Although the Copenhagen Summit fell short of a fully binding accord, the conference solidified resolve to reduce behaviors that increase global degeneration. Developing countries, including China, India, and Brazil, have “taken note” of climate change issues. China is committed to reducing its greenhouse gases by 40–45% of 2005 levels by 2020.

Timing of binding accords aside, increased catastrophic events and continued strain on fresh water supplies and ice melt, coupled with a strong need for job increases globally, have set the stage for renewed investment in infrastructure, green technologies, and innovation. The US government is funding infrastructure in a variety of locations: domestically at the municipal level through the Build America Bond (BAB) program, as well as in Haiti and Chile. In addition, developed countries are committed to paying for a portion of developing countries’ climate change initiatives through dedicated funding, largely flowing through the Copenhagen Green Climate Fund.

The BAB program is widely considered a relative value to bond investors; however, municipalities are often hard-pressed to specify whether the funding is for water/sewer improvement, governmental building refurbishment, roads, transportation, or environmental reclamation. Regardless of the infrastructure commitment, documentation is limited to financial ability to repay. No explicit commitment to rebuilding standards in preparation for climate change is communicated. If such commitments exist, bond holders are not currently able to access that information.

Private equity investment is actively sought for a number of technologies, including biomass-, solar-, and wind-generated electricity, as well as wood pellet production (as an alternative heating source). Corporate investments include continuing technological improvements in extracting “greener” fuel sources. Warren Buffett’s Berkshire portfolio, for example, includes a Chinese fuel cell producer and pipelines for carrying natural gas. Green investment opportunities abound.
Non-Conformity of Climate Change Investments
As climate change investments experience loss, position in the capital structure offers little or no protection for investors. Risk is inaccurately valued when construction commitments are unavailable. That being said, the reality is that asset class is currently driving risk premia, with bond investors receiving few operational covenants—even among privately placed bonds. Issuers are showing preference for publicly traded funding when private lenders try to obtain such covenants.

This risk compensation imbalance ultimately motivates reconsideration of traditional portfolio construction methodology. Unfortunately, losses may be sustained by an unwitting investor group before risk premia are recalibrated. Until risk compensation appropriately rewards investors, extraordinary investment risks (e.g. Haiti and Chile) will be funded largely through public sources: donations and global government commitments.

Insurers Manage Climate Change Risk
For over a decade, insurers have used climate change product solutions to better assist in personal and business risk management. Demand continues to increase for broad-based policies that better address the climate change risk set. As markets continue to digest manifestations of climate change, insurers will continue to lead with policy solutions.

However, insurers with longer-duration liabilities and geographically diverse risk exposure can use investments as viable ways to manage this risk. As a result, global insurers can, through asset-liability management, utilize their standard business practices to optimize profitability.

Biography
C. Shawn Bengtson, Ph.D., CFA, CIOP is a senior portfolio manager for Woodmen of the World Life Insurance Society’s Investment Division. Shawn is committed to bridging actuarial, accounting and finance theory and practice, and publishes applications in these areas. Her focus is on integrating enterprise risk management into investment decision-making. She has been employed in the insurance industry for nearly 20 years, but also spends as much time as possible in the classroom. Shawn is actively working with several nonprofit organizations that have education and conservation included in their mission statements.