



Sometimes When You Win, You Lose (1/13/16)

Why are commodity prices plunging? Too much supply? Not enough demand? The more appropriate question is: why are there more "inputs" required to generate a desired final product?

We at RSW have often cited aging demographics and declining real wages as being structural headwinds to "normal" economic activity. However, there are forces that lie beneath the surface that are key to understanding our nation's growth predicament. Namely, the cost of extracting commodities has increased as they have become less accessible and less "pure". This higher price for inputs acts as an under-reported decelerant to economic growth. Please be mindful that we use the term *commodity* in a literal and figurative sense as the concept of similar quantities of inputs yielding less final product goes far beyond oil or copper. For the same college educated person of 50 years ago, we have 18 more administrators, 16 more security guards, and 14 more human resource employees to produce the "finished product". Even with that said, we find that many are not "trained" to join the work force.

A Virtuous or Vicious Circle

During the early years of economic expansion, commodity production is at its cheapest point in the cycle as the easiest/least expensive "asset" is extracted first. As the economic expansion matures and commodities become scarce, the cost to mine these assets escalates. Look no further than the oil industry. Here, over time, drillers need to dig deeper wells, more expensive fracking technology is employed, and regulations to tamp down on pollution are escalated. The extra steps needed in this process equals extra costs, and leads to an environment of diminishing return on investment. This is where we transition from efficient cost effective production to inefficient high cost production. If there is one universally recognized contributor to stunted growth, other than smoking, it is productivity inefficiency.

Said differently, society is creating more intermediate products (scrubbers for coal fired power plants, fracking sand, etc.) but we are not generating a high enough level of output, such as barrels of oil to justify the manufacturing costs. Over time, a greater amount of dollars (input costs) are needed to create intermediate products designed to counter new challenges and regulations. These additional costs ultimately lead to a lower level of demand for commodities, causing prices to fall. This is not a *virtuous* circle, but a *vicious* one!

Wages

As wages in the U.S. have stagnated and the appetite/willingness to assume more debt has waned, commodity prices have lost another layer of stability. Historically, workers have paid for the increasing costs of end products (homes, cars, etc.) with a combination of higher wages and debt. Therefore, it can



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be said that oil prices and wages are inversely correlated, with wage levels tending to fall as oil prices rise. As oil is a key input cost in the production cycle, manufacturers have several levers that they can pull to mitigate their costs as oil prices rise:

- > They can attempt to pass along the additional costs to consumers. The risk here is that many consumers may not be able to pay the higher costs of the finished products.
- > Reduce costs through salary cuts or reduced hours.
- Jobs are shifted overseas: this one provides the "biggest bang for the buck" as manufacturing goods in such countries as India and China do not have the environmental regulations as those imposed on domestic manufacturers. Therefore, their use of coal, given its relative cost advantage is used more readily overseas to lessen their cost of production.

Low wages can also be linked to the drop in the civilian labor force participation rate. As the cost of commuting, paying for day care, etc. has increased, the differential between staying at home and working has shrunk. Therefore, it is no coincidence that the precipitous drop in the U.S. labor force participation rate which began in 2000 coincided with a spike in the cost of metals and energy prices. It is also no coincidence that 60% of the American workforce had their incomes peak in 2000. As wages remain under pressure, the vicious cycle rears its head again. The demand to consume "stuff" is reduced, the prices of finished goods falls, which results in further pressure on commodity prices.

Demographics

As the average age of the world's population has increased, there are two more structural issues that have embedded themselves. In general, the older generation, globally, tends to spend less on big ticket items that have an economic multiplier effect (i.e., houses, and cars), while at the same time depend more on government programs. This enhanced dependency serves to drive-up governmental costs as more monies are needed in the coffers to fund payments to retirees. This phenomenon pushes the tax rate higher, and drains the ability of citizens to consume. Again, downward pressure is once again applied to commodity prices.

We've Got This!

In order to combat these previously discussed issues, Central Banks around the world chose various methods of filling the demand void. Here, the Federal Reserve added to its balance sheet by gorging itself on Treasury bonds and mortgage backed securities totaling \$4.5 trillion.

China adopted a fiscal stimulus policy in 2008, where they built roads that no one uses, bridges to nowhere, and even a replica of Manhattan that is largely uninhabited. Likewise, the Bank of Japan (BOJ) and the European Central Bank (ECB) employed their version of a pro-growth plan, by purchasing financial assets through a quantitative Easing (QE) strategy. While oil and other commodity prices surged



temporarily, as with all liquidity driven demand, it has proven to be unsustainable.

It is no longer speculation that the global simulative experiment failed to promote the sustainable economic growth that was hoped for. The easy money policies served to prop up the financial system, fueled higher risk asset prices, and increased land valuations, but almost none of it added to "real" commodity demand.

Getting Out of Dodge!

As we try to summarize our views, we understand that may be misinterpreted as having political overtones. We hope that our penchant for keeping this a politics-free zone is and has historically been well recognized. So in distilling our message, we want to leave you with the following:

Slow growth eventually becomes a fixture of developed economies. Think about India, China, Indonesia, or Vietnam. They proceed with economic development at warp speed with little regard for workers rights, pensions, environmental protection, wetlands protection, scrubbers for coal-fired power plants, or human resource departments.

In the beginning, economic activity is the only GOD developing nations serve, and the citizenry is the only grease to the machine. As societies mature, people and their institutions demand a more balanced approach. Societies create labor laws, levy taxes, demand clean water, provide workers' pensions and medical care, along with a host of other requirements. That society, whether it understands the trade-off or not, sacrifices let's say 8% growth for more rules and regulations. Many economies start out as Dodge City, and over time morph into New York City. In the end, it is left to each government to decide where they want to be on that continuum. The only requirement is that if they choose the path of the Wild West, it won't come with traffic lights or yield signs. Likewise, excessive rules and regulations can change the DNA of the global economy toward slower growth.

Pensions Remain the Third Rail of Public Finance

Municipal bonds posted strong relative returns as yields declined rather steadily during the quarter. For example, 10-year "AAA" rated tax-exempt bond yields *declined* by approximately 11 basis points, compared with a 23 basis point rate *rise* on comparable maturity Treasury bond debt. The majority of the strong relative performance can be attributed to the month of December where Treasury yields rose by 13 basis points versus a nearly unchanged municipal bond interest rate backdrop. While these relative moves may seem quite small to a casual observer, the yield relationship between municipal bonds and Treasury securities changed rather dramatically. Simply put, 10-year "AAA" rated municipal bonds entered the quarter with their yields equaling nearly 100% of Treasury bonds (2.03% Muni vs 2.04% Trsy). By the end of the quarter, this ratio fell toward the lowest ratio that we have witnessed over the last several years, to approximately 88% (1.92% Muni vs 2.27% Trsy).



Without getting too granular, there appears to be two key forces that are driving the strong relative performance of municipal bonds. First, December typically marks the "kick-off" for the January effect. Historically, this has been a period marked by a reduced level of new issue supply, and strong demand by investors as they are busily investing an elevated amount of cash received from bond calls, maturing securities, and coupon income. In addition, the out-sized volatility of the risk markets (high yield and equity markets, commodities, etc) caused a "flight to quality" as asset allocators sought the relative safety of municipal bonds, as their "port in the storm" of choice.

Just Accounting Changes

There are new reporting requirements for pension valuations that will be implemented by state governments for their 2015 fiscal year ends. According to the various rating agencies, these changes, on average, will cause municipalities to show higher balance sheet liabilities. However, it is important to note that the actual pension liability or difference between a funded pension plan and unfunded one won't be altered significantly. With that said, as the fiscal year 2015 annual reports are published there could be additional headlines regarding weak pension valuations.

What the accounting changes do is to make reporting more detailed and conservative with better insight into pension funding forecasts. Two of the more significant changes include (i) a more conservative discount rate requirement that measures future investment growth contributing to higher unfunded liabilities and (ii) the change to show assets at the latest market value as opposed to a five-year smoothing that averaged investment gains and losses. Subsequently, volatility will be more pronounced as valuations will obviously reflect a singular point in time.

Pension Reforms Notwithstanding, the Hole Gets Deeper and the Shovel Smaller

In a perfect world, states and localities fund their pension requirements in a manner consistent with actuarially derived assumptions that meet future needs. This rarely happens as forecasting is far from an exact science. As we all know, future investment returns are not predictable with any real accuracy. Additional variables including demographics, mortality rates, future union contracts and cost of living allowances, also make "bulls eyes" difficult to hit. It is with this understanding that any deviation from sound annual revenue contributions has a mushrooming negative impact on future liabilities. The hole gets deeper and the tools to fix it harder to identify. Consider then that any time pension contributions get cut because of weak revenue performance, politics, other budgetary considerations, etc. that future liabilities will grow exponentially. To make it worse, who is to say that future tax revenues will be able to support these growing burdens given other growing and competing demands on tax revenues? Simply, even if



pension contributions consistently come close to actuarial contributions, unfunded liabilities can and do continue to grow.

It is for this reason that we continue to emphasize pensions as the largest "unknown factor" when making individual investment decisions.

Some Things To Consider

- If contributions are deemed unaffordable now, what makes one think they will be affordable later?
 - New Jersey pension contributions remain and have been significantly below actuarially determined payment levels contributing to growing liabilities. Yet the state over the past year and over the last 10 years has either registered the lowest or second lowest GDP growth nationwide. The economy and taxpayers cannot support future liabilities without real change and potential upheaval.
- According to the Federal Reserve, state and local unfunded pension liabilities totaled \$1.4 trillion in 2014 as compared to \$345 billion in 2005.
 - Tax revenue growth has been outstripped by these costs as well as other entitlement cost pressures.
- State Supreme Court and various state constitutions make meaningful reforms difficult.
 - Notwithstanding an approximate \$119 billion of unfunded pension liabilities, the Illinois State Supreme Court in a May 2015 opinion "threw the book" at the state in their attempt to reform their pension plans by telling the state that decades of their malfeasance created the mess and that it was their "bed to sleep in".
 - Illinois contributed approximately \$7 billion to the pension funds in Fiscal year 2015 and paid out another \$575 million in debt service on previously issued pension bonds. Both of these amounts are expected to double in approximately 20 years.
- You cannot get water from a stone. Taxpayers already bare high burdens.
 - Fitch Investors calculates state tax supported debt and pension allocations as a percent of personal income to be in Illinois (25%), Connecticut (23%), Hawaii (22%), and New Jersey (16%). These percentages are significantly higher than the state median which is just under 6%.
- Pennsylvania, six months into the current fiscal year, is still operating without a budget with pensions being at the center of the impasse. Years of failed attempts to adopt meaningful reform and to adequately fund the pensions have resulted in unfunded liabilities increasing from approximately \$12 billion in 2005 to \$50.5 billion in 2013.



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Summary and Conclusion

We do not envision a replay of the Puerto Rico debacle as a result of today's pension pressures. However, we do recognize that these strains in some states and jurisdictions can approach crisis proportions over longer periods of time, with solutions that are increasingly difficult to achieve. Therefore, we believe that there will be strains on liquidity, high relative yields, and the potential for less than investment grade ratings over time in the states that are the furthest in the hole, and haven't yet put the shovel down.

Robert S. Waas Chief Executive Officer/ Chief Investment Officer Stephen R. O'Donnell Mark J. Tenenhaus Head of Director of Municipal Trading Municipal Research

haus Matthew T. Werner f Senior earch Portfolio Manager

er Marites V. Pasturan Operations Analyst Randy J. Fox Business Analyst, Reporting and Analytics

Andrew C. DeVivio rst, Operations d Associate

Jeffrey S. Thompson Client Service Associate

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