The role of central banks and supervisory authorities in stimulating consideration for long-term issues: The case of climate change

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[special issue of Réalités Industrielles, November 2019]

Abstract:

Economic agents often think, decide and act with a relatively short-term view — in any case, too short to take account of long-term issues and risks. Central banks and supervisory authorities have a decisive role in leading these agents to reckon with long-term risks. Climate change provides a very good example, since coordinated international actions by these banks and authorities are indispensable for mustering the financial system's forces. The Network for Greening the Financial System represents a noteworthy advance. For these institutions, this implies modifying methods, carrying out new studies to better understand actual risks and, if need be, helping supervisory authorities to cope and better understand the issues.

In the first volume of the trilogy *The Roads to Freedom (Les Chemins de la liberté),* the philosopher Jean-Paul Sartre wrote, "*They only make short-term plans, as if they only had five or six years ahead.*" This sentence perfectly describes how economic agents usually act. Whether firms, financial institutions, investors (institutions or individuals) or the financial markets, they very frequently think, make decisions and act with a close time horizon — in any case, too short for taking into account long-term issues.¹

This especially holds for climate change. Even though its impact is already (and increasingly) being felt, the time when its effects will jeopardize the financial sector is still too distant for economic agents to reckon with it in their decision-making. This is the well-known "tragedy of the horizon" that Mark Carney, governor of the Bank of England, so clearly explained in 2015. Since economic agents have such a hard time calculating the risk of events (in particular climate-related events) that will occur in the long run, then public authorities have the task of inducing them to do so.

¹ This article, including quotations from French sources, has been translated from French by Noal Mellott (Omaha Beach, France). The translation into English has, with the editor's approval, completed a few bibliographical references. All websites were consulted in June 2020.

² "Breaking the tragedy of the horizon: Climate change and financial stability", speech by Mark Carney, Governor of the Bank of England and Chairman of the Financial Stability Board, at Lloyd's of London, 29 September 2015, available at https://www.bankofengland.co.uk/speech/2015/breaking-the-tragedy-of-the-horizon-climate-change-and-financial-stability.

In the community of central banks and regulatory authorities, this awareness arose a few years ago, and has risen faster in the past two years thanks in particular to the work done by the Network for Greening the Financial System (NGFS). Among the tools available, oversight is one of the most mature and exploratory, since several projects related to oversight and regulation are waiting to start. One thing is for sure: to fight against climate-related risks, central banks and regulatory authorities have a key role to play.

The "tragedy of the horizon": What are the specific characteristics of climate-related risks?

Climate risks are one of the many sources of structural change with an impact on the financial system and the economy in general. Given their characteristics however, they require a specific awareness and management of the issues. For instance, the scope and size of this impact are considerable, since climate change will affect all economic agents in all branches of the economy and in all places. Tipping points might even deepen these risks. Ultimately, climate change might turn out to have a much more consequential impact than other structural changes. Its practical effects, with a still uncertain time horizon and trajectory, are foreseeable: a combination of "physical risks" and of the risks related to the transition (of the efforts made to limit global warming). Climate change is also unparalleled because its impact is a priori irreversible. There is, at present, no mature technology capable of reversing the concentration of greenhouse gases in the atmosphere. A final point: the actions undertaken today will determine the scope and nature of these effects tomorrow. These actions — including those undertaken by governments, central banks, regulatory authorities, market players, firms and households — must, therefore, be part of credible long-term policies.

The traditional tools for exercising oversight do not enable us to cope with the dimension of the long term associated with climate-related risks. This is especially so for stress-tests, since their horizon barely extends beyond from three to five years, and for the calculation of assets weighted by risk, since the horizon of this sort of analysis is limited to one year. Therefore, the risk analyses made by economic agents and the approaches adopted by regulatory authorities must use tools and methods with a longer time frame. Fortunately, several authorities have opened the way in this field, in particular the ACPR (Prudential Supervision and Resolution Authority) in two recently issued reports about how French financial establishments (banks and insurance companies) are positioned in relation to climate change and exposed to both the physical risks of global warming and the risks stemming from the transition. This initial work has made what François Villeroy de Galhau,

³ ACPR [Autorité de Contrôle Prudentiel et de Résolution] (2019) "Les assureurs français face au risque de changement climatique", *Analyses and synth*èses, 102, 39p., available at https://acpr.banque-france.fr/sites/default/files/medias/documents/as_102_risque_climatique_assurances_fr.pdf.

governor of the Bank of France and president of the ACPR, has called a "photograph of the risks". However useful this information might be, it does not suffice for understanding mounting risks in the financial system. The authorities that exercise oversight will have to improve their understanding and assessment of climate-related risks and devise new tools, both relevant and robust.

How can regulatory authorities induce players in finance to take account of climate-related risks and redesign their tools and methods?

The first step is obviously to have an awareness of climate-related issues. This holds for economic agents, central banks and regulatory authorities. This awareness has grown faster among supervisory authorities over the past two years thanks, in particular, to the work done by the NGFS. This coalition has the objectives of sharing best practices, contributing to the management of climate and environmental risks and inducing conventional finance to support the transition toward a sustainable economy. Created on an initiative by the Bank of France (which serves as its secretariat) along with seven other central banks and supervisory authorities during the One Planet Summit in December 2017, the NGFS now has 421 members and eight observers on five continents.⁴

The first NGFS report, published in April 2019,⁵ states that climate-related risks are an issue for financial stability. It formulated six nonbinding recommendations: four for central banks and supervisory authorities and two for policymakers in general. The primary recommendation directly concerns regulatory oversight; it asks the competent authorities to take account of climate-related risks in monitoring financial stability and exercising microprudential oversight.

Beyond awareness, it is necessary to act. To do so, central banks and supervisory authorities must design new methods and tools to help economic agents move beyond the tragedy of the horizon. The primary purpose is to improve the assessment of climate-related financial risks. This calls for studies for mapping the physical risks and the risks stemming from the transition itself, for conducting quantitative analyses of climate-related risks based on scenarios for the "green transition" so as to measure risks on the scale of the whole

⁴ Members on 15 July 2019: Abu Dhabi Financial Services Regulatory, Banca d'Italia, Banco de España, Banco de México, Banco de Portugal, Bank Al-Maghrib, Bank of Canada, Bank of England, Bank of Finland, Bank of Greece, Central Bank of Malta, Bank Negara Malaysia (Central Bank of Malaysia), Bank of Thailand, Central Bank of Luxembourg, Banque de France/Authority de Contrôle Prudentiel and de Résolution (ACPR), Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), Central Bank of Hungary, Central Bank of Ireland, Commission de Surveillance du Secteur Financier (Luxembourg), Danmarks Nationalbank, De Nederlandsche Bank, Deutsche Bundesbank, Dubai Financial Services Authority, European Banking Authority, European Central Bank, European Insurance and Occupational Pensions Authority (EIOPA), Finansinspektionen (Swedish FSA), Finanstilsynet (Norwegian FSA), Hong Kong Monetary Authority, Japan FSA, Monetary Authority of Singapore, National Bank of Belgium, Norges Bank, Oesterreichische Nationalbank, People's Bank of China, Reserve Bank of Australia, Reserve Bank of New Zealand, South African Reserve Bank, Superintendencia Financiera de Colombia, Sveriges Riksbank, Swiss Financial Market Supervisory Authority (FINMA), Swiss National Bank.

Au 15 July 2019, the observers: Bank for International Settlement, Basel Committee on Banking Supervision, European Bank for Reconstruction and Development, European Investment Bank, International Association of Insurance Supervisors, Organization for Economic Cooperation and Development, Sustainable Insurance Forum, World Bank/International Finance Corporation.

⁵ NGFS (2019) "A call for action: Climate change as a source of financial risk", 42p., available at https://www.banque-france.fr/sites/default/files/media/2019/04/17/ngfs_first_comprehensive_report_-17042019_0.pdf.

financial system with a long horizon. It is indispensable to adopt a prospective view of the impact of these risks. To correctly assess the financial impact of climate change, the objective should clearly be to design "carbon stress tests".

While the aforementioned "photograph of the risks" provides information about the exposure to risks, it needs to be completed with a "video of the risks", i.e., a scenario-based analysis. This means assembling three bricks:

- 1) a few, severe enough but realistic, scenarios for the green transition up to 2050;
- 2) hypotheses for explaining the incidence of climate change on macroeconomic variables (productivity, inflation, unemployment, etc.); and
- 3) the financial system's direct and indirect exposure to climate-related risks (The publication of financial information would be helpful).

Doing this will take time. Meanwhile, several pilot studies have already been conducted. For example, the Bank of England/Prudential Regulatory Authority sent in June 2019 to insurance companies in the United Kingdom instructions on the stress tests for three scenarios about the transition:⁶

- 1) a sudden, disorderly transition for keeping global warming below 2°C;
- 2) a gradual, orderly transition that upholds the objectives of the Paris Agreement; and
- 3) a scenario of doing nothing. This scenario thus pays no account to the risks related to the transition itself, but the physical risks will be realized at a farther horizon.

The competent authorities must also take account of climate-related risks in their daily microprudential oversight. This calls, in particular, for collaborating as closely as possible with financial institutions. It is worthwhile drawing attention to the ACPR's initiative, in June 2019, for forming work groups devoted to the theme of the climate. Armed with the conclusions of its two aforementioned reports, the ACPR is trying to bring French financial institutions to pay more heed to climate-related risks. It also wants to hone the recommendations already made. Exchanges will be organized around the themes "Governance of climate risks" and "Measurement and quantification of the risk" (including analyses of awareness campaigns and scenarios). At the start of July 2019, the presidents of the ACPR and of the French Financial Markets Authority (AMF: Autorité des Marchés Financiers) announced a new procedure for monitoring as well as an independent evaluation of the climate commitments made by entities in the financial markets.⁷

For its part, the NGFS is prompting supervisory authorities to define their expectations about risk management in the case of climate change so as to provide guidelines to financial institutions as the understanding of this topic evolves. For this purpose, the NGFS is also planning to publish a technical handbook for supervisory authorities on the management of climate and environmental risks.

Beyond incentives for good supervisory practices, regulations might also have to be adapted to cope with the financial risks related to climate change. The NGFS's work was, with this

⁶ Bank of England/Prudential Regulatory Authority's letter to the largest regulated life and general insurers "Insurance Stress Test 2019", published on 18 June 2019, 3p., available via https://www.bankofengland.co.uk/prudential-regulation/letter/2019/insurance-stress-test-2019.

⁷ Joint press release by the ACPR and AMF of 2 July 2019: "Un nouveau mécanisme de suivi et d'évaluation indépendante des engagements climatiques pris par les entités de la Place financière".

idea in mind, presented to the Basel Committee on Banking Supervision (BCBS), which has conducted a first round of discussions on the implications of this work for its schedule. The BCBS decided to join the NGFS as an observer in mid-July 2019; and its counterpart in the insurance industry, the International Association of Insurance Supervisors (IAIS), joined as an observer in June 2019. These developments not only confirm the quality and interest of the work done within the NGFS but also reinforce the idea that regulations are now addressing this long-term issue. At present, accountancy standards are a determinant of the preference of firms and investors for the short term. Environmental ("green") standards will help introduce on company balance sheets items related to global warming, the depletion of natural resources and, more broadly, externalities related to the environment.

Meanwhile, much progress is still to be made on extrafinancial information, as pointed out by Patrick de Cambourg, president of the Authority on Accountancy Standards (Autorité des Normes Comptables). The ANC's report takes note of the strong demand from actors in the markets for this information as a complement to financial and bookkeeping information from firms. It also draws attention to the importance of improving the quality and comparability of extrafinancial reporting practices. The work on standards has to be conducted at the European level under the auspices of public authorities and in close coordination with stakeholders.

Conclusion

Climate-related risks are a worldwide issue — not a matter of probability but of certitude. The responsibility for fighting against global warming, given its nature and horizon, falls, first of all, on the shoulders of the governments that have signed the Paris Agreement. To back up this policy, coordinated international actions by central banks and supervisory authorities are indispensable for mobilizing the financial system, ensuring its resilience to cope with risks of a new sort and favoring an orderly, healthy development of green finance. Determined to act in this sense, the Bank of France and the ACPR are endeavoring to launch actions for turning the NGFS's recommendations into reality. There is a simple conviction: be exemplary in order to be credible among peers and, too, more broadly. The climate calls for strong, rapid actions and, too, for being precise and thorough. Many an analysis still has to be made to provide central banks, supervisory authorities and financial institutions with the appropriate tools and methods for identifying, quantifying and reducing climate-related risks in the financial system and for creating better incentives so that economic agents take this long-term issue into account.

⁸ BCBS press release of 20 June 2019: "Basel Committee discusses policy and supervisory initiatives and approves implementation reports".

⁹ DE CAMBOURG P., GARDES C. & VIARD V (2019) Garantir la pertinence et la qualité de l'information extra-financière des entreprises. Une ambition et un atout pour une Europe durable, report to the Minister of the Economy and Finance in May, 304p., available via

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