

Box 4

Climate risk-related disclosures of banks and insurers and their market impact

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Scarce and inconsistent information on the climate-related risk embedded in assets makes the pricing of climate risk difficult for investors and authorities.²⁵ Recent studies have found that environmental disclosures can affect the market valuation of non-financial businesses operating in sectors that are sensitive to the risks related to the transition to a low-carbon economy.²⁶ But the

²⁵ See Giuzio, M., Krusec, D., Levels, A., Melo, A. S., Mikkonen, K. and Radulova, P., "Climate change and financial stability", *Financial Stability Review*, ECB, May 2019, pp. 120-133.

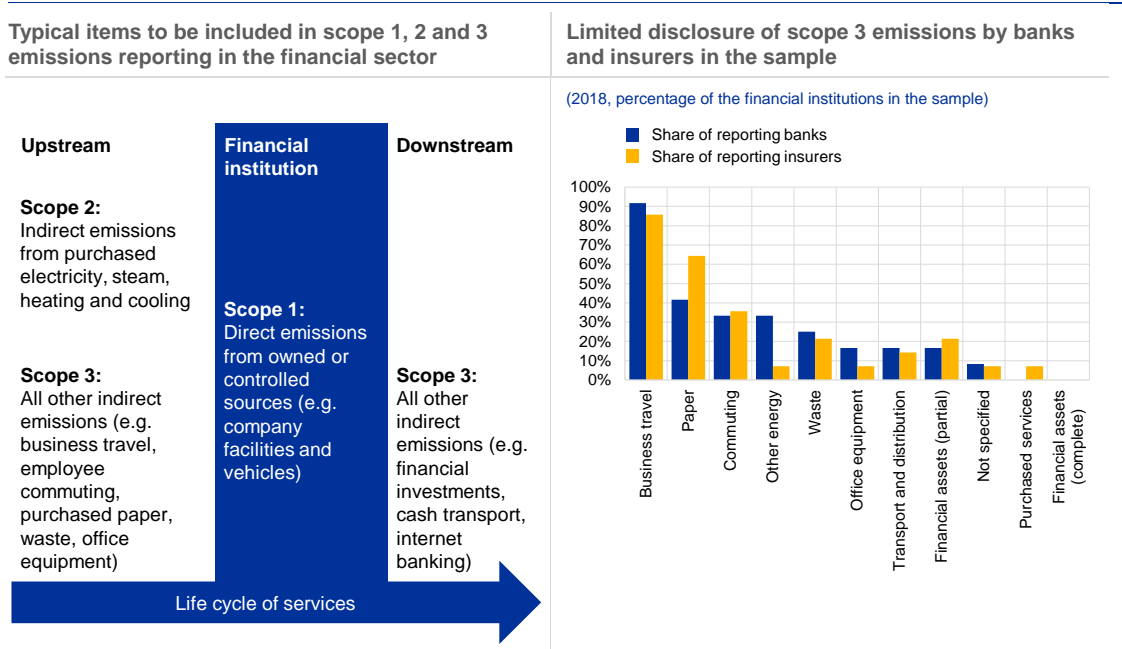
²⁶ See, for example, Bolton, P. and Kacperczyk, M., "Do Investors Care about Carbon Risk?", mimeo, June 2019; Hsu, P-H., Li, K. and Tsou, C-Y., "The Pollution Premium", mimeo, November 2018; and Alessi, L., Ossola, E. and Panzica, R., "The greenium matters: Evidence on the pricing of climate risk", JCR Working Papers in Economics and Finance, 2019/12.

impact is less clear for financial institutions. This box investigates climate-related disclosures of large euro area banks and insurers and their impact on stock market valuations.

Most of a financial institution’s exposure to climate-related risk is likely to stem from the financial activities it undertakes. The Greenhouse Gas Protocol sets out three “scopes” of emissions, the reporting of which is included in the voluntary guidelines of the Task Force on Climate-related Disclosures (TCFD) (see **Chart A**, left panel). For financial firms, emissions related to their main business of financial intermediation should fall into scope 3.²⁷ But an examination of disclosures by large euro area banks and insurers suggests that, even though scope 3 emissions are often reported, these institutions typically explicitly exclude emissions related to financial assets from that measure (see **Chart A**, right panel). Even where information on carbon emissions related to investment portfolios is available, it is partial, inconsistent and presented separately from the scope 3 measure.

Chart A

While the emissions content of financial activities is likely to be large for financial services, it is typically not reported under the scope 3 measure



Sources: Greenhouse Gas Protocol, annual and sustainability reports of financial institutions and ECB calculations.
 Notes: The sample consists of the 12 largest banks and 14 largest insurers in the euro area. The partial reporting of financial assets under scope 3 refers to cases where a carbon footprint of some parts of the investment portfolio is made available, either as part of scope 3 emissions or separately.

Market data providers have developed scores that seek to consolidate quantitative and qualitative environmental information, although these scores differ from each other. Scores provided by Bloomberg and Refinitiv are examples of easily available indicators for environmental aspects reported by individual institutions and could be used as a proxy for gauging exposure to transition risk. Although the correlation between the two indicators has improved over time, it still remains low, signalling significant discretion in environmental scoring (see **Chart B**, left panel).

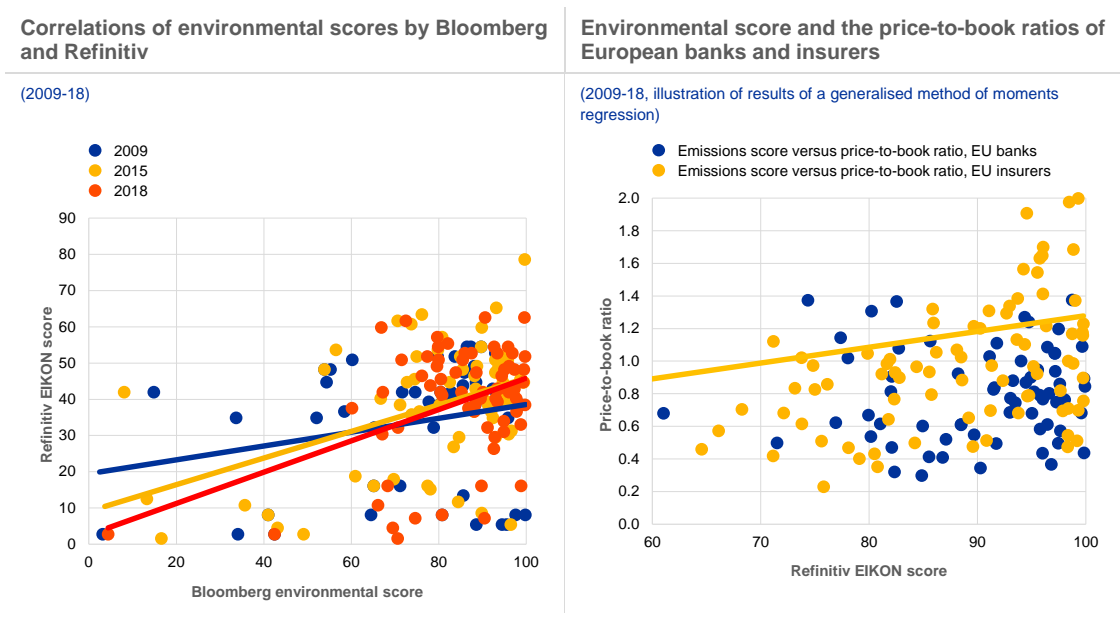
Perhaps reflecting inconsistent reporting, environmental disclosures appear to have no impact on stock market valuations for banks, but some impact for insurers. The relationship between a market score and price-to-book ratios for a sample of large euro area insurers is positive and statistically significant, but there is no such relationship for banks (see **Chart B**, right panel). This

²⁷ See “Technical guidance for calculating scope 3 emissions”, Greenhouse Gas Protocol, version 1.0.

result might reflect greater investor scrutiny of insurers owing to their higher exposure to physical climate-change risk, given insurance liabilities.²⁸ The limited evidence of financial institutions actively reducing the carbon content of their financial portfolios supports the conclusion that market discipline is possibly not effective in curbing transition risk.²⁹

Chart B

Environmental market scores are highly dispersed and seem to matter more for the valuation of insurers than banks



Sources: Bloomberg, Refinitiv EIKON, S&P Global Market Intelligence and Dealogic.

Notes: Left panel: The Bloomberg and Refinitiv environmental scores can take values between 0 and 100, whereby a higher value indicates a better performance in terms of environmental variables. Left panel: The full unbalanced sample consists of 49 banks and 23 insurers in the European Union and the United States. Right panel: The sub-sample used in the estimation consists of 16 EU insurers and 12 EU banks. Standards errors are clustered and robust. An Arellano-Bond estimator is used and controls include institution-specific variables (e.g. ROE, total debt, EBITDA, total expenses, total assets, dividend payout ratio, NPL ratio, Tier 1 capital ratio, solvency coverage ratio and premium growth when applicable) and market-specific variables (e.g. stock market volatility, long-term bond yields and GDP forecasts).

Mandatory and harmonised firm-level reporting would allow better pricing and monitoring of financial institutions' exposures to climate-related risks. The European Commission's green taxonomy and the Regulation on environmental, social and governance disclosures of financial institutions are important steps towards understanding the sustainability of economic activities and will help financial institutions in classifying their own financial exposures.³⁰ Further work will include the development of technical disclosure standards by the European Supervisory Authorities. Additional steps will however be needed to improve the understanding of climate change-related transition risks to financial institutions. Enhancing the proposed taxonomy to include brown assets would constitute an important advancement which would support the monitoring of the financial

²⁸ Physical risk refers to the effects of global warming, such as a higher occurrence of extreme weather events or a rise in the sea level, which can have a major impact on the occurrence of health, property or catastrophe insurance events. The result is also congruent with the recent evidence of an impact on equity prices from green products on the liability, but not the asset side of insurance companies. See Jakubik, P. and Uguz, S., "Impact of green bond policies on insurers: evidence from the European equity market", [Financial Stability Report](#), European Insurance and Occupational Pensions Authority, June 2019.

²⁹ See Chart 3.14 on large exposures and evidence from syndicated loans, and Chart A.3 in Giuzio et al. (2019) op. cit. with regard to developments in insurance exposures to the most policy-sensitive sectors.

³⁰ See the [Taxonomy Technical Report](#) by the EU Technical Expert Group on Sustainable Finance, June 2019, and the [Regulation](#) on environmental, social and governance disclosures of financial institutions (endorsed on 18 April 2019).

system's exposure to climate-related risk. The ECB will continue its efforts to develop methods to gauge exposures to transition risk in the balance sheets of financial institutions.
