



Financial Service
Providers' Challenge in
Dealing with Shifting
Demands & Supplies

The Sustainability Forum 2007

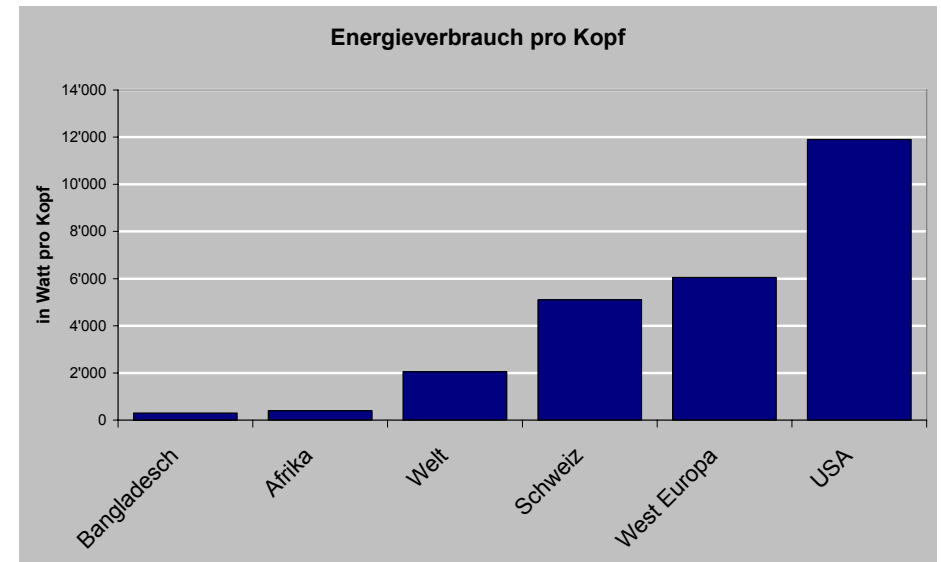
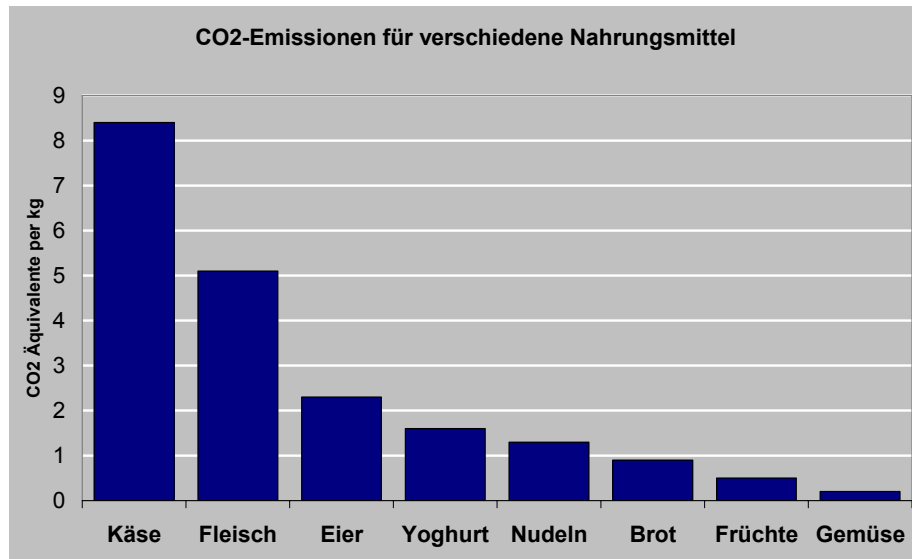
Sustainability, Demographics & Valuations

- Sustainability impact of demographic developments
- Financial impact of sustainability factors
(Corporate level)
- Conclusions

Demographics: Demand & Supply...



Demographics: Demand & Supply...



Demographics and...

... Water

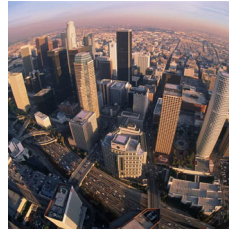
... Natural Resources

... Waste

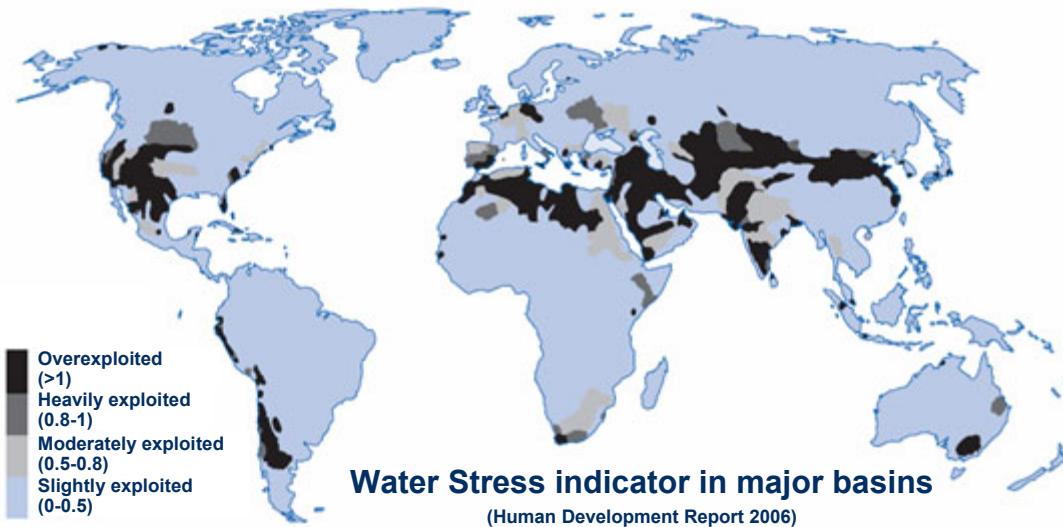
Demographics & Water

Uneven distribution of scarce water resources

Demographic Changes



- Urbanization
- Growing world population
- Economic development



Strong growth in water extraction, re-use, desalination, water purification technologies, and efficient irrigation

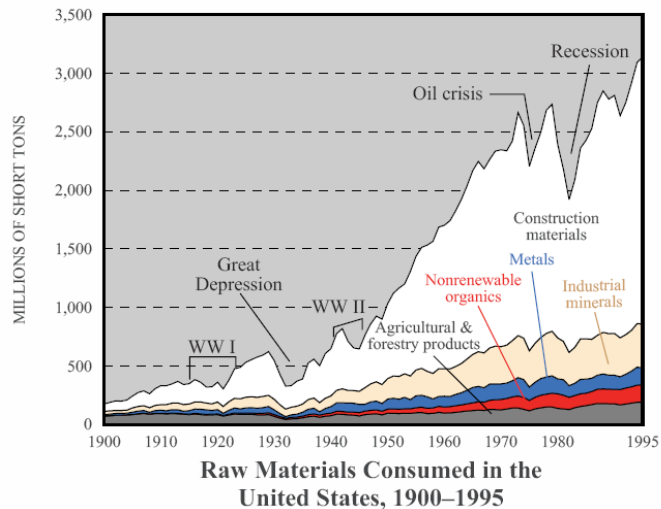
Demographics & Natural Resources

Alternative materials and resources become increasingly important

Shortage of Resources



- Price of commodities rocketing
- Resources are key to continue fueling the high growth in emerging economies

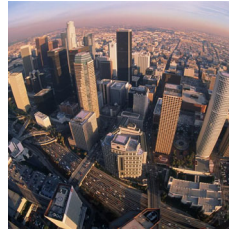


- Rising prices and depletion of natural resources
- Development of alternative materials and/or technologies that allow for a more efficient use of existing resources

Demographics & Waste

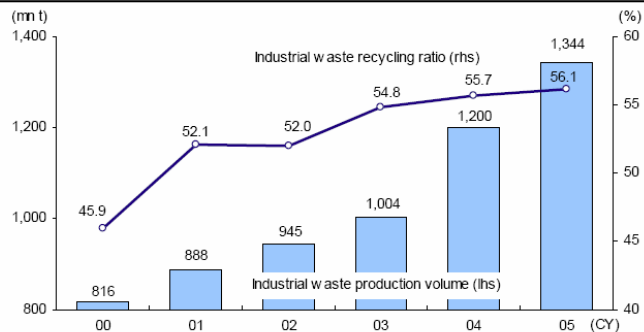
The volume of waste is steadily growing

Disposable Society



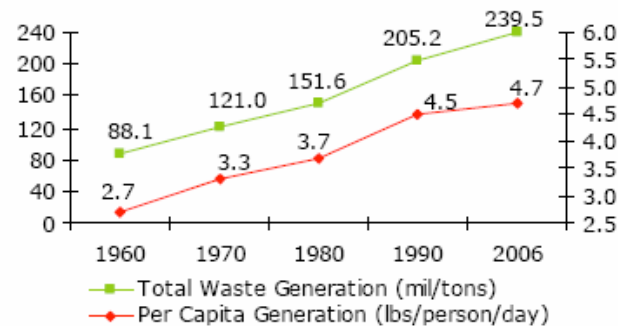
- Waste volumes growth strongly correlated with global economic development
- Industry needs to adapt to new regulation – new markets created

2. China's industrial waste volume trends



Source: Nomura, based on State Environmental Protection Administration of China data

U.S. Municipal Solid Waste Generation Trends



Source: EPA (2006 estimated)

- Waste generation is becoming a global problem as a result of shorter product lifetime
- The volume of waste that requires special treatment is growing faster than economic growth

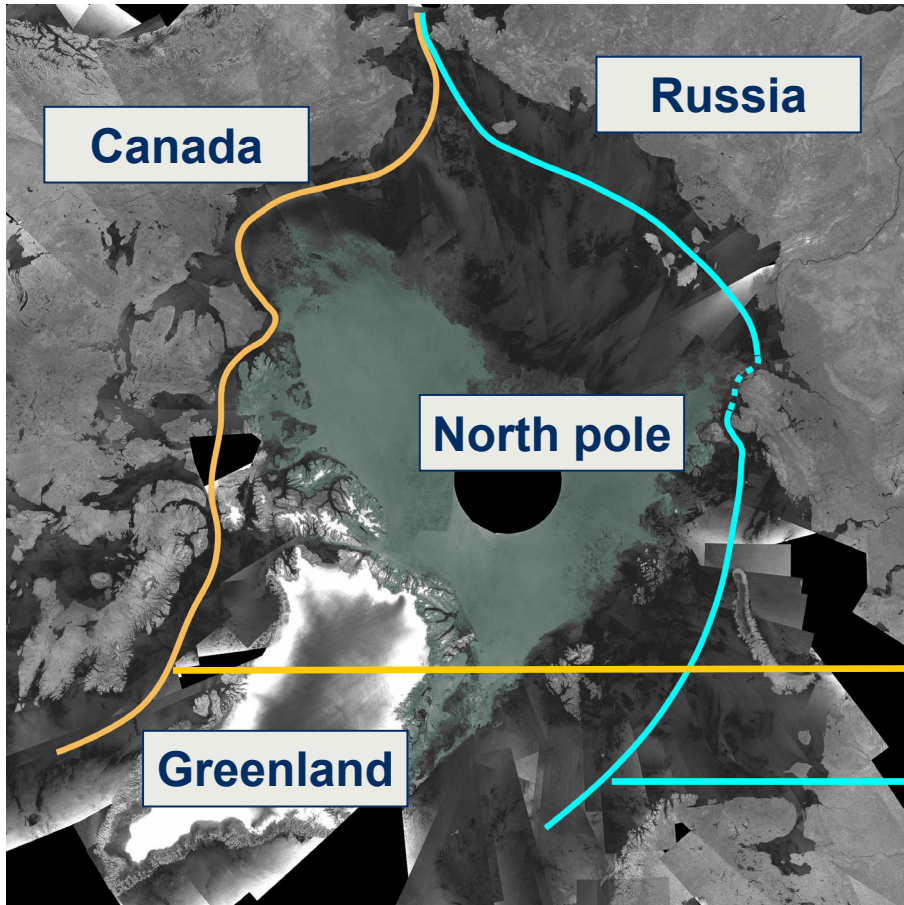
Conclusions

- Demographic development creates **risks & opportunities** for different sectors
- Significant sustainability impact in **emerging markets**
- “**Rules of the game**” will change in certain markets (Political framework, pricing, legislation etc.)

→ **Valuation impact**

How to Integrate in Financial Valuation?

Ecological Issues & Financial Valuation

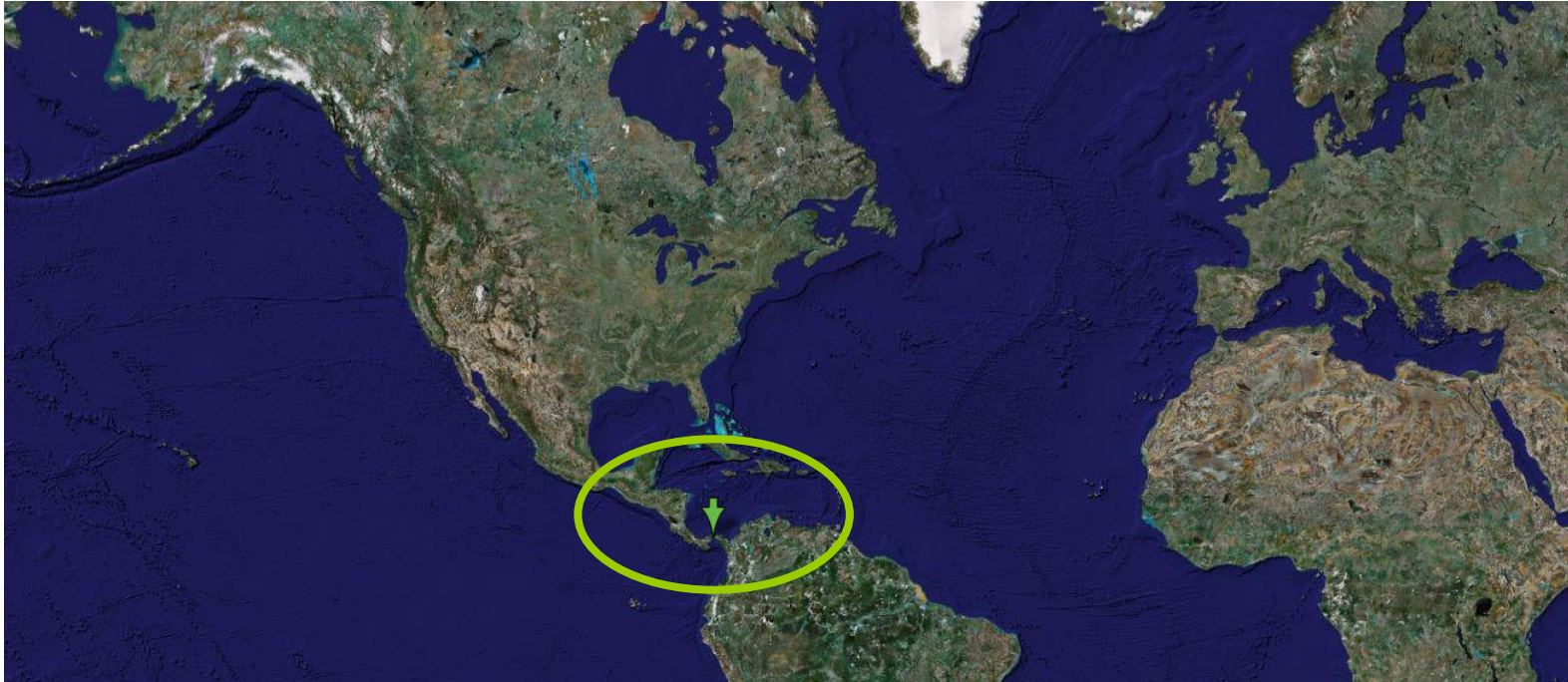


North-west route

North-east route

Source: Herald Tribune, September 15, 2007

Smelting of Ice or Investment Ratings...?



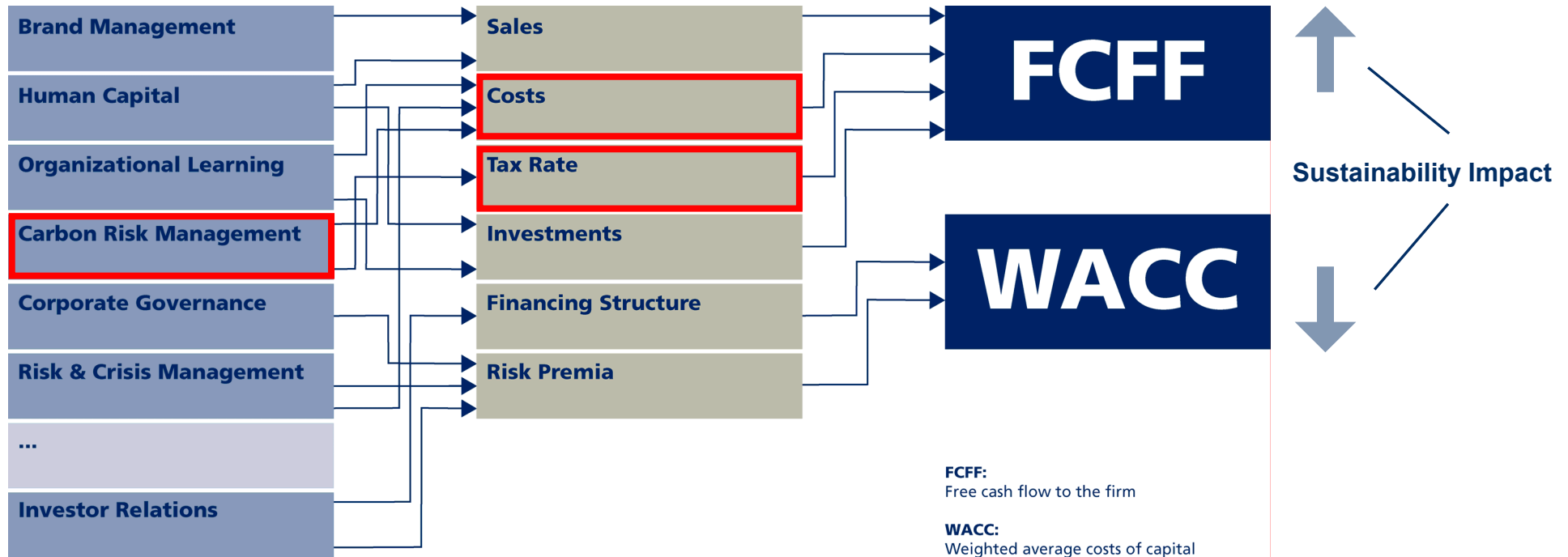
Panama's debt ratings and outlook supported by dynamic service sector – Moody's

(Thomson Financial) – Moody's Investors Service said Panama's 'BA1' foreign-currency government bond rating and stable outlook are supported by ... the strong performance of services exports, including tourism, and investment activity in preparation for the Panama Canal expansion, are key contributors to such growth.

Moody's said that, with economic activity booming, Panama's extremely favorable macroeconomic performance is likely to extend over the medium term. Real GDP growth, which was at 8.1 pct in 2006, is likely to exceed this level in 2007.

Source: *Hemscott News.com, August 21, 2007*

How Sustainability Impacts Shareholder Value



Source: SAM

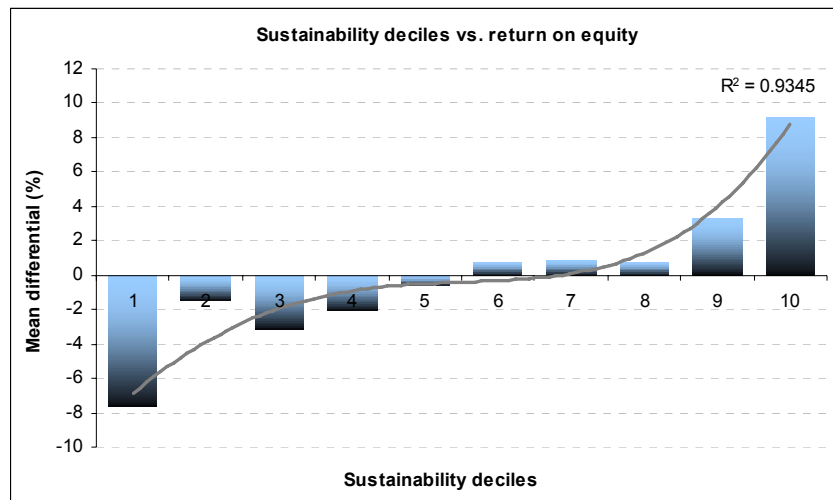
Sustainability Insights are used to assess tangible impact on Shareholder Value

Empirical Research Using SAM's Sustainability Data

Selected results of in-house research

SAM's latest empirical study confirms previous results that there is a positive, statistically-significant relationship between sustainability and financial performance:

Example: Return on Equity

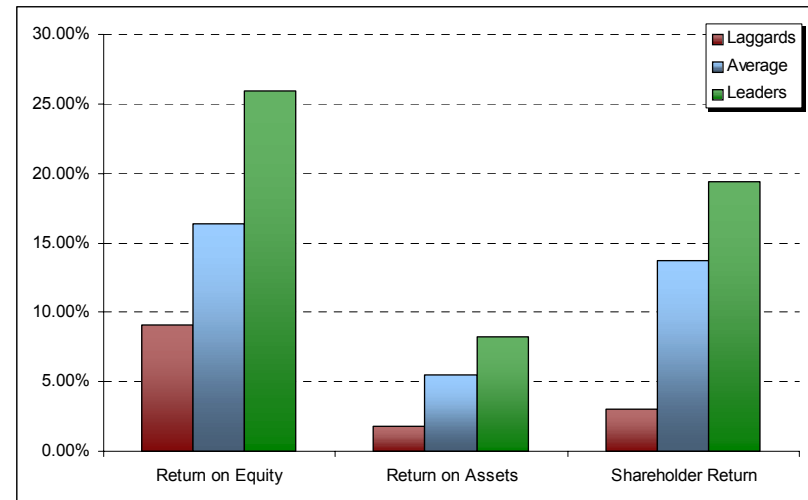


Average return on equity: 16.74% p.a.

Based on a global sample of 1'595 companies between 2001 and 2006

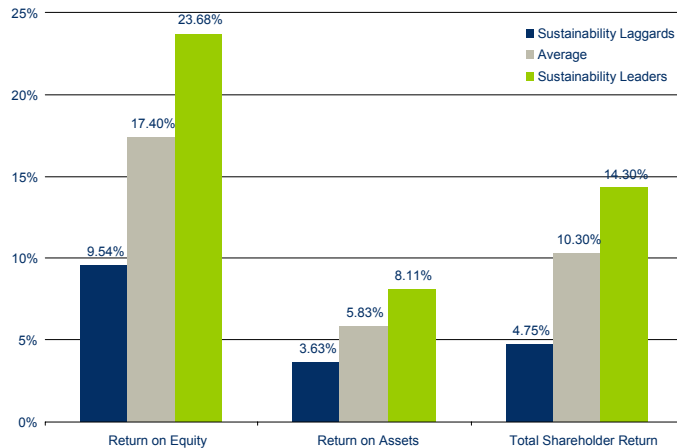
Source: SAM

Summary of results:



Evidence of Sustainability Driving Stock Returns

- Our latest empirical studies confirm a **significant positive link between sustainability and ROE, ROA and Shareholder Return.**



- SAM study shows the following results:
 - None of the sustainability criteria destroy value to the firm
 - Most of the sustainability criteria show a positive, statistically significant relationship
 - Most of the sustainability criteria appear to measure independent sources of value creation
 - Strongest results comes from total scores.This suggests that we aggregate individual sustainability criteria appropriately

Conclusions

- **Significant risk & opportunities**
(Sector & corporate level)
- **High exposure of emerging markets**
- **Potential exposure of different asset classes:**
 - Equities (Public & Private Equity)
 - Debt & Fixed Income
 - Real Estate
 - Commodities
- **Positive correlation** between
Sustainability scores & financial performance