



TAM ASSET MANAGEMENT, INC.

# ASSET CLASS<sup>SM</sup>

An update of performance, trends, research, & topics for long-term investors

## Asset Class Returns

	2002	2003	2004	Last 10 yrs.	3/31 2005
<b>Bonds</b>					
Short-term	3.9	1.6	0.9	4.9	0.2
Five-Year	10.4	3.0	2.9	7.5	-0.7
Intermediate	15.0	2.5	4.3	7.9	-1.0
Long-term	16.7	2.7			
<b>U.S. stocks</b>					
Large Market	-22.2	28.5	10.7	11.9	-2.1
Large Value	-14.9	34.4	18.2	14.5	0.2
Small Micro	-13.3	60.7	18.4	16.4	-6.4
Small Market	-19.1	51.5	17.9	14.2	-5.1
Small Value	-9.3	59.4	25.4	18.0	-2.9
Real estate	4.2	35.6	32.1	14.9	-6.9
<b>Int'l stocks</b>					
Large Market	-14.6	36.7	18.8	6.2	-0.4
Large Value	-8.5	49.4	28.8	8.8	0.3
Small Market	1.9	58.8	30.9	N.A.	5.0
Small Value	5.8	66.5	34.8	8.1	6.7
Emerg. Mkts.	-9.4	60.2	29.9	6.0	0.9

### Descriptions of Indexes

Short-term bonds	DFA One-Year Fixed Income fund
Five-Year bonds	DFA Five-Year Global Fixed
Intermediate bonds	DFA Intermed. Gov't Bond fund
Long-term bonds	Vanguard Long-term U.S.Treas.
U.S. Large Market	DFA US Large Co. fund
U.S. Large Value	DFA Large Cap Value fund
U.S. Small Micro	DFA US Micro Cap fund
U.S. Small Market	DFA US Small Cap fund
U.S. Small Value	DFA US Small Value fund
Real Estate	DFA Real Estate Securities fund
Int'l Large Market	DFA Large Cap Int'l fund
Int'l Large Value	DFA Int'l Value fund
Int'l Small Market	DFA Int'l Small Company fund
Int'l Small Value	DFA Int'l Small Cap Value fund
Emerging Markets	DFA Emerging Markets fund

\*Last 10 yrs.\* returns are ended 12/31/04.

This information is obtained from sources we believe are reliable, but we cannot guarantee its accuracy.

Past performance does not guarantee future returns.

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## What Return Can We Expect From Stocks? (Part 1)

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When someone asks me what return they should expect from stocks in the future, my quick answer is "whatever the market delivers." Implicit in this answer (which I generally go on to explain, lest it be considered facetious) is that:

- 1. Specific market returns are impossible to predict with any acceptable degree of accuracy;**
- 2. Risk and return are directly related. Therefore, whatever return the market produces over time is likely to be more than what an investor would receive from a less risky asset, such as short-term bonds;**
- 3. The market (all investors collectively) price stocks very efficiently; and**
- 4. Attempts to outguess the market through market timing and other "active" management strategies usually result in less-than-market returns over time.**

For most investors, however, "what the market delivers" is not enough because without some reasonable prediction of future market returns and the volatility of those returns, they find it more difficult to plan for important future events such as their retirement. In addition, the last four years have caused a lot of investor anxiety (two lousy market years followed by two very strong years will do that). A natural reaction to this kind of market volatility is simply to "step aside" and wait for a more cheery consensus.

There are essentially two ways to arrive at a future expected return for stocks. The first is through statistical models that factor in current fundamentals, such as dividend yields and payouts, price-to-earnings ratios, projected growth rates for earnings and dividends, and current interest rates. The second is by reviewing past stock market returns over various time periods to see how "risk premiums" (the difference between stock returns and risk-free investment such as Treasury Bills) have changed, especially under different market and economic conditions, and to decide on a rational course of action. This latter method is often scoffed at by investment experts as being too simplistic, yet given the track record of the more complex mathematic models favored by the academics I'm not sure simplistic is all that bad.

### In This Corner: The Experts

In 1996, Alan Greenspan warned of "irrational exuberance" in stock prices. Stocks went on to irrationally exuberate another 100% before they peaked. In 2002, Professors Eugene Fama and Ken French predicted very low future returns for stocks.<sup>1</sup> That same year money manager Robert Arnott and economist Peter Bernstein predicted zero to negative returns for stocks in the future.<sup>2</sup> From April 2003 until the end of last year, stocks rose over 50%.

All of these investment experts used very sophisticated mathematical models to predict future returns. My point is not that short-term returns "proved them wrong" (they didn't), but that long-term stock returns include these unpredictable short-term rallies. Whatever the future return will be, it will be lower for investors who missed the good times to avoid the bad times. I suspect that many investors found the experts dire predictions as an excuse to get out of the market temporarily or to give up on stocks forever. And I think they have lowered unnecessarily the growth potential of their portfolios as a result.

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The verdict is still out on what the average annual market return will be ten years from Greenspan's comments (eight years later it's running at about 8.2% per year) or from the market peak (it's still down). But can we expect to predict future market returns from mathematical models with any real degree of confidence? I don't think so. In the Fama/French paper the authors acknowledge that their favorite models underestimated stock returns by over 50% for a 50-year period!

As a rebuttal to the Fama/French/Arnott/Bernstein low return predictions, Roger Ibbotson and Peng Chen wrote a paper in 2002 pointing out some of the flaws in the models.<sup>3</sup> Their conclusion was that stocks should return something close to their long-term historical average, or about 6% above T-Bills.

### In This Corner: History

Now let's look at the *historical* record from a number of different perspectives.

From 1927-2004, the total return for the stock market was 10.1%. One-Month Treasury Bills yielded an average of 3.7%. Therefore, the stock "risk premium" was 6.4% (10.1% - 3.7%). Pretty close to the Ibbotson/Chen prediction.

We can also look at "rolling periods" since 1927 (for example 3-year periods 1927-1929, 1928-1930, and so on). The average stock risk premium for 3-year periods since 1927 was 6.6%. For 10-year periods it was 7.2%. Other periods are shown in the table below.

Stock "Risk Premium" for Various Periods				
	Market* Return	T-Bill Return	Risk Premium	
<b>Full Period 1927-2004</b>	10.1%	3.7%	6.4%	
Average of Rolling Periods				
	Annual	High	Low	
3 Year (76 periods)	6.6%	33.1%	-32.8%	
10 Year (69 periods)	7.2%	17.3%	-4.4%	
15 Year (64 periods)	7.2%	16.2%	-0.6%	
20 Year (59 periods)	7.2%	14.9%	1.0%	
25 Year (54 periods)	7.1%	12.6%	2.2%	
After Market Peaks				
	10 Yrs	15 Yrs	20 Yrs	25 Yrs
1929 -	-3.1%	-0.5%	2.1%	4.6%
1937 -	5.2%	7.9%	10.0%	10.3%
1973 -	-1.1%	1.6%	3.7%	5.8%

There were very good and not-so-good rolling periods in each of these ranges, but it's important to keep in mind that we're looking at the risk premium (how much stocks beat T-Bills), not the actual stock market return. For example, there have been 69 rolling 10-year periods since 1927 (using full calendar years). T-Bills beat stocks in only ten of those periods and only three of those produced negative total stock returns (all affected by the historically severe 1929 market crash).

A common criticism of using rolling returns is the overlap inherent in this view. Each new ten-year period, for example, retains nine of the same years (the first one is dropped and one is added at the end). But rolling periods are useful in answering the question, "What if I had started at the beginning of this period?" Also, I'm ignoring the behavior of most investors, especially those with 401(k) plans, who invest on a continuous basis and not in one fell swoop. Money invested after market peaks might generate

relatively low returns for the next ten years, but money added after market corrections will likely compound at much higher rates.

Now let's play devil's advocate and look at returns starting at major down years for stocks (-30% or more). The first one is 1929. Over the next ten years, T-Bills outperformed stocks by 3.1% per year. Hanging on for five more years almost pulls our hypothetical investor even with T-Bills. But after twenty and twenty-five years he's ahead 2.1% and 4.6% per year respectively. Not bad considering where he started.

An investor starting in 1937 would have seen her account drop almost 35% the first year, but patience would have been rewarded over ten years with a 5.2% stock risk premium (believe it or not, T-Bills averaged 0.2% over the period). The next really painful start would have been just prior to the 1973-1974 market decline. For the next ten years, stocks trailed T-Bills by -1.1% per year. At fifteen years stocks had pulled away to a 1.6% advantage and at twenty-five years the market provided close to its historical average at 5.8% per year over T-Bills.

### Conclusion

This simple historical perspective suggests to me that Ibbotson & Chen's estimate of just under 6% for the stock risk premium is probably realistic as a long-term projection. Add in today's T-Bill rate of 2.5% and one could project a long-term real return (after inflation) for stocks of 8.5%. Investors who are considering a lump sum investment without regular contributions might be wise to discount this number further (and the return will always be reduced by advisor and/or mutual fund fees and expenses).

For investors still living in the Wall Street fairyland of 15%-20% stock returns, even this comparatively more optimistic view of long-term stock returns is hard to swallow. I suspect many of them will continue to seek much higher returns from active managers, hedge funds, private equity, market timing, or any other "beat the market" scheme they can find. And most will fail. But this is America and we have the right to squander our money any way we wish.

There is another choice, however. Investors can diversify beyond the "total market" weighting (which favor lower risk/lower return large growth

stocks) and tilt toward value and small company stocks. Adding foreign developed market stocks and emerging market stocks can also boost the return and improve diversification. I will review the historical track record of broader asset class diversification in the next *Asset Class* article.

<sup>1</sup>Fama, Eugene F. and Kenneth French. 2002. "The Equity Risk Premium," *Journal of Finance*, vol. 57, no. 2 (April): 637:659

<sup>2</sup>Arnott, Robert D. and Peter L. Bernstein. 2002. "What Risk Premium is 'Normal'?" *Financial Analyst Journal*, vol. 58 no. 2 (March/April): 64-84.

<sup>3</sup>Ibbotson, Roger G. and Chen, Peng, "Stock Market Returns in the Long Run: Participating in the Real Economy" (March 2002). Yale ICF Working Paper No. 00-44. <http://ssrn.com/abstract=274150>

\*"Market" is the CRSP 1-10 total market index. T-Bills are 1-month maturities. Data is courtesy of Dimensional Fund Advisors (DFA).