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CAMBRIDGE ASSOCIATES LLC

U.S. MARKET COMMENT HOW TO BE BULLISH

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Eric Winig Alice Lin

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How to be Bullish

Despite our belief that the U.S. equity market is currently in the midst of a secular bear market, we have warned investors not to cut allocations too severely, due both to the volatile and unpredictable nature of bear market rallies, and to our expectation that stocks would rally as a result of the significant financial and monetary stimuli that had been provided to pull the economy out of recession. Instead, we have advised investors to weight their equity portfolios more heavily toward non-U.S. equities than would normally be the case, both on the basis of relatively attractive valuations and a desire to reduce exposure to the U.S. dollar, which has been vulnerable to significant headwinds. After a solid two-and-one-half-year rally, our advice remains the same. In short, while a continued rally is not our base scenario, a plausible argument can be made that U.S. equities are attractively priced and thus poised to move higher.

The combination of soaring earnings and stagnant equity prices since the end of 2001 has brought valuations down substantially. Since that point, S&P 500 reported earnings have grown a cumulative 150%, while prices have only increased 3.8%. As a result, price-earnings (P/E) ratios have fallen from 46.5 to 19.3 (preliminary). Indeed, both Morgan Stanley and Bridgewater Associates note that implied earnings growth for U.S. equities is now as low as it has been in at least 20 years. Bridgewater, for example, says ten-year nominal earnings growth need only average 3% per annum for stocks to be attractive relative to bonds (the lowest since 1981), while Morgan Stanley pegs discounted future earnings growth at 7.2%, 1.7 standard deviations below its post-1983 mean. (While there is a large difference in absolute numbers, this is due to methodological differences between the two models, and is somewhat misleading. More importantly, the models show a similar pattern since the Morgan Stanley series began in 1984, and are both currently at levels indicating equities are attractively valued relative to history.) Further, while precedent suggests the recent surge in earnings growth will be temporary,¹ some (e.g., Bridgewater) argue equity markets do not fully reflect the *current* strength in profits.

Our own dividend discount model (DDM), meanwhile, says S&P 500 earnings would need to grow 6% a year in nominal terms to justify today's equity prices, given an equity risk premium of 3%, and using the 30-year Treasury yield as the risk-free rate and normalized earnings of \$46 (Table A). This is not only below the 7.6% per year that earnings have grown on average since 1927 (Table B), but also a bit lower than should be expected given current inflation expectations of roughly 2.5%. As *real* earnings growth has averaged about 4% over time, a reasonable expectation for future *nominal* growth would be 6.5%.

To be sure, there are solid arguments against the usefulness of DDMs, most significantly that they are heavily reliant on inputs that are open to question (such as the equity risk premium), and tend to break down when interest rates are very low, as they are today. Indeed, DDMs' reliance on bond yields makes them vulnerable to sharp swings in interest rates—i.e., a sharp rise in rates, as many observers predict, could turn today's "undervalued" market into tomorrow's rich valuations. Still, these objections do not necessarily derail the bullish case. While DDMs are quite sensitive to inputs, models that use a consistent framework

¹ Since 1900, two-year cumulative earnings growth at least one standard deviation above average (50.9%) has been followed by subsequent average real two-year earnings growth of -3.4%. For more details, see our March 2005 U.S. Market Comment: *Earnings Growth: Don't Bank on It.*

over long periods of time can nevertheless discern useful trends. Further, while it is true that DDMs tend to break down when rates get extremely low, it is also the case that, all else equal, the lower real yields get, the more attractive equities become.²

The prospect of lower interest rates, meanwhile, is not so outlandish. Indeed, while very few predicted the current bond rally would go as far as it has, a small number of market observers (e.g., Morgan Stanley's Stephen Roach and PIMCO's Bill Gross) have recently converted to the low-yield camp, arguing bond yields are not only at reasonable levels today, but may be primed to go still lower. Martin Barnes of the *Bank Credit Analyst* expects ten-year yields to fluctuate between 3.5% and 4.5% for the medium term, as yields settle into a range "consistent with low and stable inflation and a plentiful supply of capital." Still, such voices represent a small minority of opinion; the vast majority of market participants continue to expect higher rates. (A May 6 Bloomberg poll, for example, surveyed 61 economists, all of whom expected higher rates six months hence.) Thus, it seems reasonable to assume that investors who take the other side of this trade—i.e., that rates will stay low and thus provide continued support to property prices, while a further drop in rates could kick off yet another round of refinancings. Indeed, both new home sales and refinancings have picked up in recent weeks in response to ten-year rates' brief dip below 4%.

While the above represents the foundation for the bullish case, there are other, more tangential data points that could also prove constructive for equities. U.S. consumer spending, for example, could rise faster than most expect, buoyed by rising incomes. Indeed, real disposable income rose by 3.7% for the year ended in the first quarter. More remarkably, incomes are growing despite a sharp drop in the share of corporate revenues going to labor, which is now at multiyear lows. In other words, corporate profits and disposable income are rising at the same time, even as inflation rates remain relatively subdued. Consumer confidence, meanwhile, has begun to pick up, while industrial production and manufacturing remain solid if not spectacular.

While we continue to believe that we are in the midst of a secular bear market, and recommend investors weight their equity portfolios more heavily than normal to non-U.S. markets, it is important to recognize that a plausible case can be made for U.S. equities to move higher. However, in order to be bullish, investors must not only assume that the historical cyclicality of earnings does not apply this time around, but also that the tendency for P/E ratios to fall to extremely low levels during secular bears has either been averted or pushed out into the indeterminate future.

2

 $^{^{2}}$ This of course presumes that lower real yields stimulate increased investment in projects that provide a return at least equal to the risk-adjusted cost of capital; a condition that is often not met.

Equity Risk

Equity Risk

Equity Dials

Table A

S&P 500 DIVIDEND DISCOUNT MODEL VALUATIONS UNDER VARYING ASSUMPTIONS

S&P 500 Fair Value and Percentage Over- (Under-) Valued Under Varying Equity Risk Premium, Earnings, and Earnings Growth Rate Assumptions Valuations Using 12-Month Trailing Operating Earnings of \$70

	Valuations Under Various Earnings Growth Assumptions for Next Ten Years							
<u>1%</u>	<u>3%</u>	<u>5%</u>	<u>7%</u>	<u>9%</u>	<u>11%</u>	<u>13%</u>	<u>15%</u>	
1,745 (32%)	2,094 (43%)	2,509 (53%)	2,998 (60%)	3,576 (67%)	4,254 (72%)	5,050 (76%)	5,980 (80%)	
1,027 16%	1,222 (2%)	1,452 (18%)	1,723 (31%)	2,042 (42%)	2,416 (51%)	2,853 (58%)	3,364 (65%)	
644 85%	757 57%	889 34%	1,045 14%	1,227 (3%)	1,439 (17%)	1,687 (29%)	1,975 (40%)	
	<u>1%</u> 1,745 (32%) 1,027 16% 644 85%	Valuations 1% 3% 1,745 2,094 (32%) (43%) 1,027 1,222 16% (2%) 644 757 85% 57%	Valuations Under Variou 1% 3% 5% 1,745 2,094 2,509 (32%) (43%) (53%) 1,027 1,222 1,452 16% (2%) (18%) 644 757 889 85% 57% 34%	Valuations Under Various Earnings Gr 1% 3% 5% 7% 1,745 2,094 2,509 2,998 (32%) (43%) (53%) (60%) 1,027 1,222 1,452 1,723 16% (2%) (18%) (31%) 644 757 889 1,045 85% 57% 34% 14%	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Valuations Under Various Earnings Growth Assumptions for Next 1% 3% 5% 7% 9% 11% $1,745$ $2,094$ $2,509$ $2,998$ $3,576$ $4,254$ (32%) (43%) (53%) (60%) (67%) (72%) $1,027$ $1,222$ $1,452$ $1,723$ $2,042$ $2,416$ 16% (2%) (18%) (31%) (42%) (51%) 644 757 889 $1,045$ $1,227$ $1,439$ 85% 57% 34% 14% (3%) (17%)	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	

Equity rubit									
<u>Premium</u>		Valuations Under Various Earnings Growth Assumptions for Next Ten Years							
	<u>1%</u>	<u>3%</u>	<u>5%</u>	<u>7%</u>	<u>9%</u>	<u>11%</u>	<u>13%</u>	<u>15%</u>	
2%	1,974	2,370	2,838	3,392	4,045	4,813	5,713	6,766	
	(40%)	(50%)	(58%)	(65%)	(71%)	(75%)	(79%)	(82%)	
3%	1,162	1,382	1,643	1,949	2,310	2,733	3,228	3,806	
	3%	(14%)	(27%)	(39%)	(48%)	(56%)	(63%)	(69%)	
4%	832	981	1,158	1,365	1,609	1,893	2,225	2,612	
	43%	21%	3%	(13%)	(26%)	(37%)	(46%)	(54%)	

Valuations Using 12-Month Trailing Reported Earnings of \$62

Premium	Valuations Under Various Earnings Growth Assumptions for Next Ten Years							
	<u>1%</u>	<u>3%</u>	<u>5%</u>	<u>7%</u>	<u>9%</u>	<u>11%</u>	<u>13%</u>	<u>15%</u>
2%	1,314	1,578	1,890	2,259	2,693	3,205	3,804	4,505
	(9%)	(24%)	(37%)	(47%)	(56%)	(63%)	(69%)	(74%)
3%	773	920	1,094	1,298	1,538	1,820	2,149	2,534
	54%	29%	9%	(8%)	(23%)	(35%)	(45%)	(53%)
4%	554	653	771	909	1,071	1,260	1,481	1,739
	115%	82%	55%	31%	11%	(5%)	(20%)	(31%)

Valuations Using Normalized Earnings of \$46

Other Key Assumptions

• S&P 500 price of \$1,191.50

• Long-Term Earnings Growth of 5.0%

• Risk-Free Rate of 4.36%, the yield on the 30-year Treasury on May 31, 2005.

Sources: Standard & Poor's, Standard & Poor's Compustat, Thomson Datastream, Thomson Financial, and U.S. Treasury. Normalized earnings are calculated by dividing the current index value by the annualized average real earnings for the trailing ten years. CPI-U data are through April 30, 2005. The 30-year Treasury yield is an extrapolation of the Long-Term Average Rate series calculated by the Treasury following 2/18/02, when the Treasury ceased publication of the 30-year constant maturity series. The price-earnings ratio using normalized earnings is the real price divided by the trailing ten-year average of real earnings.

Table B

S&P 500 YoY EARNINGS GROWTH

Fourth Quarter 1926 - Second Quarter 2005

Nominal Earnings Growth



Source: Calculated from data provided by Standard & Poor's and Standard & Poor's Compustat.

Notes: Graph represents quarterly data. Data for 2005 are through May 31. Fourth quarter 2004 and May 31, 2005 earnings data are preliminary.