

Valuation Check

Global equity markets have performed poorly so far this year, with the MSCI World Index down by 3.3% in the first four months of the year in U.S. dollar terms (or up only 1.0% in Canadian dollars). Continued tightening by the U.S. Federal Reserve and a rise in oil prices to nearly \$60 US a barrel in March clearly have

been the main negative factors, although reasonably good earnings and lower bond yields should have – but didn't – help.

Even with the recent brief pullback in oil prices, the potential drag on global growth posed by continued high energy prices is a serious concern. As shown in Chart 1, the OECD's main barometer of leading economic indicators for the major industrial nations has posted a significant loss of momentum in recent quarters. Although the indicators are not necessarily pointing toward a global recession in coming quarters, they are pointing to slower overall growth in overall economic activity and corporate profits.

We believe the outlook for world markets and the world economy is at an important juncture. If oil prices ease back toward \$40 a barrel and continued evidence of soft growth permits the Fed to pause in its monetary tightening later this year, the outlook for 2006 should improve substantially. That, in turn,

should be reflected in better market performance. We think that is the most likely scenario. On the other hand, if oil prices head back up and the Fed becomes more aggressive about tightening, it is likely to be an unpleasant year.

Regardless of what we think, the more interesting question is how much bad news is currently priced into equity markets? In our view, the answer is simple: a lot.

Relative Valuations Favour Stocks

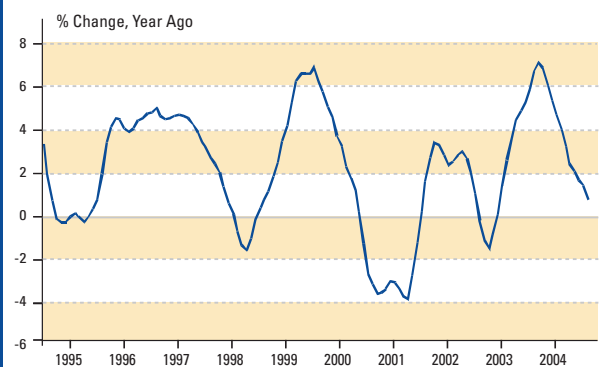
Market analysts have developed numerous sentiment indicators to try to discern whether investors are overly optimistic or pessimistic about one asset class or another. We think the best barometer of sentiment is relative prices, which are set by investors who vote with their dollars.

The so-called Fed model weighs investor sentiment by looking at

the price of stocks versus the price of government bonds. Put simply, when investors are enthusiastic about the economic and equity market outlook, they bid the price of stocks up versus the price of bonds. When they are nervous about the outlook, they favour bonds.

Specifically, the Fed model compares the price-earnings ratio of the S&P 500 Index (based on operating earnings) with the "price-earnings

Global Expansion Losing Momentum
OECD Leading Economic Indicator



Source: OECD

Chart 1: Leading indicators for the global economy are pointing to slower growth ahead, reflecting the impact of higher oil prices and tighter monetary policy.

Valuation Comparison: U.S. Stocks vs. Bonds

Data as of April 29, 2005

	Earnings Estimates	P/E Ratio	Earnings Yield	Relative Valuation	
				10-yr Nominal	10-yr Real + 3% Risk Premium
Operating Earnings					
Bottom Up 2005	\$74.89	15.5	6.5%	-35.1%	-29.3%
Top Down 2005	\$74.89	15.5	6.5%	-35.1%	-29.3%
Top Down 12 Month Forward	\$78.00	14.8	6.7%	-37.7%	-32.1%
As Reported Earnings					
Top Down 2005	\$67.40	17.2	5.8%	-27.9%	-21.4%
Top Down 12 Month Forward	\$71.19	16.3	6.2%	-31.7%	-25.6%
Stock Indices & Interest Rates					
S&P 500	1156.9				
10 Year Nominal Bond	4.2%				
10 Year Real Bond	1.6%				
10 Year Real Bond + 3% Risk Prem.	4.6%				

Source: Prof. Jeremy Siegel, Wharton School, www.jeremysiegel.com

Table 1: Numerous variations of the Fed model show U.S. stocks to be undervalued against bonds by about 30% to 40%.

ratio” of 10-year U.S. Treasury bonds. With the 10-year bond currently yielding 4.20%, its “price-earnings ratio” is 23.8 times (i.e., $1/0.042=23.8$), which means that it costs \$23.80 to buy one dollar of annual income from a 10-year government bond.

Based on the next 12 months’ expected operating earnings, the current price-earnings ratio of the S&P 500 is 14.8. That means the P/E ratio of stocks is currently about 35% cheaper than the P/E ratio of bonds. Table 1 shows this type of comparison for a variety of different measures of the P/E ratio of stocks. Most show stocks to be undervalued relative to bonds by 30% to 40%. This is based on the work of Professor Jeremy Siegel of the University of Pennsylvania, who wrote the well-known investment book *Stocks for the Long Run*.

Some analysts have pointed out that it is more appropriate to look at the relative valuation of stocks versus inflation-protected government bonds. Without getting into all the details, Table 1 also shows that the current yield on 10-year inflation-protected or “real” bonds is only 1.6%. Since stock returns have historically outpaced bonds by about 3% per annum, it can be argued that the appropriate yield to use for relative valuation analysis is the real yield plus a 3% risk premium. That works out currently to 4.6% (1.6% real yield plus 3.0%). Even on the basis of that comparison, stocks still look to be about 20% to 30% undervalued versus bonds.

To provide historical perspective, we show in Chart 2 the Fed model’s read on relative valuation since 1979.

This chart is based on the price-earnings ratio of the S&P 500 using 12-month forward operating earnings. By this measure, stocks became overvalued in 1999 and 2000 but have remained undervalued since 2002. This suggests to us that investors remain very cautious

with respect to the economic outlook. In other words, a lot of the bad news of high oil prices and Fed tightening is already priced into the market.

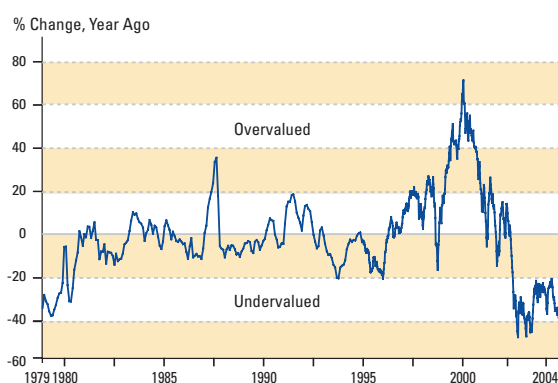
This is not to suggest that prices are set to rise by 35% on any kind of good news. One valid criticism of the Fed model is that it may simply indicate that bonds are overpriced – not that stocks are a great bargain. As Professor Siegel observes, “This doesn’t mean stocks won’t go down further, but it means that long-term investors are getting value for stock purchases at these levels.”

International Stocks More Attractive

One objection to the Fed model is that it may overlook the risk to U.S. stocks based on possible problems ahead for the U.S. dollar. That is a somewhat

The Fed Model

Relative Equity Valuations



Source: Board of Governors of the Federal Reserve and Thompson Financial, Yardeni.com

Chart 2: Even with the recovery in the U.S. stock market since October 2002, stocks still look substantially undervalued compared to bonds.

Valuation Comparison: International Stocks vs. Bonds

Data as of April 29, 2005

Market	12 - Month Forward P/E Ratio	Earnings Yield	10 - Year Nominal Bond Yield*	Relative Valuation
US	15.2	6.6%	4.2%	-36.2%
Europe ex. U.K.	12.4	8.1%	3.4%	-57.8%
U.K.	12.0	8.3%	4.5%	-45.6%
Japan	15.3	6.5%	1.3%	-80.9%
Pacific ex. Japan	11.6	8.6%	4.7%	-45.1%
World	13.8	7.2%	3.8%	-47.4%

* Weighted average for World and Pacific ex. Japan using MSCI World Index weights

Source: Lehman Brothers, Bloomberg and Trilog Advisors

Table 2: Non-U.S. stocks appear to be notably undervalued because of the combined effect of lower P/E ratios measured against lower bond yields (i.e., very expensive bond prices).

tricky issue since dollar weakness may actually favour stocks over bonds by spurring corporate profits at the cost of higher inflation. But foreign investors, who are rightly concerned about the impact of a weak dollar on their U.S. holdings of both stocks and bonds, may well decide to avoid both.

So what about the relative price of non-U.S. stocks and bonds? Here again a “Fed model” type of analysis can shed light on whether investors have priced a lot of the obvious bad news (oil prices, Fed tightening, sluggish growth, etc.) into prices. And here again the answer is emphatically yes.

Key international valuation comparisons are summarized in Table 2. With a price-earnings ratio of 12.4 times compared with bond yields of 3.4% in continental Europe, stocks are nearly 60% undervalued relative to bonds, according to the Fed model. In Japan, where bond yields are

only 1.25%, the comparison is even more pronounced and shows stocks undervalued versus bonds by about 80%! In the U.K. and the Pacific excluding Japan, price-earnings ratios are around 11.5 to 12.0 and stocks are about 45% undervalued versus bonds.

The Japanese case is instructive regarding potential pitfalls of the Fed model. Japanese stocks have looked cheap relative to the Fed model for many years now, although the recent reading of 80% undervaluation is certainly extreme. The pitfall is that an equity market that looks cheap can indeed become much cheaper if the underlying economy is permitted to slip into persistent deflation and a 15-year slump.

That said, our view is that Japan is now in the process of escaping from its long slump, primarily because of the improving health of its banking system. If we are correct, the Japanese are likely to switch money away from low-yielding bonds toward equities in coming years. Once again, much of the correction of this apparent disequilibrium in Japan may eventually come from bond yields

going up (or bond prices falling), rather than equities rallying by a full 80%.

With the MSCI World Index trading at around 13.8 times expected earnings, we think the global stock market provides solid value, with the earnings yield (the inverse of the P/E ratio) working out to a reasonable 7.25%. Measured against a weighted average of global bond yields of only 3.8%, that suggests that world stocks are undervalued by nearly 50% compared to bonds.

To be sure, there is a lot to be nervous about – and investors have clearly voted with their feet in favour of bonds. By virtually any measure, therefore, stocks are the asset class that is currently out of favour.

Against this backdrop, it would take only moderately positive news – such as stabilization in oil prices or a pause by the Fed – to permit stocks to modestly outperform bonds. Truly good news, such as a drop in oil prices back below \$40, should permit stocks to trounce bonds.

And that, in short, is why we are still optimistic on equities and why we are most enthusiastic about non-U.S. equities.

William Sterling

William Sterling
Chief Investment Officer
Trilog Advisors, LLC