

Prudential Treatment of Sustainability Risks

Fields marked with * are mandatory.



Responding to the paper

EIOPA is going to assess the extent to which a dedicated prudential treatment of assets and activities associated with environmental or social objectives would be justified under Solvency II, motivated by the proposed Article 304a of the Solvency II Directive.

The assessment follows a step-by-step approach, starting by a discussion paper focusing on methodologies and data sources for the intended analysis. At a later stage, a consultation paper focusing on empirical findings and potential policy implications will follow.

EIOPA welcomes comments on the discussion paper on the prudential treatment of sustainability risks. Comments are most helpful if they:

- respond to the question stated, where applicable;
- contain a clear rationale; and
- describe any alternatives EIOPA should consider.

Please send your comments to EIOPA using the EU Survey tool **by Sunday, 5 March 2023, 23:59 CET** by responding to the questions below. Contributions not provided using the EU Survey tool or submitted after the deadline will not be processed.

Publication of responses

Your responses will be published on the EIOPA website unless: you request to treat them confidential, or they are unlawful, or they would infringe the rights of any third-party. Please, indicate clearly and prominently in your submission any part you do not wish to be publicly disclosed. EIOPA may also publish a summary of the survey input received on its website.

Please note that EIOPA is subject to Regulation (EC) No 1049/2001 regarding public access to documents [1] and EIOPA's rules on public access to documents [2].

Data protection

Please note that personal contact details (such as names of individuals, email addresses and phone numbers) will not be published.

They will only be used to request clarifications if necessary on the information supplied. EIOPA, as a European Authority, will process any personal data in line with Regulation (EU) 2018/1725 [3]. More information on how personal data are treated can be found in the privacy statement at the end of this survey.

[1] Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents (OJ L 145, 31.5.2001, p. 43).

[2] [Public access to documents.](#)

[3] Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45 /2001 and Decision No 1247/2002/EC (OJ L 295, 21.11.2018, p. 39).

Remarks on completing the survey

After you start filling in responses to the survey there is the option to save your answers. However, please note that the use of the online saving functionality is at the user's own risk. As a result, it is strongly recommended to complete the online survey in one go (i.e. all at once).

Should you still proceed with saving your answers, the online tool will immediately generate and provide you with a new link from which you will be able to access your saved answers.

It is also recommended that you select the "Send this Link as Email" icon to send a copy of the weblink to your email - please take care of typing in your email address correctly. This procedure does not, however, guarantee that your answers will be successfully saved.

You will have the possibility to print a pdf version of the final responses to the survey after submitting it by clicking on "Download PDF". You will automatically receive an email with the pdf file. Do not forget to check your junk / spam mailbox.

* Declaration by the contributor

- I consent to the publication of all information in my contribution in whole.
- I consent to the publication of parts of information in my contribution as clearly indicated in my responses.
- All my responses remain confidential.

About the respondent

* Stakeholder name

Institut des actuaires (France)

* Type of Stakeholder

- Association
- Industry
- Ministry
- Supervisor
- EU Organisation
- Other

* Contact person (name and surname)

Samuel Cywie

* Contact person email address

samuel.cywie@institutdesactuaires.fr

* Contact person phone number

+33(0)650273124

Questions to Stakeholders

I. Assets and Transition Risk Exposures

Q1: Are there any specific data sources that might be useful for a historical analysis of transition risk for private and public equity and debt? How can EIOPA access them? Why are they relevant?

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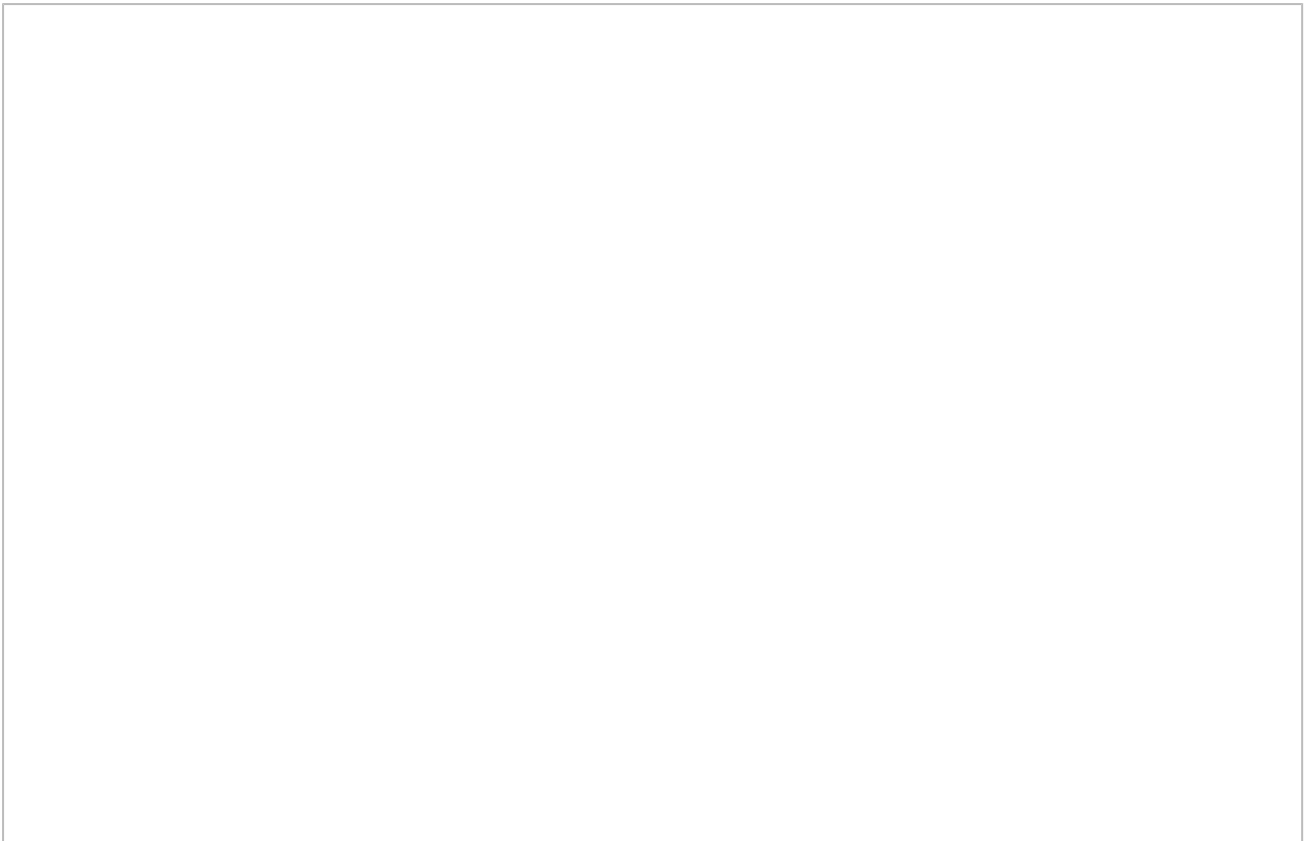
Q2: In case you are suggesting the use of historical “non-valuation data” like cash flows: How would the measurement of risk be commensurate with the definition under Solvency II (i.e. fluctuation of values in accordance with Article 75)?

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Q3: Do you have comments on the outlined criteria for the selection of market indices?



Q4: Are there any equity indices not mentioned above that would be relevant to analyze? Why?



Q5: Are there any equity indices which focus on companies with higher transition risk?

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Q6: Would you have any suggestions how the effect of different levels of transition risk could be “isolated” when comparing the historical risk for a given index with the broad market?

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Q7: Are there any other bond indices suitable for the analysis? Why?

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Q8: Are you aware of any indices which focus on companies with higher transition risk?

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Q9: Would you have any suggestions how the effect of different levels of transition risk could be “isolated” when comparing the historical risk for a given index with the broad market?

Q10: Would you have any suggestions how to compare the risk of a given bond price index (i.e. no separate spread data for each rating class and maturity buckets available) with a “conventional” bond index taking into account possible differences in ratings and durations?

Q11: Do you see any other possible approach to classify stocks and bonds according to their transition risk exposure? What would be their advantages?

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Q12: Would you have other ideas how to quantify transition risk per NACE code?

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Q13: Would you have suggestions for sector definitions other than by NACE code? What are their advantages? How does one quantify their transition risk?



Q14: Do you agree that either the debt or equity shocks from recent stress test exercises should be used for measuring transition risk (resulting in one measure for both asset classes)? What advantages do you see in using equity or debt shocks respectively?



Q15: Do you have any comments on the company-specific transition risk measures set out in this chapter? Are there other ones? If so, what are their advantages?

Q16: Do you agree with focusing on greenhouse gas (GHG) emission intensities rather than on absolute GHG emissions? What is your view regarding the scope of emissions to be used (1, 2 or 3)?

Q17: Do you see other approaches to define portfolios with companies subject to higher, medium and lower transition risk exposure based on their NACE codes? What are the advantages?



Q18: Do you consider it preferable to combine the CPRS classification (Battiston et al. (2017)) with the use of asset shocks (e.g. DNB stress test) to differentiate assets according to their transition risk exposure or should only the latter be used? Why?



Q19: If debt or equity stress test factors are used (e.g. DNB stress test), how should the thresholds to separate lower, medium and higher transition risk exposures be set?

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Q20: Do you have any comments how to test the robustness of the sectoral classifications into higher, medium and lower transition risk exposure?

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Q21: Would you have any suggestions how to derive a less granular definition of the higher transition risk sectors (e.g. based on 2nd digit NACE codes) based on the CPRS classification (Battiston et al. (2017)) in line with the granularity of the stress test exercises while preserving the risk sensitivity?

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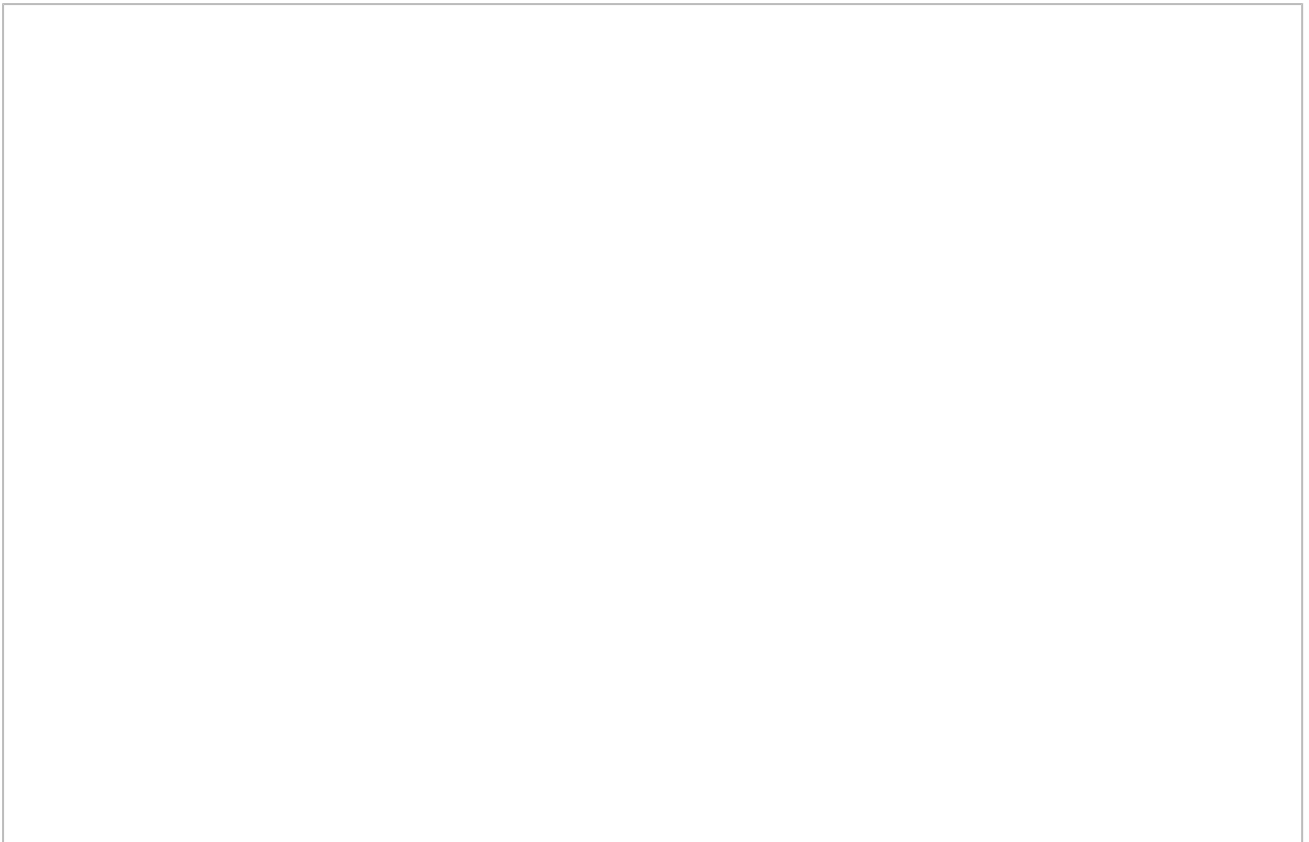
Q22: What is your view on the treatment of financial institutions regarding transition risk?

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Q23: Would you have any suggestions for other portfolios that should be analysed (perhaps also portfolios with lower transition risk)? Why are these portfolios relevant?



Q24: What is the minimum number of bonds/equities in a portfolio that ensures results are reliable?



Q25: Do you see other approaches to define portfolios with companies subject to higher, medium and lower transition risk based on the company-specific approach? What are their advantages?

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Q26: How should the thresholds to separate lower, medium and higher transition risk sectors be chosen?

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Q27: Do you have any comments on how to test the robustness of the transition risk classifications?

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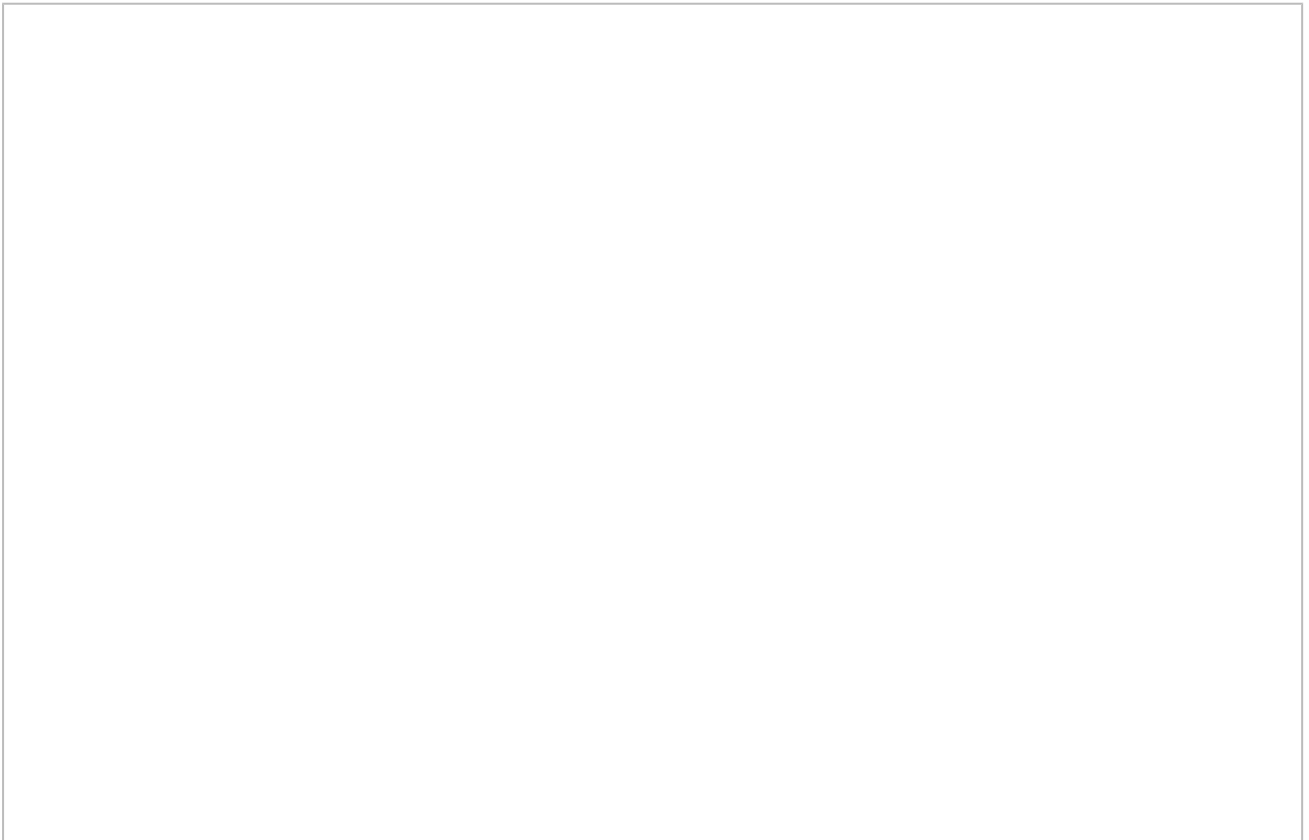
Q28: Do you have any comments on the advantages and disadvantages regarding both the sectoral and the firm-level classification approach?

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Q29: What approach should be preferred? Why?



Q30: Which equity index should be selected in terms of geography and size of the constituents to assess transition risk exposures? Why?



Q31: What are your views on applying a constant or changing composition of constituents regarding the equity portfolios? How material would the deviation between the two approaches be?

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Q32: Do you agree that a static measurement of transition risk is sufficient? If not, can you suggest relevant data sources to implement a dynamic measurement?

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Q33: Do you consider it necessary to isolate the effect of transition risk materializing in the observed historical equity risk of firms from other risk drivers from a prudential perspective?

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Q34: Do you have any suggestions how to isolate the pure transition risk effect on equity risk?

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Q35: Do you have comments on the approach for treating missing data?

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Q36: Are there specific issues with missing data for non-listed equities? How should they be solved?

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Q37: Do you have comments on the proposals regarding calculating the equity portfolio's value?

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Q38: Are there specific considerations that apply for non-listed equities?

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Q39: Do you have comments on the selection of periods for assessing equity risk?

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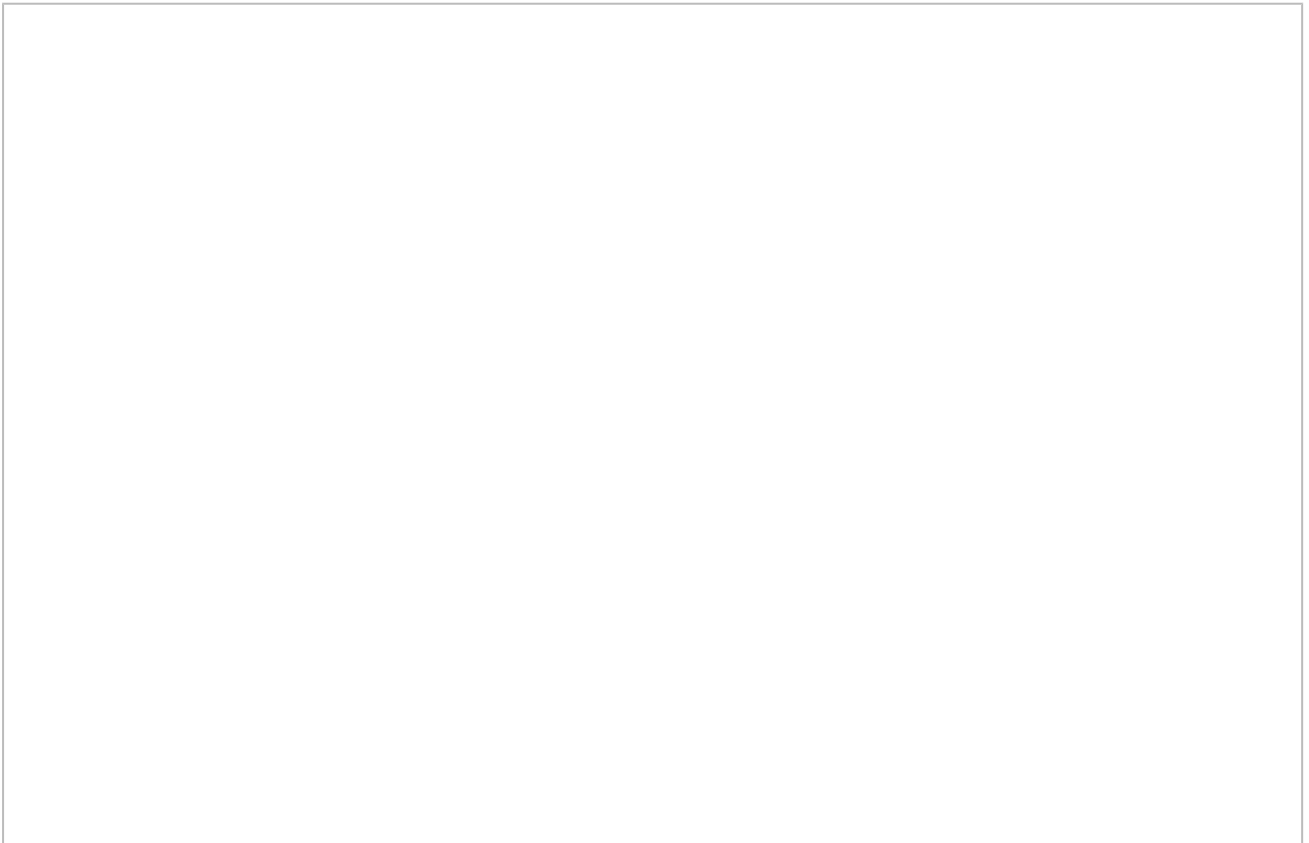
Q40: Do you have comments on the measurement of equity risk if no adjustment for transition risk is performed?

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Q41: What is your view on the merits of the absolute vs. relative approach? Why?



Q42: Which bond indices could be a suitable source for traded bonds? Why? Are there other relevant sources for traded debt?



Q43: Do you have any comments on the considerations regarding maturities and credit ratings for the analysis of transition risk?

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Q44: What could be suitable sources for data on non-traded debt?

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Q45: Do you have comments on the use of spread data provided by index providers for the analysis?

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Q46: Do you think that a simple or a market value weighted spread should be used? Why?

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Q47: Do you have comments on the selection of relevant time periods for the analysis?

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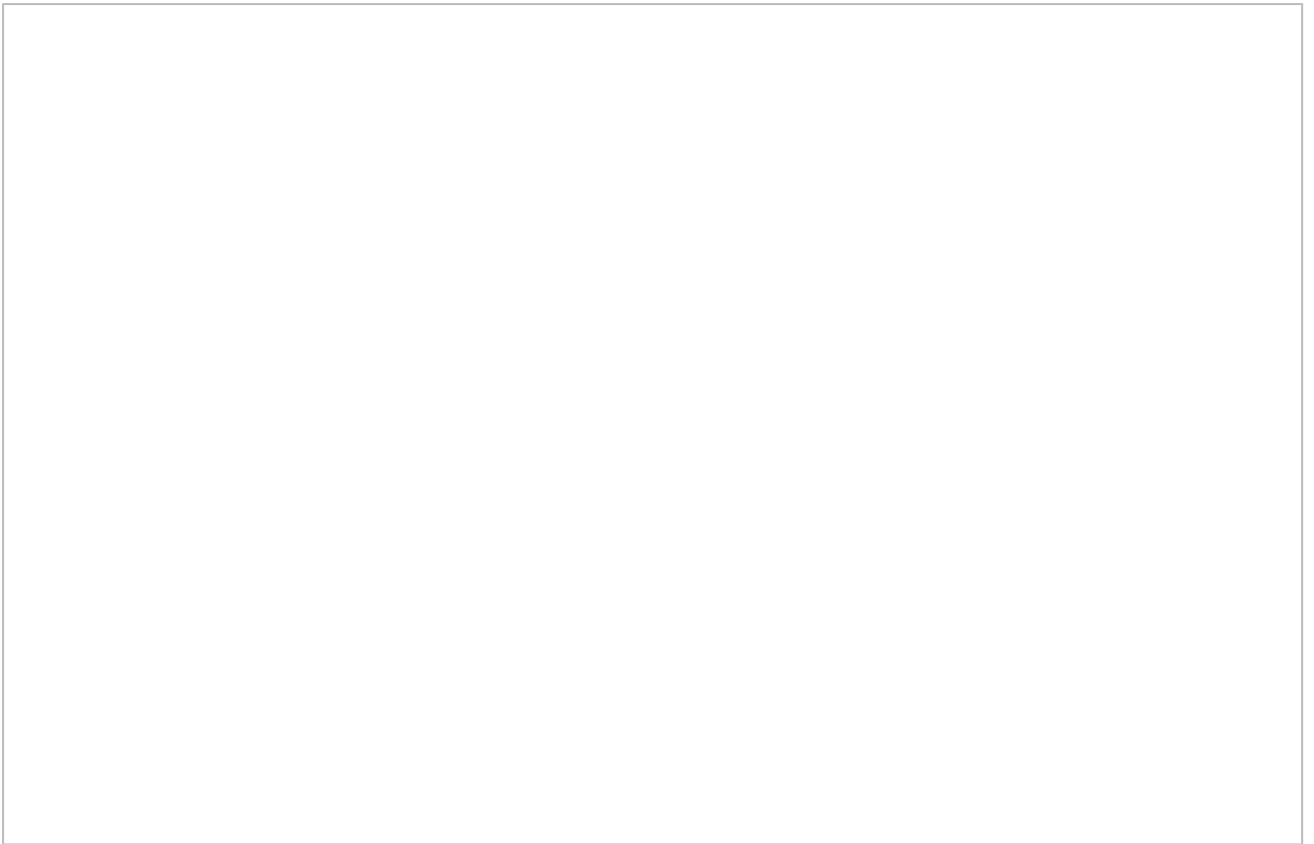
Q48: Do you have any suggestions how the similarity of different portfolios in terms of modified duration could be measured?

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Q49: What are the possibilities to account for the effect of duration/remaining maturity other than defining maturity/duration buckets? How would this work?



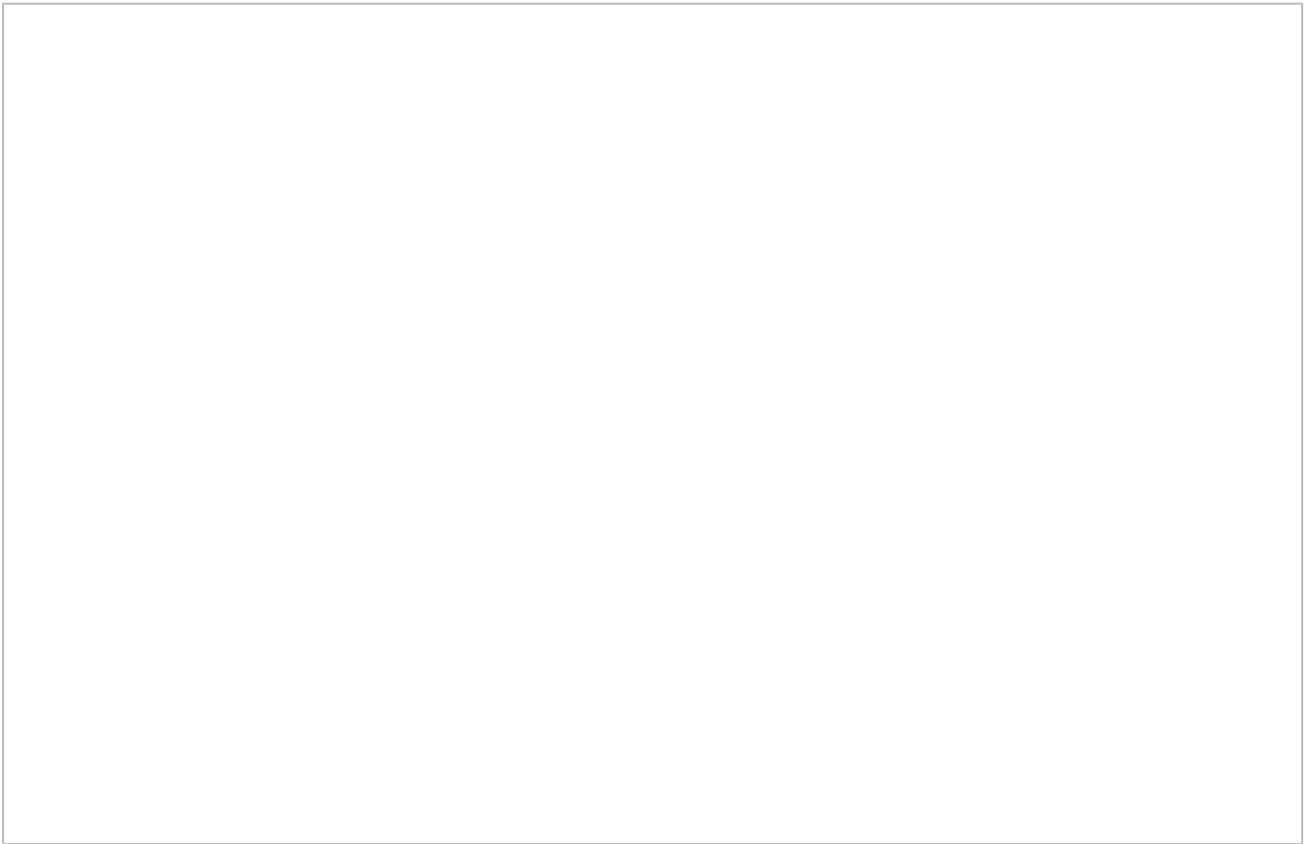
Q50: How could risk be measured for non-traded debt?



Q51: If there is a link between a building's energy efficiency and its market value, what are the economic drivers for this link?



Q52: Do you have quantitative evidence on the potential link between a building's energy efficiency and its market value on EU housing markets?



Q53: Are Energy Performance Certificates an appropriate measure for transition risk on residential and commercial real estate markets?

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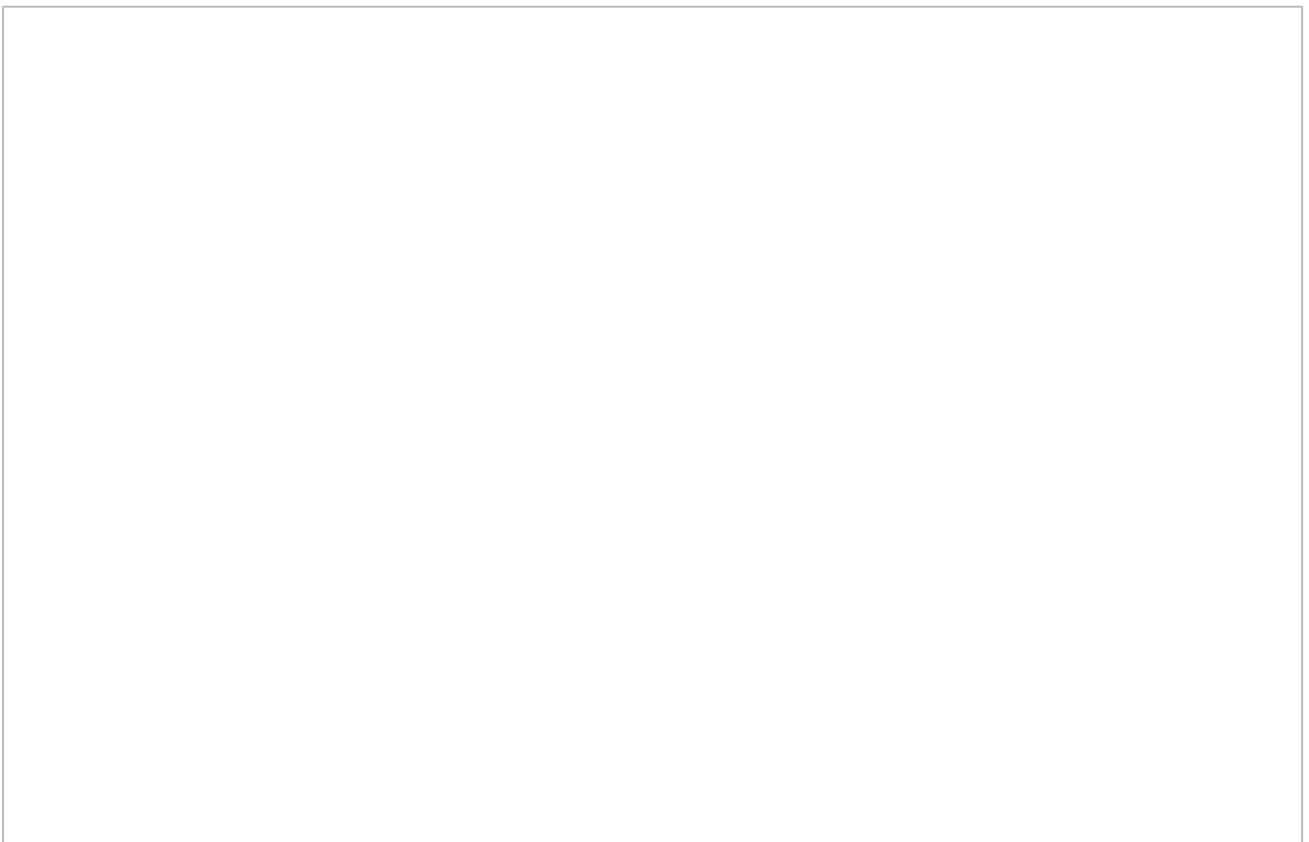
Q54: Do you expect different findings regarding potential risk differentials for commercial and residential buildings? Why?

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Q55: What are typical characteristics of commercial and residential buildings influencing their market values and therefore should be controlled for when constructing price indices?



Q56: What are the benefits or disadvantages constructing a price index on hedonic regression analysis or simple price averages for the purpose of studying potential risk differentials?



Q57: What are potential data sources for the purpose of the study, i.e. data containing the market value of a building, a measure of its level of energy performance and further value driving characteristics?

Q58: What are the benefits or disadvantages using advertisement data for the purpose of this study?

Q59: Besides transition risk, climate-related physical risk exposures might also influence property risk. Do you have evidence in this regard and what data sources are available to study this potential link?

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Q60: Do you have suggestions for other forward-looking assessments of transition risk that will help EIOPA in studying transition risk differentials? If yes, please provide these suggestions.

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Q61: Do you have comments on using the sectoral transition vulnerability factors (TVFs) introduced by DNB (2018) as a forward-looking measure regarding transition risk?

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Q62: Do you have comments on the parsimonious and pragmatic way to map the transition vulnerability factors (TVFs) onto the NGFS climate scenarios?

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Q63: Do you agree that whether an activity is aligned or not with the (climate mitigation) taxonomy does not allow per se to draw conclusion on the vulnerability to transition risk? If not, please justify your view.

Q64: Do you agree with the proposed approach to express transition risk differentials for different economic activities in terms of 0.5% value at risk (VaR)? If not, please provide your suggestions to improve the proposed approach.

Q65: Do you agree that the forward-looking assessment should also consider commercial and residential property based on energy efficiency labels? Please explain your answer.

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Q66: Do you have any suggestions that will help EIOPA in projecting forward-looking prices of commercial and residential property based on energy efficiency labels in different transition scenarios?

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II. Underwriting and Climate Change Adaptation

Q67: Do you have comments on the expected conceptual impact of adaptation measures on premium, reserve and natural catastrophe risk in Solvency II?

General Comment :

Comment on premium risk : adaptation measures may have combined positive and negative impacts on premium risk since some adaptation measures could potentially increase premium volumes and insurance would become less affordable. At the same time there would be an effective reduction of exposures. It is yet too early to assess identify which effect will dominate the other (positive or negative on premium risk).

Comment on reserve risk : Adaptation measures should normally reduce reserve risk since claims would be potentially mitigated thanks to adaptation measures.

Natural Catastrophe risk :

Nat CAT : Should be decreased thanks to adaptation measure that will reduce the peak claims amounts

NP Property CAT : Depends mainly on premium estimation. This risk can potentially increase in terms of materiality.

Man Made CAT : N/A

Other CAT : N/A

Q68: For internal model users, is it correct that climate related adaptation measures are not explicitly taken into account in your Solvency II internal model calculations for non-life risks?

If no, please provide details on your internal models results with and without taking into consideration climate-related adaptation measures.

Not enough information available to reply.

Q69: Do you have evidence on the impact of climate-related adaptation measures on premium risk?

There are no direct available evidence of the impact on premium risk. Indirectly insurance and reinsurance premium are likely to increase due to the increase in trend of natural catastrophe (for example in France the overall loss amount in 2022 has hit a record of 10Bn Nat Cat losses).

Q70: Do you have comments on the proposed methodology to study the potential impact of climate-related adaptation measures on premium risk under Solvency II's Standard Formula?

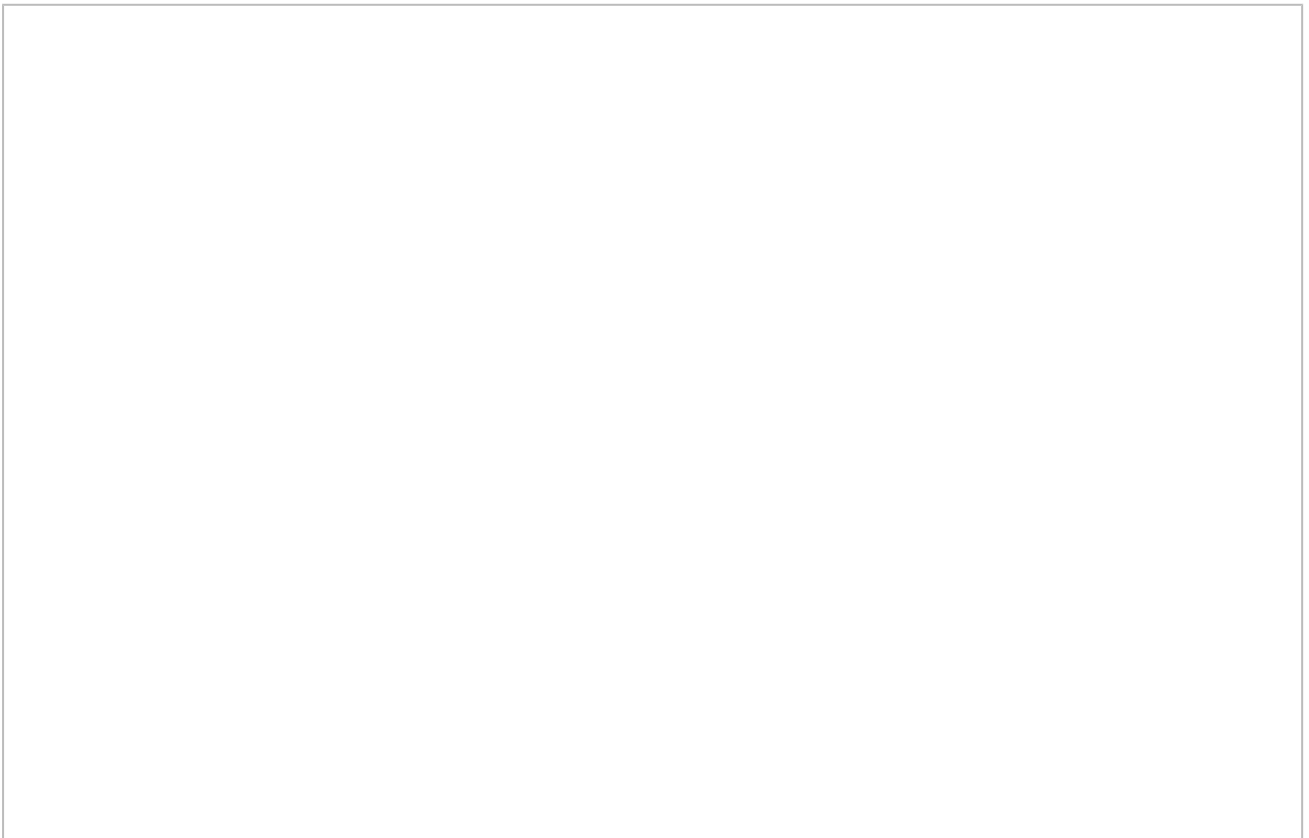
Our first comment pertains to the limitation of the overall Insurance Market data quality heterogeneity. This could potentially hinder the robustness of the premium risk volatility parameters.
Secondly, having only 2 buckets is debatable - an approach with more levels is more manageable than just with and without adaptation measures (maybe 4 ratings, zero, low, average and high level of adaptation measures).

III. Social Objectives and Social Risks from a Prudential Perspective

Q71: What do you consider to be areas where the prudential treatment of social risk and objectives should differ most from the treatment of climate risk and objectives?



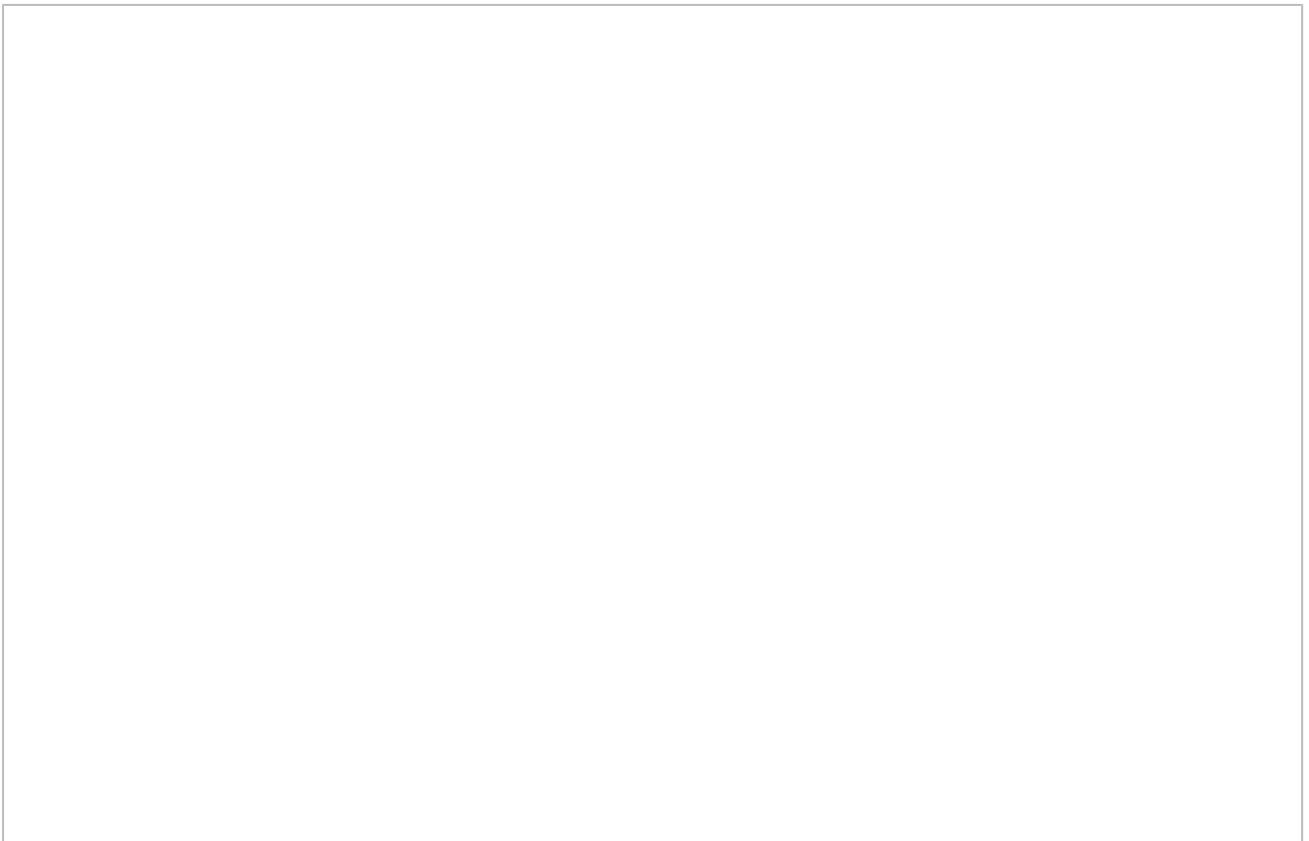
Q72: Do you have comments on the working definition of social objectives, which are generally referred to as 'social and employee matters, respect for human rights, and anti-corruption and bribery matters' and can be articulated further by referring to decent work, adequate living standards and inclusive communities? Do you consider that social objectives should include anti-corruption and bribery matters, or are these governance aspects?



Q73: Do you have comments on the mapping of social risks into prudential risks?



Q74: Do you have additional examples of how social risks can translate into the Solvency II risk categories?



Q75: Do you have comments on the proposal to start by integrating the treatment of social risks as part of Pillar II and III of Solvency II, covering governance, risk management and reporting/disclosure requirements?

[Empty response box]

Q76: What do you consider good practices for addressing social risks as part of the ORSA?

[Empty response box]

Q77: Do you think that particular guidance would be helpful for addressing social risks as part of the ORSA?

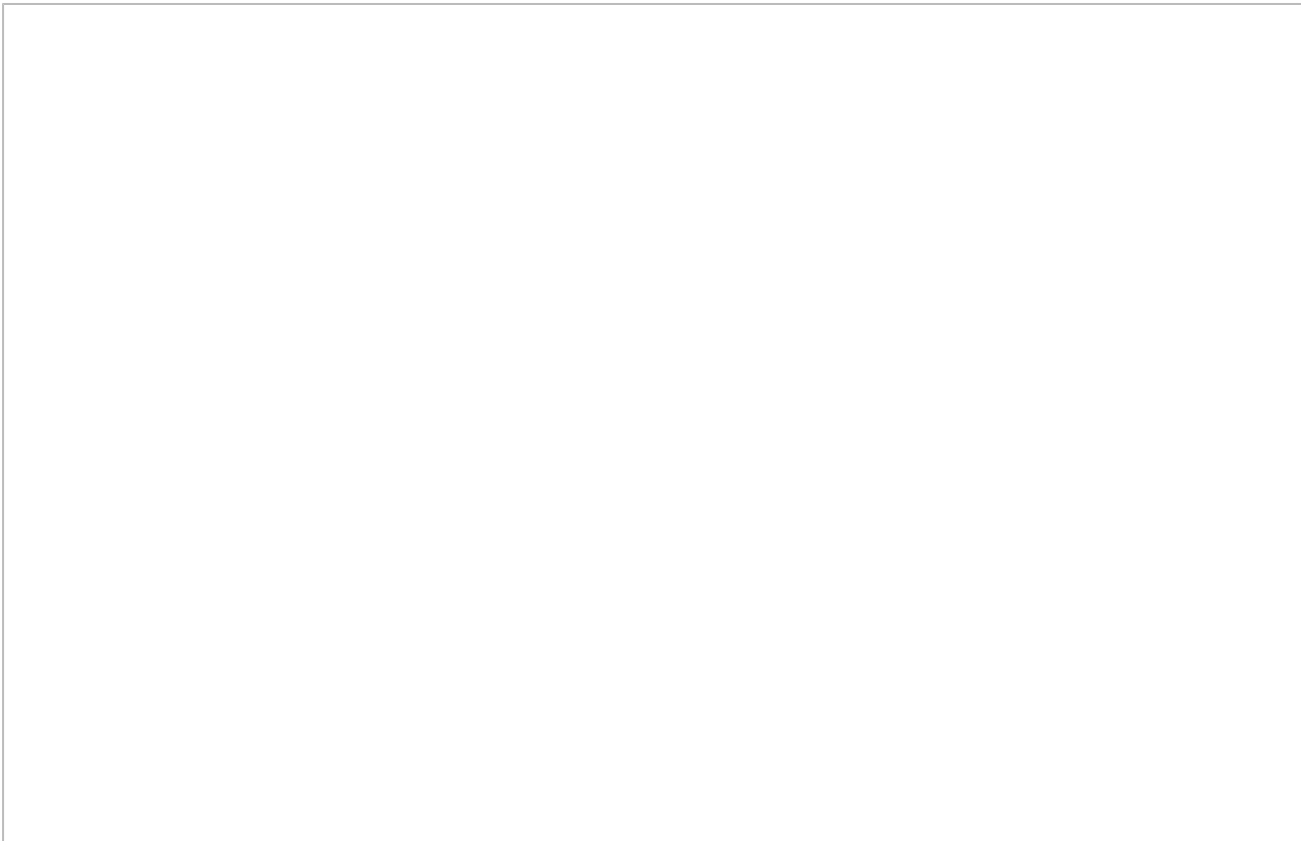
[Empty response box]

Q78: What type of risk management actions are most relevant to address social risks?

Q79: How do social risks typically impact on business planning (3-5 years) or long-term strategy?



Q80: The taxonomy regulation includes key international standards on social issues as minimum safeguards (Article 18) in order to prevent environmentally sustainable activities from harming fundamental human rights, workers' rights or principles of good governance (such as anti-bribery measures, for example). Would you agree that such minimum social safeguards could be used as guiding principles for implementing the prudent person principle requirement for investments with regards to social factors?



Q81: Similarly to EIOPA's ongoing analysis on the integration of climate change adaptation into underwriting practices, do you see value in conducting further analysis on how insurers, through their underwriting activity, can include mitigation and adaptation measures for social risks in their underwriting strategy in an actuarial risk-based manner?

In a context of climate change, it is necessary for insurers to go beyond the traditional ways of handling risk. On the one hand, adaptation measures can help prevent higher costs for the losses incurred and on the other hand, mitigation measures that may lower the impact of extreme event on insurers' books. Insurers through adaptation and mitigation measures can help society become more resilient against climate risk. Therefore, it would be of interest to quantify these effects correlated to social risks.

There is a high value added integrating and assessing the correlation of mitigation /adaptation measures and insurers underwriting activities in relation with the following topics :

- movement in population away from natural catastrophe or around areas that include mitigations factors (levees, micropiles etc..)

- evolution of insurers product propositions (build back better etc..)

Eventually, the next step would be to assess how to take into account mitigation & adaptation measures in an actuarial manner. First by identifying social harmful activities and therefore avoid (or mitigate) social tensions and a potential unfavorable economic environment. Then, to implement mitigation measures directly into undertakings operations and product proposition to help society become more resilient.

Q82: What are your views on the potential role of - and potential prudential relevance of - corporate governance aspects, such as remuneration, board composition or ant-corruption & anti-bribery tools to reduce potential social risks?

Privacy Statement related to Public (online) Consultations

Introduction

1. EIOPA, as a European Authority, is committed to protect individuals with regard to the processing of their personal data in accordance with Regulation (EU) No 2018/1725 (further referred as the Regulation). [Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC]

Controller of the data processing

2. The controller responsible for processing your data is EIOPA's Executive Director.

3. Address and email address of the controller:

Westhafenplatz 1, 60327 Frankfurt am Main, Germany

fausto.parente@eiopa.europa.eu

Contact details of EIOPA's Data Protection Officer

4. Westhafenplatz 1, 60327 Frankfurt am Main, Germany

dpo@eiopa.europa.eu

Purpose of processing your personal data

5. The purpose of processing personal data is to manage public consultations EIOPA launches and facilitate further communication with participating stakeholders (in particular when clarifications are needed on the information supplied).

6. Your data will not be used for any purposes other than the performance of the activities specified above. Otherwise you will be informed accordingly.

Legal basis of the processing and/or contractual or other obligation imposing it

7. EIOPA Regulation, and more precisely Article 10, 15 and 16 thereof.

8. EIOPA's Public Statement on Public Consultations.

Personal data collected

9. The personal data processed might include:

- Personal details (e.g. name, email address, phone number);
- Employment details.

Recipients of your personal data

10. The personal data collected are disclosed to designated EIOPA staff members.

Transfer of personal data to a third country or international organisation

11. No personal data will be transferred to a third country or international organization.

Retention period

12. Personal data collected are kept until the finalisation of the project the public consultation relates to.

Profiling

13. No decision is taken in the context of this processing operation solely on the basis of automated means.

Your rights

14. You have the right to access your personal data, receive a copy of them in a structured and machine-readable format or have them directly transmitted to another controller, as well as request their rectification or update in case they are not accurate.

15. You have the right to request the erasure of your personal data, as well as object to or obtain the restriction of their processing.

16. For the protection of your privacy and security, every reasonable step shall be taken to ensure that your identity is verified before granting access, or rectification, or deletion.

17. Should you wish to access/rectify/delete your personal data, or receive a copy of them/have it transmitted to another controller, or object to/restrict their processing, please contact legal@eiopa.europa.eu

18. Any complaint concerning the processing of your personal data can be addressed to EIOPA's Data Protection Officer (DPO@eiopa.europa.eu). Alternatively you can also have at any time recourse to the European Data Protection Supervisor (www.edps.europa.eu).

Contact

[Contact Form](#)