

## Quarterly Review and Outlook — January 2002

# DENVER INVESTMENT ADVISORS LLC

**T**he current recession, the eleventh since World War II, began last March. Projecting the short-term direction of the economy is always uncertain, and invariably an impossible task. However, just like bulbs popping out of the soil in the Spring show us that summer is near, signs pointing to an economic recovery are beginning to show up.

It is our habit to conclude our Strategy Piece with a brief summary of the various economic scenarios we feel are the most probable outcome of current economic conditions. This quarter, we feel it would be helpful to elaborate upon this usually brief discussion by examining in greater detail the possible shape of the economic recovery that will eventually follow the recent period of economic decline.



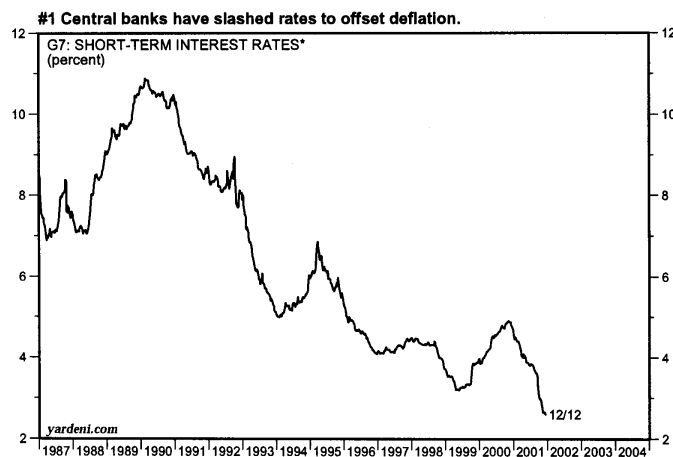
## ***Strategy Statement Summary***

## ALPHABET SOUP (V, W, L, U, or Square Root?)

*Capital spending has always  
been cyclical....*

As is often the case, the main force behind the economic boom of the late 1990s was capital expenditures by businesses. In the third quarter of 2000, capital spending reached a peak of 13.2% of Gross Domestic Product (compared to a post 1970 norm of 11% to 12%). Since the beginning of the Industrial Revolution 250 years ago, capital spending has always been cyclical. In favorable economic periods, sales rise and business confidence grows, so managers invest in new capacity, adding additional strength to the economy. This leads to additional investment, higher growth and greater confidence still. This upward trend eventually produces more capacity than can be utilized, and cutbacks ensue. These cutbacks typically are taken to an extreme, slowing many sectors of the economy. Eventually, demand increases, at which point the process starts over again. Such swings are, and will continue to be, the primary cause of business cycles.

**V** (Accelerating Recovery) This is a sharp recovery fueled by the Federal Reserve's aggressive rate cutting, increased government spending, tax cuts and rapid money supply growth. Remember that interest rates fell from 6.5% (when easing began) to less than 2%. If you look back a bit further and particularly at the global picture, the change is dramatic. This synchronized easing by central banks will eventually take hold on the global economy causing it to re-accelerate.



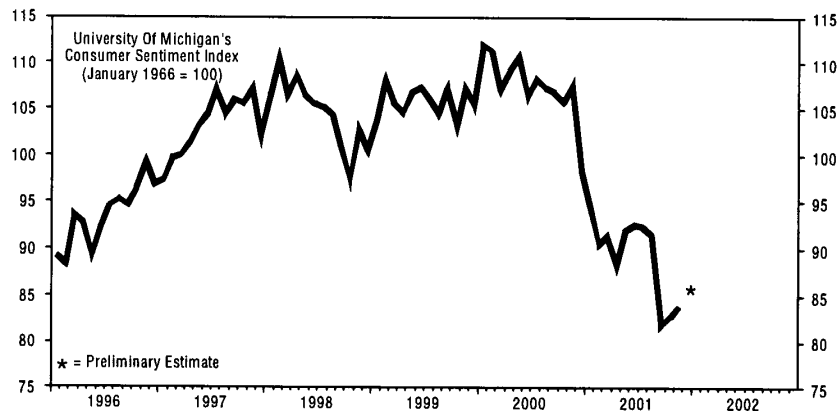
\* Unweighted average of US 3-month T-bill rate and 3-month Euro rates for Canada, UK, Germany, Japan, Italy and France.

Source: Deutsche Banc Alex Brown

When the first signs of a quickening recovery show up, inflation concerns surface and bond buyers will disappear. This causes interest rates to head back up. In this scenario, the low interest rates of early November represent a cyclical bottom in intermediate to long-term bond rates.

There is some current anecdotal evidence to support a "sooner rather than later" recovery scenario. Recently we have seen technology production start to reverse a 15-month free fall. Likewise, online holiday sales surprised even the dot-com sector this year with increases of 36%, albeit off a small base. Lastly, we are seeing consumer sentiment pick up as measured by the University of Michigan, and shown in the chart below.

*There is some current anecdotal evidence to support a "sooner rather than later" recovery....*



Note: Latest data are for December 2001.  
Source: University of Michigan.

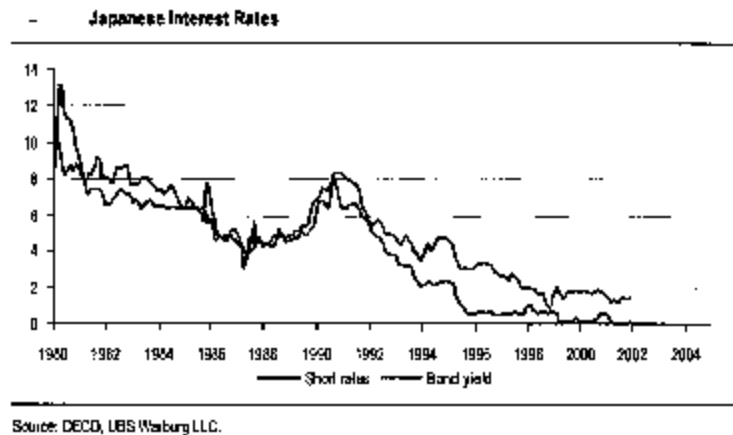
**W** (External Shock) In this case, we have the "V" recovery in full steam when it is suddenly derailed by poor policy actions or some unforeseen event. Here, the Federal Reserve might try to retrace some of its easing steps and start raising interest rates. In this case, the Federal Reserve's aggressive tightening puts the lid on corporate expenditures and final demand. Corporate profits fail to improve putting additional pressure on equity markets. This scenario played out in 1994 when the Federal Reserve reversed its previous rate cuts and the equity and bond markets reacted in a negative manner.

Outside factors such as a sudden increase in energy prices, a setback in the current war against terrorism, or simply the recent poor stock market performance could also disrupt the recovery. A short-term economic contraction follows and the economy eventually recovers mimicking the latter half of a "V" shaped recovery, but at a much later date than initially anticipated.

**U** (Prolonged Recession) The "bottoming" process in the economy takes significantly longer than in a "V" shaped recovery. Here, we fail to see a recovery in business and consumer spending. Layoffs continue and confidence remains low. Personal bankruptcies increase leading to deteriorating credit quality. GDP is essentially stagnant and corporate profit growth is non-existent for a number of quarters. Continued deflation in the form of intense global competition hurts corporate profits. This implies an almost structural deflation across the world, rather than the more widely accepted cyclical deflation that we have seen during the previous economic expansion.

*The chances of a “L” recovery seem remote....*

**L** (A variation on Prolonged Recession) An "L" shaped recovery is anything but a recovery. This is a worst case scenario, where the Federal Reserve continues to lower interest rates to increase final demand, but nothing happens. It is hard to imagine the government letting the economy fall into this continued stagnation given the shocking example we have seen of this in Japan. As astonishing as it may seem, interest rates have been hovering around zero for most of the last six years and the government has failed to take any action to correct structural problems in the economy.



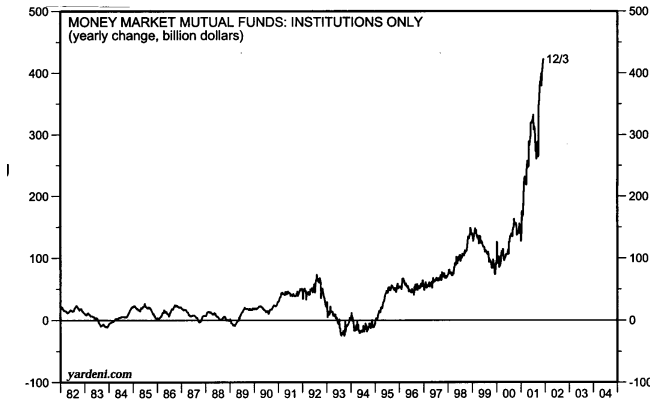
Unlike the Japanese government which favors social stability over wrenching change, we have seen our government enact change when it is needed to help the economy (e.g., the forced closing of numerous financial institutions in the late 1980's and early 1990's). The chances of a “L” recovery seem remote.

**Square Root** (Steady Recovery) This is a modest recovery after a sharp initial snapback. The initial snapback is a result of the immediate drop in GDP following 9/11. After that initial acceleration in the economy, we see gradual growth with restrained inflation.

One example of the initial snap-back is an end to the inventory correction that has been in place since the technology train-wreck of the last couple of years. This caused a substantial increase in real GDP after which final demand settles in at a moderate to slow growth rate. Because consumer spending has been strong during the current economic slowdown, it cannot "regain momentum". We do not see the traditional strong pickup in consumer demand. Other sectors of the economy grow slowly over the next few years.

However, after several quarters, capital spending could turn around. Cheap money may increase business spending on projects that promise a fairly good payback in a short amount of time. Interestingly, money market mutual fund assets held by institutions are up a record \$422 billion over the last 52 weeks. Much of this increase has resulted from corporations borrowing at very attractive long-term interest rates.

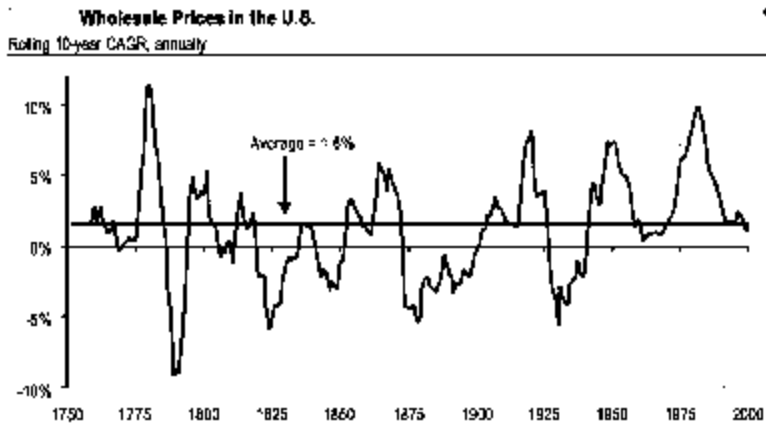
*Cheap money may increase business spending....*



Source: Deutsche Banc Alex Brown

As conditions improve, much of this liquidity will be available to finance a rebound in business spending, stock buybacks and acquisitions. Some companies may consider investing in cost-saving projects, for example, to improve the bottom line once they feel comfortable with the pace of acceleration (or lack of deceleration) in their own business.

This recovery also assumes that the Federal Reserve stays on the sidelines, unlike the "W" recovery. Inflation is moderate, allowing for few pricing increases, as growth in wholesale prices returns to its long-term average range.



Source: Historical Statistics of the United States: Colonial Times to 1970 (Part 1).

*Our recommended asset allocation remains the same as last quarter....*

Central banks around the world engaged in 184 monetary easings during 2001. These actions start to have some traction as growth across global economies experiences a slight up-tick in 2002, followed by increasing growth in 2003 and 2004. Thus, in the not-so-distant future, we could see a synchronized global recovery. Therefore, we are comfortable with the "square root" or steady recovery scenario as the most probable outcome for the economy.

### **Conclusion**

Our work continues to show a 65% probability of a Steady Recovery (the Square Root). This is unchanged from last quarter. While the events of September 11 most likely added a dip and subsequent snap-back, we still feel that the economy is poised for a steady, stable climb out of the current recession. Our next highest probabilities are split between Accelerating Recovery and Prolonged Recession, both at 15%. We have increased the probability of Accelerating Recovery (the "V" shaped recovery) by 5% acknowledging that the massive monetary stimulus coupled with fiscal stimulus may cause sectors of the economy to pick up faster than anticipated. Likewise, we have lowered the probability of a Prolonged Recession (the "L" or "U" shaped recovery) by 5% for similar reasons. We are seeing more and more anecdotal evidence that an economic recovery is at hand. However, economic forecasting is not an exact science by any stretch of the imagination which is the reason we use multiple scenarios in our model. Lastly, we have kept the probability of External Shock at 5% recognizing, in the wake of recent events, there is always the possibility of an unforeseen event shocking the financial markets.

Having adjusted our probabilities and economic assumptions, our recommended asset allocation remains the same as last quarter — 65% equity and 35% fixed income. The large performance gap over the last two years between fixed income and equity securities makes it difficult to increase fixed income weightings at this time, as does the current low level of interest rates. If anything, we feel that investors should review their asset allocation with a bias towards equities.

It is important to note that although projected equity returns look low relative to our past work, these returns are compounded numbers over a three-year time period. The timing and shape of our anticipated results are important to consider. In our current estimates, stock returns are low in the first twelve months but very attractive in years two and three. Also, we realize that stocks anticipate an economic recovery. Thus, we continue to recommend 65% equity and 35% fixed income exposure.

## **Brief Review of Economic Scenarios— A Description of the Possible Economic Outcomes Used in Our Asset Allocation Model**

**Steady Recovery— (The Square Root)** In this outcome, the economy deteriorates for another quarter and then begins to recover. The decline in the economy is deeper due to the events of September 11. Monetary and fiscal stimuli are critical. The resulting recovery is solid and inflation is reasonable. We assume many of the underpinnings of the economic expansion are still in place to allow moderate growth and low inflation. That is, the high level of investment over many years in technological capital equipment allows for productive growth. Stock returns are strong after the first year and bond returns are below average.

**Accelerating Recovery— (The V)** This scenario involved a robust recovery. The Federal Reserve's interest rate cuts and the growth in money supply prove to be too much and inflation is rekindled. Earnings growth is strong in this scenario as the economy accelerates, but investors are not willing to pay as much for these earnings as they currently are because the Federal Reserve must raise interest rates to combat inflation. Both stock and bond returns are poor over our three-year time horizon.

**Prolonged Recession— (The U or L)** Under this scenario, there is a worldwide recession that is very difficult to reverse. The events of September 11 exacerbate the downturn. Layoffs lead to a rising unemployment rate and a decline in consumer confidence. Consumer spending deteriorates and personal bankruptcies increase, leading to credit quality issues. Coordinated, worldwide monetary ease takes longer to work its magic than commonly anticipated but finally begins to stimulate the economy in the last year of the three-year time horizon. Bond returns are higher than stock returns for the three-year period.

**External Shock— (The W)** Perhaps this scenario should be called "Another External Shock." Here we acknowledge there are risks to the financial markets that are not related to the business cycle and interest rates, particularly in light of September 11. Possible events include more political instability or a pronounced negative wealth effect from the recent bear market in stocks. Stock returns are below average over the three-year period while bond returns are average.

## Capital Market Impact

The following table summarizes the capital market impacts under these scenarios:

### Three-Year Impact

Scenario	Earnings	Interest Rates	Price/Earnings Ratios	Stock Return	Bond Return	Cash Equivalent Return
Steady Recovery	Up Solidly	Up Modestly	Flat	Average	Below Average	Average
Accelerating Recovery	Up Strongly	Up Significantly	Down Significantly	Below Average	Poor	Above Average
Prolonged Recession	Down Significantly	Down Notably	Flat	Poor	Strong	Average
External Shock	Down Moderately	Down Somewhat	Down Modestly	Poor	Average	Average

## Probabilities

Changes to our probabilities are shown below:

Scenario	Current Quarter Probabilities	Previous Quarter Probabilities
Steady Recovery	65%	65%
Accelerating Recovery	15%	10%
Prolonged Recession	15%	20%
External Shock	5%	5%

## Notes on Quantitative Work

### Capital Market and Economic Indicators

<b>Indicator</b>	<b>December 31, 2001</b>	<b>Sept. 30, 2001</b>
S&P 500	\$1,148.08	\$1,040.94
P/E Based on Latest 12 Months' Operating Earnings	25.6x	21.6x
Dividend Yield	1.3%	1.5%
Long Treasury Bond Yield to Maturity	5.5%	5.6%
90-Day Bill Yield	2.1%	2.5%

Based on the foregoing probabilities for our scenarios, the following expected returns for the four asset classes we monitor are used to arrive at recommended asset mixes:

<b>Asset Class</b>	<b>Current Quarter Expected Return Through Fourth Quarter 2004</b>	<b>Previous Quarter Expected Return Through Third Quarter 2004</b>
Stocks	4.9%	4.6%
Long Bonds	4.6%	4.9%
Intermediate Bonds	3.6%	2.3%
T-Bills	3.3%	3.3%

Based on these expectations and our typical account objectives, our current recommended asset mix is 65% stocks, 35% bonds and 0% cash equivalents.

