EBA STAFF PAPER SERIES

N. 13 - MAY/2021

TESTING CAPACITY OF THE EU BANKING SECTOR TO FINANCE THE TRANSITION TO A SUSTAINABLE ECONOMY

by Slavka Eley



The EBA Staff Papers Series describes research in progress by the author(s) and is published to elicit comments and to further debate. Any views expressed are solely those of the author(s) and so cannot be taken to represent those of the European Banking Authority (EBA) or to state EBA policy. Neither the EBA nor any person acting on its behalf may be held responsible for the use which may be made of the information contained in this publication, or for any errors which, despite careful preparation and checking, may appear.

ABSTRACT

Amidst increased attention on climate change, which is characterised by high uncertainties and long-term time horizons, the financial sector and supervisors are developing methods and approaches for the evaluation of climate-related financial risks.

This paper proposes a transition capacity testing system based on the EU Taxonomy for environmentally sustainable economic activities as a useful tool for banks and supervisors to identify the exposures that are most vulnerable to climate change, to improve understanding of the transition financing needs and to support the greening of the financial sector.

KEYWORDS

Transition capacity testing; EU Taxonomy; climate scenario analysis; green asset ratio; transition capacity testing ratio; ratio not likely to transition

JEL CODES

G21; G24; G28; G32; Q54; Q56; Q58

Page 2 EBA STAFF PAPER SERIES

Introduction

In recent years, the financial sector has increasingly been paying attention to the risks stemming from environmental, social and governance factors (ESG factors) and implementing the concept of sustainable finance. Sustainable finance is understood as financing and other related institutional and market arrangements that contribute to the achievement of strong, sustainable, balanced and inclusive growth, providing both direct and indirect support for the Sustainable Development Goals¹. Sustainable finance also refers to the process of taking due account of environmental and social considerations in investment decision-making, leading to increased investments in longer-term and sustainable activities².

Environmental considerations are those related to climate change mitigation and adaptation and, more broadly, environmental risks. Social considerations include inequality, inclusiveness, labour relations and investment in human capital and communities. The governance of public and private institutions plays an important role in considering the environmental and social considerations in the management process and business mix.

The banking sector and supervisors are exploring methods and approaches to evaluate the ESG factors and their materialisation into financial risks. In particular, climate change-related risks, which are characterised by their uncertainties and long-term time horizon, are frequently discussed³. The use of stress testing and scenario analysis is often referred to as a possible way to evaluate climate-related risks in banks' portfolios, in particular by modelling climate-related scenarios and evaluating the potential impact on banks' risk profiles.

This paper introduces transition capacity testing as an alternative concept for the identification of the portfolios or exposures that are most vulnerable to climate change, based on the European Union Taxonomy for environmentally sustainable economic activities (EU Taxonomy).⁴ The paper discusses how the banking sector and supervisors could use transition capacity testing to obtain a detailed understanding of the transition or adaptation financing needs of their customers and of how this approach can contribute to better risk management as well as to effectively supporting the greening of the financial system.

The European Union has committed to the UN 2030 Agenda for Sustainable Development⁵ and to the Paris Agreement⁶, which alongside other documents have been translated into the European Commission's priorities for 2019-24 in the form of a European Green Deal.⁷ Under this agenda, the European Union has established the specific climate targets to be achieved by 2030 and 2050 (EU climate actions) to achieve climate neutrality by 2050 and to cut emissions by at least 55% versus 1990 levels by 2030.

To support the transition towards the targets set, a regulation on the establishment of a framework to facilitate sustainable investment (Taxonomy regulation)⁸ was introduced, under which economic activities considered to be environmentally sustainable would be classified. The Taxonomy regulation is accompanied by the technical screening criteria defining eligibility criteria for sustainable activities as science-based criteria aligned with the 2030 and 2050 EU targets under the Green Deal. These criteria, reviewed by the Commission and progressively

Page 3 EBA STAFF PAPER SERIES

¹ https://sdgs.un.org/goals

² Action Plan Financing Sustainable Growth

³ EBA Discussion paper on ESG risk management and supervision

⁴ https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852 en

⁵ https://sdgs.un.org/2030agenda

⁶ https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

⁷ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal en

⁸ https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852 en

integrated into delegated acts, will then support the related economic policies being developed under the key actions from the Green Deal.

Use of climate scenario analysis

As part of the discussion on methods and approaches to evaluate the ESG risks – and particularly climate change-related risks, which are characterised by their uncertainty and long-term time horizon – the use of a stress testing tool is often mentioned. Stress testing, and more particularly scenario analysis, is considered relevant to evaluating climate-related risks in banks' portfolios by modelling climate-related scenarios and evaluating their potential impact on banks' risk profiles. Supervisors and central banks pay close attention to the use of scenario analysis, where the work done by the Network for Greening the Financial System (NGFS) is the most noted. In June 2020, NGFS published an initial set of climate scenarios alongside a preliminary guide to climate scenario analysis for central banks and supervisors⁹, providing guidance on the scenario analysis process and a set of eight scenarios to explore the impact of climate change and climate policy on supervised institutions. A few European supervisors¹⁰ have conducted or announced pilot climate stress tests or sensitivity analyses (e.g. DNB, ACPR, ECB, EBA). Researchers also cover the topic of climate-related modelling and testing¹¹, exploring potential methods and approaches.

For the above-mentioned initiatives, one of the key steps involves designing climate scenarios, exploring different possible climate change futures and pathways towards achieving long-term climate goals. To design such climate scenarios, a number of assumptions need to be determined. Alongside expected greenhouse gas emissions, the socioeconomic context, technological developments and consumer preferences, key assumptions need to be made on how climate policies may evolve. These factors will then significantly impact the climate scenario (e.g. meeting the Paris Agreement goals or materially diverging from them) and, eventually, directly impact the financial soundness of banks' balance sheets.

Stress testing has been widely used by supervisors since the 2008 financial crisis to evaluate banks' resilience to adverse market developments, with a strong focus on solvency. One important distinction between climate scenario analysis/stress testing and the more established prudential stress tests is that a prudential stress test identifies overall weaknesses in a bank's solvency position caused by losses over the medium term (three to five years) under severe but plausible stress and identifies how the risk of that loss can be mitigated. In the climate scenario analysis, we aim to identify the portfolios or exposures that are most vulnerable to the potential impact of climate change over the short, medium and long term (transition risk and physical risk) on a time horizon of up to 30 years – considering the timeline of internationally agreed targets – in order to design business strategies that reflect the risks stemming from climate change.

The outcome of this scenario analysis would then enable a bank to gain a better understanding of how to adjust its portfolio composition to the level aligned with its risk appetite in terms of the medium and long-term impact of climate change. We also aim to understand how a bank's stated ESG strategy will impact portfolio allocation choices over the same long term and what this may mean for existing holdings.

Page 4 EBA STAFF PAPER SERIES

⁹ https://www.ngfs.net/en/liste-chronologique/ngfs-publications

¹⁰ https://www.iif.com/Portals/0/Files/content/Regulatory/01_21_2021_prudential_pathways.pdf

¹¹ e.g. https://www.nature.com/articles/nclimate3255;
https://www.researchgate.net/publication/341229812 A Finance Approach to Climate Stress Testing

Do we have an EU scenario?

The European Union has committed to the UN's 2030 Agenda for Sustainable Development and to the Paris Agreement. On this basis, a number of initiatives have been activated to support the transition to a low-carbon, more resource-efficient and circular economy. This ambition has been translated into a number of documents over the last several years, including the European Commission's priorities for 2019-24 in the form of the European Green Deal, which includes the specific climate targets to be achieved by 2030 and 2050 (EU climate actions). In particular, the EU aims to become climate-neutral by 2050 and to cut emissions by at least 55% compared to 1990 levels by 2030. Another set of actions deals with adapting to the impact of climate change.

To support the transition to the targets set, a regulation on establishing a framework to facilitate sustainable investment (Taxonomy regulation) was introduced to classify economic activities that are considered to be environmentally sustainable. More specifically, an activity meeting the criteria for the climate change mitigation objective is aligned with the long-term temperature goal of the Paris Agreement.¹² For its part, an activity meeting the criteria of climate change adaptation contributes to the reduction or prevention of the adverse impact of climate change, or of the risks of such an adverse impact.¹³ As part of compiling the EU Taxonomy, technical screening criteria have been developed by the Technical Expert Group on Sustainable Finance,¹⁴ defining the eligibility criteria for an economic activity to be deemed sustainable in the form of science-based criteria that are aligned with the 2030 and 2050 EU targets under the Green Deal. These criteria, reviewed by the Commission and progressively integrated into delegated acts, will then support the related economic policies that are being developed under the key actions from the Green Deal (e.g. climate law, regulations relating to pollution, circular economy, biodiversity, energy, construction, transport or agriculture). A first delegated act on sustainable activities for climate change adaptation and mitigation objectives was published on 21 April 2021 as the EU Taxonomy Climate Delegated Act.¹⁵ This will be followed by additional delegated acts to complete the technical screening criteria for other environmental objectives or to adjust the existing criteria, if needed.

The technical screening criteria consist of performance thresholds for economic activities which:

- make a substantive contribution to one of six environmental objectives defined in the Taxonomy regulation;
- do no significant harm the other five;
- meet minimum social safeguards.

Page 5 EBA STAFF PAPER SERIES

¹² https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852 en

¹³ Aligned with the Sendai Framework for Disaster Risk Reduction 2015–2030

¹⁴ https://ec.europa.eu/info/sites/info/files/business economy euro/banking and finance/documents/200309-sustainable-finance-teg-final-report-taxonomy en.pdf

¹⁵ https://ec.europa.eu/info/publications/210421-sustainable-finance-communication en#taxonomy

Figure 1: Structure of taxonomy criteria



As the transition and adaptation efforts, in conjunction with ongoing digitalisation, will also impact the job market and social environment, the EU has recently adopted an action plan to implement the European Pillar of Social Rights¹⁶.

In developing all these initiatives, the EU has designed clear long-term climate goals (2030 and 2050), social goals and also pathways towards achieving the transition towards them.

Structure of the EU Taxonomy

At this stage, the technical screening criteria under the EU Taxonomy have been prepared with two environmental objectives: climate change mitigation and climate change adaptation. Regarding the scope of economic sectors covered, the economic activities cover 70 climate change mitigation and 68 climate change adaptation activities (using the NACE classification of economic activities¹⁷) responsible for 93.5% of direct greenhouse gas emissions. The European Commission is continuing to develop the technical screening criteria, with the assistance of the Platform on Sustainable Finance, with a view to covering all economic activities and all six environmental objectives. Work has also begun on the development of a social taxonomy and advice on defining activities that either significantly harm environmental sustainability or do not have a significant impact.

In its current form, the EU Taxonomy defines four main categories of sustainable activities:

- 1. Climate change mitigation (aligned with the 2050 climate targets)
- 2. Transitional (aligned with the 2030 climate targets)

Page 6 EBA STAFF PAPER SERIES

¹⁶ https://ec.europa.eu/info/european-pillar-social-rights/european-pillar-social-rights-action-plan en

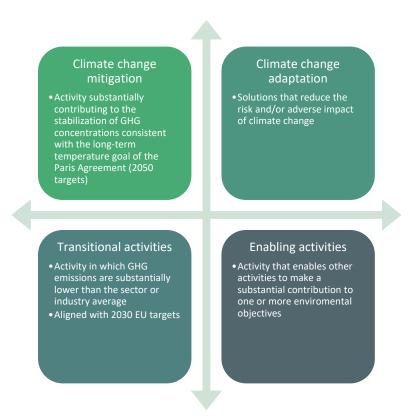
¹⁷ https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Statistical classification of economic activities in the European Community (NACE)#:~:t ext=NACE%20is%20a%20four%2Ddigit,developed%20within%20the%20European%20statistical

¹⁸ https://ec.europa.eu/info/sites/info/files/business economy euro/banking and finance/documents/200309-sustainable-finance-teg-final-report-taxonomy en.pdf

¹⁹ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/overview-sustainable-finance/platform-sustainable-finance_en_

- 3. Enabling
- 4. Climate change adaptation (resilience to physical risks)

Figure 2: Four categories of activities under the EU Taxonomy



The technical screening criteria provide quantitative and qualitative criteria for substantial contributions to the environmental objectives (climate change mitigation or adaptation). At the same time, an activity can qualify as sustainable only if it does not significantly harm other environmental objectives. For example, the renovation of a building to make it more resilient to physical risk can only be a sustainable adaptation activity if such a building is not dedicated to the extraction, storage, transport or manufacture of fossil fuels.

Transitional activities are considered to be sustainable based on the 2030 climate targets. This relates to the activities for which there might not be a technology yet to achieve climate neutrality, while their greenhouse gas emissions are substantially lower than the sector or industry average ('best in class' solutions). For example, the production of hybrid cars is a transitional activity with a set threshold for CO2 emissions. Activities enabling other activities to make a substantial contribution are also considered to be sustainable, for example research or experimental development in natural sciences dedicated to climate change mitigation.

Once the EU Taxonomy has been completed, users should be able to assign each economic activity to the relevant environmental or social objective and evaluate if the activity meets the criteria of making a substantial contribution to the given objective, while not significantly harming other objectives. Alternatively, an economic activity might fall under the category of harmful or 'no impact' activity.

Page 7 EBA STAFF PAPER SERIES

EU Taxonomy as the key to unlocking banks' capacity to finance the necessary transition

The 2030 and 2050 EU targets and the criteria for economic activities to meet these targets, as defined by the EU Taxonomy, can be seen as defining 'the EU climate pathway' or an 'EU climate baseline scenario'. The screening criteria for the individual economic activities provide a path for governments, companies and citizens to align their activities with the EU Taxonomy criteria, as these criteria will guide economic policies and regulations and may eventually become part of them.

The finance gap for investment in the transition towards a more sustainable economy to meet the EU climate and energy targets is estimated to range from EUR 180 to 270 billion annually between 2020 and 2030.²⁰ This will require a combination of public and private investment. The European banking sector, which finances over 70% of the EU economy, plays an important role in funding the transition of all relevant economic sectors under the strategy in the European Green Deal. As counterparties financed by the banking sector, corporates, SMEs and households each have a different starting point on the path to becoming more sustainable or aligned with the Taxonomy.

The transition will be partly driven by economic policies such as climate law or regulations governing pollution, the circular economy or energy, construction and transport. The transition will also be influenced by the financial institutions funding or investing in the transition-related transformation. This creates a number of new business opportunities for the banking sector in steering its customers towards the path to transition and financing their transition-related investments.

In this context, the clear target criteria set by the EU Taxonomy provide a key for the banking sector to unlock the capacity needed to finance the necessary transition. At the same time, climate change itself as well as companies' and households' level of success in meeting the targets set create new risk factors for the banking sector that need to be evaluated and managed appropriately.

While 'Taxonomy-aligned' should not be equated with 'lower credit risk', it may be assumed from the transition risk perspective that those counterparties which are unable to transition successfully will eventually become a higher risk exposure for banks, as their activities might become environmentally misaligned with regulations governing the respective sectors or be affected by society's expectations regarding their conduct.

From this perspective, the key question for banks under the EU climate pathway is to understand how ready and able a counterparty (company or household) is to adjust its activities/behaviour to meet the EU Taxonomy criteria, or how close (or not, as the case may be) these counterparties are to the EU trajectory. This can be carried out efficiently by using the EU Taxonomy as the basis for transition capacity testing.

Page 8 EBA STAFF PAPER SERIES

-

Transition capacity testing

How can we use the EU Taxonomy to understand banks' capacity to finance the transition towards a carbon-neutral economy by 2050? This question, which focuses on the readiness and willingness to align with the EU Taxonomy criteria, can be answered by evaluating a 'likelihood to transition' using the Taxonomy-based categorisation and criteria. The likelihood to transition is in principle impacted by two main factors:

- distance from meeting the taxonomy criteria, and
- existence of a strategy and credible transition plan

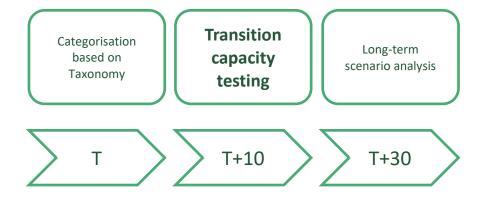
Transition capacity testing is a tool designed to identify the progress banks are making towards financing the pathway to the Paris climate goals on a forward-looking basis, as set out in the technical screening criteria of the EU Taxonomy. The framework builds on the initial categorisation of assets based on the EU Taxonomy and maps the progress towards the Taxonomy criteria (the single EU climate pathway) on the ten-year time horizon. By design, the timeframe is shorter than the longer-term (30-year) climate-sensitive analysis/stress testing.

The EU Taxonomy is used as a classification tool to, first, allocate activities to the four main categories and then determine the likelihood to transition under the EU climate pathway/scenario. This approach will enable banks to test their 'transition capacity' and identify:

- transition or adaptation financing needs of banks' counterparties (how much counterparties need to invest in order to transition), and
- the most vulnerable exposures from the transition and adaptation perspective

The transition capacity test effectively creates a bridge, or baseline, between, on the one hand, the initial static balance sheet categorisation according to the Taxonomy, which is also used for disclosure under Pillar 3, and on the other hand the multi-scenario longer-term sensitivity analysis.

Figure 3: Transition capacity testing



Page 9 EBA STAFF PAPER SERIES

Categorisation based on Taxonomy alignment

Firstly, the exposures in the sectors covered by the EU Taxonomy need to be allocated to one of the Taxonomy categories (adaptation, transitional, enabling and mitigation) following the Taxonomy-based allocation of the economic activities based on the NACE code of the main activity. Banks will also need to conduct this categorisation for the purpose of disclosure obligations under the EU Taxonomy regulation.

Secondly, the exposures' alignment with the EU Taxonomy should be determined to classify all or part of the exposure as being aligned with the EU Taxonomy criteria. Evaluating the degree of alignment will become an obligation for banks under Article 8 of the EU Taxonomy regulation, based on which the green asset ratio, as proposed by the European Banking Authority in its advice on Article 8 of the EU taxonomy regulation, ²¹ will need to be calculated and disclosed. The level of alignment will be determined based on available information, primarily using the relevant Non-Financial Reporting Directive²² disclosures or banks' internal data. Alternatively, other public information on environmental performance or available databases relevant to specific portfolios (e.g. energy performance certificates database for buildings) may be used.

The exposures that are not aligned with the EU Taxonomy, or the relevant unaligned portion of the exposures, will then be allocated to the 'not aligned with Taxonomy criteria' category. The exposures that need to transition are then placed in the relevant bucket of the Taxonomy category.

Figure 4: Categorisation of assets and allocation to the likelihood buckets

Bucketing of unaligned exposures based Taxonomy-based categorisation and on likelihood to transition current alignment Not likely to Likely to fully Aligned with Not aligned Likely to Taxonomy with taxonomy transition transition transition category taxonomy criteria criteria partially Climate Need to Managerial No transition managerial attention concerns change transition attention mitigation Transitional Need to High Managerial No transition Likelihood to transition managerial attention transition concerns attention Climate No transition Need to High Managerial managerial change transition attention concerns attention adaptation Enabling Need to High Managerial No transition managerial transition attention concerns attention

Page 10 EBA STAFF PAPER SERIES

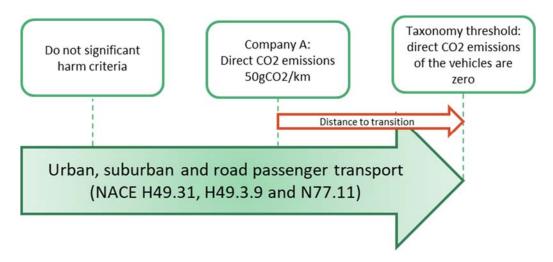
²¹ EBA Opinion on disclosures under Article 8

 $^{^{22}\,\}underline{\text{https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting}\,\underline{\text{en}}$

Evaluation of the likelihood to transition

After identifying the exposures that need to transition, the likelihood to transition can be evaluated on an exposure by exposure basis. This is especially true of corporate exposures, for which more information is likely to be available. The starting point for this evaluation entails estimating the distance of the company, based on its main activity, from meeting the Taxonomy criteria. This should be carried out based on available quantitative and qualitative data about the company using the most relevant metrics from the EU Taxonomy (e.g. current production is emissions-intensive, with CO2 emissions significantly higher than the relevant Taxonomy threshold). Understanding the distance from meeting the technical screening criteria provides an initial indication of whether the company is likely to transition fully or partially or is not likely to transition. If the distance is significant, such exposure should be classified as 'not likely to transition', unless there is a credible transition plan (see below).

Figure 5: Example of distance to transition



In this context, climate change mitigation activities would not normally be expected to qualify as 'likely to fully transition' under the 10-year time horizon of transition capacity testing, as the technical screening criteria are earmarked to be met within the scope of the 2050 targets. However, in order to be allocated to the 'likely to transition partially' bucket, sufficient progress by 2030 is expected to be included in the company's transition plan as a step on the path towards meeting the 2050 criteria. For their part, the criteria for transitional activities are expected to be met by 2030. As a result, a significant shortfall in meeting the transitional activities criteria would indicate that the activity is most likely unable to fully transition.

The initial gap between the current level of non-environmentally friendly production and the EU Taxonomy criteria can be closed only if the company concerned has a clear strategy and transition plan that outlines the path towards improving the parameters of the specified activity (or alternatively if the company plans to transform to other more environmentally friendly activities). Thus, evaluation of a company's strategy and the credibility of its transition plan is the second important component in allocating the exposures to the buckets based on the likelihood to transition.

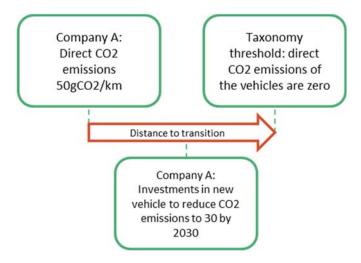
If a company has developed a clear strategy and investment plan regarding how to improve its environmental performance (with a view to ultimately meeting the Taxonomy criteria), the exposure should be placed in the 'likely to transition partially' or 'likely to fully transition' bucket depending on the transition plan's credibility. If

Page 11 EBA STAFF PAPER SERIES

no such plan is available, a conservative approach should be adopted of placing the exposures in the 'not likely to transition' bucket.

Information for evaluating the likelihood to transition would be based on the engagement banks have with their counterparties as part of the loan origination and monitoring process, or as part of their investment evaluation.

Figure 6: Example of a company likely to transition partially



In the case of household exposures, in particular those relating to mortgages, the best estimates of progress in energy efficiency of the financed properties will most likely have to be used, as exposure by exposure evaluation would not be possible.

Transition capacity

After allocating all the relevant exposures to the buckets based on the likelihood to transition and considering the 2030 time horizon, a bank would have a clear picture about the

- a. amount of exposures that are not likely to transition, even partially, by 2030 and require a high level of managerial attention as these might eventually become higher-risk exposures;
- b. amount of exposures in the transitional and enabling activities that are likely to transition partially by 2030, thus requiring targeted engagement with customers to finance their transition path;
- c. amount of exposures in climate change mitigation and climate change adaptation activities that are on the right path to transition even if by 2030 they would be placed in the 'likely to transition partially' bucket, thus requiring close engagement with customers and continued progress monitoring to finance their long-term transition needs;
- d. amount of exposures that are expected to fully transition by 2030 to meet Taxonomy criteria (2030 or 2050 targets). These exposures would not require heightened managerial attention from the transition perspective.

Exposures under a, b, c and d represent the overall amount exposed to transition risk, or the bank's 'transition requirement'. Exposures under b, c and d can be considered 'likely to transition' either fully or partially. For

Page 12 EBA STAFF PAPER SERIES

exposures under b and c, the amount should be taken as a proportion of the assets to transition partially, as these are the only ones on the transition path. This proportion could either be assigned individually based on the information available, or a proxy of 50% could be used to calculate the ratios proposed below.

Likely to transition exposures =
$$0.x * b + 0.y * c + d$$

Where 0.x and 0.y represent the estimated proportion of assets that are expected to transition partially.

The overall transition capacity can then be expressed as a proportion of the exposures likely to transition and already aligned out of the overall Taxonomy-eligible exposures. These exposures have either transitioned or are on the right pathway towards transition. This represents the proportion of the Taxonomy-eligible assets that a bank can expect not to be a source of potentially high transition risk. This proportion can be expressed in the form of a transition capacity testing ratio (TCTR).

$$Transition \ capacity \ testing \ ratio = \frac{{\it Taxonomy \ aligned \ exposures + Likely \ to \ transition \ exposures}}{{\it Taxonomy \ eligible \ exposures}} \ \%$$

On the other hand, the remaining portion of exposures not likely to transition represents the proportion of exposures requiring managerial attention as a potential source of higher risk to the bank. This can be labelled as the 'not likely to transition' ratio (NLTR).

Not likely to transition ratio = $(100 - Transition \ capacity) \%$

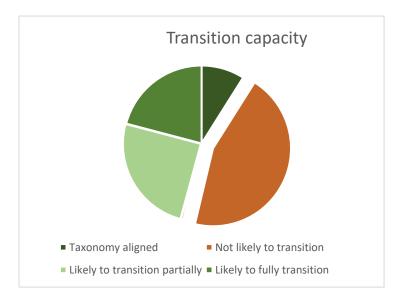
Figure 7: Ilustrative example of transition capacity ratios



Т	axonomy	Taxonomy	Need to	Notlikely	Proxy for	Likely to	Likely to	Green	Transition	Notlikely
	eligible	aligned	transition	to	partial	transition	fully	asset	capacity	to
				transition	transition	partially	transition	ratio	testing	transition
									ratio	ratio
	100	9	91	20	50%	50	21	9.0%	55.0%	45.0%

Page 13 EBA STAFF PAPER SERIES





Estimation of the transition or adaptation financing needs based on transition capacity testing can support the adjustment of banks' business strategies, including the fine-tuning or development of new financial products tailored to their counterparties' transition needs. On the other hand, identifying the most vulnerable exposures from the 'likelihood to transition' perspective will also enable selection of those exposures that require the most urgent management attention from the transition risk perspective — as exposures with potentially higher risk over the medium and long term.

If and when the activities which significantly harm environmental sustainability (so-called 'brown activities') are defined by the European Commission, transition capacity testing can also be applied to evaluating the likelihood for such activities to transition – as well as the attendant financing needs – to at least meet the 'do not cause significant harm' thresholds. Similarly, once the social taxonomy has been developed this approach can be used to estimate the transition capacity of socially related exposures.

Page 14 EBA STAFF PAPER SERIES

Conclusions

Transition capacity testing is a granular approach to evaluating the transition needs and transition likelihood of a bank's portfolio. The tool is designed to identify the progress banks are making towards financing the pathway to the Paris climate goals on a forward-looking basis, translated into the technical screening criteria of the EU Taxonomy. Subject to the time horizon of 10 years, it can create a bridge between static balance sheet categorisation used for the green asset ratio and the multi-scenario, longer-term sensitivity analysis.

This approach requires data, which are not readily available to banks at present. However, as part of the implementation of the EU Taxonomy and expected revision of the Non-financial Reporting Directive in the EU²³, the data needed to evaluate Taxonomy alignment and companies' transition plans should become reality in the next couple of years. Banks will need to use a similar set of data for the disclosure of Taxonomy-aligned exposures under Article 8 of the Taxonomy Regulation. As a result, transition capacity testing should be practically possible to apply within the same timeline as the green asset ratio disclosures.

The plan is for the overall transition capacity of an individual bank, or of the banking sector, to be expressed by the simple metrics TCTR and NLTR, which in combination with the green asset ratio (GAR) could become useful metrics for banks and supervisors to monitor the transition of the banking sector to finance the EU climate targets.

Transition capacity testing can be implemented as an action-oriented risk management and supervisory tool to support:

- Climate change-related strategies and transition target-setting (comparing the green asset ratio and overall transition capacity would indicate a gap in in alignment with the EU climate pathway)
- Managerial and supervisory focus on the portfolios most exposed to transition and physical risks
- Product design (e.g. transition loans) and setting the loan origination criteria applied by banks
- Improvements in sustainability-related disclosures

Applying transition capacity testing to the banking sector in a coordinated way ('transition capacity testing exercise') could support supervisors and regulators in testing the transition capacity of the sector as a whole in order to identify the portfolios or exposures most vulnerable to climate transition risk. Using simple and easy to understand metrics such as GAR, TCTR and NLTR will enable supervisors and risk analysts to compare data across banks, regions or countries with ease.

Page 15 EBA STAFF PAPER SERIES

_

²³ The European Commission adopted a proposal for a Corporate Sustainability Reporting Directive amending NFRD reporting requirements, which it published on 21 April 2021.

References

European Commission (2018), Action Plan: Financing Sustainable Growth

European Commission (2019), Communication and roadmap on the European Green Deal

European Banking Authority (2019), Action plan on sustainable finance

European Banking Authority (2020), Discussion paper on ESG risk management and supervision

European Banking Authority (2020), Opinion on the disclosure requirement on environmentally sustainable activities in accordance with Article 8 of the Taxonomy Regulation

Slavka Eley (2020), Environmental, social and governance factors as a new challenge for supervisors; article in EBI BrieFin #5 – Winter Edition

Network for Greening the Financial System (2020), NGFS climate scenarios for central banks and supervisors

Network for Greening the Financial System (2020), *Guide to climate scenario analysis for central banks and supervisors*

Technical Expert Group on Sustainable finance (2020), *Taxonomy: Final report of the Technical Expert Group on Sustainable Finance*

Platform on sustainable finance (2021), Platform on Sustainable Finance report on transition finance

Institute of International Finance (2021), Prudential Pathways: Industry Perspectives on Supervisory and Regulatory Approaches to Climate related and Environmental Risks

European Banking Authority (2021), Risk assessment of the European banking system

Luis de Guindos (2021), blog – Shining a light on climate risks: the ECB's economy-wide climate stress test

Vermeulen, R. et al. (2018), An energy transition risk stress test for the financial system of the Netherlands, Occasional Studies, Vol. 16, No 7, De Nederlandsche Bank

Bank of England (2019), Discussion Paper: The 2021 biennial exploratory scenario on the financial risks from climate change

Page 16 EBA STAFF PAPER SERIES

ACKNOWLEDGEMENTS

I would like to thank Piers Haben, Director of the Banking Markets, Innovation and Consumers department at the European Banking Authority, and Fabien Le Tennier, Policy Expert on Sustainable Finance at the European Banking Authority, for their helpful comments.

Slavka Eley:

Head of Banking Markets, Innovation and Products, European Banking Authority

EUROPEAN BANKING AUTHORITY

20 avenue André Prothin CS 30154 92927 Paris La Défense CEDEX, France

Tel. +33 1 86 52 70 00 E-mail: info@eba.europa.eu

https://eba.europa.eu/

ISBN 978-92-9245-738-9 ISSN 2599-7831 doi:10.2853/983739 DZ-AH-21-003-EN-N

© European Banking Authority, 2021.

Any reproduction, publication and reprint in the form of a different publication, whether printed or produced electronically, in whole or in part, is permitted, provided the source is acknowledged. Where copyright vests in a third party, permission for reproduction must be sought directly from the copyright holder.

This paper exists in English only and it can be downloaded without charge from www.eba.europa.eu/staffpapers, where information on the EBA Staff Paper Series can also be found