THE FINANCIAL SECTOR AND CLIMATE SCENARIO ANALYSIS – ADVISING INSTITUTIONAL INVESTORS

OCTOBER 2017

Jillian Reid, Principal
Responsible Investment
• Assist our clients to set and meet their risk/return objectives, over multiple years and ultimately multiple decades. This includes:
  – **Strategy** setting – what % allocation to which asset classes?
  – **Manager selection** – what % allocation to which managers?
  – Ensuring **diversified company exposures**, in aggregate, by sector, geography, size and style characteristics
INTEGRATING CLIMATE CHANGE INTO THE INVESTMENT PROCESS

Assess risk exposure
- Total portfolio
- Asset class
- Industry sectors

Engage to reduce risk
- Managers and companies
- Policymakers

Decarbonise
- High ESG ratings
- Potential divestment
- Sustainability / low-carbon allocations
<table>
<thead>
<tr>
<th></th>
<th><strong>How big a portfolio risk / return impact could climate change have?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td><strong>How does it compare to other risks currently being monitored?</strong></td>
</tr>
<tr>
<td>3</td>
<td><strong>What action could we take?</strong></td>
</tr>
</tbody>
</table>

This research is consistent with the recommendations of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD).
FOUR RISK FACTORS AND FOUR SCENARIOS

THE INVESTOR ZONE

THE CLIMATE ZONE

Risk Factors

Transition Risks
TECHNOLOGY
POLICY

Physical Risks
SOURCE AVAILABILITY
IMPACT

Scenarios

Transformation
Coordination
Fragmentation

2°C
3°C
4°C

Lower Damages
Higher Damages
QUANTIFYING CLIMATE IMPACT ON RETURNS

CLIMATE CHANGE RISK FACTORS

<table>
<thead>
<tr>
<th>T</th>
<th>R</th>
<th>I</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.25</td>
<td>-0.75</td>
<td>-0.75</td>
<td>-0.75</td>
</tr>
<tr>
<td>-0.50</td>
<td>-0.75</td>
<td>-0.75</td>
<td>-0.75</td>
</tr>
<tr>
<td>&lt;0.25</td>
<td>-0.50</td>
<td>-0.75</td>
<td>&lt;0.25</td>
</tr>
<tr>
<td>-0.50</td>
<td>-0.75</td>
<td>-0.75</td>
<td>&lt;0.00</td>
</tr>
<tr>
<td>0.50</td>
<td>-0.25</td>
<td>-0.25</td>
<td>1.00</td>
</tr>
<tr>
<td>0.50</td>
<td>-0.75</td>
<td>-0.25</td>
<td>0.50</td>
</tr>
</tbody>
</table>

CLIMATE CHANGE SCENARIOS

INVESTMENT IMPACTS

- Total portfolio
- Asset classes
- Industry sectors
ASSET CLASSES - CLIMATE IMPACT
2° SCENARIO, 10 YEAR MEDIAN ANNUAL RETURNS

- Developed Market Global Equity
- Emerging Market Global Equity
- Low Volatility Equity
- Small Cap Equity
- Private Equity
- Hedge Funds
- Real Estate
- Infrastructure
- Timber
- Agriculture
- Private Debt
- Emerging Market Debt
- Multi-Asset Credit
- Developed Government Bonds
- Corporate Bonds
INDUSTRY SECTORS – CLIMATE IMPACT ACROSS SCENARIOS, 10 YEAR MEDIAN ANNUAL RETURNS
TOTAL PORTFOLIO RISK ASSESSMENT
CLIMATE IMPACT ON RETURN

10 years

TOTAL PORTFOLIO

ASSET CLASS DRIVERS

SECTOR EXPOSURES

RECOMMENDED ACTIONS – GAP ANALYSIS
IN SUMMARY

Assess risk exposure

Engage to reduce risk

- Managers and companies
- Policymakers

Decarbonise

- High ESG ratings
- Potential divestment
- Sustainability / low-carbon allocations

INTEGRATED

BELIEFS

ESTABLISH

POLICY

PROCESSES

ENHANCE

PORTFOLIO

EVOLVE
IMPORTANT NOTICES

References to Mercer shall be construed to include Mercer LLC and/or its associated companies.

© 2017 Mercer LLC. All rights reserved.

This contains confidential and proprietary information of Mercer and is intended for the exclusive use of the parties to whom it was provided by Mercer. Its content may not be modified, sold or otherwise provided, in whole or in part, to any other person or entity, without Mercer’s prior written permission.

The findings, ratings and/or opinions expressed herein are the intellectual property of Mercer and are subject to change without notice. They are not intended to convey any guarantees as to the future performance of the investment products, asset classes or capital markets discussed. Past performance does not guarantee future results. Mercer’s ratings do not constitute individualized investment advice.

Information contained herein has been obtained from a range of third party sources. While the information is believed to be reliable, Mercer has not sought to verify it independently. As such, Mercer makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential or incidental damages), for any error, omission or inaccuracy in the data supplied by any third party.

This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities and/or any other financial instruments or products or constitute a solicitation on behalf of any of the investment managers, their affiliates, products or strategies that Mercer may evaluate or recommend.

For the most recent approved ratings of an investment strategy, and a fuller explanation of their meanings, contact your Mercer representative.

For Mercer’s conflict of interest disclosures, contact your Mercer representative or see www.mercer.com/conflictsofinterest.

Mercer’s universes are intended to provide collective samples of strategies that best allow for robust peer group comparisons over a chosen timeframe. Mercer does not assert that the peer groups are wholly representative of and applicable to all strategies available to investors.
MAKE TOMORROW, TODAY