Analysis

Could the Green Supporting Factor help mitigate climate change?

Financial stability, Climate | 13 July 2020 | Otso Manninen, Nea Tiililä

AUTHORS



Otso Manninen
Senior Economist



Nea Tiililä

The need for sustainable finance has grown because of the urgency to mitigate climate change. One proposal to encourage sustainable finance is the Green Supporting Factor, which would make it less costly for entities in the financial sector to finance environmentally sustainable investments. However, it is not clear how well this would incentivise companies in the real economy to 'greenify' their investments. Furthermore, the uncertainties and potential adverse effects of the Green Supporting Factor make it an alternative all the less appealing.



If the EU is to achieve its climate and environmental goals, the availability of sustainable finance needs to be enormously increased and urgently so. The European Commission is renewing its

sustainable finance strategy, and a public consultation on the matter is currently underway.[1] The new strategy aims to integrate the risks that climate change poses to the European financial system, as well as present a roadmap for new measures that will increase the flow of private investment into sustainable projects, supporting the goals of the European Green Deal.[2]

One question asked in the Commission's consultation survey is whether it might prove effective to use the financial sector's prudential framework to encourage green investment. Both the Commission and part of the financial industry have voiced their support for this approach. But supervisory authorities have expressed doubts about repurposing the prudential framework to this end.

The prudential framework defines the minimum quantity and quality of capital that a bank must hold in proportion to the aggregate risk associated with its balance sheet. The quality and quantity of the capital required are determined by taking the aggregate risk of the bank's assets and assigning a relative risk weight for each asset. The higher the weighting given to a particular asset, the more capital the bank needs to hold to compensate for the risk associated with the asset.

The Green Supporting Factor is a proposal for a 'green incentive' that would encourage banks to finance environmentally friendly investments. It would lower the risk weights applied to environmentally friendly (i.e. green) loans and investments, thereby reducing banks' capital requirements for these particular assets. Since reduced capital requirements would make these loans less costly for banks, the hope is that this would spur lending and investment in environmentally friendly projects.

Housing loans are one bank asset where lower risk weights could be applied. If a housing loan were taken out for a house that was energy-efficient enough, financing the loan could be considered a green investment. The lender bank would thus be required to hold less capital for the green loan than for a standard housing loan.

To maximise the effect of the incentive, a reduction in risk weights should also be reflected in the price of the loan for the borrower. The loan will be less costly for the bank, as it will not have to hold as much capital in reserve. If loan markets operated efficiently, this should also lead to a reduction in the price of the loan for the consumer. Consumers would be incentivised to purchase energy-efficient homes, as the lower risk weight applied on these properties would make them eligible for cheaper loans. However, it is not clear how much lowering risk weights would actually reduce the prices of housing loans for consumers, if at all.[3]

Increasing the financing of sustainable and environmentally friendly investments is important for mitigating climate change. Nevertheless, adjusting risk weights to spur such investments may have

harmful side effects. It is not even certain whether lowering risk weights would have the desired outcome of bolstering green investment. One of the sticking points in the risk weight debate is the lack of comprehensive impact assessments.

Closely related to the discussion on risk weights is the concept of a Brown Penalising Factor, which is a disincentive for environmentally harmful, or 'brown', investments. This would apply higher risk weights on investments of this type. The EU's upcoming taxonomy for sustainable finance offers a definition for green activity, but an equivalent does not exist for brown activity. It is difficult to split all economic activity into two categories of green and brown, as a variety of different activities fall somewhere in the middle and are neither strictly sustainable for the environment but nor are they particularly harmful.

Risk weights need to reflect actual economic risks

Capital adequacy calculations for a given investment should be based on the investment's actual economic risks. This needs to remain a key principle even if it is never perfectly realised. The point of capital adequacy calculations is to ensure that entities in the financial sector possess enough capital to maintain their operations even in times of adversity. Risk weights should be calibrated to serve this purpose.

Capital adequacy calculations are based on historical data, where risks for different assets are estimated based on the riskiness of similar assets in the past.[4] Because the effects of climate change and climate policies will only be seen in the future, risk assessments that are based on historical data do not factor in climate risks.

How, then, do the economic risks of green investments differ from the risks of other types of investments?[5] In principle, green investments should stand to benefit from increasingly stringent climate policies. But they are also often based on new technologies and novel business models, which makes them more unfamiliar and potentially riskier than traditional investments.

There will always be arguments both in favour of and against adjusting risk weights, which is why assessments of risk differentials should be supported by robust numerical analysis. However, statistical data and economic indicators are relatively lacking from an environmental perspective, so the relationship between, say, the riskiness of a particular economic activity and its impact on the environment cannot be estimated with commonly used databases.

One main issue has been the lack of a clear definition for green investments, but this situation will improve as the EU creates a definition for sustainable economic activity.[6] At the same time, the EU is introducing legislation that will require the financial sector's entities and largest firms to submit

more comprehensive and harmonised reporting on the environmental aspects of their activities in future. Provided that better data become available in the next few years, estimating the risk differentials of green investments should become more viable.

Lowering risk weights may increase financial stability risks

The purpose of prudential regulation is to ensure that banks possess enough capital to cover loan losses that may occur during economic disturbances such as recessions. If a bank cannot cover its losses with its own funds in a crisis situation, its ability to function becomes paralysed, and the bank will not be able to resume its operations as normal. Relaxing capital adequacy requirements enables banks to take on greater risk. Because banks are rewarded the potential profits generated by additional risk but are not fully liable for its potential losses, they are incentivised to pursue risk. In the current bail-in regime, a bank's owners and debtors are principally responsible for the absorption of losses, after which resolution funds may be deployed.

Prudential regulation should be based entirely on the assessment of economic risk, where the amount of capital held by a bank is proportionate with its overall balance sheet risk. Injecting political aims into the prudential framework interferes with this purely risk-based approach and thus gives rise to problems. If bank capital requirements are lowered by political decree without a reduction in banks' actual risk levels, this weakens the ability of banks to absorb risks and potential losses in crisis situations. Relaxing the risk weighting of green assets could lower capital adequacy requirements without truly reflecting a change in risk levels.

In particular, it would be dangerous to use risk weights as an incentive in climate-related issues. Lowering risk weights would reduce the banking sector's capital adequacy without reducing its actual risks, which could materially compromise the banking sector's resilience and even predispose the economy to financial crises. In the worst case, a financial crisis, or any sort of acute crisis, might push the debate and policy actions on climate issues further into the future, even at a critical junction where climate change ought to be factored into recovery measures. On the whole, there is a danger that using risk weights to combat climate change might prove self-defeating.

Before relaxing risk weights, it would be vitally important to try to evaluate the effects of doing so. Thus far at least, there is no evidence to suggest that the risk balance of green investments would be any different than the balances of non-green investments, one way or the other. Indeed, further analysis is needed to establish a more concrete understanding of their risk differentials. It is unclear what broader effects a climate-driven lowering of risk weights would have on financial markets. It is also unclear whether lowering risk weights would even have the desired outcome, that is, whether it would bolster banks' financing of green investments or merely weaken their capital adequacy.

Notes

1. https://ec.europa.eu/info/consultations/finance-2020-sustainable-finance-strategy_en. The Bank of Finland has replied to the consultation. ↑
2. For more information on the European Green Deal: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en. ↑
3. In the past, lowering risk weights has not had an immediate impact on the prices of bank loans, see https://www.bofbulletin.fi/en/2015/2/tightening-regulation-has-only-a-limited-impact-on-loan-margins/. Interest rate margins on housing loans have also been on the decline in recent years, even though the weightings applied on these loans have been tightened. Indeed, some other factor appears to be dominating the prices of bank loans. ↑
4. As an example, the riskiness of a loan to firm A is based on loans issued to similar firms in the past and, as a result, the estimated probability that firm A will default on its loan in the future. ↑
5. One answer is that no one knows (yet), as evidenced by a new report by NGFS, see https://www.ngfs.net/sites/default/files/medias/documents/ngfs_status_report.pdf. ↑
6. The EU's taxonomy will set out criteria by which economic activity can be defined as sustainable. Sustainability refers to a host of environmental considerations beyond climate change alone. Although the taxonomy will provide a harmonised definition for sustainability, it only distinguishes between economic activity that is sustainable and non-sustainable, but does not further specify harmful activity (which is often referred to as brown economic activity). The issue with the taxonomy, however, is that it classifies economic activity and not firms, which means that a single firm can engage in both sustainable and non-sustainable activities. And even if the firm were to declare its revenue along these two categories, money in the right pocket is no different from money in the left. ↑

The opinions expressed in this article are those of the authors and do not necessarily represent the views of the Bank of Finland.

Keywords

climate change, financial stability, solvency, sustainable finance