The impact of climate risk on the reallocating of capital
From physical changes to regulation

Hugues Chenet
Co-Founder
Scientific Director
Financial risk and the transition to a low-carbon economy

Towards a carbon stress testing framework
Climate change risk and financial system

Physical risk

Carbon risk

CLIMATE CHANGE
Climate change risk and financial system

Physical risk

Carbon risk

CLIMATE CHANGE
Sources of Carbon Risk

**POLICY**
Risks related to policies impacting the transition to a low-carbon economy.

**MARKET**
Risks related to market changes impacting the relative profitability of high-carbon and low-carbon investments.

**LEGAL**
Legal challenges associated with liabilities for financing high-carbon activities and associated responsibility on damages and costs.

**REPUTATIONAL / SOCIAL**
Risks related to the ‘social license’ to operate or reputational costs associated with high-carbon activities.

*Source: based on 2°ii, UNEP-FI & WRI (2015) and UNEP-FI / WRI (2015)*
Sources of Carbon Risk

**Market Risks related to market changes impacting the relative profitability of high-carbon and low-carbon investments.**

**Reputational/Social Risks related to the ‘social license’ to operate or reputational costs associated with high-carbon activities.**

**Policy Risks related to policies impacting the transition to a low-carbon economy.**

**Legal Risks associated with liabilities arising from financing high-carbon activities and associated responsibility on damages and costs.**

*Source: based on 2°ii, UNEP-FI & WRI (2015) and UNEP-FI / WRI (2015)*
Cf. our 2013 concept note:

- *Carbon Boomerang:*
  
  *The landscape of climate litigation risks for companies and investors*
Carbon risk and the investment chain

**PHYSICAL ASSETS SPHERE**

- Climate goals and associated policies
- Carbon budget and decarbonization pathways
- Value creation and value destruction

**FINANCIAL SPHERE**

- Risk and performance of financial assets
- Risk and performance of financial portfolios and institutions
- Propagation to the financial system and potential systemic effect

+2°C
Carbon risk and the investment chain

**PHYSICAL ASSETS SPHERE**

- Climate goals and associated policies
- Carbon budget and decarbonization pathways
- Value creation and value destruction

**FINANCIAL SPHERE**

- Risk and performance of financial assets
- Risk and performance of financial portfolios and institutions
- Propagation to the financial system and potential systemic effect

+2°C
Why CC-related financial risk is important for policy makers?

- Avoid financial crash
- Avoid financial bubbles
- Help reorient markets towards low-carbon

- Smooth the transition
- Give visibility
- Frighten the markets about high-carbon

- But risk then needs to be material for FIs...

Materiality

No materiality
Is the financial system exposed?

Level of understanding
Turning point

- Significant steps in integrating carbon risks in risk and valuation models
- Short-term materiality of these risks?
- Some practitioners are ready to investigate and implement new approaches
- Because they believe carbon risk will become material
- And anticipate a push from regulation
"I expect the Financial Policy Committee to also consider this issue [stranded assets] as part of its regular horizon scanning work on financial stability risks"

Mark Carney
Governor of the Bank of England
October 2014

“We ask the Financial Stability Board to convene public- and private- sector participants to review how the financial sector can take account of climate-related issues”.

Communiqué of the G20 Finance Ministers and Central Bank Governors Meeting
April 2015

“...shall disclose [...] information on how their investments take ESG criteria into consideration, and the means implemented to contribute to the energy and ecological transition. [...] including the exposure to climate-related risks [...].”

Art.173 of the Energy Transition Law
August 2015
"Monetary and prudential authorities are now concerned by three main categories of risk: physical climate risks [...], induced responsibility risks [...], and transition risks [...]"

François Villeroy de Galhau
Governor of the Banque de France
November 30, 2015
“...to align these private initiatives in the direction of the ‘public good’ that is the fight against global warming, public intervention is necessary.”

François Villeroy de Galhau
Governor of the Banque de France
November 30, 2015
Thank you for your attention

Read us!
http:2degrees-investing.org

Contact us!
hugues@2degrees-investing.org

Join us!
Individual and organisation members welcome