

# Executive Summary

BNP Paribas (BNPP) welcomes the opportunity to respond to the Bank of England (BoE) Discussion Paper – “The 2021 biennial exploratory scenario on the financial risks from climate change”.

We support the BoE in its efforts to encourage banks and insurers to assess the impact of climate change on their businesses. We are encouraged that the BoE are thinking about this as an exploratory exercise and that there will be no impact on the capital requirements of banks at this stage.

In light of the current COVID-19 situation we would propose that the implementation of the BES be delayed for a period to allow firms to manage resources where required.

Banks and insurers cannot solve the climate change issue on their own. BNPP is committed to financing the transitioning economy and working alongside other players including governments, to mitigate climate change effects. We have set out some high level comments on the Discussion Paper below:

## **1. Global/International Co-ordination**

There are a growing number of supervisory initiatives linked to climate change, in particular stress tests recently announced by the EBA, ACPR and BoE. Differing scenarios and modelling approaches by regulators will make this overly burdensome on firms. A common approach across global prudential authorities would be useful, given the international reach of climate change, and in our view, the NGFS has a central role to play in this coordination.

## **2. Feasibility**

The scenario analysis requires a granular bottom-up approach (client-specific vulnerabilities, forward-looking response functions, etc.) and requires a vast amount of data for modelling. Our primary concern is driven by the level of granularity requested in the corporate scope, as the majority of corporates either do not currently disclose the level of data required, or are disclosing in an inconsistent manner. We note that the TCFD provides a reporting framework, but this will take time for corporates to implement fully, upon which, timeframes discussed could be more practicable.

To make this exercise more feasible, we would recommend that the BoE consider a less granular approach. For example, running the BoE scenarios for the top 50 exposures across all industry/sectors that the firms’ balance sheet is exposed and documenting the firms’ exposure to climate change and any associated risk mitigants. This would be a single name level analysis subject to data availability (noting that data availability is better in certain sectors than others). Caution should be noted with any attempts to extrapolate portfolio effects from this single name analysis. Approaches used by the BoE to size the risks in the banking sector should then be discussed during the feedback process and shared across industry by the BoE. This may require banks to collaborate in order to come up with proxy methodology to cover missing sectors or significant counterparties.

We will also be grateful if the BoE confirm that this exercise is designed for corporate exposures and hence the modelling of banks exposures to other financial institutions is excluded from this exercise?

## **3. Physical and Transitional Risk scope**

BNPP recognises the potential impacts of climate-related transition risk and physical risk on our activities, as well as on financial stability. The Discussion Paper indicates that both physical and transitional risks should be considered. In line with our proposal above regarding analysing the top 50 exposures across all sectors, we think this sub set of 50 exposures would be the starting point for both the physical and transitional assessment. Further to this, there are potential second order effects from the conclusions of the first round which can be taken into account in phase two.

#### **4. Market Risk in the trading book**

We think it is important to differentiate between the more longer term market risk in asset management versus short term trading book behaviour. For trading books, the core need is to prepare for instantaneous shock events linked to climate risk. However, an asset manager will need the longer term view on what is probably a less liquid portfolio, in order to identify the trajectory and probable 2 degree alignment of their investments. The latter requires a 30 year modelling approach whereas the former requires instantaneous shocks. Since the trading book approach does not call for the same type of long term model development, we believe that investing effort in computing trading book results will divert essential resources away from the core loan book modelling task in hand. In essence we do not think that the trading book test will show anything more significant in terms of systemic risk than that a classical EBA annual capital scenario.

As such, we would propose to exclude trading books from the BoE exercise, except in cases for institutions only having such exposure. This would still allow the BOE to observe the approach taken in banks, but would assist in simplifying the issue.

We nonetheless recognise that good practice for trading books would call for the design of:

- i) new macro scenarios where relevant
- ii) new micro scenario quantification
- iii) more enhanced risk reporting

Examples of macro scenarios could include significant wildfire or weather events or large scale policy announcements impacting broadly across markets. Micro scenarios would call for the analysis of specific names or sectors at risk of shock events. There is a vast range of events that could be used but they could include change in local/country policy, new carbon pricing, floods, physical asset repricing, the market reaction to an advanced corporate disclosure, or action impacting either directly or indirectly on the markets/supply chain. The key requirement for banks would be that trading book exposures having a degree of climate risk can be flagged, analysed and discussed with senior management.

#### **5. Self-Fulfilling Prophecy**

We also want to highlight the potential risk behind the publication of detailed scenarios, such that they do not become self-fulfilling with regards to signalling to markets and investors that in the eyes of regulators, certain industries may be high risk, and that the financial system as a whole should not enter into new business with them. These scenarios could lead at the end

to potential litigation cases against regulators in the event that the BoE scenarios strongly imply something that isn't already observable in the public arena.

## Questions on Chapter 2: The key features of the 2021 BES

- 1. Are there areas of the financial system that should be represented in the 2021 BES that are not captured by the proposed participation?**

No, we think that the scope of the BES for 2021 is sufficient. At a later point, we would suggest that regulators consider mirroring this exercise for pension funds.

- 2. Do firms envisage any challenges with modelling the no additional policy action scenario spanning 2050–80?**

We welcome the BoE initiative and it will encourage banks in developing the assessment of financial risks related to climate risks. However, we believe that the capabilities and methodologies are in a development stage and we encourage a focus on transition risk at this preliminary stage. At this stage, where a framework is not mature enough, we see a strong risk that this no policy action scenario results in mild impacts and potentially inadequate conclusions compromising the credibility of the exercise.

## Questions on Chapter 3: Scenario narratives

- 1. Are there any other scenarios that the Bank should be testing as part of the 2021 BES?**

The three scenarios cover the possible trajectories well with regards to a test and learn process.

- 2. Do the scenario timeframes strike the right balance between allowing a full assessment of these risks while also being tractable for firms' modelling?**

Please refer to the executive summary section on feasibility for our response to this question.

## Questions on Chapter 4: Scenario specification

- 1. Does the scenario specification adequately capture the risks in each scenario? Are there additional risk channels or scenario variables that should be considered as part of the BES?**

A preliminary view suggest that more scenario variable granularity would be beneficial on sovereigns and pointers on government policy as follows:

Sovereign Ratings:

- It is noted that financial institutions who do not produce internal sovereign ratings must be able to infer the reaction of the agencies.
- on government policy/potential political instability such as following measures decided by a government, or critical consequences such as forced migrations and other structural changes.

- 2. Are there alternative approaches to capturing the interactions between physical and transition risks, including capturing the impact of stranded assets?**

We are unaware of alternative approaches.

- 3. Are there particular external sources to calibrate physical and transition risk impacts that the Bank should consider when calibrating the scenario variables?**

Consistency would be recommended, for example, using IPCC/IEA data however, the relationship between macroeconomic / macrofinancial and climate variables is not well documented.

Partly related to this question we may consider if the Transition Index is a useful measure for bucketing clients into those that are either:

- i) Fully engaged in the transition
- ii) Partly engaged
- iii) Doing nothing

- 4. Are there particular external sources or approaches that the Bank should consider when relating long-term macrofinancial variables to climate variables?**

Using the Shared Socioeconomic pathways (SSP) which make use of OECD forecasts could be an adopted approach by region by country.

## Questions on Chapter 5: Modelling approaches

- 1. Are there data gaps or modelling deficiencies that would impede participants' ability to model the scenarios? How would participants reflect judgements about companies' current mitigation and adaptation plans in their quantitative assessment?**

A full assessment of needs and gaps for the measurement of financial risks has not been completed to date within the bank. However, we expect to require data such as carbon emission paths per client and carbon price sensitivity by country for transition risk. We will also need to be able to challenge these trajectories and check for their consistency with overall global economic transition trajectories. Such data is also required for the monitoring of our portfolio alignment with the bank's commitments related to compatibility with Paris agreement. Should physical risk be included in scope of the first test, banks would need a mapping of client assets by location.

Up until now, firms have retrieved financial statement data at the counterparty level in order to compute the rating. To be able to model climate scenarios and perform the qualitative analysis against any red flags shown up in the model, firms need to collect new data at the counterparty level such as CO2 emissions, energy mix, consumption of commodities for which prices are going to evolve along the scenario, asset location, carbon price sensitivity by region etc. Even though ESG data providers exist, being able to collect such data for a significant volume of the portfolio is currently unachievable within the timeframe proposed.

Given climate risks have not yet materialised in terms of credit and market risks, the major challenge banks have to cope with in terms of modelling, is that historical data cannot inform the relationship between credit risk and climate risk drivers. In the absence of statistically

significant relationships, banks will need to develop microeconomic approaches, where the rating is dynamically reassessed along the scenario taking into account the climate variables projections up to the projection date, i.e. scenario-conditional evolution of financial statement ratios driving the rating allocation. Rolling such a granular approach out will be resource intensive and complex to automate. In addition, to reflect judgements about companies' current mitigation and adaptation plans, the firms could develop a sectoral ranking from weak or limited to robust or advanced, and disseminate scenario-conditional GHG emissions decrease, consequently adapting financial statement variables consistently. Rolling such a granular approach out, is going to be complex to automate.

Deploying such an analysis on 80% of corporates clients is a huge task. We believe that at this stage of research and development, a more pragmatic approach would be to complete a detailed analysis of the top 50 relevant exposures across all industries/sectors of the firms balance sheet.

In addition to modelling for climate change our first priority is to setup a robust portfolio alignment framework, which we are working on in the context of PACTA (Paris Agreement Capital Transition Assessment). This will address much of the data needs for transition risk and will be a leading indicator with regards to the judgment element of the test. The link between carbon emissions/pathways per client and the impact on credit risk remains an additional challenge.

- 2. Would participants be able to assess 80% of their corporate counterparties at counterparty level, leveraging the tools set out in Annex 2 and expert judgement?**

Please refer to the executive summary section on feasibility for our response to the question.

- 3. Does the proposed approach to modelling future risks at each reporting point work for both the modelling of credit and market risk? Does the reporting framework, in particular the frequency of five-yearly reporting points, adequately capture the evolution of risks over time? Might more frequent reporting be useful for some parts of the scenarios, for example, during the transition in the late policy action scenario?**

Please refer to executive summary section on market risk in the trading book. With regard to the five-yearly reporting points, we would not propose making the test more complex.

## **Questions on Chapter 6: Firm submissions**

- 1. Given the suggested timetable for the BES, is 30 June 2020 the latest cut of balance sheet data that firms can submit? Is three to four months sufficient time for participants to the run the BES?**

The three to four month time frame is ambitious, given that there is an industry wide a lack of data and expertise. Data collection and assessment of gaps is likely to take longer than this, therefore an extension to the proposed timeframe would be welcome. For the initial first phase of the BES, we would suggest allowing a minimum of six months to run the exercise which would be more practical when reflecting upon the length of time taken to run a large annual effort such as an ICAAP. Giving banks the option to take end of year data (Dec 19) may further smooth the process.

**2. Would the proposed outputs accurately capture the climate-related financial risks faced by participants and achieve the objectives of the BES?**

We believe that the first round of the BES will highlight to both firms and regulators the data gaps and general readiness to capture climate risk and differing firms assumptions around these risks. This exercise should not be considered as fully sizing climate financial risk as this will develop over time.

**3. Do participants have access to data and tools to enable them to estimate the temperature alignment of their current asset holdings? Which asset classes should be included in this calculation?**

BNPP and four other Katowice commitment banks are currently developing 2° investing initiative open source methods and tools for measuring the alignment of lending portfolios with the goals of the Paris Agreement (COP 21). Lending portfolios will be included in this calculation. It should be noted that this is a sector-based methodology, focused on the worst emitting sectors.

**4. Do five-year reporting intervals pose challenges to participants that are not reflected in this discussion paper?**

The five year reporting intervals do not impact from a modelling perspective, however, fewer time frames would be less resource intensive and have lower data demands and assumptions. We would suggest either three ten year intervals or two five year intervals followed by two ten year intervals.

**5. Are there additional changes that should be modelled in the second round that would allow the Bank to better understand systemic climate-related risks?**

- i) For the second round, a broader scope in terms of client coverage could be considered.
- ii) The static balance sheet assumption could be challenged where banks have defined risk reduction or alignment strategies in certain sectors.
- iii) A more detailed scenario describing for example innovations, level of companies' investments, changes in consumer habits, evolution of competitive environment could be useful for a granular assessment.