// TAM Asset Management, Inc. REVIEW

Diversified, indexed investment strategies for long-term investors, retirement plans, and trust fiduciaries

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Four more years of President Clinton and the Republicans retain control of Congress. Evidently, the market likes this arrangement since it closed up 100 points higher the day after the election. It stands now at just over 6,400 (DJIA) with a lot of nervously-optimistic investors and money managers hanging on.

I thought, under the circumstances, that an article on "reversion to the mean" would be appropriate. The fact that the growth-biased S&P 500 Index is ahead of the DFA US Large Value Fund so far this year (25.1% vs. 21.5%) and P/E and P/B ratios are historically high, indicate to me that optimism is reaching untenable levels.

Across the Pacific, Japan continues to languish, creating ever greater opportunities for far-sighted investors. Japan's economy still has problems, particularly in the banking industry, but looking out several years investors should consider Japanese stocks attractively priced.

Interest rates in the U.S. remain fairly low and the Federal Reserve apparently is not in a hurry to raise them. If the economy continues to grow at its relatively low rate, we should expect rates to remain low for some time.

This newsletter is published by TAM Asset Management, Inc.
Editor: Jeffrey C. Troutner

Comments, questions, or suggestions are always welcome. For more information on our investment management services, please call 1-800-826-4015.

Revert to the Mean: Growth Stock Style

By Jeff Troutner

I have used the phrase "regression (or revert) to the mean" to describe the tendency for winning managers to become average managers over time. It also explains why growth stocks eventually surprise investors with slower growth and lower returns than expected.

The fact is, most investors buy growth stocks *after* they've become growth stocks. In other words, they tend to jump on the bandwagon when the story in most compelling and the outlook the rosiest. Prices have already moved to reflect this outlook.

To illustrate, let's look back at a popular topic of the early eighties. In 1982, Tom Peters wrote a book called *In Search of Excellence: Lessons From America's Best Run Corporations*. Peters looked at a group of companies considered to be the best in the country and screened them based on six fundamental financial measures. The companies that passed the screen were then analyzed to identify what made them special—the "lessons" in his book.

A study by Michelle Clayman shows the irony of buying great companies expecting great stock performance in the future. Chart 1 shows the excellent fundamentals of the companies profiled in Peters' book. Chart 2 shows the stock performance as measured by Clayman in her study. Quite a contrast.

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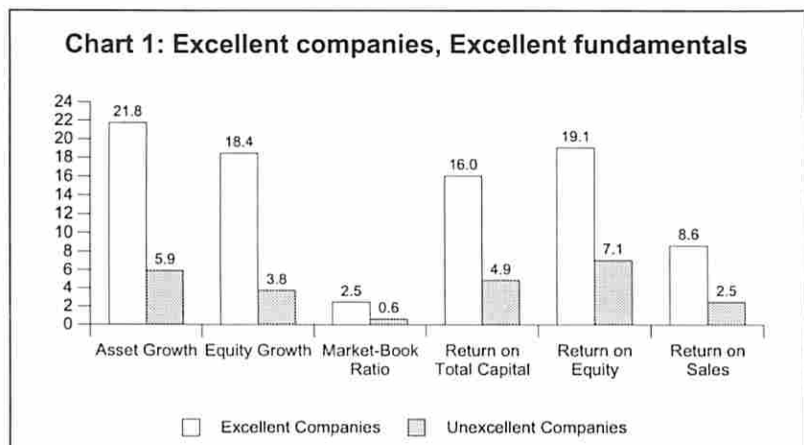
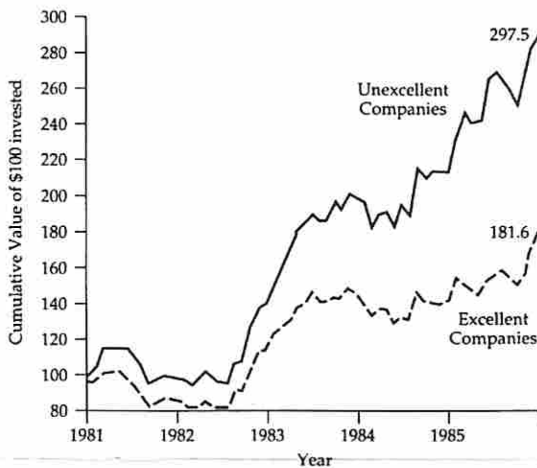


Chart 2: Unexcellent companies, Excellent stock returns (1981-1985)



Source: Clayman, M., "In Search of Excellence: The Investor's Viewpoint, *Financial Analysts' Journal*, May–June 1987, p. 63.

Revert to the Mean... (cont.)

The obvious lesson here is that while corporate managers may find inspiration from "excellent" companies, investors would do well to look at "unexcellent" companies for superior stock performance.

But don't most money managers run stocks through similar screens as Peters' in order to find good companies to buy for their clients' portfolios? And isn't this what most investors look for in a good advisor?

Absolutely. And this is why most fail to outperform the growth-biased S&P 500 Index. As I pointed out in the last newsletter, this is also why the value-stock advantage is likely to exist for some time.

The fundamental qualities of the companies in Peters' study reverted to the mean very quickly. Growth rates dropped dramatically.

But the characteristics of the unexcellent or "value" companies also reverted to the mean—growth rates <u>*increased*</u> *as management, productivity, cost control, or any number of other factors improved!*

There are a number of very good studies that show that reversion to the mean does occur with groupings of stocks designated as growth or value based on the extremes (top or bottom 10%-20%) of price/earnings and price/book ratios. For an in-depth analysis of some of these studies, read Robert Haugen's book *The New Finance*. Here's a short version using approximate numbers from one of the studies Haugen uses.

Table 1: Each stock $100; Revert to average growth of 9%, P/E of 18

Year	Value Stock Growth Rate	New Earnings	Growth Stock Growth Rate	New Earnings
1	-5%	$11.88	+23%	$4.10
2	-3%	$11.52	+21%	$4.96
3	-1%	$11.40	+19%	$5.90
4	+1%	$11.52	+17%	$6.90
5	+3%	$11.86	+15%	$7.94
6	+5%	$12.46	+13%	$8.97
7	+7%	$13.33	+11%	$9.95
8	+9%	$14.53	+9%	$10.84
Price at 18x P/E		**$261.54**		**195.28**
Annual return		**12.8%**		**8.7%**

Assume that you own two stocks—an average growth stock and an average value stock—both selling at $100 per share. The growth stock has earnings of $3.33 for a P/E of 30 and the value stock has earnings of $12.50 for a P/E of 8. Assuming that the average stock will grow earnings at 9% per year and have a P/E ratio of 18 eight years from now, Table 1 shows the ending value for each stocks after reversion to the mean sets in.

The value stock never turned into a growth stock, but both reverted to average over time. Since we started at a higher earnings level with the value stock, the growth stock was never able to catch up.

Not *all* growth and value stocks revert to the mean. But as groups they do and since most investors buy stocks in groups through mutual funds, often classified as "growth" or "value", reversion to the mean is an important concept to understand.

Investors can deal with reversion to the mean in several ways. They can: (1) find growth stocks that won't revert to the mean, (2) get out of them before they do, (3) pick one or two growth fund managers out of thousands to do those things for them, (4) buy both growth and value funds and settle for "market" performance, or (5) invest exclusively in value asset classes through index funds and be patient.

Jeff Troutner is President of TAM Asset Management, Inc.

Asset Class Results Year-to-Date: A Mixed Bag

By Jeff Troutner

Investor focus this year has been drawn to the runaway performance of the Dow Jones Industrial Average. Once again the "market" has managed to mystify most experts who felt that this year would produce a correction from last year's hot returns. In fact, U.S. large stocks are performing better than any other asset class this year.

TAM portfolios are diversified among several other asset classes with the objective of reducing portfolio volatility and downside risk while increasing returns over at least a ten-year period. In other words, we are willing to give up superior short-term performance of one asset class in order to reach a higher plateau over time with fewer bumps along the way.

This year, large company stocks in the U. S. and overseas are outperforming small company stocks. Domestically, large growth stocks are ahead of large value stocks, but on the small stock side we find that value is beating growth. In the foreign markets we see just the opposite: large value and small growth are outperforming their counterparts.

Confused? Focus on the long-term and the picture gets much clearer.

The table on the right shows the normal relationships between the asset classes.

The inconsistency in the short-run indicates, to those who care about such things, that the market is not "efficient." They have a point. There are extremes in investor behavior. The markets do not always move in a rational manner.

But try to exploit the inefficiencies through stock selection or market timing and the markets might hand you your head. How would you have placed your growth and value chips this year, for example? How about U. S. versus foreign, particularly after last year?

Four years ago "indexing" was an alien concept to most investors. Today it receives almost as much attention as the occasional hot fund manager.

Wall Street Week had the new head of Vanguard Funds on recently and you could see the pain in Louis Rukeyser's face every time he had to acknowledge indexing's popularity and advantages. When it came time for the "panel" to ask questions, not one of them had the nerve to challenge indexing's superiority as a long-term strategy. Every one asked a powder-puff question totally unrelated to the issue.

The fact is, no bull market in history has caused more anxiety or insecurity among professional investment advisors as this one.

Imagine what a bear market will do.

Higher risk, higher return?
Not necessarily in the short-run.

	Return Advantage	
Asset Classes	**Long-term**	**This Year**
U. S. / Foreign	Neither*	U. S.
Large / Small	Small	Large U. S. Large Foreign
Value / Growth	Value	Growth (U. S. Large) Value (U. S. Small) Value (Foreign Large) Growth (Foreign Small)

* Foreign stocks outperformed in the past due primarily to currency changes, not necessarily due to higher risk. This relationship may or may not hold in the future.

Performance Notes:

Asset Class Returns: 1-Yr. Bonds = DFA One-Year Fixed Income Portfolio; 5-Yr. Bonds = DFA Five-Year Government Portfolio; U.S. Large Value Stocks = DFA Large Cap Value Portfolio; U.S. Small Value Stocks = DFA Small Cap Value Portfolio; Int'l Large Value Stocks = DFA Large Cap International Portfolio; Int'l Small Value Stocks = DFA International Small Cap Value Portfolio;Emerging Market Stocks = DFA Emerging Markets Portfolio.

TAM Portfolio Returns Net of Fees: These are the actual returns of TAM portfolios in each risk category net of actual TAM management fees, custodial fees, and fund expenses. The "Growth" returns were calculated using a model portfolio for the four months1/31/93 to 4/30/93 and actual accounts thereafter. The "Aggressive" returns were calculated using a model portfolio for the three months 1/31/93 to 3/31/93 and actual accounts thereafter. In both cases, the maximum TAM fee was deducted, representative custodial costs were deducted, and all mutual fund returns are net of expenses. The "Moderate" returns were calculated using actual account performance since inception. Past performance is no guarantee of future returns. This is especially the case with model portfolios which are not subject to specific economic or market factors.

Asset Class Returns

Year-to-Date Through 11/30/96

Asset Class	Return
U.S. Large Value Stocks	21.5%
U.S. Small Value Stocks	19.7%
Emerging Market Stocks	10.0%
Int'l Large Value Stocks	9.3%
5-Yr. Bonds	7.0%
1-Yr. Bonds	5.4%
Int'l Small Value Stocks	4.0%

TAM Portfolio Returns

Through 11/30/96

Risk (% stocks)		YTD 1996	1995	1994	1993	Annual Return 1/93-11/96
Aggressive	(100%)	11.5%	15.1%	5.3%	21.1%	13.4%
Growth	(85%)	12.0%	15.9%	2.6%	16.6%	11.9%
Moderate	(65%)	10.0%	14.6%	2.1%	14.0%	10.3%

Benchmarks

Morningstar recently changed their mutual fund classifications to more accurately reflect a fund's "growth", "value", or "blended" characteristics based on fundamental data such as Price-to-Book, Price-to-Earnings, and Price-to-Dividend ratios. This is consistent with TAM's view of style classification and is a welcome—and long overdue—recognition by Morningstar of the importance of Modern Portfolio Theory in analyzing a manager's investment style. Since the DFA funds themselves are considered benchmarks of these asset classifications, comparisons to Morningstar averages will be discontinued.

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