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FINANCIAL REGULATION AND BANKING

Climate risks are real and need to become part of bank capital regulation

Rens van Tilburg, Seraina Grünewald, Dirk Schoenmaker, Arnoud Boot / 7 Dec 2022

Climate risks are building up on banks' balance sheets. Supervisory reviews show that banks are not well prepared. Yet, supervisors have been slow to include climate risks in minimum capital requirements. This column argues that doing so would speed up the transition to a low-carbon economy. Given the urgency of addressing the environmental risks that are now largely not accounted for, speed is of the essence.

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In 2023 it will be decided if and how to integrate climate and environmental risks in the prudential rules for European banks. The update of the Capital Requirements Regulation and Directive (CRR/CRD) provides a rare opportunity to do so. These climate and environmental risks encompass ‘physical risks’ from, for example, a changing climate (such as wildfires, hurricanes and droughts that damage or destroy assets) and ‘transition risks’ triggered, for example, by new innovations and regulations that limit climate change and can turn existing assets into stranded assets. It has, by now, been well established that climate and environmental risks are material financial risks (NGFS 2019, ECB 2020, De Arriba-Sellier 2021). As an illustration, one only needs to look at the devastation of the wildfires and floodings that have hit Europe over the last few years.

Banks are not prepared

The 186 largest European banks are still far from meeting the ECB’s supervisory expectations relating to risk management (ECB 2022). In the words of the Vice-Chair of the Supervisory Board of the ECB, Frank Elderson (2022), “the glass is filling up slowly but it is not yet even half full”. The ECB found ‘blind spots’ in 96% of the banks, concluding that “almost all boards are still unaware of how these risks will develop over time, what precise risk level the bank can accept and what action it will take to rein in excessive risk”.

The ECB (2022) found that only a handful of frontrunners had voluntarily allocated economic capital for climate risks as part of their Internal Capital Adequacy Assessment Process (ICAAP). For a small number of banks, their lagging performance fed into their Supervisory Review and Evaluation Process (SREP)-scores, resulting in higher Pillar 2 capital requirements. Most importantly, the ECB set 2024 as the date for banks to comply with its supervisory expectations.

Minimum capital requirements are needed

Important as this development in the second pillar of the capital regulation is, more is needed. It is Pillar 1 on mandatory regulatory minimum capital requirements that drives credit decisions within banks on a permanent basis. It is for that reason indispensable that climate and environmental risks are also reflected there (Schoenmaker and Stegeman 2023).

This is by no means a new thought. It is more than ten years since the *Carbon Bubble* report put transition risk on the

table (Carbon Tracker Initiative 2011). In 2015, Mark Carney warned of a “climate Minsky moment” (Carney 2015). Since then, climate and environmental risks have entered the mainstream amongst financial supervisors, resulting in a barrage of stress tests and scenario studies, but without leading to much substance in terms of real change in the capital requirements faced by banks (Schoenmaker and van Tilburg 2016, Campiglio et al. 2018, Smolenska and van 't Klooster 2022). As the ECB (2022) testifies, to date it has had little impact on the actual lending policies of European banks.

In 2018 two of us proposed integrating climate risks in the first pillar of the capital regulation framework (Boot and Schoenmaker 2018). We also highlighted that this cannot be done using models that are based on historical data, as both climate change and the energy transition are unprecedented developments. Rather, scenario studies should be used to quantify their impact. This innovation in risk assessment breaks with convention and will be imprecise; such a break is nevertheless necessary, as it is better to be roughly right than exactly wrong. The precautionary principle also mandates supervisors to err on the safe side and act on incomplete information and in a discretionary manner. This principle is well recognised in the EU practice. It is defined in the EU Treaty under Article 191 and its use was clarified and reinforced by the European Commission (2000).

In this light, the European Banking Authority's discussion paper on the role of environmental risks in the prudential framework (EBA 2022) fell short. In particular, it did not give regulators any guidance as to how a forward-looking approach could be integrated in the Pillar 1 requirements. The EBA even concluded that “there is still little empirical evidence of a risk differential” for environmentally harmful exposures. However, it arrived at this conclusion by looking at studies that are backward-looking, while climate change and biodiversity loss are unique new phenomena whose impact can only be found in the future.

Higher capital charges speed up the transition

Higher capital requirements for assets with high climate and environmental risks do two things. First, they give lenders with large transition risks the capacity to withstand losses when, for instance, the energy transition accelerates, as it must do if we are to achieve the stated global goal and commitment of limiting climate change to well below 2°C. Second, as unsustainable lending becomes more expensive, it will discourage further investments that contribute to climate change, for instance. Thus, the systemic risk of climate change itself would be reduced.

Given the urgency of addressing the environmental risks that are now largely not accounted for, speed is of the essence. The European institutions should encourage the ECB to step up its efforts through Pillar 2, giving capital add-ons not just to the current small number of banks, but to all banks that account insufficiently for environmental risks.

Most importantly, the CRR/CRD update should ensure that these risks are integrated in the main part of the risk framework, namely, Pillar 1 (Schoenmaker and Stegeman 2023). This can be done quickly by adjusting capital requirements for the largest risks as a simple tool that fits the nature of climate and environmental risks better than an

approach that depends on detailed modelling exercises. At the same time, we should start with the more gradual and detailed process of adapting the methodologies used in Pillar 1, the standard approach and the internal ratings-based approach, to become more forward looking over a longer time horizon. A complementary measure would be to address concentration of climate and environmental risks through strict limits (so-called large exposure limits). The CRR/CRD update provides an opportunity to increase the robustness of the banking sector, which is highly to climate and environmental risks and, as the ECB's assessments show, little prepared for what is coming.

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