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“A Climate Change by Any Name”

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The great Charlie Munger, Warren Buffet’s long-time partner at Berkshire Hathaway, is an advocate of intra-disciplinary thinking, being able to view situations from many angles. He believes the best investment opportunities benefit from what he calls the “Lollapalooza Effect” – many factors intersecting with a synergistic effect. With that in mind, we’re presenting a two-part article on responsible investing. Part One is a discussion of how the current landscape is fertilizing the elements of a “Lollapalooza Effect” around responsible investing. Next quarter, we will discuss how AIP’s SRI LargeCap strategy is evolving to take advantage of this potentially powerful effect.

Intro

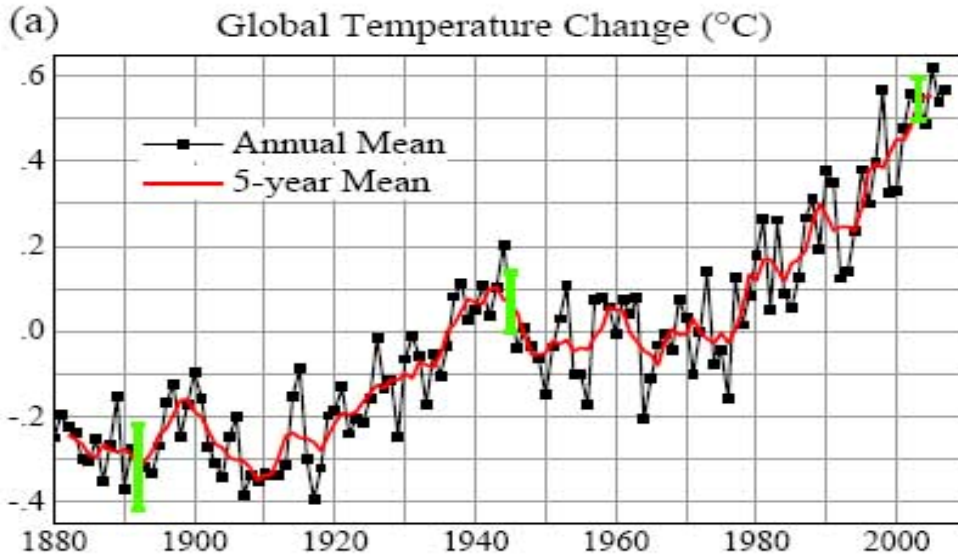
Climate change has exploded onto the world’s collective conscience. Whether it’s filling up our gas tank, watching the six o’clock news or the latest Hollywood blockbuster, or listening to the Presidential debates, we are constantly reminded of climate change. Some investors are interested in saving the planet, others in protecting our national interests or supporting their religious beliefs, and still others are driven solely by the interest of profiting from a powerful investment trend. Regardless of the individual reasons, Sustainable and Responsible Investing (SRI) is here to stay.

Climate Change Is Real, but Don’t Believe the Hype

Admit it. You’ve walked outside on a hot summer day and have thought to yourself, or perhaps remarked to a friend, “Boy, it’s so hot out - I wonder if this is what global warming feels like?” Then, of course, you snapped back to your senses and went on with your life. You can believe that this has happened to most everyone I work with here in Safety Harbor, Florida.

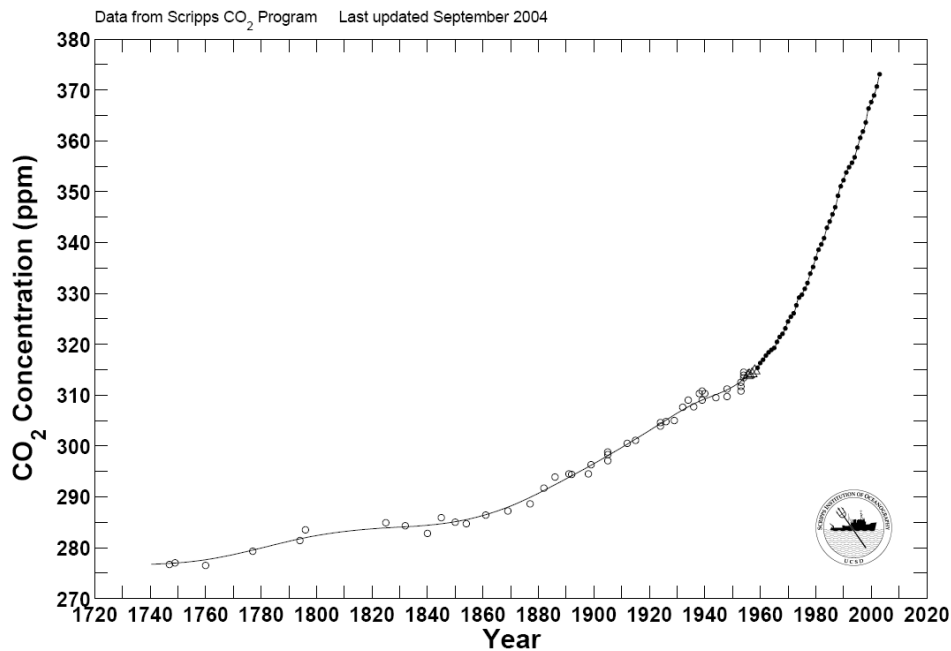
While it’s unlikely that any of us can discern the effects of global warming on a daily basis, on a cumulative basis, scientists do indeed observe global warming. In fact, according to NASA, 2007 was the second warmest year on record. Eight of the past 10 individual years are among the 10 warmest single years on record (chart a). And the

concentration of CO₂ in the atmosphere began to increase more rapidly at the dawn of the industrial revolution, and has gone hyperbolic since 1970 (chart b), according to the Scripps CO₂ program.



Source: Goddard Institute for Space Studies (GISS)

Trend in Atmospheric CO₂ Concentration over the Industrial Era



In fact, we in Florida have several reasons to be particularly concerned about climate change. Those of us who aren't natives settled here because of the tropical climate. Among our concerns:

- Mangroves are disappearing rapidly (a loss of 20% of the world's mangroves since 1980)ⁱ
- Coral reefs are decaying due to temperature increase and acidificationⁱⁱ
- If ocean levels rise significantly, Florida will be adversely impacted
- Hurricane frequency and intensity (seven of the nine costliest Atlantic hurricanes on record have occurred since 2004)ⁱⁱⁱ
- Rising rates of heat stress, insect-borne disease, increase in skin cancer occurrence

But while climate change is real, it's also wildly overhyped. TIME® Magazine's famous 2006 feature on global warming featured the photo of a polar bear floating aimlessly on a piece of ice, searching in vain for the polar ice cap. In his book "Cool It," Bjorn Lomborg (widely regarded as one of the world's preeminent experts on climate change) notes that of 20 global polar bear subpopulations, only one or two are in decline, two are increasing, and the rest are stable. In fact, while the TIME® story claims 15 bears die each year due to the effects of global warming, Lomborg notes that 49 die each year due to hunting!

Sea level rise due to ice melt is a myth – ice already displaces water. Sea level rises because water expands as it warms, and due to run-off from land based glaciers. Glacial run-off contributes about 60% of the rise, expansion 40%^{iv}. The UN expects that sea levels will rise about one foot over the course of this century – the same rise we've experienced since 1860^v. Even if we did nothing about global warming, more and more people will be subject to flooding due to massive population increases on the coastlines (Florida coastline population grew 50x versus US population growth of 4x) and sinking cities (Santa Clara, CA sank 4 yards from 1920-1970 due to water usage)^{vi, vii}.

A Remedy

In each of these cases, Lomborg urges us to consider the most economical means of addressing the problem. If we want to save polar bears, we should change hunting laws. If we want to curb the consequences of sea level rise along the coastlines, perhaps we should reduce regulation of insurers and allow them to charge higher rates along the coast. The increased cost of living in these high-impact areas would curb the outsized population growth.

This is because CO₂ cuts — no matter how large — will have a minimal impact. Economic studies show that due to the enormous costs associated with curbing CO₂ emissions, optimal policy calls for only modest reduction. The up-front cost of reduction is so enormous that the costs outweigh the benefits for the first 170 years. The break-even point would be around the year 2250^{viii}. Diverting R&D monies to alternative energy resources combined with more cost-effective programs to address poverty, hunger and disease will lead to far greater economic gains. However, The Kyoto Protocol in no way encourages R&D spend on alternative energy.

The Kyoto Protocol treaty was negotiated in December 1997 at the city of Kyoto, Japan, and came into force February 16, 2005."

The Kyoto Protocol is a legally binding agreement under which industrialized countries will reduce their collective emissions of greenhouse gases by 5.2% compared to the year 1990 (but note that, compared to the emissions levels that would be expected by 2010 without the Protocol, this target represents a 29% cut). The goal is to lower overall emissions from six greenhouse gases - carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, HFCs, and PFCs - calculated as an average over the five-year period of 2008-2012. National targets range from 8% reductions for the European Union and some others to 7% for the US..."

The Global Investment Community Responds

Many business risks are related to climate change. Companies must concern themselves not only with their production's susceptibility to increased fossil fuel/raw materials costs, but also their supply chain's susceptibility^{ix}. Many companies are

vulnerable to sudden regulatory changes to cap greenhouse gas emissions, and could be subject to litigation if they do not subsequently curb emissions. In today's interconnected world, even a company's reputation can be viewed as a business risk (recall the response when reporters uncovered Nike's child labor factories). The risks are real and evolving, as is the response of the investment community.

The investment strategy often referred to as Socially Responsible Investing is changing. Rather than simple mission-based negative screening for industries such as alcohol, gaming, tobacco and firearms, SRI now includes issues such as climate change, alternative energy, carbon emissions, community development, economic fairness, corporate governance, and ideological and religious investing.

Assets flowing to such strategies are surging. The global SRI market stood at more than \$5 trillion in 2006. At the same time, \$2.7 trillion — 11% of all AUM in the US — is involved in SRI. From 2005 - 2007, SRI assets increased by more than 18%, while all professionally managed assets increased less than three%. Institutional SRI mandates soared 27% during the same period, from \$1.49T to \$1.88T.^x Investment banks such as Goldman Sachs and JP Morgan are choosing to buy companies outright rather than take them public and collect underwriting fees. Hedge funds such as DE Shaw and SAC Capital have made significant investments. Notable investors in the space include Warren Buffett, Jeff Immel, Sergei Brin and Larry Page, Bill Gates, and Sir Richard Branson.

There has been substantial corporate progress in the US, including, but not limited to, Chevron's integration of renewable technologies into its energy portfolio, Ford & GM's plans to increase hybrid vehicle production tenfold to 250,000 annually by 2010, American Electric Power building the first commercial-scale power plant using coal gasification technology, and General Electric's "ecoimagination" campaign, a plan to double investments in climate-friendly technologies and reach \$20 billion in annual sales by 2010^{xi}.

Could SRI become a Fiduciary Responsibility?

A recent study of leading pension funds notes that clarification by legislature as to whether or not sustainability goals need to be taken into account by the pension fund is desirable for the legal certainty with respect to fiduciary duty^{xii}. The long-running concern is whether SRI strategies generate inferior returns. However, studies refute this notion. “Demystifying Responsible Investment Performance,” a Mercer Consulting and UN Environment Program Finance Initiative (UNEPFI) review of 20 academic studies revealed that only three show a negative relationship between Environmental, Social and Governance (ESG) factors and portfolio performance. Their review of 10 brokerage reports reveals none show a negative relationship between ESG factors and portfolio performance. Further, The Responsible Investor Landscape 2008 Asset Owners survey shows 47% of investors already committed to responsible investment strategy said their choice had made a positive impact on investment returns, while 43% said it was too early to say.

A fundamental truth is that pensions have a long investment horizon, consistent with SRI. Beneficiaries have a strong interest in being able to live out their retirement in an intact environment and a peaceful world. To this point, the “Freshfields Report” (A Legal Framework for the Integration of Environmental, Social and Governance Issues into institutional investment – October 2005) clears the way for SRI considerations. In fact, according to this report, where beneficiaries have expressed investment preferences toward SRI, these preferences should be taken into account.

Finally, sustainability reporting requirements for Florida Plans are already being increased. Florida Treasury is beginning a formal analysis of its investments for the financial implications of climate change. They’ve launched a semi-annual review to assess how public fund managers incorporate climate risk in portfolio holdings as part of prudent investment management. Similar developments have occurred across the US.

The Future of SRI

A problem for a broader application of SRI has been the dearth of measurable data. Over the past few years, however, quantitative data in the SRI space is improving exponentially. The Enhanced Analytics Initiative (EIA) was established by a group of asset owners and fund managers to promote better broker or sell-side research on extra-financial issues. Many private firms now offer high quality data known as Key Performance Indicators. The indicators cover environmental, economic, social, and governance issues in a reliable, repeatable manner.

The alignment of environmental interests, automakers, the agricultural industry, and security and energy independence advocates is a powerful force. Think of the solution to these environmental and social problems as a distributed Manhattan Project. Exponential growth in, and convergence, of supercomputing, data storage, advanced algorithms, biotechnology and nanotechnology is opening once unthinkable opportunities. The surge in investment is drawing top minds from university and corporate research labs, and could propel a disruptive change. And early movers may be beneficiaries of a tailwind.

Next quarter we will describe the evolution of AIP's SRI strategy, as well as what we are doing as a firm to "act locally."

ⁱ *The World's Mangroves 1980-2005*, Food and Agricultural Organization of the United Nations, 2008

ⁱⁱ Bruno, John. August 2008 *Coral Reefs and Climate Change*, the encyclopedia of earth, 2008.

ⁱⁱⁱ *The Thirty Costliest Mainland United States Tropical Cyclones 1900-2005*, Atlantic Oceanographic and Meteorological Laboratory, 2008.

^{iv} *Climate Change 2007 – The Physical Science Basis*. Intergovernmental Panel on Climate Change, 2008. Cambridge University Press.

^v Jevrejeva, S., A. Grinsted, J. C. Moore, and S. Holgate (2006), Nonlinear trends and multiyear cycles in sea level records, *J. Geophys. Res.*, 111, C09012, doi:10.1029/2005JC003229, 2006.

^{vi} Pielke, R.A., Jr., & Landsea, C.W. (1998). *Normalized Hurricane Damages in the United States: 1925-95*. *Weather and Forecasting*, 13(3), 621-631.

^{vii} Waltham, T. (2002). *Sinking Cities*. *Geology Today*, 18(3), 95-100.

^{viii} Kavuncu, Y.O., & Knabb, S.D. (2005). *Stabilizing Greenhouse Gas Emissions: Assessing the Intergenerational Costs and Benefits of the Kyoto Protocol*. *Energy Economics*, 27(3), 369-386.

^{ix} Lash, J. & Wellington, F. (2007), *Competitive Advantage on a Warming Planet*, Harvard Business Review, March 2007.

^x *2007 Report on Socially Responsible Investing Trends in the United States*, Social Investment Forum, 2008.

^{xi} *Corporate Governance and Climate Change: Making the Connection*. Ceres, March 2006.

^{xii} Hesse, A. (2008), *Long-Term and Sustainable Pension Investment: A Study of Leading European Pension Funds*. Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, May 2008.