Finanzmärkte als „Game Changer“ für Klimaschutz? – noch nicht!

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Agenda

Six thoughts on financial markets and climate change:

• A vision
• A lot is going on
• Relevance is acknowledged
• Reality looks different
• Conclusion: knowledge-action gap
• Implication: invert the logic of the big bet
A Vision

“Whatever form economic development takes, banks and investors play a central role in the allocation of capital through their financing function. [...] Whatever form sustainable development takes, banks and investors can be seen as key drivers—or obstacles to it.”


“Financial policymakers will not drive the transition to a low-carbon economy. Governments will establish the climate policy frameworks, and the private sector will make the necessary investments.”

Mark Carney, Governor Bank of England, European Commission Conference, 21 March 2019
A lot is going on
Relevance is acknowledged

- **Stranded assets**: 33% of oil, 50% of gas, and 80% of coal reserves should remain unused in order to meet the 2 °C target (McGlade & Ekins, 2015, Nature 517)
- **Top global risk**: Climate change is increasingly recognized by businesses and investors as one of the top global risks (WEF, 2019)
- **Practical guidance**: On behave of the Financial Stability Board (FSB) the Task Force on Climate-related Financial Disclosures (TCFD) published recommendation how to disclose information about the risks and opportunities presented by climate change
- **Policy action**: EU-Report “Financing Sustainable Growth” calls for new transparency and labeling efforts; lays out the basis for extending the established risk appraisals towards carbon and climate issues
Reality looks different (I): institutional investors

A study on behave of BAFU (Swiss federal office for the environment) asks:

Are the financial portfolios – specifically the portfolios invested in equity and corporate bonds markets – of Swiss pension funds and insurance companies consistent with the 2°C climate goal?

⇒ Collectively, the financial flows underlying the corporate bonds and listed equity portfolios of Swiss pension funds are currently on a 6°C pathway

Source: 2°C Investing Initiative / PICTA (2017)
Reality looks different (II): reliable data

Example: combined estimated scope 1&2 emissions for a single company from 2012-2016. Each column represents data from a different provider.

⇒ Emission levels can differ by more than factor 2
⇒ Even trends can differ

Source: Busch, Johnson, Pioch, Kopp (2018); Download: https://www.wiso.uni-hamburg.de/forschung/forschungsschwerpunkte/sustainable-finance/03-topics.html
Reality looks different (III): financial performance

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<td>0.064***</td>
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<td>(0.084)</td>
<td>(0.056)</td>
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Observations: 27083

\(R^2\): 0.157, 0.482, 0.135, 0.142, 0.555, 0.519, 0.180, 0.113, 0.534, 0.559

Note: ROA = return on assets, TQ = Tobin’s Q, EU = European Union, US = United States, ETS = emission trading system, Cap.-Int. = capital intensity

Numbers in parentheses are the heteroscedasticity-robust standard errors.

\* \(p < 0.05\), \** \(p < 0.01\), \*** \(p < 0.001\)

⇒ Analysis over 10 year timeframe; more than 27’000 firm-year observations  
⇒ Carbon performance (CP) is negatively related to financial performance

Source: Busch, Bassen, Lewandowski, Sump (2016), Working Paper Research Group on Sustainable Finance, University of Hamburg
Conclusion: knowledge-action gap

The carbon budget for reaching the 1.5°C target at current emission levels (https://www.mcc-berlin.net/en/research/co2-budget.html)

⇒ 16 years ago

⇒ 8 years ahead
Implication (I): invert the logic of the big bet

- Currently, there is the big bet that climate policy will fail
- Inverting the bet: stringed and reliable policy needed!
- Foremost: *(certainty about)* a carbon price
- Important further steps:
  - **Risk appraisals**: Help actors implementing TCFD recommendations, notably regarding how to incorporate forward looking data
  - **GHG accounting & reporting**: universally accepted standard and broad application
  - **GHG estimation methods**: Increase transparency & extend scope of data coverage (esp. regarding SMEs)
Implication (II): invert the logic of the big bet

- Short-Termism → Long-Termism
- Predictability of the Future → Systems Interconnectedness
- Price Efficiency → Carbon Price Dynamics
- Risk-Adjusted Returns → Active Ownership

Implication (III): invert the logic of the big bet

- Kyoto-Protocol enters force, February 16\(^{th}\) 2005
- 1\(^{st}\) phase of EU ETS, January 1\(^{st}\) 2005
- EU ETS Directive, October 13\(^{th}\) 2003
- Kyoto-Protocol, December 11\(^{th}\) 1997
- Nuclear phase out under Schröder, June 11\(^{th}\) 2001
- Fukushima accident, March 11\(^{th}\) 2011
- Nuclear phase out under Merkel, June 30\(^{th}\) 2011
- Financial crisis, 2008 onwards (2\(^{nd}\) phase of EU ETS, January 1\(^{st}\) 2008)
- 3\(^{rd}\) phase of EU ETS, January 1\(^{st}\) 2013
- Hambacher forest protests, 2013 onwards

Share price of large German energy utility