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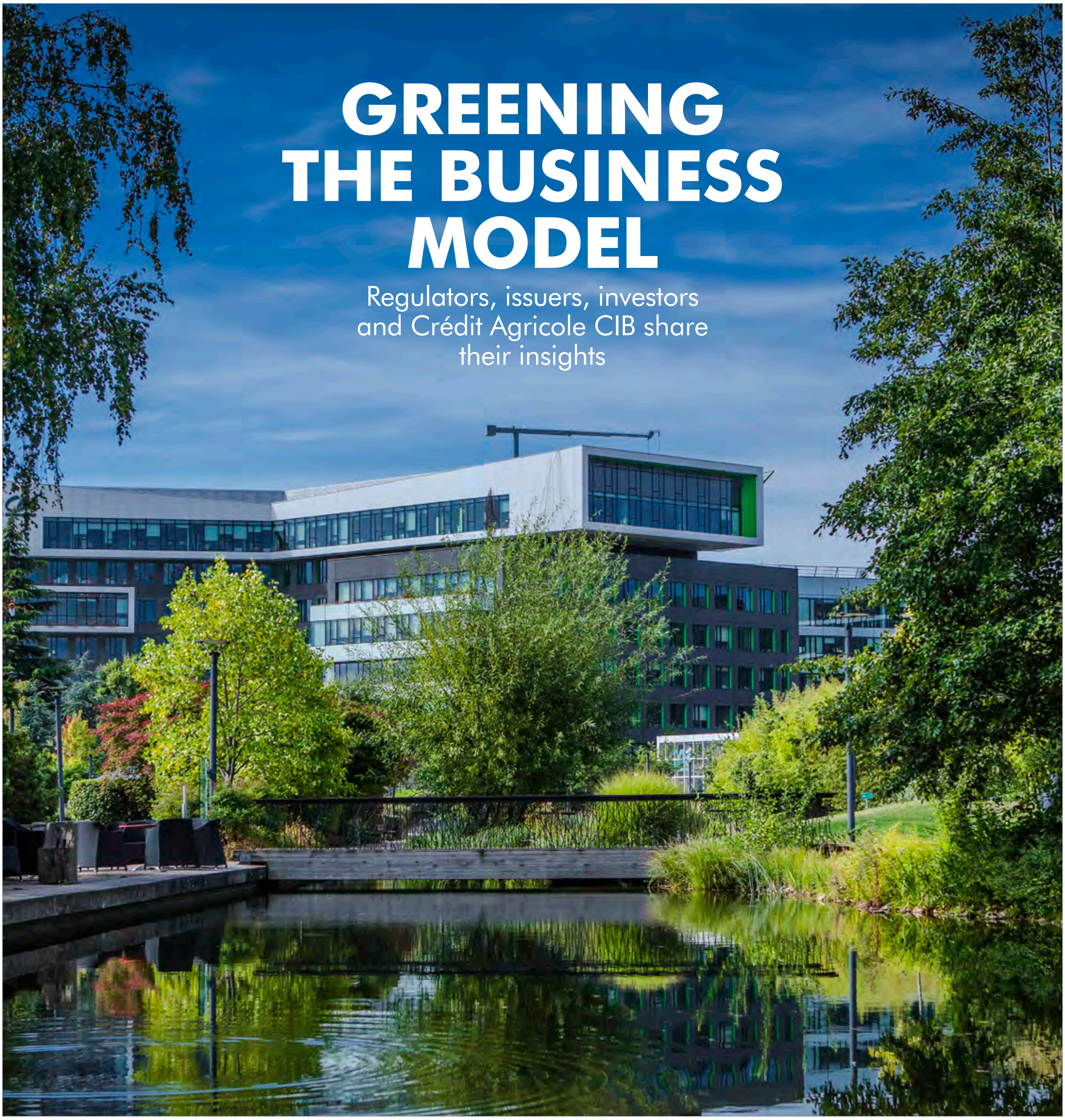
GREENING THE BUSINESS MODEL

Regulators, issuers, investors and Crédit Agricole CIB share their insights



NOVEMBER 2022

Crédit Agricole CIB's 2nd ESG Bank Day

Against a backdrop of climate change and the energy transition increasingly dominating the headlines, Crédit Agricole CIB on 13 September followed up its 2021 sustainable bond-focused ESG Bank Day with a new event to discuss greening the business model. In this special follow-up publication, we are pleased to bring you key insights from the different sides of the market, moderated by Crédit Agricole CIB representatives and introduced by its bank and green bond-ESG fixed income analysts.

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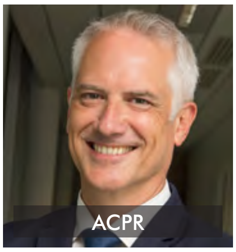
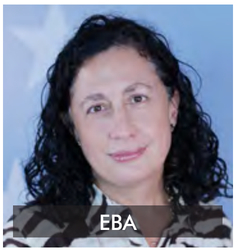
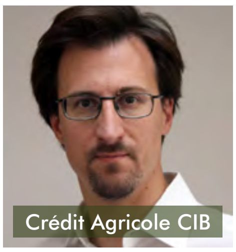






Greening the business model

While GSS bonds have hitherto represented a way for issuers and investors to engage on sustainability, ESG is being integrated more broadly and deeply into their strategies. Regulatory initiatives are furthering this move, with environmental and social factors being increasingly put at the centre of business models. Here, Crédit Agricole CIB analysts highlight the key developments, and the risks and opportunities they bring.

Until now, sustainable bonds have for investors represented a proxy to integrate ESG into their investment strategies, and for issuers, a way to show that they are taking action against climate change, according to Léa Le Leonnec Serra, green bond-ESG fixed income analyst, Crédit Agricole CIB.

Despite challenging funding conditions, financials and non-financial corporates had contributed around 60% of year-to-date sustainable bond issuance, she noted, with financials alone accounting for one-quarter of the overall sustainable supply. Senior preferred and senior non-preferred have been the most popular issuance format for financials and Crédit Agricole CIB expects sustainable supply in the two formats to meet last year's issuance level thanks to a catching-up of sustainable issuance at the end of the summer.

Although the past two years have witnessed a diversification of sustainable fixed income products from the traditional green bond into the newer sustainability-linked bond (SLB) format, this has been stronger on the corporate side, noted Le Leonnec Serra. Financials have continued to focus on use-of-proceeds bonds, with the European Banking Authority still discouraging the use of SLBs by banks for MREL/TLAC-eligible instruments.

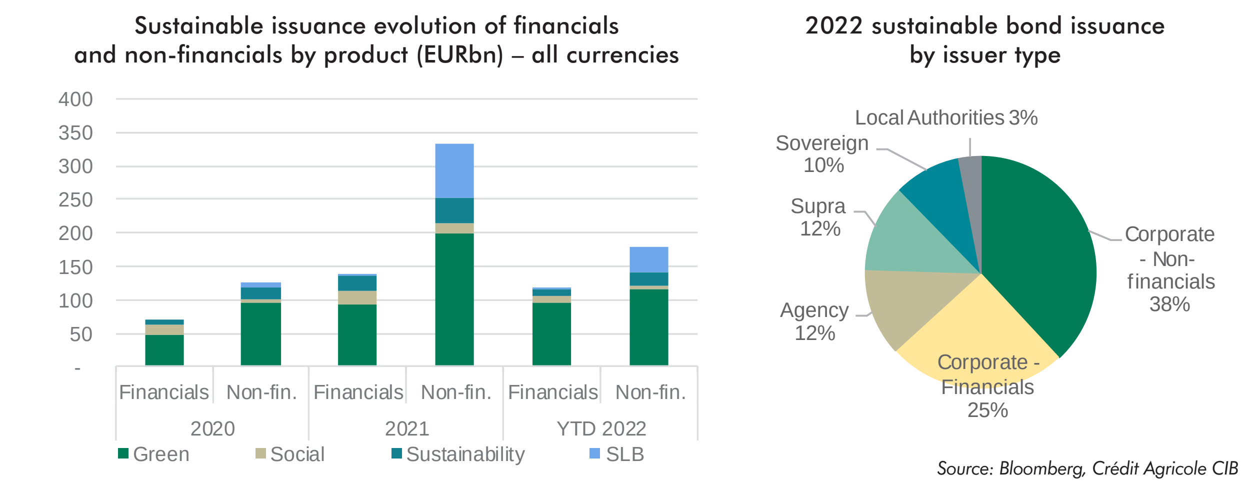
Greenium has meanwhile become increasingly visible, with Crédit Agricole CIB analysts putting it at some 6bp-8bp based on data across 15 European banks' senior preferred and non-preferred bonds. A lack of relevant comparable bonds means that an analysis of subordinated debt is still limited.

"That said, we see that the bottom of banks' capital structures seems to offer more spread room for the greenium," added Le Leonnec Serra.

Within covered bonds, the greenium has improved recently amid high issuance that resulted in spread-widening, with green bonds attracting buyers whose appetite for classic covered bonds was already filled.

Buyside adapts to challenges

Within a context of increased ESG integration, in particular with regard to climate and transition objectives, the buyside is facing new constraints and



Source: Bloomberg, Crédit Agricole CIB

Valentina Sanna,
Crédit Agricole CIB

opportunities, Valentina Sanna, green bond-ESG fixed income analyst, Crédit Agricole CIB, told delegates at the event.

"Firstly, investors are exposed to increased scrutiny on the climate impact of their activity, and also the impact of climate change on their activities," she said. "On the one side, climate change and the energy transition impacts the profitability of companies they invest in, through in particular the negative potential impacts of physical climate risk, but also transition risk, meaning that investors need to integrate this new risks and opportunities into their return expectations.

"On the other side, they are also exposed to increased scrutiny of the climate impact of their investments, particularly some sectors like coal, oil and gas. This means they have to complement their financial objectives with environmental objectives."

Secondly, investors are increasingly participating in net zero initiatives to show their willingness to take action against climate change, noted Sanna, such as the Net Zero Asset Managers initiative, the Paris Alignment Investment Initiative, the UN-convened Net-Zero Asset Owner Alliance, and the Net-Zero Insurance Alliance. This involves setting interim and long term targets, and periodically reporting on progress.

"And thirdly, increasingly investors need to adapt to new regulation that is bringing new ESG disclosure."

Sanna cited three such regulatory developments facing investors: Article 8 of the Taxonomy Regulation, requiring disclosure of the Taxonomy-aligned percentage of their activities; the Sustainable Finance Disclosure Regulation (SFDR), requiring disclosure of how ESG risks are integrated into investment decisions as well as classification of funds according to ESG characteristics; and MiFID II, requiring that investors check clients' ESG preferences and propose them appropriately adapted products.

"Faced with these new constraints and opportunities, the question for investors is how to integrate them into their operation," said Sanna. "Indeed, integrating climate risks and opportunities as well as aligning to net zero objectives and initiatives, and adapting to new reporting requirements, requires them to adapt their

Léa Le Leonnec Serra,
Crédit Agricole CIB

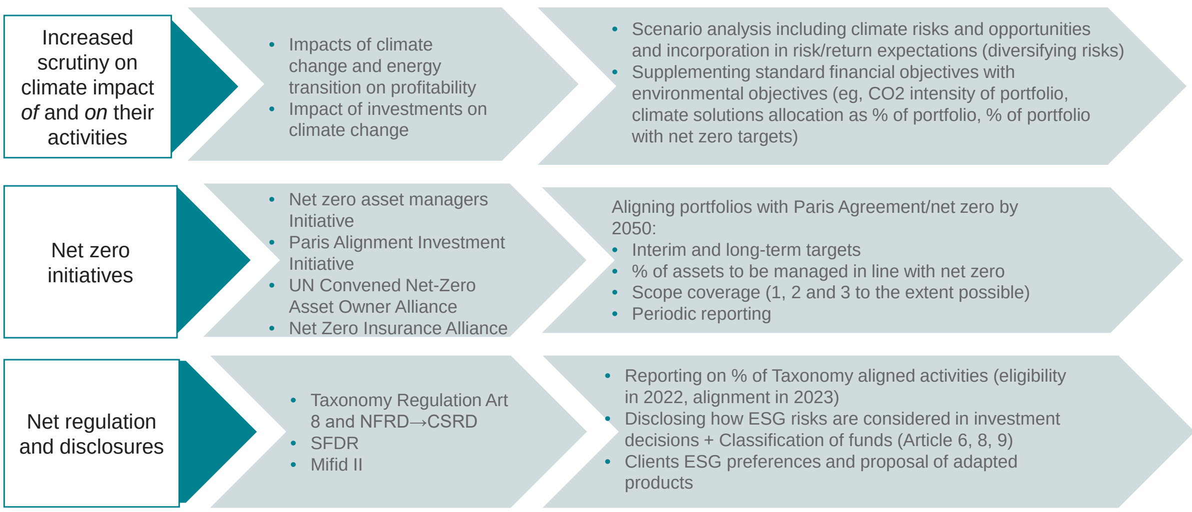
strategies as well as to adopt new data and metrics."

New strategies could include engage with companies to drive change, she added, as well as capital allocation strategies such as tilting between and within sectors, divestments, and investment in climate solutions — with green bonds being a concrete example of the latter. To this end, investors can employ metrics such as absolute CO_2 emissions and emissions intensity, and reductions in these, while also aligning with sector-specific pathways.

However, these approaches face challenges, not least in finding sufficient data, noted Sanna.

"While it is true that the Taxonomy adds a burden to the reporting of companies," she said, "it will also be helpful, since it will increase the availability of

Investors facing new constraints and opportunities



Source: Crédit Agricole CIB, Paris Alignment Investment Initiative, UN Convened Net-Zero Asset Owner Alliance

Gwenaëlle Lereste, Crédit Agricole CIB

data on the share of green activities at the issuer level, while also giving standard definitions of climate solutions and also standard CO_2 product intensity for some sectors."

Regulations spur change

As well as rising up the agenda of investors and regulators, climate and environmental risks are becoming top priorities for banks, who are increasingly putting such matters at the centre of their business models.

"Climate change and the transition to net zero poses risks to households and firms, and therefore to the financial sectors," said Gwenaëlle Lereste, senior credit analyst, bank analyst, Crédit Agricole CIB. "Banks finance around two-thirds of the economy and as a consequence they are playing a key role in accelerating the move to a more sustainable economy.

"Reorienting private capital to more sustainable investments requires a comprehensive shift in how financials work," she added. "This transformation will trigger business opportunities for banks, but at the same time will also lead to potential financial and reputational risk."

This has been reflected in regulatory developments — Lereste cited revisions to CRR2 and CRD5 to include climate factors, as well as Pillar 3 disclosures and Pillar 2 requirements, with the integration into the SREP of the outcome of the first ECB stress tests — raising questions about potential climate capital rules.

"We view the ECB climate stress test as a credit positive start for the banks," she said, "because it helps banks embed more climate factors into their strategies."

An acceleration in banks' ESG strategies has been reflected in the incorporation of climate factors in strategic plans, including long term commitments to reduce exposures towards fossil fuels, while supporting their counterparties to lower carbon emissions. European banks have also joined the Net-Zero Banking Alliance, thereby committing to aligning their goals with the Paris Agreement, as well as the Science Based Targets initiative (SBTi), with La Banque Postale in October 2001 being the first European bank to have its decarbonisation pathway recognised by the SBTi.

"ESG is gaining momentum from liabilities to assets," said Lereste. "However, even though the ECB has recognised the progress being made by banks, they are lagging in several areas and do not yet sufficiently embed climate risk in their business models."

She highlighted discrepancies among European banks and a lack of clarity over commitments, targets and metrics.

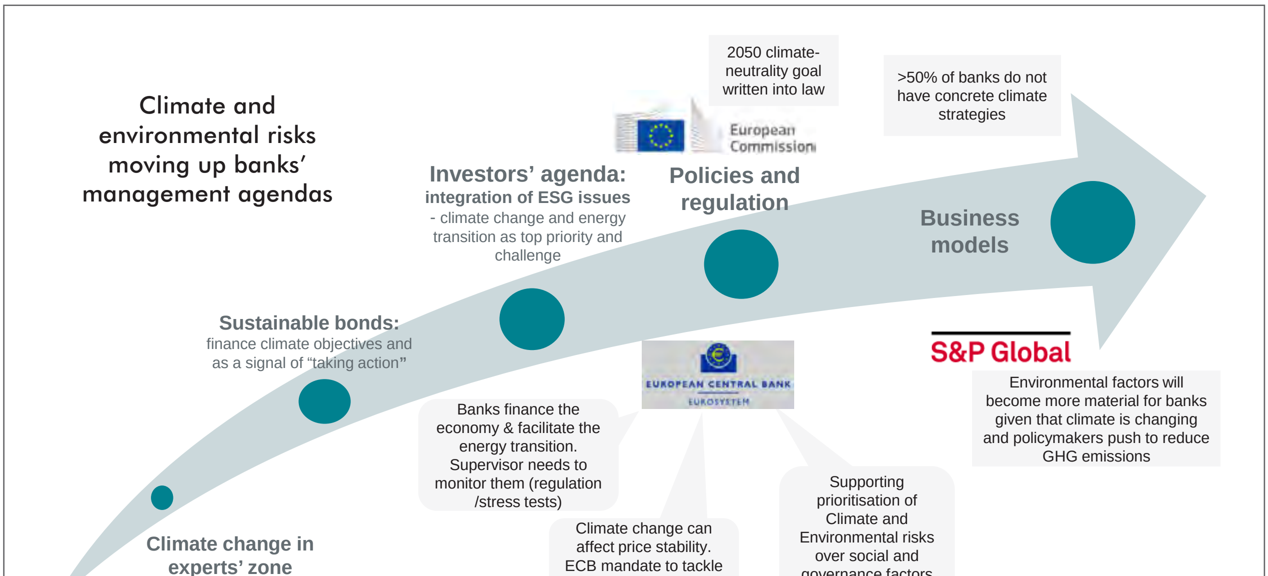
"ESG risk will increasingly be a credit differentiator," said Lereste, "but available and harmonised data remain a big obstacle."

The data issue should also make it challenging for banks to report on their Green Asset Ratios (GARs), noted Sanna. Banks will have to start disclosing the key KPI in 2024.

"Some of the challenges include the availability of company data, quality and comparability," said Sanna, "but also the need for new expertise, to assess the alignment with the technical criteria of the Taxonomy and do-no-significant-harm."

In a pilot exercise last year, the EBA calculated a first estimate of just 7.9% for the EU-aggregated GAR.

"While the disclosures present some challenges," said Sanna, "we think that more transparency could also be seen as an incentive for banks to green their balance sheets, which ultimately need to be decarbonised." ●



Source: ECB, rating agencies, Crédit Agricole CIB

The regulators' perspective
A moment of reckoning

Between climate stress tests and the incoming Green Asset Ratio, banks are being spurred by regulators to improve how they address climate change-related risks. In discussions moderated by Crédit Agricole CIB's Gwenaëlle Lereste, representatives of the ACPR, EBA and ECB shared insights into their work and expectations, tackling topics including data challenges, risk metrics, and capital requirements.

Speakers:

- Laurent Clerc, director for research and risk analysis, Autorité de contrôle prudentiel et de resolution
- Pilar Gutierrez, head of reporting and transparency unit, European Banking Authority
- Carmelo Salleo, head of the stress test and modelling division, DG macroprudential policy and financial stability, European Central Bank

A common refrain throughout the regulators' presentations and Q&As at Crédit Agricole CIB's event was that banks are making significant progress in how they address climate change risk, but that more needs to be done — immediately.

Carmelo Salleo — speaking in a personal capacity, with his views not necessarily reflecting those of the ECB — summed this up when saying that the situation with respect to banks' efforts could be viewed as a glass half full or a glass half empty.

"I'm an optimistic person," said Salleo. "I would rather look at it as half full: we can say that among the vast majority of banks, there is the understanding that this is an important topic, and that it needs to be integrated in risk management, in overall business strategies, and just put together with the other risks that are relevant when a bank decides where to go with its strategies. That's the positive thing, that there is awareness.

"You might take this for granted," he added, "but when we started working on climate change risk a few years ago, people were just paying lip service to that, saying these risks are not going to materialise for 20, 30, 40 years — who knows where my bank or I will be by then! So banks have come a long way over the past few years."

The half empty perspective, said Salleo, comes from the fact that not many banks are well progressed in their efforts.

"We will see over the next few years whether banks will act on what they are saying and on what they are acknowledging," he added, "and will make the necessary investments to bring themselves up to the best practice frontier in dealing with this topic."

An overarching challenge across the topics under discussion was the availability of data and the appropriate methodologies into which these are inputted. The EBA's Pilar Gutierrez raised the issue when discussing the Pillar 3 Implementing Technical Standards (ITS) on ESG the authority published in January.

"We acknowledge that there are big challenges in terms of data," she said, "and in the technical standards we include some proportionality measures for certain disclosures and we discuss the possibility of using proxies and estimates.

"But we also think that banks cannot delay further this type of disclosures, given the urgency of the matter and also the needs of investors and other stakeholders."

The regulators were unanimous in saying that banks must ensure that, particularly for new lending, the requisite data is collected henceforth, even if alternate methods may be used to address existing loans.

"Embedding ESG climate change considerations in the credit processes and loan origination from the beginning is very important," said Gutierrez. "But we are also expecting banks to use estimates and to make use of internal models, for example on the energy efficiency of the real estate portfolio when they don't have information on the EPC labels, and also on greenhouse gas emissions when the information is not comprehensive enough.

"As I said before, we acknowledge that the first disclosures will be far from perfect, but we still think that this is the time for banks to start making the effort to collect all the data that they need."

The view from the ACPR

The ACPR has been working with the banking and insurance industries to identify best practices in respect of climate change and environmental risk, with a view to developing a stylised governance framework to effectively address the issue. According to the ACPR's Laurent Clerc, these efforts include looking at institutions' business models and strategies, both in terms of alignments targets, exit policies and the like, and in terms of how they are engaging with their clients.

The regulator is also focused on the internal organisation of financial institutions and their processes, and in this regard, he said ACPR has seen pluses as well as shortcomings.

"We have noticed a clear improvement in the way financial institutions are organised," said Clerc, "especially with respect to the alignment and delineation of responsibilities in the decision-making bodies. Now, it's usually the case that there is at least one member of the board who is assigned the responsibility of taking care of climate change risk.

"However, an important aspect of governance also relates to the capacity-building and training of the staff, and this is an aspect that still needs some improvement, because, so far, we have noticed that the development of the strategy that is defined at the level of the financial institution does not necessarily lead to operational developments, especially for clients, businesses or originators. That is an important aspect. As far as governance is concerned, another key point is the incentives that are provided to the various parties, in particular, whether the remuneration policies of managers or key decision-makers are related to the ESG performance of the institution."

Regular surveys conducted among banks, insurers and asset managers by ACPR have also painted a mixed picture of institutions' climate change commitments and strategies.

"Financial institutions are really mobilised," said Clerc. "They have been still increasing their public commitments with respect to climate change actions, not only through individual but, in a growing trend, through collective commitments and coalitions.

"However, although there is this effort from the industry, it is still very difficult to identify, compare and assess those commitments. Each institution has a specific scope, sometimes the definitions are not consistent across the board, and for some of them, the commitments are not really binding."

Furthermore, while almost all institutions have made commitments to stop funding fossil fuels with appropriate deadlines, he added, milestones, KPIs and potential remediation actions are insufficiently clear and most of the time inexistent.

"When you look at the reports that are published by financial institutions," added Clerc, "you will see that there is still a lot of heterogeneity. The information that is relevant for the investor, the client or for the supervisor is not necessarily there.

"You will find in these reports very nice colours and charts, but if you are looking for the precise exposure of the bank to coal, oil or gas, you will hardly find it. So this is a clear area for improvement."

GAR thinking and scope

With the EBA having published the Pillar 3 ITS on ESG in January this year, the first disclosure reference date will be 31 December 2022, with the first reports published next year and disclosure semi-annually thereafter.

The Green Asset Ratio (GAR) will then kick in from the end of 2023, subject to phase-in provisions. Gutierrez noted that the timing of implementation and also reporting had been designed to be synchronised with other incoming sustainability regulations and reporting requirements.

In May 2021 the EBA published a first estimate of the EU-aggregated GAR of 7.9%. Gutierrez said the EBA is not anticipating any particular level, but is focused on what forward-looking steps a bank is taking.

"What is important for us is that banks disclose where they are now, where they plan to be in the future, and their strategy

Pilar Gutierrez, EBA: 'GAR values will depend on the business models of the banks, their risk appetite, and how fast they want to move'

to meet their targets, so that stakeholders understand the bank's strategy," she said.

"The values," added Gutierrez, "will depend on the business models of the banks, their risk appetite, and how fast they want to move when transitioning towards the Paris Agreement objectives."

She noted that banks will have to disclose what proportion of their balance sheet the GAR is referencing, so that stakeholders can make appropriate comparisons.

"We understand that there are banks more focused on trading activities and others more focused on lending," said Gutierrez. "The GAR is focused on the banking book, and it is the most relevant KPI taking into account the business model of European banks."

"There are other KPIs that are in the Taxonomy Regulation delegated act — such as disclosure on trading portfolios, on fee and commission income, and the extent to which these are coming from Taxonomy-aligned activities," she added, "but they are not in the Pillar 3 ITS because we did not think that a measure of, for example, how banks are contributing to market liquidity of taxonomy aligned investments is so relevant from a risk perspective or to understand how they are mitigating their climate-related risks."

Gutierrez said that, with the ITS, the EBA is taking a sequential approach, with the initial focus being on climate change-related risks, including the quantitative side. However, responding to a question submitted by a member of the audience, she denied that this would lead to quantitative disclosures overshadowing qualitative disclosures.

"Quite the opposite," she said. "So far, banks are publishing their TFCD reports and the focus there is mostly qualitative information. With the ITS, banks should complement this with quantitative information that gives investors a better understanding of the extent to which banks' qualitative disclosures are being reflected and properly implemented — this is the usual way things are done in traditional Pillar 3 disclosures."

First ECB climate stress test

Launched in January with results out in July, the first ever ECB Single Supervisory Mechanism (SSM) climate risk stress test showed an aggregate loss of some €70bn among the 41 banks that provided bottom-up projections — a number below market expectations and which the ECB itself said significantly understates the actual risk.

One of the main objectives of the exercise was to contribute to the overall Supervisory Review and Evaluation Process (SREP) in a qualitative way.

"Let me stress once more," said Salleo, "this was not a capital adequacy exercise; this was an exercise to understand where banks stand and to make a qualitative assessment of their degree of readiness in understanding and tackling issues related to climate change in their risk management structures. This was a joint learning exercise both for banks and supervisors, and a first step in preparing banks for possible regulatory changes."

The results of the exercise showed that an orderly green transition leads to lower loan losses than a disorderly one or no policy actions at all, he highlighted. The €70bn of aggregate losses come under a combination of the short term disorderly scenario (€53bn) and two physical risk scenarios (€17bn).

However, even in the best outcome losses are non-trivial and the methodology also means that the numbers are a "lowball estimate", according to Salleo,

Carmelo Salleo, ECB:
'While there might have been some bankers who thought that this is really small fry, it's not'

with four factors cited as contributing to this: narrow risk coverage and reported exposures targeting specific portfolios (only around one-third of the participants' total exposures); banks' data and modelling capacity being at a preliminary stage with still-limited sensitivity to climate factors; no supervisory overlays having been applied in the bottom-up projections, reflecting the learning nature of the exercise; and the use of benign scenarios where shocks are not accompanied by an overall economic downturn.

Salleo noted the latter differs from the standard approach in stress tests and also highlighted the implications of current macroeconomic developments.

"Because of the spike in energy prices, there is talk of going back to increasing dependency on fossil fuels that are not gas, and delaying the green transition," he said, "and this is happening together with a downturn. So you can see that in the stress test, where there was merely a policy decision to delay the transition, the scenario was very benign."

Regarding lessons learned from the exercise, Salleo said banks had provided new and comprehensive information giving insights into their climate risk stress testing capabilities — or lack thereof. From their responses to the questionnaires, it was unclear whether banks were able to properly reflect transition pathways in their long term strategies, he added.

"Banks should acknowledge that they face significant challenges in terms of data and modelling that affects the quantification of climate change risk," said Salleo. "Many banks have not integrated climate risk into their stress testing framework, but they are actually sensitive to losses arising from transition and physical risks.

"So while there might have been some bankers who thought that this is really small fry, it's not. This is a moment of reckoning that this is something that one has to take into account — it cannot be kept at the margin."

Among valuable insights that supervisors had gained into banks' climate risk stress testing frameworks and capabilities was an overview of data availability and the use of proxies — which was very widespread, according to Salleo — as well as insights into the vulnerabilities of banks' business models and individual banks' exposures to climate change risk.

He said supervisors now need to work on a stress scenarios that reflect a wider variety of situations, enhance the methodological approaches, and broaden the scope to a larger part of banks' portfolios.

"We should really think how to help banks overcome the challenges of data availability, and possibly provide guidance on best practices, which is something that is clearly planned for the future."

Salleo noted that the ECB is working on a more in-depth analysis of the banks' submissions and will publish best practices this quarter.

The output of the climate stress test will meanwhile be integrated in the SREP using a qualitative approach, with no direct capital impact via the Pillar 2 Guidance (P2G), but possible indirect impact via the SREP score on Pillar 2 Requirement (P2R).

ACPR pilot stress test

The ACPR conducted a pilot stress test climate exercise in 2020 with the results published in May 2021, as parts of its responsibilities under the French Energy Transition for Green Growth Law of 2015. Similar to the ECB's subsequent stress test, the ACPR pilot was aimed at raising awareness of climate issues and assessing vulnerabilities and risks, supporting the implementation and development of appropriate methodologies and analytical tools, and assessing mitigating actions taken by banks and their consistency with public commitments.

A bottom-up exercise involving both banks and insurance companies, the stress test took in a time horizon of 2020 to 2050, and incorporates scenarios for four areas worldwide — France, EU, US, rest of world — to reflect French groups being big international players.

The methodology of the ACPR exercise was notable in two further respects, according to Clerc, one being the adoption of a granular sectoral approach, taking in 55 sectors.

"That was quite demanding for firms," he said, "because we asked them to consider for each scenario and for each geographical area the impact of climate change on these 55 sectors."

Another novel feature was the use of dynamic balance sheet assumptions for the longer-term horizon (2025-2050), alongside a static approach for the short term (2020-2025).

"The static approach is very conservative, but it is very useful when you are considering risk in the very short term horizon, as is usually the case in standard stress test exercises where there is a three year horizon," said Clerc. "But when you are looking at something over 30 years, it is implausible that the firm will keep its balance sheet and the structure of it unchanged when it is facing significant shocks related to the need for transitioning and also with respect to physical risk.

"Another aspect that was very important for us was to identify and assess the strategies that could be implemented by financial institutions and the extent to which they will be able to reallocate their exposures. And indeed, some of them realised in the context of this exercise that this may generate conflicts of objectives with keeping their market shares, and that there are some transitions risks that had been overlooked."

A key takeaway from the exercise was the strong participation and engagement from participants, according to Clerc.

"Many firms told us that the exercise was really useful and served as a catalyst to develop internal models and knowledge," and "and we had already noticed significant methodological developments, despite the challenges faced in this regard. Firstly among these is handling long run horizons, especially for certain risks that are usually managed in the short run, like market risk. Another challenge was to account for the sectoral differentiation and the integration of this into internal models.

"So firms have developed different approaches, but some of them are perhaps less convincing than others."

Clerc echoed the point made by Salleo on the limitations of the scenarios used in the exercise.

"Overall, the estimated impact on the balance sheet was moderate," he said, "but this is conditional on the scenarios and assumptions. In particular, the scenarios that have been developed so far by the Network for Greening the Financial System (NGFS) lack variability, so in the end, it's very difficult to have a significant impact."

Laurent Clerc, ACPR:
'Firms have developed different approaches, but some of them are perhaps less convincing than others'

New metric under development

At the ECB, Salleo highlighted a new climate metric the central bank is developing, provisionally dubbed the transition-to-credit risk intensity (TCI). Currently, the most common climate metric for corporates are emissions measures.

"Either absolute emissions — how many tonnes of CO_2 a company emits, putting together Scope 1, 2 and 3 emissions — or emissions intensity — the absolute emissions scaled by a firm's sales revenues or similar," said Salleo. "This works well for understanding the impact of transition risks and it's easy to use —

Overview of supervisory climate stress test approaches

	BdF/ACPR	OeNB (2022)	DNB (2019)	BoE (2022)	ECB (2022)
Bottom-up/Top-down	BU	TD	TD	BU	BU
No. of scenarios	4	2	4	3	7
Scenario horizon(s)	30Y	5Y	5Y	30Y+	1Y, 3Y, 30Y
Risk coverage	Credit risk, counterparty risk and market risk	Credit risk, market risk (revaluation losses for bonds)	Credit risk, market risk (bonds & equities)	Credit risk, market risk, counterparty & litigation risks	Credit risk, market risk, BM, (OpRisk)
B/S assumption (dynamic vs. static)	Static (first 5Y) then dynamic	Static	Static	Static	Static (ST)/dynamic (LT)
Transition risks	Yes	Yes	Yes	Yes	Yes
Physical risks	Yes	No	No	Yes	Yes
Institutions covered	Banks and insurers	SIs + LSIs	Banks, insurers, pension funds	Banks and insurers	Banks

Source: ACPR

because if a firm has a lot of direct or indirect emissions, you can see what an increase in carbon costs on the firm will be — but it doesn't necessarily translate very well into financials.

"What people have been doing so far is basically measuring the intensity of emissions in loans — instead of dividing your borrower's emissions by revenues, you divide it by loans. However, the link from that to what the impact is on the risk for the bank is not straightforward at all."

Salleo gave the example of a bank lending to a company that is a heavy polluter but that is largely self-financing and has very few borrowings. He noted that while the company may have a very high emissions-to-loans ratio that could on that basis appear to imply problems for the bank, the risk is in fact very low, because the company has decent profitability and very low leverage.

"So you're completely off the mark for understanding the climate change-related risk for a bank," said Salleo. "What you're measuring with the standard measure of emissions over loans is how much the bank is financing emissions, which is important for industrial policy and regulators who want to incentivise banks to move their portfolios from brown to green companies, but it doesn't say anything to risk management or to supervisors concerned about climate change risk in a bank portfolio — actually it can be very misleading.

"So we've developed an alternative measures, which has the limitations of simple measures, but at least it has the benefit of being simple, intuitive and robust, and easy to calculate."

The TCI score is emissions divided by loans, multiplied by the probability of default. In Salleo's example, while the emissions over loans would be high, the probability of default would be very low.

"You will get a number that takes into account both the emissions intensity — which is a relevant parameter, for example, should there be an increase in carbon taxes, and hence a good measure of the potential risk of the firm — but also a measure of the risk of the firm that comes from the rest of its balance sheet, which is anyway the most important driver.

"The key insight here," he added, "is that we have to distinguish between the two concepts: the extent to which banks are financing emissions; and how much risk they hold that comes from the emissions they are financing. These are separate concepts that need separate measures."

While the metric currently addresses transition risk, Salleo said it could conceptually be extended to physical risk, and that his team is working with colleagues in supervision to refine the measure.

Capital questions

Asked his view on capital add-ons to reflect climate risks in the Pillar 1 and/or Pillar 2 framework, as well as the concept of a green supporting factor, Salleo reiterated that he was answering in a personal capacity and not reflecting the views of the ECB.

"I'm not entirely sure that capital measures are the most appropriate way of dealing with this type of risk," he said. "Traditional risk, perhaps, but physical risk is a typical case of tail risk, and I'm not sure that tail risk is best dealt with via capital measures."

Salleo noted that there has been discussion about concentration measures as way of dealing with such risks and that this could make more sense.

He said he did not have a strong view about whether Pillar 1 or 2 could be more appropriate.

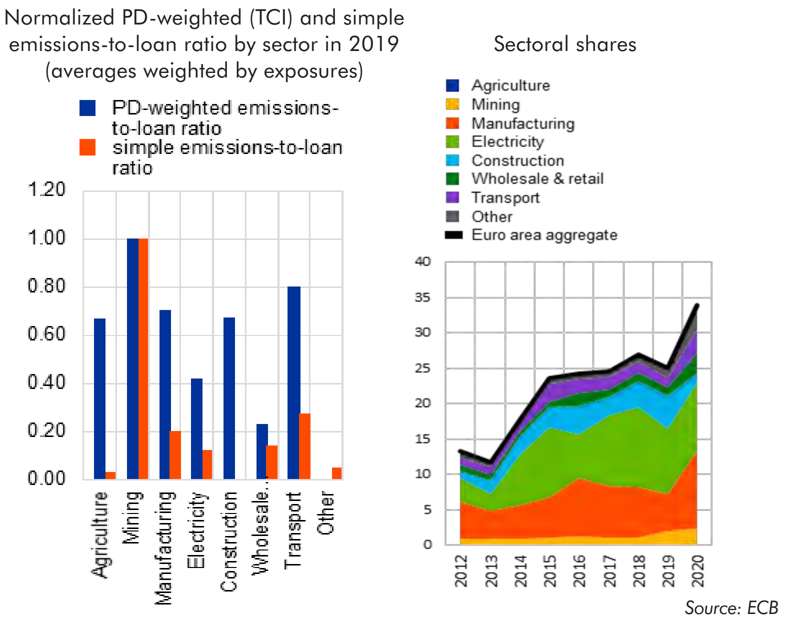
"What is important," he added, "is that climate risk is one of many types of risk, and banks should just put it in their overall risk assessment. It shouldn't be that they do the regular things, and then do this as an add-on; it should just be seamlessly put into everything else. If you look at if from this perspective, it becomes a bit easier to understand where you want to put it.

"So, in a nutshell, I think we have to reflect further on whether more capital to cover this type of risk is the better answer from the perspective of ensuring the resilience of banks."

Regarding green supporting or brown penalising factors to incentivise banks to decrease financing to polluters, Salleo said that the concepts are interesting, but that they should be tested and simulated to see what introducing such capital requirements would mean in practice.

"I don't have strong views," he said, "I tend to think in terms of empirical answers and practical responses. If you see that they would need to be set very high to have an impact, then maybe that's not the right way of going." ●

PD-weighted measures of emissions can capture the financial component of banks' climate risks



Source: ECB

The issuer perspective
A work in progress

Sustainability is increasingly being put at the core of banks' business strategies, but ESG integration is easier said than done. Correctly capturing climate risks, calculating sector decarbonisation pathways, and the perennial issue of data are among the challenges to be tackled alongside regulatory demands. Banks are nevertheless pressing on with individual and joint initiatives targeting net zero.

Panel participants:

- Sharon Bloemendal, global ESG lead, group treasury, ING
- Eric Campos, CSR head, Crédit Agricole SA, and CEO, Grameen Crédit Agricole Foundation
- Patrick Steeg, head of ALM, Landesbank Baden-Württemberg

Moderators:

- Laurent Adoult, head of sustainable banking, FIs & SSAs, Europe, Crédit Agricole CIB
- Cécile Bidet, head of FIG DCM, Crédit Agricole CIB

Cécile Bidet, Crédit Agricole CIB: In July, we had the results of the first ever ECB climate stress test. According to the ECB, despite some progress having been made, banks were still lagging behind in several areas. What is your view on how climate risk is being integrated into bank business models, including risk and capital management?

Eric Campos, Crédit Agricole: This is a very interesting question, because it allows us to talk about the main point when it comes to climate risk, which is the fact that this is a work in progress. There is clearly a long way to go in defining just what climate stress tests for the banking sector should involve. Why? Because the scope of this ambition, which is to integrate climate into the banking business, is huge. It isn't just about an Excel sheet or about experts; it's a real revolution in the banking system. It's about tools, methods, expertise, competencies, governance, from top to bottom and vice versa. This means that, for instance, board directors should be able to talk about climate risk and the stress test results and integrate these parameters into strategy, but also that the commercial front should also be knowledgeable or, ideally, expert in climate matters. So it's not about spreadsheets; it's also about human beings, how everyone in the bank can talk about how climate is being part of the way we do business.

Stress tests require a solid methodology and reliable data. Today, we have to admit that neither of these are robust. Again, it's a work in progress. Methodologies are still evolving and the set of non-financial data is very limited. We cannot ask banks to produce stable data and results in this unstable environment. So this is very complicated. We do our best, of course, to integrate climate into the business, but we have to admit that this is a long journey.

Patrick Steeg, LBBW: We've had an ESG strategy at LBBW for almost for 30 years, so it's nothing really new to us. For example, implementing ESG across credit processes. But the developments we've seen over the last five years in particular have been tremendous, with the ESG capital markets developing greatly and a lot of new issues coming to market — I think there are hardly any issuers who have not issued a green, social or sustainability-linked bond. At the same time, also with the growth in regulation, all banks have taken up ESG as one of the core pillars in their individual business strategies.

In July this year, as you mentioned, we saw the results of the ECB climate stress test, and according to the ECB, some progress is being made, but there are still some blank spots that need to be filled. That's because, as Eric said, the industry is still in the process of identifying and analysing the various implications of climate risk — it is indeed a work in progress. Data availability from companies in the real economy is often still rudimentary or being worked on, and banks are therefore still fairly dependent

Laurent Adoult, Crédit Agricole CIB: 'There is increasing discussion about the introduction of a link between climate risk and capital requirements'

on data providers and models. Risk and capital management models should ideally already reflect all risks, including climate risks, but of course the models need to undergo regular reviews and adjustments to take into account new findings in that field.

We have already integrated ESG risk into the management of LBBW. The first step was implementing a scorecard and reporting. The second was making ESG an additional component in the sector report that we publish. And the third is a traffic light review and ESG checklist that you can also find in our sustainability report. ESG was also integrated as an additional component in an internal stress test for market price risk. That's already what we have already done. One further step has been to define sector pathways. Some have already been completed, notably utilities and automotive OEMs. And we also publish those details in our investor presentation. So ESG is definitely, let's say, in the DNA of the bank.

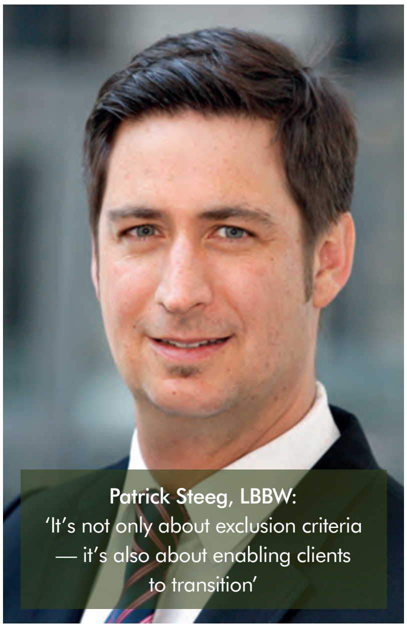
We participated in this year's ECB climate stress test. Like the other banks, we were asked to calculate and evaluate projections up to the year 2050 under different scenarios. We received a good rating from the ECB, which positively highlighted both the integration of sustainability via internal climate stress tests in the stress test framework, and the methodology used for the projections.

Bidet, Crédit Agricole CIB: Do you think that the climate stress test will also impact your lending? Will you reduce your exposure to industries that are too exposed to physical risk or transition risk, for instance?

Steeg, LBBW: In general, I would say ESG will definitely change the way banks go about lending. At LBBW, we are currently in the process of a deep dive analysis of our credit portfolio, working on sector-specific decarbonisation plans. As I said, we have already done two, for utilities and automotive OEMs. And the focus, initially, is on those sectors that generate the most CO_2. The goal is to implement the voluntary climate protection plan for the financial sector in Germany, to make the portfolio compliant with the Paris Agreement, and to be an active player in the transformation process. So it's not only about exclusion criteria — these are definitely very helpful at times, but it's also about enabling clients to transition. That's the most important task here, enabling clients to transform their businesses towards less carbon intensive ways of doing business and being a banking partner for such clients.

Laurent Adoult, Crédit Agricole CIB: There is increasing discussion about the introduction of a link between climate risk and capital requirements. Some NGOs and politicians are pushing to use capital requirements as a tool to incentivize banks to finance the energy transition, in other words, a regulatory approach such as the green supporting or brown penalising factor, but also the systemic risk buffer limits and potential inclusion in Pillar 2 requirements. What do you think of this? Do you welcome it, or do you think it could be ineffective or potentially even dangerous?

Steeg, LBBW: In my view, capital requirements should always reflect as many parameters as possible, including certain climate risks that are measurable and identifiable. However, the industry is still in the process of identifying and analys-



Patrick Steeg, LBBW: 'It's not only about exclusion criteria — it's also about enabling clients to transition'

ing the various implications of climate risk. So as long as climate-related risks are not covered in the traditional risk models of banks, a green supporting or brown penalising factor could be helpful. The steering of loan flows via such factors should nevertheless be viewed rather critically.

Campos, Crédit Agricole: Firstly, we have to admit that climate risk is there, without a doubt — climate change will impact the economy, and the huge transformation that we have to follow and support should change the way we work with our clients.

Secondly, the main issue that we have to tackle is the transition. Transition is how you support a company get from point A to point B whereby the business model of the company is being decarbonised. If we succeed in doing that, we will have succeeded in playing the true role of the banking sector — transition.

Thirdly, Basel II is not about political pressure; it is about the real assessment of risk. To me, we are not on the way to including climate in Basel II with brown penalising or green weighting factors, because we do not have the real methods to do so, even though climate is a significant risk. So that's why, for the time being, we prefer to have a credit rating approach, tackling two issues: the credit aspect on a client by client basis, plus the net zero scenario following the decarbonisation path of the sector. By using these two drivers, I think that we will play the right role for transition purposes.

Bidet, Crédit Agricole CIB: Many banks have joined the Net Zero Banking Alliance, while under the Pillar 3 ESG requirements, supervisors are also asking banks to calculate their carbon footprint. What is your view on the calculation of financed emissions, i.e. Scope 3, and the challenges in building a strategy to get to net zero?

Sharon Bloemendal, ING: We all know that Scope 3 emissions are on average 700 times higher than a financial institution's direct emissions, so the increasing focus on Scope 3 emissions is vital.

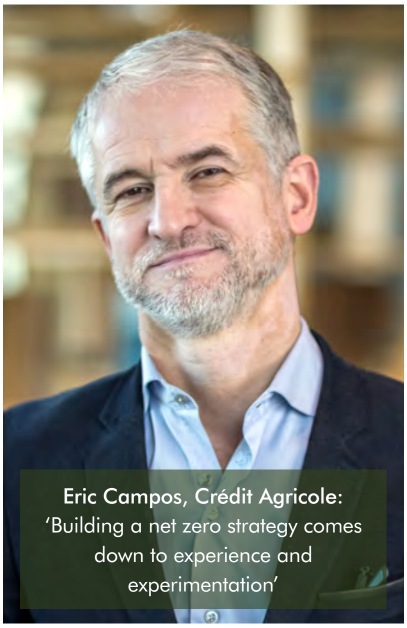
Like a few other banks, ING joined the Net Zero Banking Alliance last year, which means we will steer our loan book towards keeping the rise in temperatures below 1.5 degrees Celsius.

On the one hand, the pathway to net zero will bring many opportunities in financing new technology areas, like carbon capture, energy storage, or hydrogen.

But to come to what the difficulties are in building a net zero trajectory, the financial services sector would benefit from greater standardisation of the climate calculation methods per sector. Currently, they differ per sector, and hence the comparability of those different calculations is not always clear. So we call for global viable standards for banks to measure the climate alignment of their loans books and the climate risks. This may require a regulatory push, with the authorities deciding on the calculation method to be used and everyone agreeing to adopt that same method. But that needs time and currently it's baby steps that are being taken.

Meanwhile, you also have to set intermediate targets on the pathway to net zero, and ING will publish these intermediate targets this month.

Campos, Crédit Agricole: Building a net zero strategy comes down to experience and experimentation. We have been calculating our lending footprints



Eric Campos, Crédit Agricole: 'Building a net zero strategy comes down to experience and experimentation'

since 2011, initially using a top-down approach. When we joined the Net Zero Banking Alliance, we decided to move in terms of methodology to the PCAF bottom-up method addressing Scope 3 emissions. Last year we launched a huge exercise regarding the net zero trajectory for 10 sectors, and by the end of this year we will issue these for several sectors, hopefully five or six, with the rest next year.

The difficulty we face is moving from scientific baselines — we take into account the net zero 2050 scenarios from the International Energy Agency — to sector baselines. To do so, we have to work with the relevant stakeholders in the various sectors to consider the relevant technologies, substitutes and alternative products and solutions. Why? Because, as I said, net zero is not an Excel approach, but a real action plan, how to transition from point A to point B. This is not a question of drawing a straight line from 100 to zero, but translating the decarbonisation of the sector into an action plan. And such an action plan needs to be out with all the banking business lines, and we are doing this each sector.

Besides this translation of baselines, the second challenge we face is the granularity of data for each sector — this is a very complicated issue. We don't have enough data internally to build a real scenario, so we have to work with external data, and even then, we don't have enough data. So it's a long journey. Furthermore, some sectors face big difficulties in seeing how to move their business models — aerospace and shipping are good examples of this. We are, of course, working with these sectors to find a good action plan.

Bidet, Crédit Agricole CIB: Coming back to the issue Sharon raised, how comparable are the commitments? How easy is it for investors to have a clear picture of what the different banks are doing?

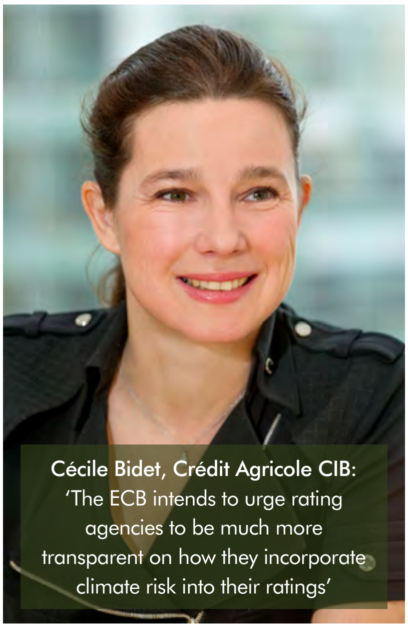
Campos, Crédit Agricole: The difficulty is in communicating something that is very complicated — complicated because it is necessary to take the time to understand the trajectories. This is true for banking, for asset management, for insurance.

Comparability is indeed key and we have to use the same methods. One thing I would say to all the coalitions is: be tough on comparability. Otherwise, there is a risk of green-washing.

Adoult, Crédit Agricole CIB: We have seen a huge wave of ESG disclosure requirements recently, mainly coming from EU regulations — Article 8 of the Taxonomy Regulation, Pillar 3 ESG, etc. What are the key difficulties that you face as a bank in disclosing the relevant data? And to what extent will it really help transparency in the market?

Steeg, LBBW: In general, a certain degree of regulation is helpful, especially when it comes to transparency and comparability. However, these requirements should be designed in a way that is feasible. As an example, we are issuing green bonds to retail and since 2 August they have needed to be MiFID 2-compliant, but if you compare the timeline and targets of MiFID and the Green Bond Standard, they are not synchronised. So sometimes there are contradictions between the regulations and this shouldn't happen.

Secondly, let's talk about the Green Asset Ratio. This is certainly a metric



Cécile Bidet, Crédit Agricole CIB: 'The ECB intends to urge rating agencies to be much more transparent on how they incorporate climate risk into their ratings'

that can be used when assessing the level of greenness of a bank and be used to compare one to another. However, there are other metrics that could make more sense. For example, transition paths, decarbonisation paths, what we talked about earlier, and interim goals that give a specific stimulus and are not only a figure that is reported once or twice a year. As Eric described it: it's not about taking point A and point B and then extrapolating from one to the other; you need to have those transition paths and plans, and you need to have certain timelines in order to achieve your goals. So the GAR is positive, but it's just a beginning. Again, this is a work in progress, and I'm sure that in the near future there will be adjustments in the metrics and the models to make it even more comparable. So yes, it can help, but there's still some work to do.

Adoult, Crédit Agricole CIB: Sharon, what's your view? Is calculating your GAR an easy exercise?

Bloemendal, ING: To start with, I am in favour of setting up a uniform classification scheme. The market needs regulatory pressure to increase green transition efforts, and that's what I've witnessed since the announcement of the EU Taxonomy: efforts in green assets, products and also in net zero commitments have heavily increased. However, I don't think it helped that nuclear and gas were included in the Taxonomy, because this is leading to more fragmented use of it, preventing it from becoming a gold standard. Everybody is using a piece of it and saying, this is what they see as green, and this is what we see as green.

ING is a globally operating bank. The EU Taxonomy's narrow scope causes difficulties for us as an issuer in aligning our green bond framework with the Taxonomy, while the assets in our eligible green loan portfolio are sustainable but could be potentially ineligible for the GAR. This greatly undermines its use for comparing one bank to another. An EU-based bank offering only mortgages will achieve a higher GAR than a bank operating globally that, for example, has a lot of renewable energy projects outside the EU, which have a higher impact on CO_2 emissions than the mortgages. It is very dependent on how banks are running their business. So we need to expand the GAR and I hope we see it done on a global basis. It would be more helpful if the EU could work towards a globally accepted framework.

Bidet, Crédit Agricole CIB: Returning to credit issues, within the banking sector, Moody's, S&P and Fitch have taken very few rating actions driven by ESG factors. But the ECB intends to urge rating agencies to be much more transparent on how they incorporate climate risk into their ratings. What's your view on this topic?

Campos, Crédit Agricole: We said that transparency and comparability are key. If we want to be able to fully integrate ESG ratings, we need to understand their methodologies in depth. At the moment, ESG ratings are like black boxes, and we cannot rely on them, as we cannot compare ratings coming from different rating agencies. The rating agencies all have their specific methodologies and there are no common standards. This naturally leads to discrepancies between their ratings of the same company. For instance, if we compare a company that does not use any energy coming from coal with another for whom a large proportion of their energy comes from coal, we can find exactly the same ratings. This raises questions over this type of rating. So we have to open the black boxes to be able to understand and compare them, perhaps taking into account some of their points while ignoring others. If we want to integrate ESG ratings, this is the right way to go about it.

Steeg, LBBW: If credit ratings directly incorporated ESG factors, that would reflect the economic impact of these factors. But in contrast to credit rating agencies, ESG rating agencies differ considerably in their methodologies. Every ESG rating agency develops its own methodology and focuses on different parts of the E, S and G dimensions. So it is still very difficult to compare ESG ratings from different agencies to each other, and that adds a lot more complexity. So I fully agree with Eric's words.

Adoult, Crédit Agricole CIB: Sharon, I believe you have taken some steps in updating your framework to align it with the Taxonomy. Can you share your experiences of how that is going? And how you are aligning your lending activities to EU Taxonomy?

Bloemendal, ING: Yes, we have tried to align our eligible green loan portfolio with the Taxonomy as much as possible, but not all the assets we fund and will fund in the future could fulfil the technical screening criteria or the do no significant harm criteria — that was the case for the assets outside the EU in particular. So that was a big hurdle. But as I said earlier, those assets are predominantly renewable assets that are more impactful than the other assets in the portfolio in respect of CO_2 emissions, so we would rather keep them in the eligible green loan portfolio — a renewable energy project isn't less green than another project just because it's outside the EU. We will just be transparent and straight with our green bond investors about our reasoning.

Another hurdle is that we foresee the EU Taxonomy evolving over time, and that means that we expect to update our green bond framework on an annual basis as of now. We are also advising and assisting clients in how to report under the Green Asset Ratio, CSRD and NFRD as they come into play, and we anticipate an increase in our eligible green loan portfolio to include the respective assets.

Bidet, Crédit Agricole CIB: Looking now at the liability side, banks are increasingly offering green or social deposit solutions. Could this be a threat to the green/social bond market? And do you anticipate some innovative developments on the green, social, and sustainable bond market, or in sustainability-linked bonds?

Sharon Bloemendal, ING: 'I think the social bond world will increase tremendously in the coming years'

Bloemendal, ING: ING is committed to supporting the transition of our clients around the world. We do this via various financial instruments, such as green loans, sustainable improvement loans, green bonds, and, maybe in the future, green deposits. I do not see that as a threat, as it will mean that the asset side is increasing as well, because you cannot offer green deposits if you don't have the green assets. I therefore see that as a very welcome diversifying instrument to add to the universe and support the transition. And I also don't see it as a competition, whether there are more green bonds or more green deposits; you just need to serve your clients in the best way possible, and if that's by offering green deposits as well, that's great. But start with the green assets, in my opinion.

Sustainability-linked bonds for financial institutions aren't taking off. We all know that this is because the EBA is not keen on those instruments. I also think that as a bank, with the use of proceeds format you have a better story. I think the social bond world will increase tremendously in the coming years as well, and I welcome that, because it's not yet the biggest market.

Campos, Crédit Agricole: Green deposits offer welcome competition to GSS bonds. The more demand we have for green or social investments, the more we are incentivized to develop our lending to green and social projects, and the more we can increase the liquidity discount for green projects.

Innovation in GSS bonds keeps going, for sure. CACIB has been at the forefront of innovations, with sustainability linked-loans, the conversion of bond stock into green for mortgage companies, and solidarity bonds in Taiwan, where a portion of the economics is given to NGOs, for example. But we don't seek innovation for the sake of innovation. Our ambition is innovation that can have an impact, because the credibility of GSS bonds is their measurable impact. ●

Seat of Crédit Agricole SA, Montrouge, Paris

The investor perspective
Seeking clarity and impact

Investors face the parallel tasks of weighing both the impact of their investments on sustainability goals and the impact of climate change on their holdings. To this end, they are calling for greater disclosure and comparability, and favouring those credits leading the way in tackling the challenges facing the world. But while issuer-level considerations are increasingly in focus, GSS bonds and their pricing remain under scrutiny.

Panel participants:

- Kristian Hefting, senior portfolio manager, Danske Bank Asset Management
- Stéphane Herndl, head of fundamental and sustainable analysis, La Banque Postale Asset Management
- Michael Liller, senior portfolio manager, DWS
- Caspar van Grafhorst, analyst, senior banking credit, NN Investment Partners

Moderators:

- Gwenaëlle Lereste, senior credit analyst, bank analyst, Crédit Agricole CIB
- Karl Moll, head of FI credit sales for Germany, Austria, Netherlands and Nordics, Crédit Agricole CIB

Gwenaëlle Lereste, Crédit Agricole CIB: The vast majority of asset owners have made some sustainability commitments — the Net Zero Asset Managers initiative, targeted amounts of green bond purchases, etc. How do such commitments affect your asset allocation and investment decisions? And when making investment decisions, how do you balance greenness with pricing?

Stéphane Herndl, La Banque Postale Asset Management: As we've heard in the various panels today, sustainability is taking centre stage for the whole financial sector, including not just ourselves but the entire asset management industry.

To answer your question, you first need to answer a preliminary question, which is how you incorporate ESG, or what is the type of ESG that you want to do. There are essentially two ways to look at it. The first is that you can look at ESG from an ethical perspective: you can define minimum standards that you want companies to abide by, and decide what sectors you don't want to be involved in. It's the philosophical approach, if I can put it like that. And then there's the other approach to ESG, which is what I would call financial materiality: which companies are best or least well placed to tackle, for instance, climate risk, transition risk; what changes in regulation or customers' expectations do you anticipate; and how are companies able to deploy capex, for instance, to adapt their business models. So these are the two ways to look at ESG, and we see very varying approaches among asset managers.

What we've decided to do is to combine both, which is the so-called concept of double materiality. I think the two approaches are complementary. The first, the ethical or philosophical aspect, will define our investible universe. As I said, there are sectors we don't want to be involved in, there are minimum standards that we want to abide by. I should stress that in this respect our company is pretty strict compared with the asset management industry: we've committed to 90% alignment of our eligible portfolio to net zero by 2030. Once this universe has been defined, we can look at the second aforementioned aspect, i.e. the materiality differential: what companies do we want to be invested in, and at which level do we want to be investing.

So to sum up in answer to your question, the greenness or the ethical aspect defines the universe for us, whereas the pricing element relates to how we do our picking and bank selection within this constrained universe we have constructed.

Kristian Hefting, Danske: We have committed to the Net Zero Asset Managers initiative, and have set interim targets committing to a 50% reduction in the weighted average carbon intensity of our portfolio by 2030. Besides that, we have set a target to engage with the top 100 largest emitters in our portfolios on their transition plans by 2025.

How do those targets filter into our investment decisions? Well, we have a very strong focus on the transition plans of the companies we invest in when it comes to Scope 1, 2, and material Scope 3 emissions. And then we have developed a net zero investment framework, where we evaluate each company we invest in alongside six dimensions relating to their net zero alignment. We look at their ambition — do they have a target? And do they have short and medium term targets? We look at their current performance in terms of emissions intensity. We look at the quality of their disclosure on Scope 1, 2 and 3 emissions. And when we talk about banks, that's especially the financed emissions, of course. Furthermore, we will look at their decarbonisation strategy, and how that strategy is aligned to their capital allocation framework, so to speak. Simply put, we are more prone to invest in companies that perform well on these dimensions and to engage with companies that score less well. And again, when it comes to banks, we like those that commit to net zero, that demonstrate good disclosure on financed emissions, and have a critical decarbonisation strategy. Unfortunately, it is indeed still early days when it comes to this area and we acknowledge that, but we really push banks on this agenda and we don't think we're compromising anything here if we invest in the banks that are leading the pack.

In terms of pricing differences, we can talk about the greenium in green bonds and I believe we will discuss that later.

Caspar van Grafhorst, NN IP: First of all, we have a dedicated green team that labels every bond, whether it's green, social or sustainable. Alongside that, we have specific portfolios where we have minimum percentages for how much should be sustainable, which is related to the relevant legislation there. If companies have a controversy score of four or higher, they are simply forbidden for the sustainable portfolios — there are no such restrictions for the normal portfolios.

But on balance, it's all down to relative value. If it's a green bond, we adjust for that compared to a non-green bond. And then we determine if there is value in it compared to what we see as fair value. If it's expensive, then we're not going to buy it, not for the sustainable portfolios, but also not for the normal portfolios. Otherwise, it's certainly an option to put it into our portfolios.

Karl Moll, Crédit Agricole CIB: Let's talk about the first ECB climate stress test. We have seen substantial progress being made by banks, but the results have shown that they are not sufficiently embedding climate risk into their models. What's your assessment of how banks are doing based on the outcome of the stress test? Is the level of efforts and disclosures sufficient?

Michael Liller, DWS: The results of the stress test are not surprising for those of us who are looking at banks in their day to day business. At DWS, we did a bigger survey at the beginning of this year, half a year before the climate stress test, and we basically got the same results that the ECB showed, essentially that banks partly are not aware how to incorporate all the variables into their credit risk models. But what I would stress is that data quality and the extent of data available is a big problem here going forward. Looking at the mortgage market in Germany, for example, most banks don't even know the climate level of the building on which the loan is secured.

I think this exercise is a good starting point, but the ECB is maybe trying to take two steps at once by trying to analyse risks that within the banks are not measurable or where the models are not yet sufficiently sophisticated because it is not clear which variables to incorporate and on what time basis. Getting the weather forecast right for next week is already a challenge; doing so for 10 years' hence is even harder. Ultimately, it was clear from the stress test that fundamental information is missing at the moment.

Herndl, LBP AM: I largely agree with Michael. You can look at it as a glass half

Kristian Hefting, Danske Bank AM: 'It is indeed still early days and we acknowledge that, but we really push banks on this agenda'

empty, saying banks are not prepared and only aggregated data is available, so there's not a lot that we can actually take away from this stress test. I would also question the €70bn of losses under the scenario — this seems pretty low in the context of the of the European banking system as a whole, given how much it has been stressed that we need to take that risk into consideration.

But I would be tempted to look at it the other way around, as a glass half full. This is the first endeavour, we had to start somewhere, we basically start from scratch. As has been said, there's clearly a problem obtaining accurate data, corporates have to disclose their information only as of 2023, so proxies are being relied on and it's difficult to get more than that.

Where I would be cautiously optimistic is in the fact that this exercise will trigger changes. The mere fact that we have started having a stress test will push banks to better incorporate this risk in origination, in capital planning, in their risk appetite. And also, critically, it will force them to get the right skills on board and set up the right teams to look at this issue. If that works, then this should help the banks adapt their strategies, exit some sectors which they cannot keep, and try to work along with their clients towards adaptation or transition. That's why I would be cautiously optimistic, because I think it's going to create a shift in the sector.

Van Grafhorst, NN IP: I concur on the data-gathering exercise. That's probably not only an issue for the banks, but also the regulator. Some banks told me that they question whether the regulator is really already up to speed on this front and knows what they're doing — they said that sometimes it feels that they have to teach the regulator what to do and what to say. That could lead to multiple ideas or models. The question is, will there in the end be a single model imposed by the regulator and agreed upon by all the banks? That is potentially a concern. But the effort is good, and as has been said, you need to start somewhere. And when it comes to disclosure, yes, it's understandably very limited as we're only in the very early days on this path towards better climate-aligned strategies among the banks and the regulators.

Lereste, Crédit Agricole CIB: We have seen more and more banks stepping up their decarbonisation strategies and pathways, joining the Net Zero Banking Alliance and the Science-Based Targets initiative (SBTi). How do you judge the various announcements so far? And how do you embed in the asset allocation and investment decision the decarbonisation strategies highlighted by banks?

Hefting, Danske: If I can just follow up quickly up on the climate stress test as a prelude to my answer. The climate stress test was all about what Stéphane discussed around financial materiality, what impact climate change will have on the banks, their expected losses, and so on. While that is important, banks have an incentive to get that right by themselves. I think the most interesting thing to discuss — and I'm now leading into the question you asked, Gwen — is decarbonisation strategies and related issues. As we've heard, a large number of banks have joined the Net Zero Banking Alliance, and, of course, we see that as very positive — we consider that banks have a big role to play here in terms of helping their clients to reduce their emissions going forward. But there are still many banks that have not set targets yet, or are in the very early stages when it comes to calculating financed emissions, transition pathways and so on. Among those who have already done this, there are still big differences in quality when it comes to how much of their portfolios are included, the ambitiousness of the targets, and the strategy they are employing to reach the targets. And I think that's actually the most important part. While we still acknowledge that it's early days and it's difficult, we really urge banks to improve in this area. And we also urge them to have their decarbonisation plans verified by a third party validator — we've already discussed the SBTi being one of those.

Caspar van Grafhorst, NN IP: 'Will there in the end be a single model imposed by the regulator and agreed upon by all the banks?'

So that was a long introduction to answer your question on how it influences our investment decisions. It is a key input into our investment decisions. As I mentioned earlier, we have developed this net zero investment framework, and we evaluate banks within this framework, just as we do for non-financial issuers. How high are the requirements that we set for banks and other issuers really depends on the type of fund — we are managing both Article 8 and Article 9 funds, and for the Article 9 funds, especially for our green bond fund strategy, we set a higher threshold than for the Article 8 funds. But it is, again, early days, and we do face huge difficulties, just like the banks, in terms of getting all the data right.

Van Grafhorst, NN IP: We see it as a good step that most, if not all banks have joined in the alliances committing to net zero. But I would stress the need to split it in two: you have Scope 1 and 2 on the one hand, and Scope 3 on the other. Given the nature of banks, managing Scope 1 and 2 is, in our view, relatively easy. Scope 3 is a totally different ballgame. That's about what their clients are doing, and basically all the banks that we talk to that are still in data-gathering mode. I'm afraid that banks need at least one or two years or simply to get to a starting point where they can say, we now know what our clients are doing to achieve the energy transition, gathering data either from their clients or buying in third party data. On the corporate side, we already see banks working on it, seeking the data but also in their day to day business, trying to incentivise clients via pricing to take up sustainable products and make a good start on the energy transition. Retail is another thing altogether. When it comes to the mortgage portfolio, it's relatively easy to achieve a net zero commitment for newly-built houses. But for the backlog, the old houses, it's going to be really difficult to achieve anything there, given that it's probably way too expensive for most people to make their house net zero or sustainable. Government subsidies are probably the only way to make that affordable for them. So I don't expect much progress there.

This Scope 3 part is probably the most important one in deciding whether or not you should be invested in a bank, and that's why we try to get a view on the decarbonisation strategies.

Moll, Crédit Agricole: Coming back to the ECB's climate stress test, its output will be integrated into the Supervisory Review and Evaluation Process using a quite qualitative approach. What's your view on a climate risk capital add-on? And what about the introduction of a green supporting factor? Would these inform your investment decisions when it comes to banks?

Van Grafhorst, NN IP: In time, it would be a very good decision to incorporate this climate risk in either the Pillar 1 or the Pillar 2 framework — it probably still needs a few years before being implemented.

The SREP analysis, the capital framework and the buffers that come out of that are a very important part of our investment decisions determining which banks we will or will not invest in.

Herndl, LBP AM: On the first point regarding a possible capital add-on, climate risk is a growing factor that we need to incorporate in one way or another in the capital framework — it is a new risk, and risks need to be taken into consideration in the capital of banks. So there's no question there. I'm more in favour of incorporating it as a Pillar 2 requirement then as a Pillar 1, because at this stage, again, because of data quality, it's very difficult to set the right level in a quantitative process across the board for all banks. It will also help us differentiate those banks that are laggards, where the ECB as supervisor has determined that banks are just too exposed compared to others, for instance, or that they have just not taken the necessary steps to incorporate that risk. So there is an element of information that you can derive from the Pillar 2 add-ons that we could expect sometime in November when the SREP update letters will be sent, and that will feed through to our investment process and decisions. We have made our own assessment of what types of exposures banks have on a relative basis and where we see risks, but we may have some surprises given that the ECB has more detailed information.

On green supporting or brown penalising factors, I'm against a green supporting factor. I'm OK with a brown penalising factor subject to it being adequately framed — there is the issue of being able to target it and calibrate it adequately. Why am I against a green supporting factor? Because it does not really look like a capital requirement; it looks more like a monetary policy tool for the ECB to make sure that they can channel the money in order to support the green transition. To be clear, I'm not saying we should not support the green transition, but it should not come at the expense of financial stability and the stability of banks — these are two separate things and that's simply what I want to say. On the brown penalising factor, if it is well targeted and well calibrated, it's OK, because we know that there are some assets that will become stranded assets at some point because of climate risk, which is accelerating, because of regulation, and because of changes in the expectations of some customers. The estimated credit risk of these assets is likely to increase, so they should have more capital in front of them.

Lereste, Crédit Agricole CIB: Let's turn to the Taxonomy and Green Asset Ratio (GAR). Once formally adopted, Article 8 of the EU regulation will require banks to report the GAR, which is being considered by the EBA as *the* relevant KPI. What are your views on the GAR? What do you expect in terms of level? And do you consider the GAR as helpful to your investment considerations?

Liller, DWS: As with the stress test and the efforts being made to reflect its results in the SREP, the GAR is just another step in getting some information across to investors, and towards getting a starting point for some standardised reporting numbers.

The problem with the GAR is that it's black and white, and it's a backward-looking measure with too many shortcomings and too many exceptions. For starters, small and medium-sized enterprises can never be counted as green. And then the level of the GAR ultimately comes down to the business model of the bank. For example, if you take a big mainly retail-focused Spanish lender, roughly 90% its assets are covered, whereas for a French bank with a bigger trading book or more SMEs on its balance sheet, the scope of assets for the GAR, assets that are Taxonomy-eligible, is a lot smaller. So we basically see GARs that relate to the historical business model of the bank.

There should be a lot more effort towards standardising KPIs for what banks


Michael Liller, DWS:
'The level of the GAR ultimately comes down to the business model of the bank'

need to evaluate during the loan process. Is that a sustainable investment? Is it going to reduce carbon emissions? Is it on a transitional path? Then it doesn't matter if it's an SME or retail — just try to get the information at hand rather than going through the current loan portfolio and saying that each loan is green or brown. So I would rather focus on more forward-looking measures where you can see progress within the loan portfolio, not black and white measures where you also have so many exceptions that ultimately you have to change your business model to get a high green asset ratio. Transitional ratios reflecting changes in climate emissions or some such would be a better source to really monitor progress.

It all starts with data quality, and banks need to try to get this information when they give out a loan — you need to start now, you need to start quickly, but clearly you need to act on the new stuff, not the old stuff.

Hefting, Danske: Michael really hit the nail right on the head. We see many of the same issues with the GAR that he touched upon. I will not dare to come up with a guess for the GAR levels we will see going forward, but echo Michael in saying that the focus should really be on the transition. I was actually happy to hear from the EBA presentation that that's also part of the thinking behind the GAR. We welcome any general regulatory push within this area and, of course, the GAR is a part of that. But I do fear a little that there will be a bit too much focus on this ratio compared to how relevant we see it as being.

Herndl, LBP AM: Simply put, you cannot sum up a green strategy and green exposures in just a single ratio — in the same way that for risk management in general, you do not rely on a single indicator to assess a company. In line with earlier comments, there is a problem of comparability of data. Sharon at ING made the point about not being able to include foreign assets in the ratio, for example. More broadly speaking, I'm fully in line with the fact that you need to understand the green strategy of the company. To play devil's advocate, you could argue that having just the one ratio could lead some banks to push for as high a ratio as possible just for their image — even if it's not a binding ratio — and in the end that could lead to a mispricing of green assets. So we need to be very careful about this type of ratio when you look at it from a financial performance standpoint. If you look at it from an ethical point of view, it may be a ratio that makes sense because it would support the green transition. But again, as credit analysts we tend to look at it from the other angle, i.e. financial performance.

Moll, Crédit Agricole CIB: Let's talk about the greenium, something particularly pertinent to primary transactions. We have seen green senior issuance pricing in the high single-digits tighter than some conventional bonds, whereas a greenium is not really apparent in covered bonds. What's your view? How do you see the greenium evolving in the future?

Hefting, Danske: That's a difficult question. In the short to medium term, I don't see the greenium going anywhere. It's a result of supply and demand, and as we've seen recently, there is still significant demand for some of these green transactions in the market. And there are a number of factors supporting this demand going forward. In the last couple of years we've seen an increase in the number of labelled bond funds, and also increased inflow to these

Karl Moll, Crédit Agricole CIB: 'We have seen green senior issuance pricing in the high single-digits tighter than some conventional bonds'

kinds of funds. That could be especially due to the implementation of the SFDR, where many investors are seeing labelled bond funds as a sure-fire way to create an Article 9 fund that cannot be questioned by the regulator. The MiFID 2 ESG rules that we've also discussed today are only adding fuel to that fire. Furthermore, we see a lot of issuers starting to align their green bond frameworks to the Taxonomy and stating that they are going to apply the Green Bond Standard when it arrives. Due to these regulatory developments and forthcoming regulation, investors will appreciate green bonds with a high level of Taxonomy alignment as a way to boost the Taxonomy alignment of their portfolios. That's further supported by the net zero agenda. Last year PCAF had a consultation on how to calculate emissions for green bonds, and also local disclosure guidance on the same subject, where it is permitted to include green bonds with lower CO_2 emissions than non-green bonds from the same issuer. We already see investors using the avoided emissions given in green bond reports as a way of showing that they are making an impact. We invest in green bonds in funds that have a particular green or sustainability focus, and hopefully in the long run this greenium will disappear. That said, as active managers a lot of our return comes from identifying bonds where we see spread compression and less of it from just sitting back and enjoying the carry — that's a mitigating factor, at least.

Liller, DWS: Regarding the lack of a greenium in covered bonds, we see a big distortion in this market due to the ECB's buying of covered bonds. When it comes to covered bonds being labelled as green, our problem is that from a risk perspective, if something goes sour on a covered bond — and I hope we never experience that — we own the same cover pool that includes green assets and brown assets, even if the covered bond has been issued as green funding. So it's very hard for me to accept that distinction. On the senior preferred or senior non-preferred side, you can differentiate more clearly. Here, it comes down to the question, do you see senior non-preferred as funding or as a capital instrument? Looking at a capital instrument, I believe it's very hard to justify a green premium, because ultimately it's there in case the bank gets into trouble. On the other hand, if it's a funding instrument, and its clear where the proceeds are going, a green label is helpful.

As Kristian said, it's a matter of demand, and currently there is a lot of demand for green bonds. We see that every time a new issuer is coming to the market: on a debut green bond, the greenium is more in the higher single-digits than in the lower, but we see green curves evolving and the greenium getting lower and lower — look at some of the bigger French issuers, for example. And with the greening of business models going forward, there will be a strong convergence between the now-issued green bonds and the bonds that will be issued in the future, because in the end, everybody is going in the same direction: there needs to be climate action and this has to occur in banks' loan books. So there's a clear convergence trend and the greenium is a temporary pricing misalignment.

Lereste, Crédit Agricole: The strong demand from investors confirms the importance of sustainable debt. So far senior debt and covered bonds have been the favoured formats, but we've also seen sustainable subordinated debt gaining momentum — from Bank of Ireland, ING and SG, for example — although some reluctance on green Additional Tier 1 has

been evident. What are your opinions on sustainable debt developments as a whole? Do you see differences between covered and senior on the one hand, and Tier 2 and AT1 on the other? And what would be the key considerations when investing in a sustainable bank capital instrument?

Van Grafhorst, NN IP: Starting with covered, that's probably the most straightforward: if it's green buildings, then it should be fine.

Our green bond team will check each and every bond to see if it is green according to their standards. They will consider whether the use of proceeds method being implemented correctly, with an allocation report and an annual impact report signed off by auditors so you can see what the money is being used for and what the impact is.

If they agree that it is correctly labelled as a green bond, then their view is that it doesn't really matter from what point in the capital structure it is issued, and we agree on that.

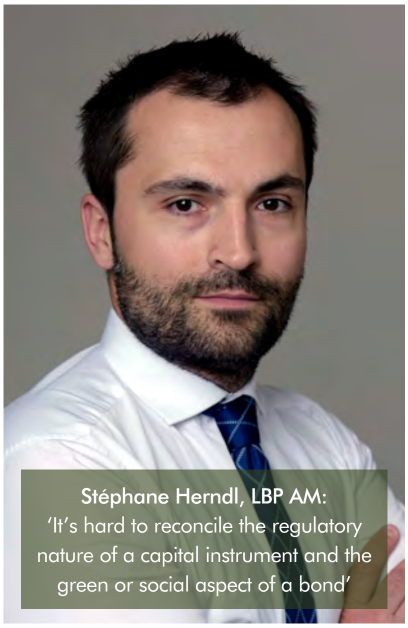
A consideration when it comes to Tier 2 and AT1 is how the maturity of green bonds compares to the horizon of ESG targets. We are quite cautious towards green bonds where the green projects or more generally the horizon of ESG targets are shorter than the maturity of the green bonds at issue, because what is happening in the remaining time that the bond still is out there? What's the focus of the bank? And what are they doing with the money?

Regarding AT1, some people say that you then have perpetual money so you can invest in new projects after the initial green projects are finished. I don't know what our green bond team think, but personally I tend to differ a bit there. The money's already been used — sure, it may generate some new money that can be invested into new green projects, but it's probably very difficult to assess if that's really the case.

Are we going to invest in capital instruments that have an ESG label? Next to the use of proceeds and the impact, relative value is the most important factor. It may be green, but if it's expensive, we also have an obligation to earn some money from a mandate point of view.

Liller, DWS: As I said at the end of my previous answer, the price of a bond is related to its risk, and currently I don't feel that climate risk is correctly incorporated into the pricing of these instruments. When it comes to looking at risk for AT1s, we are talking about a gone concern instrument, and in the end it doesn't matter if it's green or not, you're stuck with what you've got — it's Additional Tier 1. From a credit investor point of view, I'm not very willing to pay a high premium for the green element on capital securities, especially when they are on the gone concern side. You can have a different discussion about Tier 2, but clearly AT1 is nothing that should really be considered at the current time as a green investment, even if the use of proceeds are green. But even this is limited for this type of credit instrument, in my view.

Furthermore, while trying to sell a green AT1 could be a good way of getting attention, the green investor base that can add AT1 to their funds is very limited. It can't be sold to retail investors and you need to set up specific guidelines for it.



Stéphane Herndl, LBP AM: 'It's hard to reconcile the regulatory nature of a capital instrument and the green or social aspect of a bond'

Herndl, LBP AM: It's hard to reconcile the regulatory nature of a capital instrument — AT1, Tier 2 or even non-preferred or HoldCo senior instruments — and the green or social aspect of a bond. In some cases, it could be problematic, because these instruments are there to absorb losses or to recapitalize a bank, which means that they need to be fungible, while green and social use of proceeds instruments are in a way not meant to be fungible. I'm not sure it's a binary issue, i.e. whether AT1 or other types of instrument are green or not; I see it more as a continuum: the lower you go in the hierarchy of the bank's capital structure, the bigger the misalignment, if I can say, between the regulatory nature of the instrument, including its fungibility, and the use of proceeds nature of the of the instrument. And when you go to the lowest ranking instruments, where the loss absorbing feature is the most important, you should not attach any greenium to them.

As alluded to by Michael, you could imagine potential mis-selling issues in future, if the instrument has been sold on the premise that it is a green instrument without taking into consideration or highlighting its subordinated nature. And this could also pose challenges to resolving a bank — are supervisors willing to impose losses on these type of instruments if they are not sure who holds it, and whether the holders have really understood the risks they've taken? So we need to be cautious. ●

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