The Risks

A possible war against Iraq presents a large risk in this forecast. Another risk is the projected U.S. Current Account deficit of almost $500 billion, which is around 4.7 percent of GDP. A reversal of capital flows could cause a rapid and dramatic devaluation of the U.S. dollar against other key currencies, such as the euro and the yen. This would badly distort world trade and harm world economic growth. However, the dynamic productivity growth rate in the U.S. is a hint that it might be continuously attractive to invest here.

The risk of a Brazilian default is acute. With an overall debt of almost $300 billion—a little more than 60 percent of GDP—it is hard to understand how stern the situation really is. It is the debt structure more than the actual level of debt that causes concern. After the last monetary reform in 1994, the Brazilian government tried to minimize the financing cost of government debt by indexing sovereign bonds either against the U.S. dollar or the short-term domestic interest rate. Consequently, any devaluation of the domestic currency (the real) or an increase of the domestic interest rate to avoid a further slipping of the currency increases the debt burden. Brazil seems to be caught in a vicious cycle. Only if the new government is able to reverse the devaluation trend of the real and to lower real interest rates will Brazil have a realistic chance to avoid a fall-back into monetary chaos and economic contraction. The contagious shock waves from such an event would be devastating for the whole continent. ◄

Financial Forecast

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The financial outlook for 2003 is cautiously optimistic. We think the market has reached its lows and is now poised to return to the positive column. As we all know too well, since peaking in March of 2000, the performance of the equity markets has been abysmal. The Dow Jones 30 Industrials has fallen 24 percent, the S&P 500 has declined 41 percent, and the Nasdaq Composite has plummeted a stunning 73 percent. As investment professionals who advocate a long-term investment strategy, we have suffered the decline with everyone else. In fact, our 401k plans have been reduced to 301k's!

From a historical perspective, the behavior of the markets over the last seven years has been highly unusual. From 1995 to 2000, the S&P 500 increased an average of 21 percent per year, well above the long run growth rate of roughly 11 percent. These growth rates, of course, are not sustainable. Many have characterized this period as a "bubble" and indeed, after the fact, the description seems appropriate. However, suppose that as a long-term investor you had put your money in the S&P in 1995 and not paid any attention to the markets. Your average return over the seven-year period would be 7.5 percent per year. That's a bit lower than the historical average, but still a decent overall return.

As students of financial markets, we know that stock prices are influenced by three fundamental factors: interest rates, earnings, and attitudes toward risk. Our outlook toward interest rates is generally favorable for the next year. While interest rates are at historically low levels, the market does not expect a large increase over the next year. The Federal Funds rate—the interest rate set by the Federal Reserve for very short-term borrowing—is currently 1.75 percent, an extremely low interest rate. Does this mean that interest rates will rise in the near term? In fact, the opposite is expected to occur. The interest rate on short-term Treasury Bills is now about 1.5 percent. The only way for the Treasury Bill rate to be below the Federal Funds rate is for investors to expect the Fed to announce additional rate cuts in the near future.

A different logic applies to long-term interest rates. The ten-year rate is currently about 4 percent, also at the bottom of its historical range. Do we expect this rate to rise? Yes, but forecasting long-term rates is a bit like forecasting next year's Super Bowl Champion—a very imprecise process. Long-term interest rates are driven by expectations of future inflation and expectations of future growth. On the inflation side, recent data suggest little evidence of price pressures. Over the past 12 months, the Consumer Price Index has risen 1.5 percent and the Producer Price Index has fallen 1.2 percent. Both of these measures, however, tend to overstate the true inflation rate because they don't adequately reflect technological improvements. The second factor, expectations of future growth in the economy, influences the slope of the yield curve. As the expected future growth rises, the yield curve becomes steeper. If corporate earnings reflect future growth, then an anticipated increase in earnings may contribute to a rise in long-term rates.

The outlook for corporate earnings is generally positive. After terrible earnings momentum in 2001, the decline has finally stopped. In the first quarter of 2002, S&P 500 earnings fell 12 percent from the previous year. By the second quarter, however, positive growth had returned and reached 6 percent during the third quarter, compared to the previous year. Earnings for the fourth quarter of 2002 are expected to rise 15 percent from year earlier levels. Overall, 2002 earnings should show a growth of roughly 2 percent. The outlook for 2003 is much more positive. According to estimates from First Call and industry analysts, 2003 earnings will rise 15 percent, with growth rates increasing as the year progresses.

While low interest rates and a return to normal earnings growth would be a welcome sign to investors, an important factor

If you put money in the S&P in 1995, your average return over the next seven years was 7.5%.

influencing the market is the risk premium. Investors need to be compensated for the risk of their investments. There is some evidence that during the last half of the 1990s investors were less wary of risk. In the past two years, this has been reversed. As investors grow more cautious, they require a higher expected return for their investments. One way this risk premium is revealed is through the Price/Earnings ratio. Holding everything else constant, a lower P/E ratio implies a higher risk premium. As investors become more risk averse, the price they are willing to pay for a given stream of earnings declines, and this means the P/E ratio will fall. In the past year, investors have grown more risk averse and the P/E ratio has fallen from 21.0 to 18.4.

In reality, however, P/E ratios are influenced by other factors, such as interest rates, business cycles, and expected earnings. A common approach for industry analysts is to compute the forward P/E, the current price divided by the expected earnings over the next year. This approach incorporates fluctuations in earnings due to business cycles. Based on the expected earnings for 2003, the P/E is 16.7. While this is much closer to the historical average, is it still too high? One commonly used comparison on Wall Street is to contrast the P/E ratio of the S&P 500 index with the inverse of the long-term Treasury Bond rate. If the P/E is below this target, it suggests the stock market is undervalued. With the 30-year bond rate currently at 5 percent, the inverse of the bond rate is 20.0. Since this exceeds 16.7, it suggests that stocks are moderately undervalued.

What does this all mean for the investor? We are cautiously optimistic that 2003 will provide a decent rate of return for stock market investors. Only once since 1926—during the depression era of 1929 to 1932—has the market declined for four consecutive years. However, the economic conditions surrounding that period are virtually absent in today's economy. What could derail our predictions? The most likely area of concern is corporate earnings. If the economy falters in 2003, earnings will diminish and stock prices could fall from their existing level. ◂

Housing

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Existing home sales have continued to be strong and should finish 2002 at a record level. The National Association of Realtors projects existing home sales of 5.44 million units in 2002 and the National Association of Home Builders projects 5.53 million units for 2002. This compares with 5.29 million units during 2001. Existing home sales should remain strong during 2003 although they may be slightly off the record pace of 2002.

Housing starts for 2002 will be at about 1.69 million units, which is the highest level since 1986, when housing starts peaked at 1.81 million units. Prior to that the highest level was a record 2.02 million units in 1978. The National Association of Home Builders projects housing starts to total 1.63 million units in 2003, just slightly off the 2002 level.

Table 1 summarizes the housing and interest rate forecast from the National Association of Home Builders, which is consistent with the forecast from the IU econometric model. Mortgage rates are likely to start 2003 at a slightly lower level than the average for 2002, as rates recently dropped to record lows during the end of 2002 following the lowering of interest rates by the Fed. For the year 2003 mortgage rates are not likely to differ significantly from those during 2002 (see **Figure 1**).

The low mortgage interest rates in 2002 resulted in a record level of home mortgage refinancings, with more than half of the borrowers taking cash when they refinanced. This has helped fuel consumer spending. It isn't likely that this level of refinancings will continue during 2003, since most homeowners have already refinanced.

It is interesting that the market value of the residential housing market is now greater than the stock market. Of course, a large part of this is the declining stock market. The market capitalization of stocks listed on the New York Stock Exchange and the Nasdaq Composite dropped during 2002 to about $11.4 trillion, down from a peak of $17 trillion in March 2000. Over the same time period rising home values and increasing housing stock from new home construction boosted the value of the residential housing market to about $13.1 trillion. Of that amount, homeowner's equity (after subtracting mortgage debt) was about $7.5 trillion.

As suggested from the discussion above, home prices have risen significantly on a national basis with double-digit annual

Table 1
Housing and Interest Rate Forecast

Housing (in thousands)	2000	2001	2002	2003	2004
Total Starts	1,573	1,603	1,687	1,630	1,618
Single-Family	1,232	1,273	1,337	1,302	1,284
Multi-Family	341	330	350	329	334
New Single-Family Home Sales	880	908	953	931	917
Existing Home Sales	5,159	5,291	5,533	5,349	5,274
Interest Rates					
Fixed-Rate	8.1%	7.0%	6.5%	6.2%	6.9%
ARMs	7.0%	5.8%	4.6%	4.3%	5.8%
Prime Rate	9.2%	6.9%	4.7%	4.5%	6.2%