

Quarterly Letter

DEAR LIMITED PARTNER,

What Are We Thinking About This Quarter? Both our firm and our portfolios continue to grow and evolve. We are adding staff and preparing for additional growth. We continue to become more and more active with our investments. These are exciting times for our shop. Here's some of what we're thinking about this quarter.

Welcome to James Cahn, the newest member of our firm

Is it the End of the World Yet?

Times have been prosperous and good for a long time, yet the markets are very, very nervous. We continue to wait for the "world to end," while admiring the prosperity we see around us. It's a bit schizophrenic. The seemingly infinite springs of cheap debt are drying up. The mega-deals we read about in the papers are starting to stall out. The dollar has fallen against major world currencies and domestic spending is slowing. There

is no shortage of things to be worried about. Time to hide under the bed? No. Time to be careful? Definitely.

More than ever, we believe, it is important to "pick your shots" as investors. But the rest of the world seems to be booming. And there is prosperity to be found in every corner—all you have to do is look for it. Long term opportunities abound for companies that will thrive on a cheaper dollar, booming overseas markets,

and the ever-increasing demands of a developing world growing richer by the day. We are all about "Rising Stars and Fallen Angels" positioned to take advantage of long term trends. Our job is to find those opportunities for you, our partners.

> Yours, Eric Wanger, JD, CFA

Ralph Wanger Reports on the Aspen Ideas Festival and the End of Cheap Energy

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Ralph Wanger Reports on the Aspen Ideas Festival: The End of Cheap Energy



Ralph Wanger

The Aspen Ideas *Festival takes place the* first week of July. It is sort of a summer camp for pseudo-intellectuals. There are politicians—I enjoyed an exchange between Karl Rove and Colin Powell about the Valerie Plame case. I attended seminars on the environment and energy, which is the subject of this brief essay, although my personal favorite was a picture show by NASA with spectacular photos of the rings and moons of Saturn. However, energy issues, including global warming, are critical to our life style and very hard to solve.

Two hundred years ago 90% of all the people in the world were subsistence farmers. Their standard of living and their technology was not significantly different than that of two thousand years before their time. The population of the world was less than one billion people. They were thin-only rich people were fat. Energy was limited to the muscle power of humans and draft animals, plus some wind power for ships and windmills and a little water power for milling.

Then men learned how to burn coal. Steamships and railroads made it possible to open up new farming areas, such as the American Midwest. With cheap energy, lots of new inventions became possible. By 1870, oil was discovered, then natural gas, and then electricity made from coal. Cheap energy led to the invention of artificial fertilizer, and the population of the world started to grow rapidly, now at 6.5 billion people.

Automobiles, airplanes, steamships, electric appliances, telephones, air conditioning, space ships, and machine guns were just some of the things that cheap energy allowed us to make. Today we live better than the kings of olden times. Our prosperity has grown right along with the rate at which we consumed fossil fuels. Now China and India have gotten prosperous enough to buy cars and air conditioners.

China is building new coal-fired electrical generating capacity at a rate of one new plant every ten days. Will they willingly stop using oil and electricity in order to slow global warming in the distant future? Try a thought experiment. You and your spouse have finally moved into a decent apartment, perhaps in Pune, a growing city near Mumbai. The weather is normal, 100 degrees and 100% humidity. You say "Honey, lets not run the A/C tonight, it's bad for the environment." What is your chance for sex in the next 48 hours? This is the famous Pune Poontang hypothesis.

Many Americans have not realized how much their lives will have to change. A lot of people think that getting better gas mileage by buying an electric or hybrid car will solve the problem. A lot more lifestyle change will need to happen. I said to a friend "some guys here drove their Prius'

to the airport and then flew their Cessna Citations to Aspen." He answered "Why yes! That is exactly what I did".

Fossil fuels are a finite resource. Oil is going to be the first fuel to run into supply constraints. Oil was \$3 per barrel in 1972, \$40 in 1989, and \$80 today (Brent field). Energy economist Phil Verlager thinks that oil could go much higher, \$200 five years from now. Taxes on gasoline are likely to rise too, so \$10 for a gallon of gas is coming soon. Dr. Verlager does not think higher energy prices will cause a major economic downturn, but there are still big consequences. One will be the amount of money going to the OPEC producers. In 1999, OPEC grossed \$99 billion, but if oil goes to \$200, OPEC gross revenues reach \$1 trillion dollars. That much money in the hands of countries such as Iran and Venezuela is scary. In the last couple of years we have seen a big increase in Al Qaeda activity, funded by the jump in oil revenue.

The world will have to learn how to live with more efficient use of energy. That will happen, for energy efficiency has been improving every year for a long time. These efficiencies will happen because we will use technology to replace energy. One change going on now is for electric lights. The tungsten filament incandescent bulbs we use now take 25% of all the electrical power we generate (that includes the air conditioners we need to get rid of the heat generated by lamps). Compact fluorescent bulbs now, and LED lighting in a few years, will reduce lighting demand, perhaps by 80% if everyone converts to the new technology.

Computerizing homes, offices, and malls to use less energy will work. Mr. Zimmerman, leader of Wal-Mart's Sustainable Buildings Network, told us how Wal-Mart is a leader in building energy-efficient stores. Because Wal-Mart will therefore have lower costs, other retailers will be forced to follow.

WLTOF will look for companies that will prosper by helping the world become energy efficient.

Ralph Wanger is a Senior Advisor to Wanger Investment Management, LLC.



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From The Desk Of Eric Wanger



Eric Wanger

"If the U.S. federal government properly accounted for its explicit and promised liabilities, it would record a national debt of \$64 trillion."

Table 1. U.S. Federal Fiscal Imbalance and Components, Projected for FY 2006 - FY 2012

Category	FY 2006	FY 2007	FY 2008	FY 2008	FY 2010	FY 2011	FY 2012
Present values (billions of constant 2004 dollars)							
Total fiscal imbalance	63,575	66,118	68,533	70,967	73,501	76,123	78,834
Social Security	7,684	8,017	8,344	8,675	9,011	9,367	9,737
Medicare	65,181	67,578	69,928	72,291	74,728	77,251	79,859
Rest of federal government	-9,190	-9,477	-9,738	-9,987	-10,239	-10,494	-10,762
As a percent of the present value GDP							
Total fiscal imbalance	6.6	6.6	6.7	6.8	6.9	6.9	7.0
Social Security	0.8	0.8	0.8	0.8	0.8	0.9	0.9
Medicare	6.7	6.8	6.8	6.9	7.0	7.0	7.1
Rest of federal government	-0.9	-0.9	-1.0	-1.0	-1.0	-1.0	-1.0

Those are pretty dramatic words for a publication as famously un-sexy as the Journal of Financial Analysis. In "Do the Markets Care about the \$2.4 Trillion U.S. Deficit?" authors Gokhale and Smetters present a carefully constructed look at a long term cash-flow model they developed to help us envision the staggering size of US Federal entitlement programscurrently in place. Their conclusion: If we had to use GAAP accounting as a country, our liabilities would vastly exceed our assets on a present value basis.

An imbalance of \$63.7 trillion is hard for the average person to fathom. It is larger than the value of the entire capital stock in the United States, including all property, land, buildings, roads, homes, automobiles, factories, bank accounts, stock certificates, and consumer durables. In fact, if the federal government confiscated all the land in the United States along with all of its improvements—buildings, highways, plant and equipment, and other durable assets built on it—and sold them at auction to foreign investors, it would still fall more than \$20 trillion short in present value of the monies required to satisfy its future

budget. And this calculation assumes the foreigners would value U.S. property and assets as much as Americans do.

The message of their cautionary tale is this: The financial shortfalls that the federal government faces are unprecedented, as investors will eventually figure out. Economic theory says that the capital markets should realize the significance of the situation and respond through some type of market action such as driving up interest rates. This, theoretically, would send powerful signals to policymakers in Washington who would then be forced to take notice and respond. Currently, however, no such thing is happening. The capital markets have not sent the signals because they don't appear to be bothered by the true magnitude of the US deficit. The article proposes a number of hypotheses why this might be—and then proceeds to debunk each of them.

It's an interesting, if not scary read. If you have trouble finding a copy, let us know. We'll be happy to help out.

Eric Wanger

¹ Do the Markets Care about the \$2.4 Trillian U.S. Deficit? By Jagadeesh Gokhale and Kent Smetters. Financial Analysts Journal, Volume 63, #2, 2007.



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A Long Term Opportunity: Paying Taxes With Credit Cards

We were recently in Reston, Virginia, at the headquarters of Tier Technologies, Inc. (NASDAQ: TIER), a recent addition to the WLTOF portfolio, speaking with Ron Rossetti, CEO, and David Fountain, CFO. TIER's Electronic Payment Processing division ("EPP") will generate more than \$70 million this year providing this service, and we expect it to grow at more than 20% per year.

Federal, state, and local governments around the US will be giving Americans the ability to pay their corporate and personal taxes with credit cards, a trend that is predicted to grow rapidly. It seems that governments at all levels want to provide credit card enabled payment to us

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citizens. Why? It's simple—when we pay with credit cards, our governments get paid more of what they're owed, more quickly, and with many fewer bounced checks. Apparently, we citizens like it too. Credit cards allow us to pay our taxes on time (avoiding the penalties and hassles of late payments) while still having additional time to actually come up with the money. Over certain periods of time, credit card interest rates may actually be lower than tax penalties and interest— and don't forget about the frequent flyer miles!

But wait a minute before you call your broker. This is a turn-around story. TIER has a messy past and Rossetti and Fountain are not completely done cleaning it up yet. Tier was a government services rollup that went bad, a consulting firm that tried to hyper-grow through a classic "leverage a public multiple to acquire lots of small private firms" rollup strategy. After 19 acquisitions, things got out of control. Rossetti and Fountain strapped on their hip waders and grabbed their pooper-scoopers. Previous management left them a mess and it is their job to clean it up.

They have made significant progress. The company is back on the Nasdaq and cash is flowing again. The next step is for Rossetti and Fountain to sell two non-core, low-margin divisions. Selling these divisions would allow them to shed nearly 700 employees and let them devote their time and resources exclusively to Electronic Payment Processing for government. The result would be a lean and mean government payment processing firm, generating more than \$70 million with fewer than 200 employees.

Despite its messy history, TIER has some significant assets and some big opportunities. TIER currently has over 3,100 federal, state, and local governments as clients, plus a host of educational institutions, utilities and commercial firms. The firm also has cash, more than \$60m in the bank and no debt. That's more than \$3 per share. If they sell these businesses, they would have \$4-\$6 per share in the bank—that would be a war chest of over \$100 million!

The company has already racked up some significant marquee customers: First and foremost, the IRS. In fact, Tier's Official Payments Corporation and Metavante's Link2Gov are the only two providers the IRS has approved for collecting the payment of individual and corporate federal taxes by credit card. Intuit's TurboTax has also chosen Official Payments as the only credit card payment processor for TurboTax e-filed tax returns. We call that a Long Term Opportunity.



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Wanger Investment Management Welcomes James L. Cahn

James Loren Cahn will join as a Principal of the firm. He will have both investment and client responsibilities.

Prior to joining Wanger Investment Management, Mr. Cahn was a Senior Financial Risk Consultant with Quantitative Risk Management Inc. (QRM). QRM specializes in managing interest rate, credit and volatility risks for major financial institutions. Mr. Cahn co-led the Analytic Consulting Team that worked with clients (minimum portfolios of 10 billion dollars) to determine optimal market model calibration parameters and hedging strategies.

Prior to Quantitative Risk Management Inc., Mr. Cahn was an Analyst with JP Morgan Fleming Asset Management, located in both New York and Chicago; where he

assisted institutional clients in constructingefficient portfolios to meet long term cash flow requirements.

Mr. Cahn received his Bachelor of Science in Economics and Performance Studies from Northwestern University in Evanston, IL and is pursuing a degree in Analytical Finance (MBA) at the University of Chicago. He also serves as the Co-Chair of the Emerging Artist Advisory Committee at the Museum of Contemporary Art, Chicago, and sits on the Board of the Society for Contemporary Art at the Art Institute of Chicago.

Michael Spertus Joins Our Advisory Board

Michael Spertus has joined our Advisory Board, making his deep understanding of Computer Science and the software industry available to us.

Mr. Spertus is currently a Distinguished Engineer at Symantec Research Labs and a Lecturer in the University of Chicago Computer Science department. Previously, he was Chief Technologist for the Performance Management division of VERITAS, and was the founder and CTO of Geodesic Systems, a maker of self-healing software, later acquired by VERITAS. At Geodesic, he was the chief de-

signer of Great Circle, a garbage collector for C and C++, which was selected as Product of the Year in its category by Software Development Magazine. He is widely published in academic and trade journals and has spoken widely in both University and industry settings. Mike is also a member of the board of directors of the Spertus Institute and the Visiting Committee for the Physical Sciences Division at the University of Chicago.

