



INVESTMENT STRATEGY UPDATE

June 29, 2012

ENERGY INDEPENDENCE – MORE THAN JUST A PIPE DREAM?

The world's developed economies are struggling. At home we have enormous budget deficits and what can only be termed a dysfunctional government. Across the pond, the rather significant problems in the eurozone hit the headlines almost daily. Yet we are encouraged by several major longer-term developments, at least as they impact the United States. Our demographic trends are superior to nearly everywhere else in the developed world, and there are early but meaningful signs of a renaissance in U.S. manufacturing. Perhaps most importantly though, surging domestic energy production is allowing this nation to reduce significantly its dependence on foreign oil. It would be hard to overstate the positive implications of this last point. For instance, there will be a continuing increase in high-paying jobs in the energy sector and its suppliers. Also, lower fuel bills will allow American families to spend more on other priorities, giving a boost to overall consumer spending. Furthermore, U.S. manufacturers will be more competitive given their lower input costs. Global geopolitics will be permanently altered.

First Steps

In our April 2, 2010 *Investment Strategy Update* **NATURAL GAS – A STRATEGIC AMERICAN RESOURCE**, we opined that the new abundance of domestic natural gas was going to be a game changer. In hindsight that was an understatement. The U.S. energy industry has proven capable of producing natural gas in quantities well in excess of current usage and in the process has driven the price below \$2.50 per million BTUs which, on an energy-equivalent basis, translates to about \$15 per barrel of oil. By comparison, the current price a North Sea producer receives for natural gas is \$8.50. Ultimately, we think that producer economics in the U.S. will require a higher natural gas price, in the \$4.50 to \$5.00 range, but that would still equate to about one third of the current world oil price of \$90. In barely five years, natural gas has gone from being in short supply, to being the cheapest and most abundant fuel source on this continent.

Just as importantly, energy producers in the United States are now also implementing innovative hydraulic fracturing techniques to unlock ever increasing amounts of previously trapped light, sweet crude oil. Suddenly, a 38-year decline in domestic oil production has been reversed. And with that change, along with the abundance of domestic natural gas and the growing trend of energy conservation, the seeds of energy independence have been planted.

What It Would Take

Before we count our chickens, however, we need to examine what and how long it would actually take to become energy self-sufficient. According to the Lawrence Livermore National Laboratory, in 2009 the U.S. used 95 quadrillion BTUs of energy, the equivalent of more than 50 million barrels per day (MBD) of oil. The mix of the energy supplied was 37% oil, 25% natural gas, 21% coal, 9% nuclear, 4% biomass, 3% hydro, and 1% total for wind, solar, and all other sources combined.

It is important to note that other than rapidly decreasing amounts of natural gas from Canada, oil is the only significant fuel source we currently import, and the predominant use of that fuel is for transportation. This means that energy independence hinges on the challenges of producing more domestic oil, using less, or substituting other domestic fuels into the transportation sector. Thankfully, as a nation we are now meaningfully doing all three.

Making It Happen

Domestic production of all liquid fuels (oil, natural gas liquids, ethanol and biodiesel) peaked at 12 MBD in the late 1960s and early 1970s. This output compared to consumption of 13 to 14 MBD, meaning we were once substantially self-sufficient. Unfortunately, by 1977 usage had spiked to 18 MBD and production had dropped to 10 MBD resulting in the need for massive oil imports. In our worst year, 2005, production had dropped to 8 MBD and consumption had risen to 22 MBD, so that we needed to import more than 60% of our liquid fuel needs. Since then, production has been brought back to 10 MBD, and usage has decreased to 19 MBD, leaving our current import need at 9 MBD, which represents 45% of our liquid fuel needs and 18% of our total energy needs.

This increase in overall production has taken place primarily on private land in the states of Texas, Oklahoma, North Dakota, and Pennsylvania. Furthermore, it has occurred despite production declines in the oil-rich Gulf of Mexico, due to the moratorium on drilling there in the wake of the British Petroleum disaster of 2010. Production is expected to accelerate sharply over the next couple of years and then continue to grow steadily beyond that, so that by the early 2020s we could see up to 14 MBD of domestic liquid fuels production, with most of that growth, importantly, coming from oil. Similar dynamics are occurring in Canada, making North America as a whole the fastest growing energy supplier in the world.

Given our huge reserves of low-cost natural gas, it makes sense to increase our utilization of this fuel in the transportation sector and, in fact, this is happening. However, it is not occurring in the passenger car market, nor do we believe that it will in any meaningful way during the next ten years. Instead, natural gas has been substituted for gasoline and diesel in commercial transportation, including buses, taxis, garbage trucks, and short-haul trucks; basically anywhere vehicles can be refueled at a central depot. Substitution is also beginning to gain traction in long-haul trucking. All of this is occurring without new government subsidies, because it is economic on its own, given the cost advantage over oil. To be sure, natural gas refueling infrastructure is still lacking and will need to be expanded, but we expect this to happen. The opportunity to substitute into these fleet-based uses – long with the rail, domestic marine, and diesel power markets – amounts to approximately 3 MBD. The actual amount of substitution over the next ten years will certainly be well below this potential and, while hard to estimate, might reduce imports by up to 1 MBD. Also a distinct possibility is that several gas-to-liquid

(GTL) plants could be built in the U.S. Rather than converting vehicles to run on natural gas, this proven technology converts natural gas into super-clean diesel and jet fuels. Royal Dutch Shell and Sasol have each announced their intentions to build GTL plants on the U.S. gulf coast, which are expected to be operational in the 2017 to 2019 time frame.

The third leg of the energy independence stool, affectionately known as the “fifth fuel”, is conservation; the other four fuels being petroleum, coal, nuclear, and renewables. Any BTU not used is a BTU that does not need to be produced in the first place, and there is no better alternative than to use fuel efficiently. Liquid fuels usage has decreased by approximately 3 MBD since the peak years of the mid-2000s. This has been caused by a variety of factors including a weaker economy, but has primarily been a function of driving more efficient vehicles as well as driving fewer miles. We believe that both of these trends will continue. The love affair with SUVs appears to be over for most Americans, as the percentage of SUVs bought is now well under 8% of all cars, versus close to 20% in the early 2000s. Furthermore, cars of the same size and power are 20 to 30% more efficient than they were just a few years ago. And gains in efficiency are not limited to automobiles. Our newer homes and commercial buildings use much less energy as well, as window and lighting technology has seen huge improvements over the past decade. We are indeed using our energy more efficiently and will continue to make major strides in this endeavor going forward.

Conclusion

Adding it all up, is the U.S. going to be completely energy independent within the next ten years? Most likely not, but we believe it is entirely feasible that current oil imports can be cut by more than half. That would be incredibly significant, as 5 MBD of oil at \$80/barrel would add up to a staggering \$150 billion per year. These dollars could instead be spent domestically and create a multiplier effect in the economy. One economist has estimated that this effect would add half of one percent to GDP per year for each of the next five years, even after considering the impact of a stronger dollar that would result from an improved trade balance.

So what are the investment implications of this very significant trend? On the positive side, U.S. manufacturers and other big users of energy will benefit from lower energy prices. Domestic petrochemical and refining companies will additionally benefit from lower feedstock costs, thereby allowing their products to compete even more effectively in the global arena. We would also expect those transportation companies that are able to convert to natural gas to have a major cost advantage. For example, the payback for a waste collection company from spending \$30,000 to convert a garbage truck to run on natural gas is about one year. Also, the multi-year capital spending to produce this energy and to upgrade and expand our pipelines and natural gas infrastructure should strongly benefit engineering and construction firms. Interestingly, we see a somewhat neutral impact for the oil and gas producers in aggregate, as we believe the benefits of increased production will be offset by lower prices. On the negative side, the economics of alternative energy will clearly be even more challenged going forward. In addition, while coal will remain an important fuel in the production of electricity, coal companies will struggle on the margin as their product increasingly gets displaced by natural gas.

Finally, while not a direct investment implication, the net result of substituting natural gas for coal and oil in certain situations, coupled with continuing conservation efforts, should be positive for the environment.

Stock Market Comment – No One Knows

Uncertainty reigns in the financial markets, what with the continuing financial drama in the eurozone, the unknown duration of the Chinese economic slowdown, the ongoing domestic questions regarding the budget deficit, the November election, and the unwillingness of our elected officials to address our longer-term structural problems. What's going to happen? The fact is that no one is quite sure when or how the current difficulties will be resolved. So, what is an investor to do?

In such times, we have found that it is best to fall back upon what we do know. For instance, we know that stock market returns are a product of corporate earnings growth, dividend yield, and changes in valuation. Corporate America is in its best financial shape in decades and we are quite confident that earnings and dividends will grow over the long term, due in part to the trends mentioned in this report. We also know that dividend yields of 2.1%, while not historically high, certainly beat the zero return on cash and 1.6% on the 10-year Treasury. Furthermore, following ten years of uninspiring stock market returns, current stock market valuations are quite reasonable.

As we wrote in our year-end *Investment Strategy Update*, we expect three or four more years of modest but respectable stock market returns in an environment of higher-than-normal volatility, before the next multi-year stock market advance begins in earnest. By then, one way or another, the current uncertainties will likely be behind us. But we also said, and we continue to believe, that the bottom for the current stock market cycle has already been seen, and that we are more likely to see a series of higher lows going forward, much as we did during the second half of the 1970s. In any case, returns on stocks should compare very favorably to the returns of the obvious alternatives.

Our bottom line is that the current global uncertainty warrants a conservative investment posture with a focus on high-quality domestic-focused dividend-paying companies. Many of these companies currently yield more than twice the 10-year Treasury rate and have long histories of annual dividend increases. We expect favorable absolute and relative returns from these investments going forward. We are investors, not traders.

Previous Investment Strategy Updates are available online – www.btrcap.com

- 4 -

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST. The information contained herein is based on sources which we believe reliable but is not guaranteed by us and is not to be construed as an offer or the solicitation of an offer to sell or buy the securities herein mentioned. Opinions expressed herein are subject to change without notice. This firm and/or its individuals and/or members of their families may have a position in the securities mentioned and may make purchases and/or sales of these securities from time to time in the open market or otherwise.