.83%</td>
</tr>
<tr>
<td>39</td>
<td>EXPO</td>
<td>EXONENT INC</td>
<td>22.72%</td>
<td>$1.60</td>
<td>$1.45</td>
<td>17.20%</td>
<td>14.38%</td>
<td>1.47</td>
<td>17.62%</td>
</tr>
<tr>
<td>40</td>
<td>FB</td>
<td>FACEBOOK INC-A</td>
<td>34.15%</td>
<td>$1.28</td>
<td>$1.10</td>
<td>9.14%</td>
<td>9.18%</td>
<td>0.98</td>
<td>33.89%</td>
</tr>
</tbody>
</table>
Economy Watch
Disinflation — “lowflation” — deflation … and performance!

By R. David Ranson

Deflation can result from economic weakness, when it is severe enough. But it is more likely to be a symptom of a rising dollar. In that case, its antecedent is a fall in the price of gold, as is exactly the situation today. This is bullish for the stock and bond markets and, shortly afterward, the economy.

Conventional indicators don’t show it yet, but there’s reliable evidence that the United States has passed the line that divides inflation from deflation. The line is imprecise; according to the consumer price index, with a 0.5 percent increase November over November, we have what the IMF calls “lowflation.” But the CPI is a mix of leading and lagging (and super-long-lagging) price indicators. In a world of sticky and volatile prices, it’s the most volatile (including those of food and energy) that predict the sticky ones (like rent) and provide the timeliest information.¹

The most recent annual change in the CPI for food, energy, and other commodities was a decline of 2.1 percent. The producer price index for commodities fell 6.7 percent, or 2.3 percent excluding fuels. Investors care most about asset prices, and these are much more closely related to commodity prices than with officially promoted indices like the CPI and the producer price index.² If we want to understand capital market performance, neither “headline” measures of inflation nor the commentary that accompanies them in the press will cast much light.

Nothing is more contrarian than this commodity-market based view of deflation. Is deflation a clear and present danger, as many claim? No, it is a clear and present fact—if you look in the right place, and depending on how you define your terms. Even more importantly, widespread fear that deflation is bad for economic health does not stand up to factual investigation.

R. David Ranson
President and Director of Research
H.C. Wainwright & Co. Economics, Inc.

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Deflation is a positive leading indicator of the economy and capital markets. Many people are under the impression that falling prices present a threat to economic growth. This is a belief that captured the minds of the unfortunate generation that lived through the 1930s. As the 1920s came to an end, US output dropped and consumer prices fell. A parallel conjunction occurred in Britain and elsewhere, prompting John Maynard Keynes and others to imagine a close causal relationship between deflation and economic vitality, an interpretation which inspired new theories about the forces that drive economic growth. It was not shaken by the fact that US consumer prices resumed their rise through the 1930s and beyond, while the Depression lasted an entire decade. Indeed, despite the accumulating facts, it’s a belief that never lost its hold from that day to this. According to The Economist, deflation is “the world’s biggest economic problem … And once deflation has an economy in its jaws, it is very hard to shake off.”

Although US consumer prices have hardly ever declined on a sustained basis in more modern times, the producer price index (earlier known as the wholesale price index) has exhibited deflation on a number of occasions. An earlier other HCWE report showed an inverse relationship between producer-price inflation or deflation and subsequent industrial growth during the postwar period. It also included similar evidence for two major countries that were much more deflation-prone than the US, namely Germany and Japan. The left and right panels of Table 1 are reprinted from this source.

Table 1

(a) US Financial Performance in Inflationary and Deflationary Times

<table>
<thead>
<tr>
<th>Calendar-year average data from 1954</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVERAGE for years in which the producer price index rose more than 5% (3 years)</td>
</tr>
<tr>
<td>-1.4%</td>
</tr>
<tr>
<td>AVERAGE for years in which the producer price index rose less than 5% (28 years)</td>
</tr>
<tr>
<td>AVERAGE for years in which the producer price index fell (four years)</td>
</tr>
</tbody>
</table>

Data: Calendar-year averages of indices of producer prices (all commodities), industrial production and S&P total return.

(b) Deflation and Economic Performance in Japan and Germany

<table>
<thead>
<tr>
<th>Calendar-year average data from 1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVERAGE for years in which producer prices rose</td>
</tr>
<tr>
<td>Japan</td>
</tr>
<tr>
<td>-2.2%</td>
</tr>
</tbody>
</table>

[<1] 1.5 3.8

Data: Indices of industrial production, industrial wholesale prices (Germany) and wholesale prices (Japan).

Although US consumer prices have hardly ever declined on a sustained basis in more modern times, the producer price index (earlier known as the wholesale price index) has exhibited deflation on a number of occasions. An earlier other HCWE report showed an inverse relationship between producer-price inflation or deflation and subsequent industrial growth during the postwar period. It also included similar evidence for two major countries that were much more deflation-prone than the US, namely Germany and Japan. The left and right panels of Table 1 are reprinted from this source.
In other countries modern evidence is sparse because the propensity for inflation has in modern times has been so strong. Despite that, a first look at the facts for both the United States and overseas in the nineteenth and twentieth centuries clearly suggests that deflation is a precursor of stronger rather than weaker economic growth.

In the light of these data, it should not be surprising that producer-price deflation in the postwar United States has also been associated with improving performance on the part of both corporate earnings and the stock market. Figure Two, reprinted from another 20-year old publication, shows these relationships in bar-chart form.7

Table 2 illustrates the case of the Japanese stock market, reprinting a table that originally appeared in an HCWE publication in 1999.8 After Shinzo Abe became Japanese prime minister, we re-analyzed the Japanese data through 2012, but drew identical results.9 The relationships shown in Figure Two and Table 1 have also been confirmed by updated tests.

It is impossible to escape the conclusion that deflation is, and remains, favorable for economic and stock-market performance. But there are nuances to the story.

The sequence linking commodity prices, inflation/deflation, and economic performance to the price of gold. Since changes in producer prices are strongly and positively correlated with changes in commodity prices, the evidence concerning deflation and the economy seems paradoxical — at first. The answer to this paradox is that there are two separate and opposite correlations between commodity prices and the economy. They are illustrated in a bar chart, reprinted in Figure Three from a report published some fifteen years ago.10

Table 2

<table>
<thead>
<tr>
<th>Japanese Economic and Stock-Market Performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In Inflationary and Deflationary Times</td>
<td></td>
</tr>
<tr>
<td>calendar-year average data, 1870-2001</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>year-to-year change in</th>
<th>average price index (%)</th>
<th>average Japanese equities index (%)</th>
<th>Industrial production growth index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>declined more than 3%</td>
<td>-5.0</td>
<td>10.6</td>
<td>4.6</td>
</tr>
<tr>
<td>changed -3 and 3% (10 years)</td>
<td>-0.4</td>
<td>10.9</td>
<td>-0.4</td>
</tr>
<tr>
<td>increased by more than 10% (5 years)</td>
<td>11.9%</td>
<td>3.6%</td>
<td>-3.7%</td>
</tr>
<tr>
<td>increased by less than 10% (30 years)</td>
<td>15.2%</td>
<td>8.9%</td>
<td>3.3%</td>
</tr>
<tr>
<td>increased by less than 3% (18 years)</td>
<td>8.9%</td>
<td>3.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>increased by more than 1% (20 years)</td>
<td>13.3%</td>
<td>10.6%</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

Data: Calendar-year averages of the Japanese wholesale price index (International Monetary Fund), the Japanese equities total-return index converted to yen (Morgan Stanley International) and the Japanese industrial production index (IMF).

It is not difficult to resolve this paradox by thinking about the two different directions in which causation may run between the variables. On a simultaneous basis, as shown in the left panel, economic weakness implies weakness in commodity prices: a positive correlation. But lower commodity prices boost the economy one year in the future, as shown in the right panel: an inverse correlation. Thus commodity-price deflation is usually the immediate result of economic weakness; while economic strength is the usual result of commodity-price deflation.

The time sequence by which different manifestations and consequences of deflation show up now becomes clearer. The stock and bond markets react favorably to a decline in industrial commodity prices, but both move somewhat more quickly than
the real economy, given the inherent delays of changing physical output, employment, income and spending. In turn, the economy moves more quickly than official inflation data such as the “headline” consumer price index, as a result of the stickiness of its other price components.

There is just one more essential indicator to add to the beginning of this sequence: the price of gold, which moves still earlier than the prices of non-precious commodities. There is no known leading indicator of gold — it is the value of the dollar as expressed by gold price movements that represent the trigger for the whole process, and which provide the strongest predictive correlations for all the other data surveyed in the above exhibits. Table 3 illustrates the time sequence that ultimately connects gold-price movements to consequences for the CPI years into the future.

Table 3

| Data: Calendar-year averages of the monthly price index for all urban consumers (Bureau of Labor Statistics) and of monthly yields on long Treasury bonds (Federal Reserve Board), month-end total-return indices for long Treasuries (University of Chicago/Dimensional Fund Advisors), and unweighted mix of month-end prices for four commodity groups: metals, foodstuffs, textiles and crude oil (Reuters Bridge Commodity Research Bureau/HCWE), together with calendar-year averages of month-end three-month Treasury bill rates (Federal Reserve Board) and the month-end total-return index for the S&P 500 companies (University of Chicago/Dimensional Fund Advisors). Source: Reprinted from "What investors need to know about inflation – and what doesn’t matter," Interest-Rate Outlook, HCWE, February 28, 2015, Table 1, p.2. Figure Four provides more detail by reprinting another illustration published in an HCWE report some years ago. It distinguishes the immediate and delayed implications of a rising versus falling gold price on three well-known price indices year by year.

It’s clear that the producer price index responds to gold more quickly than the headline CPI, and the latter more quickly than the GDP price deflator. The speed of response for each index can be summarized by the time it takes for half of the ultimate response to be registered: referred to in the diagram as the “half life.” As shown, the half life for the headline CPI is no less than six years.
Furthermore, different components of the CPI move much more quickly than others, as shown in Figure Five, which is constructed like Figure Four and drawn from the same source.

The contrast between the speed of adjustment for energy prices and the "core" index is clearly enormous. Energy prices are more sensitive than food prices to the price of gold, and adjust more quickly. Food prices are more sensitive to gold than the "core" index, and adjust more quickly. The slow speed of adjustment for the core index suggests that it carries the least prompt and least useful information of all the inflation indicators we have compared. It is likely to be the last place in which we could expect deflation to show up, after the full implications of deflation have already long been reflected in capital markets.

Investment conclusions. Belief that deflation is bad for the economy is based on a misreading of experience. It’s true that economic weakness causes commodity prices to fall, and that brings downward pressure on CPI inflation. But the more usual source of falling commodity prices is a strong dollar, as expressed in a decline in the price of gold. A sufficient rise in the dollar implies deflation: very quickly in commodity prices, more slowly in the producer price index, and more slowly still in the consumer price index. The impact on stock and bond prices is felt in the earlier phases of this sequence. And it is unambiguously favorable.

References
5. Source: “Deflation, depreciation and disinformation,” The Capitalist Perspective, HCWE, June 12, 2003, Figure One, p.2.
8. “Japan needs its strong yen,” International Forecaster, HCWE, August 31, 1999, Table 1, p.2.
10. “What falling commodity prices say about the future of the economy,” Economy Watch, HCWE, October 17, 2001, Figure One, p.1.
11. “CPI inflation: eat the apple and pitch the ‘core’,” Interest-Rate Outlook, HCWE, February 13, 2004, Figure One, p.2.
Chapman University and the Argyros School of Business and Economics are pleased to house the Janes Financial Center. The Center provides students and the campus community with real time financial information and state-of-the-art financial analysis technology. The Center will supplement the academic body of knowledge administered to the Argyros students in the areas of finance and investments with practical, hands-on experience affording Argyros students a robust resume and expertise, making them more competitive candidates in the employment market. The Janes Financial Center is a hub for collaborative activities between members of the Finance and Investment industries.

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