

Q2

Wanger Investment Quarterly Letter

What Are We Thinking About This Quarter?

Ralph Wanger Reports on Why It's Dark at Night

Bill Andersen explains why this isn't the 1970's.

DEAR LIMITED PARTNER,

It Was a Tough Quarter

If you've been reading this newsletter, you know we have been calling for the end of the world for awhile. Apparently, it came in June. Lehman, FannieMae and FreddieMac were all rumored to be going under, oil was making new highs near \$150, and the dollar was continuing its plunge.

It was a period of great unrest, some would even say crisis.

Long Term Investor? Prove it!

Second quarter was a period which tested our resolve as long term investors. Our conviction to long term investing, a strategy which says buy well and stay the course, was severely tested in Q2. We believe in what we're doing and we continue to be opportunistic looking for aggressive values during some crazy times.

Say "Uncle"

2008 came in like a bear and, thus far, has overstayed its welcome. And all but the most optimistic "perma-bulls" still see some more pain before we emerge from this one. We believe that there will be more major write-offs in the financials as bad credit and mispriced risk continue to come off of balance sheets.

Has the market "capitulated" yet? Hard to say, but there are few investors still calling for the return to bull status. Fewer are calling the end of downturn. We seem closer to the bottom than we have for awhile.

Opportunities to Invest

For long term purposes, this is our kind of market. We are always on the hunt for high quality and yield rich companies at excellent valuations.

Markets like these favor a flexible approach to valuation, growth and value alike, a fundamental research based methodology and a long-term time horizon.

The Income and Growth Fund

You, our investors, asked for an investment vehicle that provided reliable yield while offering some protection from inflation. The Wanger Income and Growth Fund is open for business under the skillful hand of portfolio manager Bill Andersen. If you're an accredited investor and wish to learn more about Bills's thinking regarding current income and inflation protection, please contact us.

Keep the Faith. Keep on Working.

There is no shortage of things to be worried about. But ultimately, valuations are down and yields are up. Our job is to find those opportunities for you, our partners.

Yours,
Eric Wanger, JD, CFA

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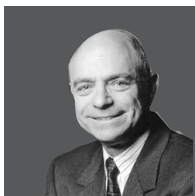


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Ralph Wanger Reports:

Why is it Dark at Night?



Ralph Wanger, CFA

*“Common sense is the collection of prejudices acquired by age eighteen”
—Albert Einstein*

We all share common assumptions about the world, most of which are true, but not always. One of my friends was crossing the street in Tokyo, and looked carefully to the left to check for oncoming cars. He was seriously injured by a car coming from the right; he had forgotten that in Tokyo cars drive on the left, English-style. The story has an added zinger, because the man had been born and raised in Tokyo before moving to Chicago as an adult.

There are an amazing number of things that sound simple but are not. Why are rainbows curved? Why is the sky blue? Any friend of a six year-old gets a lot of questions like that, but few of us can give a correct answer. Once in a while, a smart person will ask a simple question that cannot be answered even by experts, and causes a change in the way we think about the world. This weird question is called a paradox. You may have studied the Paradoxes of Zeno in a math class some time. To solve these paradoxes required modernizing ancient mathematics to cope with infinite series.

One simple question should have changed science, but the answer was so opposed to scientific assumptions it didn't happen: “Why is it dark at night”?

Why can a grown-up ask such a silly question? Even our six year-old buddy can show how the rotation of the earth.... Two centuries ago, a grown-up man, a professional astronomer yet, asked that question. He claimed that by the assumptions of Newton's cosmology, it should not get dark at night.

Ever since astronomers realized that the heavens are not some kind of solid dome over the earth, they speculated whether the universe had any kind of boundary at all. In Newton's view, the universe existed in an infinite space. But he calculated that if there were only a finite number of stars in this space, gravitational attraction between all would cause the universe to collapse to a single point. So the infinite space must contain an infinite number of stars. That way the gravitational force on any star would come from all directions equally and the cosmos would be stable.

A second assumption was that the universe was perfectly clean and transparent. God's celestial creation could not be filled with dust and garbage.

In 1823, the German astronomer Heinrich Olbert thought about this model of the heavens and pointed out that if there were an infinite number of stars out there, then in whichever direction you looked, your line of sight would be blocked by a star. The sun is bright because it is close to us and covers a lot of area in the sky. Every star occupies a tiny point in the sky, but that star point is just as bright as a point on the sun. The skies should be blazing as if the sun filled the whole sky, night and day. Since that is not the way the sky looks, we had a new paradox. This one was named Olbert's Paradox, and is still discussed in current textbooks. Since no one of Olbert's fellow scientists could resolve the paradox, they did the sensible thing and ignored it. The problem was not solved until the 1920's, a century later, when Hubble proved that the universe was not static, but expanding. The universe was also not clear but dusty. In a dusty expanding universe, there will be spaces between stars as seen from the earth, and the dust will make the stars less bright, so Olbert's Paradox was resolved. Hubble is famous and got the space telescope named after him, while Olbert is a footnote. Olbert could have been a contender, but he could not take the leap of genius to revolutionize astronomy.

My point is not to give a poor-quality lecture on astronomy. The point is that no scientist could deduce the true structure of the universe for a hundred years because none were willing to scrap the assumptions of the Newtonian world. This can still happen today. You probably studied the Petersburg Paradox in some math or finance course, and had to explain it away. We all have a box of assumptions that control our thinking process and it takes a rare iconoclastic genius to think “outside the box.”

Why did the Egyptians lie?

The Italian philosopher Giambattista Vico, a contemporary of Newton, was a marvelous transitional figure between Renaissance and modern thought. His “New Science” pioneered the use of philology and etymology in historical criticism. The book was seldom read after he died until a fashion for “New Age” philosophy appeared in the 1970's and rescued his ideas from obscurity. Vico's thesis was that

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Why is it Dark at Night? (Continued)

Vico believed in the literal truth of the Bible, so he “knew for sure” that Noah’s flood wiped out Egypt in 2332 B.C. Therefore, to him it was a logical consequence that the Egyptians must have fudged the books.

the historical past could be explained by modern scholarship on ancient relics and records, along with correct theology. This was a novel and powerful approach to the study of Rome, Greece, and Egypt.

As Professor Vico studied the documents of the earliest civilizations, he ran into a paradox of chronology. Egyptian historical records were continuous from 4200 B.C. or earlier, but Vico believed in the literal truth of the Bible, so he “knew for sure” that Noah’s flood wiped out Egypt in 2332 B.C. Therefore, to him it was a logical consequence that the Egyptians must have fudged the books. Vico was forced to seek psychological causes for his deduced Pharaonic mendacity.

Of course, we now know that Egyptian chronology was correct, leaving Vico with nothing but the honor of writing erroneous psychohistory 150 years before Freud popularized the genre. One can’t blame Vico for staying with his orthodox belief in biblical chronology; for he was a professor at the conservative University of Naples in the 1740’s, and a heretical theory could have brought him before the Papal Inquisition. Vico provides us with an example of a careful analyst doing ingenious work based on faulty premises, resulting in an erroneous conclusion.

Why do the Chinese use Hebrew?

Well, they don’t use Hebrew, but I thought they did. In April, Leah and I were in Xian, where the terra-cotta army is posted. I saw a van in the hotel driveway that had, in our alphabet, the word “MSIRUOT” printed neatly on its side. That word means nothing in English or Chinese, but it looks like Hebrew (think of the city of Sderot). It took me about a minute to figure out that the painter had taken an English word but painted it backwards. There were several assumptions that were confounded by the Xian van. In English or other European languages, we assume writing goes left-to-right. In Hebrew, writing goes right-to-left. Chinese can go from either the left or the right (although they really like top-to-bottom). The collision of incompatible assumptions resulted in some smiling stsirot.

Why do they call it the Stock Market?

In 1905, the Chicago Symphony Orchestra appointed a principal conductor. He took the young orchestra and built it into a world-class orchestra over his long tenure. He finally retired in 1942.

In 1905, the Dow-Jones Industrial Average traded at 100. The U.S. economy was just taking off, as manufacturing supplanted agriculture as our leading sector. U.S. Steel was founded in 1905. General Motors, General Electric, DuPont, Merck, Proctor & Gamble, Sears, Macy’s, Firestone, International Harvester, Armour, A&P, Coca-Cola, Anaconda – all date from this period of history. Railroads, autos, electric utilities, agricultural machinery, steel, oil, aluminum, radio, meat-packing, supermarkets, department stores, air-conditioning, all were fabulous new growth industries....

In 1942, after all this fabulous industrial development, the Dow-Jones Industrials traded again at 100. Also in 1942 the CSO conductor retired. After 37 years at the podium, Hayden’s Symphony #100 sounded about the same in 1905 as it did later in 1942 (probably better; the orchestra had improved). But the market sounded about the same as in 1905, although the unfortunate shareholders who had gone through the 1930-1942 market did not fancy the tune. In 1942, the Great Depression had just ended, only to be replaced by World War II, which, in early 1942, we were losing. It is true that if an investor had adopted a buy-and-hold strategy in 1905, and stayed with that strategy, he would have made a decent return on dividends. That statement is true as academic logic, but real-world people faced with the panic of 1907, the Great War, the 1920 depression, the 1902 bull market, the 1929 crash, then the Great Depression, and then World War II, did not stick to a buy and hold strategy. (Certainly my grandfather did not. He came to this country penniless, married well, and was a stockbroker through this whole period. He was rich in the 1920’s and stone broke after the crash). His generation ended in financial tragedy with a revulsion against stocks.

The market didn’t exist in the 1940’s. How can I say that? Obviously there were shareholder-owned companies around. The point is that very few people cared. The people that did care detested the market, because the market was

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wildly volatile but without long-term trend, and manipulated by crooked insiders. Trading volume was about one million shares per day, which meant that the volume at one year of trading in 1942 could be done in one hour of trading today. Answer this question: are you long or short orange-juice futures? I suspect your answer would be “Huh? I have never traded orange-juice futures and I have no plan to do so in the future. Please change the subject.” Exactly. That is how people felt about stocks in 1942, except they hated stocks but liked orange-juice.

So the key question is, “What was the name of the CSO conductor?” The answer: Frederick Stock. Next question: Was the market named the Stock Market in his honor? No. The name of the market had been Stock for a long time. We can still memorialize the great musician by dubbing his 1905-1942 tenure the Fred Market.

There were not many books written about the stock market in the 1940-1955 era, but the most common theory on an unpopular subject was “formula timing”. The normal market assumption was that the Fred Market was a random process without trend, so you could establish valuation bands. If the Dow was at 300, stocks were too high, so you

should be all bonds. When the market dropped to 100, fully in stocks, and in between there might be three bands for a stock-bond mix. This sounded like a perfectly reasonable system for anyone who had lived through the Fred Market. Of course, in 1954 the Dow broke through the 1929 high and sailed upward, leaving the Formula Timing fans out of stocks at the start of a great bull market.

As CFA's, our religion is based on the books of prophecy by Ben Graham. His early ideas of value investing were based on Fred Market experience. If you could buy a stock below book value, it was cheap and sensible, while three times book was time to sell. Growth didn't signify. Graham's system was based on assumptions that did not hold in a long bull market.

Like Olbert's Paradox, and Vico's Pharaohs, the conclusion depends on the assumptions.

*Ralph Wanger, CFA, is Senior Advisor
to Wanger Investment Management, Inc.*



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From The Desk of Eric Wanger:

It Was a Tough Quarter



Eric Wanger, JD, CFA

The Long Term Opportunity Fund buys shares in very small public companies, looking for capital appreciation over the Long Term. We reduce risk through hedging and embrace an activist approach to investing in small companies.

Q2 was a tough quarter. Energy soared and financials plunged. The Long Term Opportunity Fund which appeared well-hedged and cleverly invested through May, took a nose dive in June. While we believe our investments will do extremely well in the long run, there is no doubt that we took a lot of punishment in the short run.

Oil. Oil prices skyrocketed near \$150/barrel when legitimate buyers, speculators and energy-subsidizing governments conspired (along with the continuing plunge of the value of the US dollar) to push the price of a barrel of oil to new heights. Gasoline prices shot up to more than \$4.00 per gallon while the press and politicians, all too predictably, began screaming for quick fixes and villains to blame. The Democrats demanded that we punish “big oil” while the Republicans demanded offshore drilling--lots of heat without much light.

But in the midst of the chaos, something very interesting did occur: US gasoline consumption (which represents approximately half of US demand for oil) dropped dramatically. We learned, for example, that the largest highway fuel provider (i.e. truck stop) in America reported a 12% year-over-year decline in sales of some of its major fuel categories. We have all heard about America’s insatiable thirst for oil. But we just saw proof that demand for gasoline, like everything else in the real economic world, is ultimately subject to the laws of supply and demand, responding to price and availability.

We believe the price of oil will settle down in the near/intermediate term. It is our view that prices got ahead of themselves, and despite any long-term issues regarding the crude oil supply chain, a US dollar denominated price of \$150 is simply too much too soon. The American driver seems quite willing to drive less to save money. China will not be able to continue its \$100 billion energy subsidies indefinitely without taking a significant toll on its own economy and currency. Maybe we’ll see \$150 oil eventually, but it won’t be back right away.

Auto. The second quarter also saw more angst from Detroit. The major auto makers continued to report precipitous declines in the sales of trucks and SUV’s. This is not really a surprise. It simply tells us that consumers will respond to actual prices in a way they won’t respond to cajol-

ing, moralizing or propaganda.

It’s hard to imagine that the Big 3 auto makers will rebound any time soon. Americans seem to have finally lost their appetite for SUV’s and trucks, the last bastion of margins for Detroit. While there is much discussion about hybrids and electric cars, it will be a long time before they will move the needle.

Financials. The drama in the financial sector was unprecedented during the second quarter. Rumors began to flourish that Lehman was going to go under and, like Bear Stearns, get stuffed into some type of back-room forced acquisition. It’s shares dropped 55% during the period. Just as dramatic, investors worried--legitimately so, that both FannieMae and FreddieMac, the two juggernaut mortgage insurers would both go bankrupt, forcing the federal government to take them over. It was a period of unprecedented volatility in the financial sector.

Unfortunately, we are not out of the woods yet. There will certainly be more big write downs among the financials. While we’ve probably absorbed many of the biggest mutli-billion dollar write-downs stemming from the initial residential mortgage debacle, we still haven’t seen the full aftermath of the condo crisis, the consumer slowdown or commercial credit crunch. With the economy slowing and commodity prices high, the consumer will drive fewer miles and spend big dollars at the shopping mall. Furthermore, more consumers will be defaulting on their credit card bills:

This is already starting to occur. According to the Wall Street Journal, in the second quarter, delinquencies on Citigroup’s total credit-card portfolio were up nearly 12% from the end of last year to about \$4.27 billion. Delinquencies on the securitized portion of that portfolio had a 16% rise during the same stretch. Additionally, rising defaults on credit-card payments, coupled with a bleaker economic outlook, are spooking investors in the market where this debt is packaged and sold. In July, issuance of credit-card asset-backed securities fell to \$4.4 billion from \$5.26 billion in June, according to J.P. Morgan Securities Inc.

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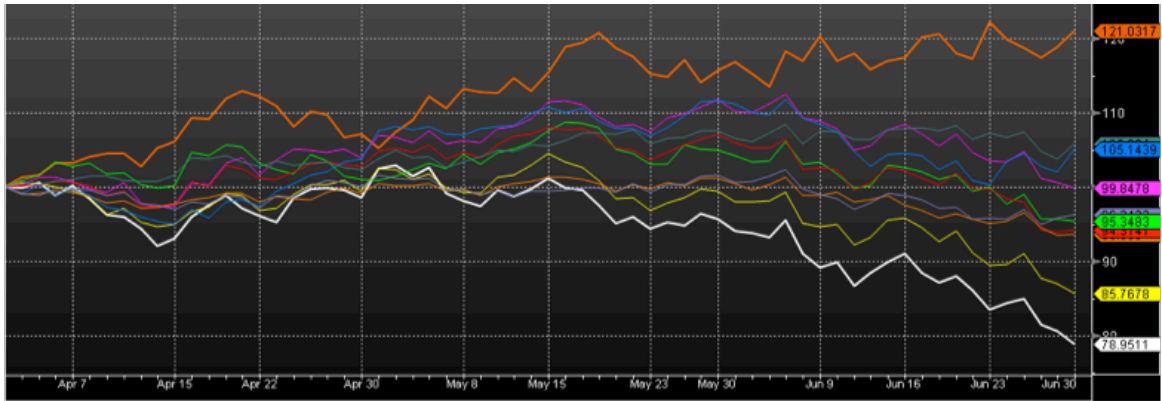


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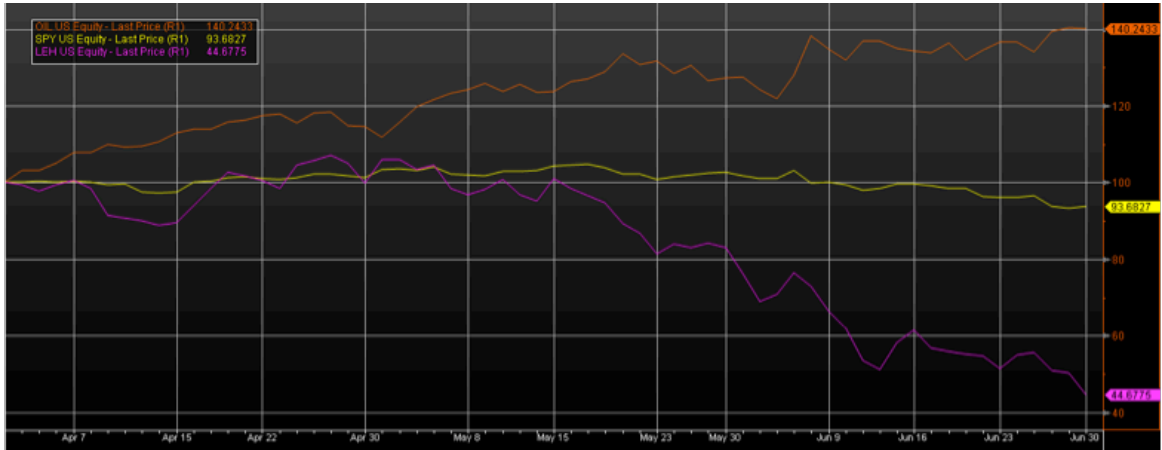
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It Was a Tough Quarter (Continued)

Second quarter was quite a quarter: The S&P 500 Energy Sector index was up 21% during between 04/01/08 and 06/30/08 while the S&P 500 Financial Sector Index was down 21% during the same period.



Lots of Drama: This next graph shows crude oil stocks (iPath S&P GSCI Crude Oil Total Return Index) vs shares of Lehman between 04/01/08 and 06/30/08. The oil index was up 40% during the quarter while Lehman was down more than 55% during the period.



US Dollar. Looking closely at the 5 year graph of the dollar against the euro, one can see that the dollar took a brief respite from its plunge against the Euro during the end of Q2, however, there is little reason to think that we are out of the woods. Foreign wars, spiking energy costs, national debt and a troubled economy all will be drags on the currency. Exports do appear to be picking up. That's the good news. In the long run, we will come out of this positioned to be much more competitive.

In the meanwhile energy costs will continue to bite at our heels. Domestic wages and lower housing prices will help hold down domestic inflation in a macro sense, but food and many critical goods will be more expensive. The

dollar holding world will continue to finance our national debt, but it seems likely they will want to extract more interest for this privilege.



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Bill Andersen:

Why This Isn't the 1970's

William Andersen is the portfolio manager of the Wanger Income and Growth Fund, our newest portfolio.

One of the most important issues for economic policy makers the past few months has been the rapidly increasing rate of inflation experienced by most countries around the world. While the U.S. gets the most attention, the problem is actually more acute overseas, especially in the developing world. There are now 50 countries globally with inflation rates above 10%. The average rate of inflation in developing markets is 9.1% according to the International Monetary Fund. In the U.S. the figure is currently 4.1% and growing. Europe's inflation level is a little lower.

Why are inflation rates so much higher in emerging economies? A look at some of the differences between the U.S. and developing economies can help to understand the current situation and to analyze likely outcomes.

Developing economies are experiencing inflation similar to that experienced by the U.S. in the 1970's. Food prices are up substantially: 22% in China in the past year, according to the Economist magazine. Food comprises 30-40% of the CPI in most developing economies vs. 15% in most mature ones. The increase in food prices has led to rapid wage increase in many cases, as policy makers have understood that food costs are a political as well as an economic issue. Many developing economies have currencies which are pegged to the dollar. During a period of dollar weakness this has resulted in interest rates being kept abnormally low. The result has been an overly lax monetary policy given the strength of these economies, which has led to "overheating."

The situation in the U.S. has some common elements and some which are different. Clearly prices have been driven up by commodity prices including the costs of food and energy. But on a relative basis these factors have a lower impact than they do in developing countries. This

hasn't (at least so far) translated into increasing wages. The U.S. labor force is largely service sector focused now and much less unionized than during the inflation shock of the 1970's. Also, the threat of outsourcing probably acts as a barrier to wage increases. The U.S. economy is also remarkably flexible with a work force which historically has been willing to relocate and change careers. With the slowdown in the economy, the U.S. also doesn't suffer from over-stimulation.

Unlike the situation in developing economies, there are also deflationary forces at work in the U.S. Most notably, the cost of residential housing has fallen dramatically in the past two years. Since it peaked in April of 2006, the Case-Schiller index has fallen 22 consecutive months by a total of 20%. This is by far the biggest drop on record, and is difficult to reconcile with an argument for accelerating inflation. Contrast this with the 1970's, when home prices in the U.S. rose by an annualized rate of 11.1%, almost tripling during the decade. The current fall in home prices is not accounted for in CPI, which only includes rental rates. Rental rates have fallen much more slowly than home prices.

Our likely view is that the U.S. will not enter into an inflationary spiral as it did in the 1970's. Emerging markets are more at risk than the US with respect to 1970's style stagflation, but such a result is probably unlikely in emerging markets as declining global GDP rates will naturally lead to lower commodity prices—a trend we are already beginning to see.

Bill Andersen, CFA



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James L. Cahn:

How Did Anyone Get to \$200 Oil?

The logic behind \$200 per barrel of oil goes something like this:

1. *Supply is growing at a fixed rate, approximately 1% a year.*
2. *Consumers of oil cannot consume more oil than supplied, therefore supply growth equals demand growth.*
3. *Since the world economy is growing, at around 4%, the price of oil must rise to depress demand such that demand growth equals supply growth.*

And investment banks created models like the one below, from Goldman Sachs:

$$\% \Delta \text{Demand} = 1 * (\% \Delta \text{GDP} - 2.0\%) - 0.015 * \% \Delta \text{Price}$$

Do the math...

$$1\% = 1 * (4\% - 2\%) - 0.015 * \% \Delta \text{Price}$$

...and the price of oil needs to rise by more than 50% to balance supply and demand.

In addition to the model being extremely sensitive to inputs, the model ignores some important real world facts: 1) given the expected \$500 billion investment in exploration and production supply will expand 2) Americans are cutting back mileage in response to high gas prices in a non-linear way (i.e. for every nickel gas goes up, drivers cut back more than they did on the previous nickel) and 3) GDP growth is dependent on cheap fuel. As oil spiked in the Q2 we saw an opportunity to reduce our exposure to energy prices.

Wanger Investment Management Welcomes Michael Kelnosky

Michael Kelnosky joins as Director of Distribution. Michael will focus on managing and expanding the firm's client relationships as part of the company's plans to increase distribution of its investment strategies through financial advisors and other channels. Michael has 14 years of experience in the financial services industry and, most recently, served as the Sales Desk Manager at Calamos Investments

where he led the internal sales effort. Prior to joining Calamos Investments, Michael served in various capacities at LaSalle Bank. Michael is a cum laude graduate of St. Xavier University and is currently at Benedictine University pursuing a Master of Business Administration degree. Michael is a spokesperson for early cancer detection and sits on the American Cancer Society's Board of Directors.



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Irene's Corner:

Intern 1 & 2: A Landmark Summer at WIM

June 2, 2008: a landmark event at Wanger Investment Management, Inc. as the first intern in the history of the firm started work. That historic afternoon would be revisited three weeks and one day later on June 24, 2008, when the second intern began his internship. "Taking on the role of intern is no easy task," said Dan Westen, AKA Intern #2. Westen continued, "We put in a lot of hard work this summer and learned a great deal about the finance industry." Joel Hainsfurther, AKA Intern #1 agreed, stating, "We were really given a great opportunity to learn this summer. Dan and I got to help conduct research on companies and we truly took on the role of analyst." The interns spent their summers helping the firm by engaging in a wide array of tasks ranging from researching companies to working on a communications strategy for marketing. They conveyed their research findings to Eric, Jim, and Bill via written reports or through personal briefings.

One project that Joel worked on involved a Brazilian bus manufacturing company. When asked why he liked the company, Joel said, "After conducting research, I strongly believe that the demand for public transportation in emerging markets will continue to grow. As the economies of these countries continue to grow, their workforces will expand and these workers need to find transportation to get them to work." Hainsfurther continued, "Furthermore, the company consistently has 40% market share in Brazil while its next closest domestic competitor lingers far behind in the upper teens. It has subsidiaries in other countries across the world that own a large market share in their respective countries. The company has positioned itself to expand globally and has solid financials." When asked how he went about the research process Hainsfurther responded, "I began my research by examining the equivalent of the annual and quarterly reports that the company filed in Brazil. I went on to look at their financial statements, examine their revenue growth, and look at the demand for their product in the marketplace. I took a close look at Brazil because the company is headquartered there. I communicated with the investor relations people at the company as well as the investor relations people that

worked for several of their competitors in order to run channel checks. This enabled me to see how their clients viewed them and their product and why the clients of their competitors did not use their product. One thing that I found particularly appealing about Brazil is that President Lula, whose term expires in 2010, wants to have the legacy of being the president who brought the school bus system to Brazil. He wants to have 25,000 school buses in Brazil by the time that he leaves office and revenue from these buses is tax-free. Another aspect of the company that I found attractive was that its subsidiary in South Africa has a relatively large market share. In 2010 the World Cup will be in South Africa, so the demand for public transportation will increase."

Dan, who worked primarily with Bill Andersen on Pipeline MLPs and REITs, said that he enjoyed seeing how interconnected different industries are in the overall scheme of the market. Dan stated, "As an economics major, I was pleasantly surprised to see how general macroeconomic conditions can affect specific industries. For example, it was interesting to see how the price of oil and gasoline affects consumer behavior, thus impacting the Retail Real Estate companies." Dan also commented that he noticed a strong connection between popular political topics and trends in the market place, stating, "On television, you constantly hear about the potential of natural gas as an alternative to foreign oil. While researching pipeline companies, I realized that natural gas will play a very important role in the market for years to come, especially as more pipeline companies expand their networks into the Rocky Mountains."

As the summer winds down, the interns will soon be leaving Wanger. However, both plan on resuming their internships during the year and hope to continue to learn more about the financial industry.

Irene Moy

Joel Hainsfurther

Daniel Westen

