

# SHARPER ♦ GRANITE



*Optimal Portfolio Management*

**W**ith the dawn of the new year, three primary challenges that faced equity investors in 2004 are still present: persistently high oil prices, rising interest rates, and the war in Iraq.

While there is also discussion of the declining U.S. dollar and the increasing federal budget deficit, our studies indicate that equities are more sensitive to these three factors: extreme oil prices, rising interest rates, and the uncertainty associated with war and terror, in that order.

In past letters we explored the economic impact of oil prices (see "Oil - our Most Important Commodity", *Spring, 2004*) and of war (see "Historical Impact of War on Investments", *Spring, 2003*) on the economy. This quarter we focus on recent interest rate behavior and another dynamic monetary factor in the news, the weak U.S. dollar.

Despite these overhanging long-term challenges and the short-term challenges mentioned in the "Fourth Quarter 2004 Economy Review", our outlook for the year is still mildly positive based on a robust economy featuring strong consumer spending, steadily improving manufacturing activity, and solid corporate earnings reports.

**WINTER**  
**2004**

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## Financial Markets Summary

In the 4th quarter of 2004 from October 2 - December 31, the S&P 500 Index surged 6.4% while the Lehman Aggregate Bond Index finished flat.

The average of all Sharper ♦ Granite client portfolios increased 7.0% (net of fees) and maintained a risk level 18% less than the S&P 500 Index.<sup>1</sup> At this risk level, one would expect to finish at 5.4% in a perfectly fair, cost-free, efficient market over the quarter. Thus, this marks the 6th quarter in the last eight that the average of all Sharper ♦ Granite portfolios outperformed the S&P 500 Index on a risk-adjusted basis. In fact, 72% of Sharper ♦ Granite clients beat their respective risk-adjusted benchmark this quarter.

For the year 2004, when normalized to the same risk as the S&P 500, the average of all Sharper ♦ Granite client portfolios increased 12.3% (net of fees).<sup>1</sup> For comparison, during 2004 the S&P 500 Index improved 8.8%, and the Lehman Aggregate Bond Index finished -0.4%. 2004 was the third consecutive year that the average of all Sharper ♦ Granite portfolios outperformed the S&P 500 Index on a risk-adjusted basis.

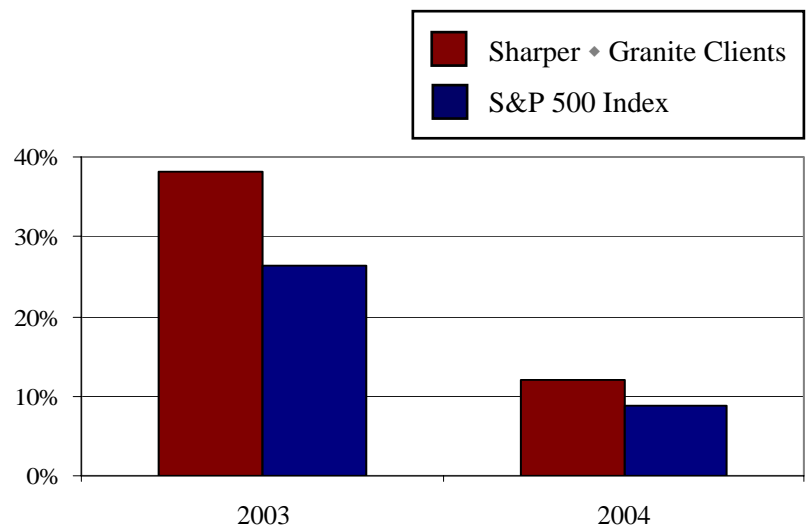
Following a strong 4th quarter for the market, with the uncertainty of the U.S. presidential election resolved, most greeted 2005 with exuberance, perhaps too much (see Investor Sentiment in the "Fourth Quarter 2004 Economy Review"). At the time of print, 2005 was in danger of leading off with three straight down weeks for all three major equity indexes (S&P 500, Dow Jones Industrials, and the Nasdaq Composite) -- the first such start ever for a calendar year.



The first few days of 2005 showed a pattern of large institutional investors selling equities in the face of solid economic news. Large institutions have impact on the short-term markets for two reasons: a) they are large enough to sway the markets with their volume, and b) they tend to follow each other like a herd. Additionally, several stocks that had been leading the market rally suffered sharp corrections, yet another sign of a potential short-term correction.

Through these times of short-term negative outlook, Sharper ♦ Granite alters portfolio trading only minimally. Drivers of our investment decisions are long-term economic indicators. These are outlined as always in the final section of this letter. ●

## Sharper ♦ Granite Three Year Performance<sup>1</sup>



## Impact of Current Monetary Behavior

There has been tremendous discussion recently in the financial media around two apparently unique, current monetary phenomena and their effects on the stock market. First, there is increasing discussion about the "flattening" of the yield curve and how that portends a weak stock market. We will explain what is meant by yield curve flattening and look at its real effects.

Second, in the 4th quarter of 2004 the dollar reached an all-time low against the Euro. Conventional wisdom says that a low dollar both reduces the U.S. trade deficit and increases foreign appetite for U.S. company goods, thus boosting the U.S. equity markets. But with international interdependencies in trade and sophisticated currency hedging by today's multinational corporations, is this really the case?



## Yield Curves

CNBC ran several pieces in early January discussing the flattening yield curve. They were referring to the fact that while the Fed has been raising short-term rates, long-term rates, which are defined more by free bond market trading, have remained relatively flat.

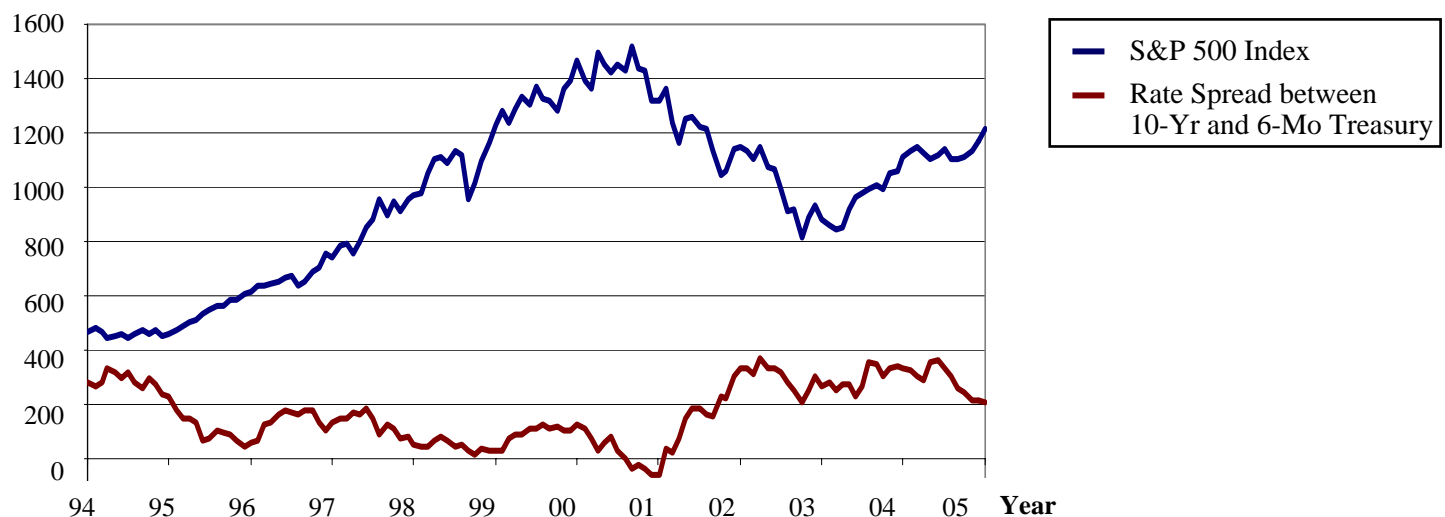
Dividend yields offered from short-term bonds are usually lower than yields from long-term rates because long-term bonds hold more interest rate risk. A higher yield is thus required to compensate lenders for this additional risk. Specifically, this is the risk that inflation and rising market interest rates will erode the value of long-term bonds.

For example, if you buy a \$10,000 bond with a ten year duration that pays you 6%, then you live with some risk that interest rates may increase. If so, a similar bond will offer perhaps 8% a year from now. At that point, if you wanted to sell your \$10,000 bond, investors would be less inclined to buy it because they would rather buy the new 8% yielding version. Thus, you would have to sell your 6% bond for something much less than \$10,000.

The gradual difference in bond yields at different durations traces an arc that is called the yield curve. A "steep yield curve" is one with relatively low short-term rates and high long-term rates and is said to have a large "rate spread". Conventional wisdom says that steeper yield curves are better for the economy because they encourage investors to borrow short-term in order to invest in long-term projects which, for example, helps corporations grow through development of new products and markets. Banks and other lenders become more willing to lend, and thus fresh cash investments flow into the economy. Concern in the financial news media is that the yield curve is flattening and that it will coincide with a weak economy.

## *S&P 500 Index vs. Rate Spread Since 1994<sup>2</sup>*

**S&P 500 Index Value and Rate Spread in Basis Points<sup>3</sup>**



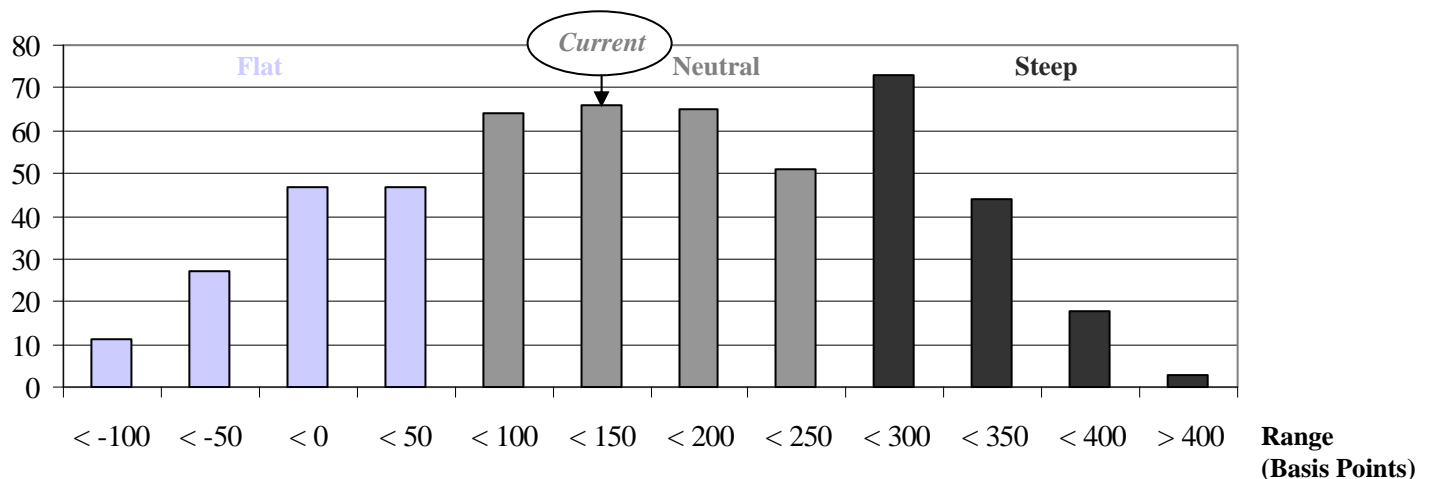
Sharper ♦ Granite analysis researched the correlation of rate spreads with S&P 500 Index performance each month from 1962 - 2004. One would expect that as the rate spread increases, S&P 500 stock performance would improve. Over this 516 month period, a correlation did exist; however, it was significantly less than expected at only +13%.<sup>2</sup> What is even more interesting is that in the period since 1994, the correlation actually reversed to -30%. In the chart above this negative correlation can be seen. Increasing rate spreads map more to a declining market and vice versa. See footnote (2) for more details on this study.

While periods of very flat or even inverted yield curves have preceded stock market downturns, this study concludes that rate spreads in more recent years may not be as accurate as once thought in predicting stock market direction.

Furthermore, there is a question as to whether we are even in a period of a "flat" yield curve. The chart below shows 516 months of rate spread occurrences since 1962. The current rate spread of 136 basis points (bps) is actually less than the average of 147 bps.<sup>4</sup>

## Rate Spread Occurrences Since 1962

Number of Months Since 1962 that the Rate Spread has been in this Range



Then why all the commentary about a flat yield curve? We noted in our *Summer 2004* letter to investors that the yield curve was near a historical point of steepness. This was due to the market expectations of a rates rising faster than actually occurred. Fundamentally, the bond market differed from the Federal Reserve Board in its estimates of the strength of the economy and inflation. The bond market was predicting a hotter market with more inflation than the Fed predictions. The market-controlled long-term rates jumped significantly while the Fed held short-term rates in check. Since then, the economy and inflation grew at rates closer to those predicted by the Fed, and the market corrected long-term rates back to a more normal point relative to the Fed's short-term rates. Thus, the yield curve has snapped back from historically steep to neutral today.

## Dollar Decline

The yield curve is not the only monetary measure featured in today's economic discussions. In December of 2004 the U.S. dollar reached an all-time low against the Euro. In this past quarter a 7% dollar slide<sup>5</sup> coincided with a stock market 8% rally. In early January of 2005, the dollar turned to advance while stocks reversed to the downside. Conventional wisdom would attribute this action to foreigners buying up U.S. goods and services at bargain prices, and certainly this

is one factor. After all, 31% of S&P 500 revenue came from foreign markets in 2003.<sup>6</sup>

But a broader correlation study between the dollar and the S&P 500 Index since 1984 shows little relationship over time. In 1984 both the dollar and the S&P 500 increased together. In the 1990's the dollar and stocks both rose. Stocks peaked in 2000, two full years before the dollar. In 2002 the dollar and the stock market fell steeply together. All together, as with the rate spreads, Sharper ♦ Granite research showed only a small correlation between dollar declines and stock market performance, with this connection diminishing in more recent years.<sup>2</sup>

Other economists looking at dollar-stock market relationships present research that echoes Sharper ♦ Granite research:

*“There are some correlations that can be made between stocks and how the dollar moves, but they're pretty loose, certainly not enough to make any strong bets on.”*

— David Wyss, Standard & Poors Chief Economist

*“We have found few dollar-stock ties. Even any indirect links that can be made between the two wind up showing lag effects (of several months).”*

— Komal Sri-Kumar, TCW Group Chief Global Strategist

The ties that may have loosely existed in the past may well be disappearing. There are more geopolitical and policy factors influencing currency exchange rates that do not tie directly into stock market movements. Moreover, multinationals today routinely use currency hedges and buy their raw materials locally.

Treasury departments at large multinational companies work to ensure that firm success is built, for example, on a core competency of drilling oil or manufacturing computer chips. Their job, in part, is to nullify global factors beyond corporate control, like foreign exchange rates, to the extent possible. With the sophisticated derivative hedging products available today, this is more easily manageable than it was 15 years ago.

In summary, the shape of the yield curve and strength of the dollar, while important as economic factors, hold only weak stock market predictive power at best. Further, this power may be weakening with time as global financial markets become more efficient, and multinational firms become more internationally integrated. ●

**Tax Preparation:** 1099 forms should arrive to clients in late January or early February, mailed directly from our custodial banks: either TDWaterhouse, Ameritrade Institutional, or Charles Schwab. If you have any questions related to taxable dividends or capital gains in your Sharper ♦ Granite accounts please contact your portfolio manager or email: [questions@sharpergranite.com](mailto:questions@sharpergranite.com)

### Fourth Quarter 2004 Economy Review

Oil prices between \$40 and \$50/barrel remain, in our opinion, the biggest threat to equities. High oil prices hit the economy with a double-whammy, slowing corporate growth and consumer spending, and then spurring inflation. Every \$2/barrel increase costs the U.S. Gross Domestic Product (GDP) 0.1%/year.<sup>5</sup> \$50/barrel for a year would cut the U.S. GDP by one-third.

Furthermore, we believe that oil will persist in the \$40 to \$50/barrel price range due to demand during this global growth phase, especially from China and India

In both October and November the Federal Reserve increased short-term interest rates by 0.25% as expected. Long-term rates increased only slightly. Equity markets do not perform as well during years of rising interest rates.

Observing a strong 4th quarter, most stock market pundits touted every possible reason for believing that an explosive 2005 lies ahead. Unfortunately, it is just when this level of optimism among the professionals turns so high that caution is warranted in the market.

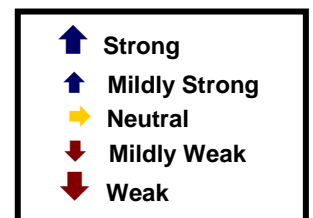
Investor sentiment is an important contrarian indicator and is featured as one of our market indicators below. Market conditions are actually more favorable when “expert” opinions are more bearish. This is true for two reasons. First, studies show that “experts” seeking to time the market are consistently wrong more often than they are right. Second, short-term investors place their bets first, then tout their directional picks. For example, when investors are overly bullish, they have likely already employed their capital, leaving less money to be pushed into the market to generate demand.

This indicator is just one of the top ten measures that we use to base our long-term expectations. Our Leading Economic Indicator summary below is still slightly positive, but less so than recent quarters. We enter 2005 with expectations for moderate long-term growth, but we are cautious in the near-term.

### Leading Economic Indicator Summary

- **Market Cycle:** Looking forward, the 1st quarter of each year tends to be strong, powered by January which has been the third strongest of the months for the S&P 500 since World War II.<sup>7</sup>

January is a very good month but primarily for small caps and international stocks. Small caps have averaged 4.8% return in the month of January since 1925. In foreign countries, January returns account for 30% of the total annual return on average.<sup>7</sup> However, the first few trading days of this January have been decidedly negative.



Furthermore, we have begun a period of increasing interest rates. Stock market returns since 1970 have averaged only 8.7% in years of increasing interest rates compared to 18.5% in years of declining interest rates.<sup>8</sup>

↓ **Political Cycle:** We are in the 1st year of President George W. Bush's second term. Traditionally, the 1st year in the presidential cycle is the weakest. Since World War II, the 1st year of the presidential cycle has seen the S&P 500 Index post an average gain of 9.1% and only 3.4% under Republican presidents. Only eight of the 15 post-WW II 1st years have been positive. When the data is reviewed stretching back to 1888, 1st years are still the worst performers. However, the market has performed better during times of a Republican controlled Congress, which we have currently.<sup>7</sup>

↑ **GDP Growth:** Gross Domestic Product (GDP) is the official economic measure of the U.S. economy. It is a measure of all goods and services produced in the United States. 3rd quarter GDP was revised and finalized to 4.0%. This is solid steady growth and in line with a healthy growing economy. It was the twelfth consecutive quarter of expansion, or positive economic growth, since the official recession of 2001.<sup>9</sup>

↑ **Purchasing and Manufacturing:** The Institute of Supply Management (ISM) Index, the key manufacturing indicator, remained strong through the 4th quarter, rising consecutively in November and December. Economic activity in the manufacturing sector grew in December for the 19th consecutive month, while the overall economy grew for the 38th consecutive month.<sup>10</sup>

Factory orders were mildly positive through the 4th quarter as they were for the year 2004.<sup>7</sup> Factory hiring remained positive but actually slowed to its lowest point since 2003.<sup>10</sup>

Construction spending continued its gradual decrease since March, 2004.<sup>10</sup>

↑ **Inflation Control:** The most widely accepted measurement of inflation is the Consumer Price Index (CPI). The core CPI, which excludes volatile food and energy prices, continues to advance at the gradual and manageable pace targeted by the Federal Reserve Board. December's inflation numbers were slightly lower than predicted. Still, when energy prices are factored, the inflation outlook is less optimistic. The longer oil prices stay high, the more pressure falls on the Fed to raise rates at a faster than anticipated pace.

↑ **Consumer Spending:** Economists keep a close eye on consumer spending because it accounts for two-thirds of all U.S. economic activity. The Consumer Confidence Index increased nicely in December, nearly to its highest point since May, 2002. This continues an overall positive pattern since March, 2003.<sup>11</sup>

Expectations for holiday sales were low. However, December retail sales presented a positive surprise, growing 8.7% vs. the previous year, the best growth since 1999.<sup>12</sup>

↑ **Capital Spending:** Overall capital spending behavior continued to show strength this quarter, though enterprise software sales lagged domestically.<sup>11</sup>

↓ **Investor Sentiment:** Investor sentiment has remained stubbornly high since September, 2003.<sup>13</sup> In December of 2004, sentiment reached its most exuberant point yet. This represents a significant headwind against the market as it indicates that professional investors, who first place their bets, then tell the world their opinion, have already pushed a lot of their available capital into the market.

- ↑ **Corporate Earnings:** Profits among the S&P 500 companies that have thus far reported for the 4th quarter are 15.3% higher than the previous year. This matches 4th quarter estimates. 1st quarter 2005 estimates average 7.6% year-over-year growth, which is in line with the average earnings growth over the last 50 years.<sup>14</sup>
- ↓ **Insider Trading:** Insider trading measures have been unusually bearish over the last 18 months. In the 4th quarter insider sell to buy ratios remained high.
- ↑ **Investor Cash Potential:** Mutual funds and venture capital funds remained flush with cash. This 4th quarter saw a big jump in initial public offerings (IPOs), and mergers and acquisitions (M&A). More IPOs occurred in 2004 than the previous three years combined. We appear to be at the cusp of a new venture capital investment cycle. The success of the deals in 2004 implies that there is less pressure for achieving quick exits and liquidity events, and that venture capitalists will be injecting high amounts of quality, long-term capital into new start-ups.<sup>15</sup>

Questions?  
Contact us at:  
[questions@sharpergranite.com](mailto:questions@sharpergranite.com)

**Notes and Acknowledgements:**

1. Arithmetic average used for return measurement. Asset weighted average beta used for risk-adjustment to market risk level. Performance includes assets tracked for clients that lie outside Sharper ♦ Granite direct management, which amount to less than 10% of total assets. All client portfolios weighted equally in calculation
2. Research provided by Sharper ♦ Granite analysis. Rate spread is calculated as the difference between the 10-year and 6-month treasuries. Correlation of rate spread and S&P 500 Index performance over 516 months from 1962 - 2004 was +13%. Correlation from 1993 - 2004 was -30%. When this rate spread was lagged one and two months behind the S&P 500 the correlation expanded to -32% and -34% respectively. When the S&P 500 was lagged one and two months behind the rate spread, the correlation contracted to -28% and -26% respectively. This may indicate that the stock market is a precursor to yield curve changes and not the reverse
3. A basis point equals 0.01 of a percentage point. Thus 100 basis points equals one percentage point
4. Research provided by Sharper ♦ Granite analysis.
5. *Investors Business Daily* trade-weighted dollar index
6. *Investors Business Daily*, January, 2005
7. Jeremy J. Siegel, Professor of Finance, Wharton School of Business at Penn University
8. TDWaterhouse Research
9. Bureau of Economic Analysis, December 22, 2004
10. Institute for Supply Management (ISM) – Chicago, January 3, 2004
11. Conference Board, December 28, 2004
12. U.S. Commerce Department, January 10, 2005
13. Investors Intelligence, January 10, 2005
14. First Call, January 10, 2005
15. VentureOne.