

July 18,
2004

Bill Miller Commentary

The two best performing groups in the market in the past 12 months were Energy and Basic Materials, both up over 30%. We don't own anything in either group and have not for many years. The last time these sectors had such a strong performance, in early 2002, we wrote as follows:

The fund is underweight, or more precisely, zero weight, the two best performing sectors, basic materials and energy...investors [have] piled into stocks of companies perceived to be sensitive to the resumption of economic growth. We observed similar patterns in the early 1990's, when investors hoped that cyclical and commodity based companies were going to experience extended prosperity. That resulted in short-term trading opportunities, but hopes of a more sustained improvement were not fulfilled. We believe the situation is similar today.

I noted then that most of the companies in these areas do not earn above their cost of capital through an economic cycle, making them unsuitable for long-term investment. Those that do rarely trade at discounts to their estimated intrinsic value.

These features are not sufficient to deter speculators from "playing" the names in hopes of catching a trade before moving on to wherever the near term outlook and trend appear more promising. In the current environment, "speculators" means just about everyone, since the average holding period for a stock in a mutual fund portfolio is now less than a year. It is no surprise that the hedge funds, whose strategy in the aggregate appears to be to surf the market, hopping from

wave to wave, are reported to be the most overweight energy of all the S&P sectors.

Our turnover in our fiscal year ending March 31 was under 4%. Over the past ten years, our turnover has averaged about 20% per year, suggesting we hold the typical name about 5 years. There is no dogma in this; if we thought we could get better returns by behaving differently, we would. The evidence, though, indicates that the market's efficiency increases as one's time horizon shortens. Ben Graham once noted that it was naïve to believe the market was unaware of the prospects for most businesses over the next 6 to 12 months, or that it had not priced those prospects into their shares.

I think market prices for the shares of most energy and commodity based companies reflect the significantly improved prospects for those businesses due to rising prices and a strong global economic recovery. Hedge funds and other speculators will be quick to exit these names if they believe the momentum is changing, or that pricing may not stay as robust as presently believed.

The investor, unlike the speculator, considering these businesses must confront the question of whether it is different this time, and if so, how? Have the long-term economics of the businesses changed? Can one invest in them over a multi-year period and earn an excess risk adjusted rate of return?

It is one of the tiresome clichés of the investment profession that the most dangerous words are, "it's different this time." Speculative enthusiasms generate greater

**LEGG
MASON**

conviction the longer they persist, and latecomers are usually persuaded that the cyclical has become the secular. The complexity of the energy situation is compounded, as it is with gold, by the true believers, who are ideologically committed to being bullish. Their arguments always seem most persuasive when the stocks are outperforming and commodities prices are rising. Even skeptics have to wonder if maybe the long predicted energy shortages are finally appearing, whether the current supply demand imbalance is part of a permanent shift leading to rising real energy prices, if we are approaching, or have reached, Hubbert's peak, the point where global production stops rising and begins to fall, despite the advances of technology and increased drilling?

We started managing money in 1982, shortly after energy stocks peaked as a percent of the S&P 500 at over 30%. There was widespread belief that the drop in oil prices then occurring was temporary, and that they, along with inflation, would soon begin to rise again. That, of course, proved spectacularly wrong, as the economy began a twenty-year period of falling inflation and generally falling real energy prices.

Today's more thoughtful bulls on energy and basic materials note that the current deflationary effects of massive excess labor in China, Russia, and India, coupled with easily transferable technology, and high indebtedness especially in the US, mean that policy makers must counter with persistent reflationary policies, both fiscal and monetary, which should underpin hard asset prices and values. Moreover, the huge marginal demand for raw materials from China and India may be sufficient to tilt the supply demand equation more or less permanently to one where demand grows faster than supply, leading to rising prices.

What got me thinking about all this was not just our glaring lack of any exposure in energy at a time when it appears everybody knows that is the place to be; I am used to that feeling. The trigger was something far more obscure: the death of Thomas

Gold.

Thomas Gold died on June 22 at the age of 84. It is safe to say few investors noted his passing and most have probably never heard of him. If he was right, though, about oil and gas, the global economy (and global politics) will be profoundly different from the implications of the current trajectory.

Gold was an astrophysicist of great originality whose bold, iconoclastic speculations turned out to be right far more often than his critics ever imagined. At the time of his death he was professor (emeritus) at Cornell and a member of the National Academy of Sciences. He first achieved prominence in the late 1940's along with Fred Hoyle and (now) Sir Hermann Bondi, when they proposed the steady state theory of the universe, which posited that the universe was infinite in space and time. This has been supplanted by the now accepted Big Bang theory.

His batting average, though, got better. In the Foreword to Gold's last book, *The Deep Hot Biosphere*, Freeman Dyson explains that it was Gold who demonstrated, contrary to the view of experts in anatomy and physiology, that our ability to discriminate the pitch of various sounds is due to the inner ear's containing finely tuned resonators and not to its ability to translate the sounds into neural signals. Gold later disputed the widely held view of the moon's volcanic constitution, predicting instead that it's surface would not be volcanic, but would be covered with a fine powder, as turned out to be the case. After pulsars were discovered in 1967, their explanation a mystery, he famously predicted, again correctly, that they were rotating neutron stars.

His last major prediction, though, is still unresolved. It is that oil and gas are not fossil fuels and that they did not originate from the compression of biogenic material. He held that they are created deep inside the earth, and other planetary bodies, and gradually rise toward the surface. The supply of oil and gas, he believed, is virtually inexhaustible. This is known as the abiogenic petroleum theory. This is not a view

espoused by those who are bullish on oil and gas. It is not generally favored by producers, or by environmentalists, or by those who want to encourage conservation, or those worried about global warming, or those who want to increase gasoline taxes to reduce our dependence on “fossil” fuels. As Charlie Munger might say, there is little incentive caused bias in favor of the abiogenic theory.

It is, though, beginning to receive increasing attention, as the anomalies associated with the biotic view are scrutinized, and evidence for abiogenic origin begins to mount. From outright denial some years ago, western petroleum engineers are beginning to admit that some hydrocarbons are abiogenic, just not enough to make a commercial difference. “Western” is an important adjective, since the abiogenic view has long been respectable in Russia, where it has substantial support.

It is ironic that Gold’s death should come within a few weeks of a conference originally scheduled for mid-July, now postponed until next year, on the “Origin of Petroleum--Biogenic or Abiogenic and Its Significance in Hydrocarbon Exploration and Production”, sponsored by the American Association of Petroleum Geologists.

Gold believed that the biological material present in petroleum is the residue of extremophile microbes that feed on it as it rises up from deep beneath the earth’s surface. These microbes, discovered in the 1970’s, can thrive in environments previously thought unable to support life. One, called Strain 121, found last year, can survive at temperatures typically used for sterilizations.

Gold pointed out that the biogenic theory has trouble explaining the presence of helium, commonly found in oil deposits, does not know how to explain the presence of hydrocarbons on planetary bodies devoid of life, such as comets and Saturn’s moon, Titan, where hydrocarbons were confirmed by the Cassini spacecraft just a few weeks ago, and is at a loss to understand how some deep wells keep refilling, (such as Eugene Island in the Gulf of Mexico) or that fields

such as the White Tiger in Vietnam produce oil from granite basement rock, which is not thought to have sediments beneath it.

In the Middle East alone, for example, reserves have doubled in the past 25 years despite significant production and few new discoveries. As one professor put it, “It would take a pretty big pile of dead dinosaurs and plants to account for the estimated 660 billion barrels of oil in the region.”

This subject is obviously too complex and too controversial to cover in this venue. I am too ignorant of the science and details on either side to have an opinion. Having looked at some of the evidence, I think someone considering the long term path of oil and gas prices would have to be agnostic, or at least agnostic enough to just price the commodity off the six year future, which today is in the high \$20’s.

Since the Club of Rome’s famously wrong prediction in the 70’s about running out of oil by the turn of the century, oil prices are, in real terms, about half what they were at the peak around 1980. Oil consumption per unit of world GDP is now lower than in 1960 as the global economy gets increasingly efficient.

None of this means that oil stocks may not continue to outperform or that they and their industrial materials brethren may not be in for an extended period of prosperity. Even if Gold is right and the supply is inexhaustible and prices will not increase in real terms over long periods, that could have little relevance for the next few years.

Over that period, the supply demand equation is governed by the fact that demand changes more rapidly than supply. With the global economy and global energy demand growing, and the sources of supply being, at the margin, in inhospitable or politically unstable regions, prices are subject to unexpected shocks.

Energy stocks are not, in my opinion, cheap; they

are also not particularly expensive. They are quite popular due to their recent outperformance and the short-term outlook for favorable results. I am not as confident now as I have been for most of the past twenty years that there are sufficiently many investment opportunities that are superior to that of energy companies that one can safely omit them from portfolios. We are continuing to study the area.

I am more confident, though, about this market. I like it and think it is going up. The NASDAQ is making lows and most of the overvaluation in "old tech" shares such as Intel and Texas Instruments and Applied Materials has been worked off, in my opinion. They may not be bargains, but at 15x next year's earnings they do not present a lot of risk, either. Companies such as Citigroup at 10x, or Fannie Mae at 8x are

bargains.

Interest rates present no impediment to stocks with the ten-year under 4.5%. With interest rates having bottomed, debt growth has likely peaked, which will keep the economy from running away on the upside. Inflation should remain subdued, and profits growth should continue higher. The Fed's efforts will be "measured," as they say. Corporate balance sheets are in great shape, and dividends should grow faster than profits as payout ratios start up from depressed levels. All in all, the environment for equities looks fine, especially with the market having declined modestly since the beginning of the year. We are fully invested and bullish.

Bill Miller, CFA

The information contained herein has been prepared from sources believed reliable but is not guaranteed by us as to its timeliness or accuracy, and is not a complete summary or statement of all available data. This data is intended solely for our clients, is for informational purposes only, may not be publicly disclosed or distributed without our prior written consent, and should not be construed as a research report, a recommendation, or an offer to buy or sell any security referred to herein. Opinions expressed herein are subject to change without notice. Employees of Legg Mason Capital Management may have a position in the securities referred to herein.