Ministerio de Hacienda

Gobierno de Chile

PUBLIC-PRIVATE ROUNDTABLE ON GREEN FINANCE

FINDINGS REPORT: SURVEY OF THE RISKS AND OPPORTUNITIES ASSOCIATED WITH CLIMATE CHANGE FOR CHILE'S FINANCIAL SECTOR

Findings Report: survey of the risks and opportunities associated with climate change for Chile's financial sector

Ministerio de Hacienda

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EXECUTIVE SUMMARY

In July of 2019, the Ministry of Finance set up a Public-Private Roundtable on Green Finance with the aim of creating a space for actors within the capital markets to identify, understand and incorporate the risks and opportunities associated with climate change into decision-making.

This was done with a view to maintaining the development and stability of the financial system, establishing that, upon materializing, climate risk can affect markets, and, along with them, the economy and society as a whole.

The work of the Roundtable this year was reflected in three key milestones. On the one hand, a Statement by the Chilean Financial Authorities in which they pledge their commitment to, and interest in, studying, understanding and promoting the adequate management of the risks and opportunities associated with climate change within the financial market.

On the other hand, the adoption of the voluntary Green Agreement, which sets out the general principles and commitments of financial actors to both take advantage of the opportunities arising from the transition to a carbon-neutral economy and to adequately manage climate risk. Said Agreement is the base instrument through which long-term, private-private cooperation will be generated in this area from the year 2020, through the 2020+ Roadmap.

In turn, the Ministry of Finance conducted out a survey of the Pension Fund Administrators, General Fund Administrators, Life Insurers and General Insurers, Banking and Intermediaries in the Santiago Stock Exchange, with the main objective of finding out the level to which climate change is included as a relevant variable in the business strategy of financial market entities.

The survey consisted of six sections and was responded to by 48 entities.

Based on the responses, the following findings stand out:
In relation to the understanding and evaluation of the risks and opportunities resulting from climate change, 72% of the entities believe that climate change is a risk which affects or could affect their current or future solvency or results, and 64% believe that it could affect Chile's financial stability. In spite of this, 43% do not participate in initiatives for reporting or sharing information related to climate change or Environmental, Social or Governmental (ASG, for its acronym in Spanish) criteria.

In terms of governance, close to half of the entities surveyed indicate that they have a policy or strategy which explicitly incorporates climate change. On the other hand, 44% of those surveyed have assigned a team member, lead or committee with specific responsibility for the issue of the environment and climate change.

In terms of strategy, 46% of the entities consulted assert that they have identified the business opportunities associated with climate change which will allow them to contribute to the transition to a low-carbon economy.

Meanwhile, the findings on the risks related to climate change broadly indicate that 45% of those surveyed incorporate and manage the physical risks associated with climate change in decision-making, while 53% confirmed doing so for transition risks.

Additionally, 18% of the entities had rejected investments as a result of the evaluation of these risks. Nonetheless, 93% stated having no methodology for evaluating them.

Finally, in terms of the measuring, reporting and dissemination of information related to climate change and its effect on the entity, only 13% indicated that they have a clear and uniform definition for identifying/classifying investment operations which contribute to the mitigation of, and adaptation to, climate change. In addition to this, only 2% of those surveyed said that they share or report on the material financial risks and opportunities associated with climate change for their investment portfolios.

These findings help to identify the gaps in the financial industry in relation to the management of the risks and opportunities associated with climate change, with a view to creating the appropriate spaces to help bridge those gaps in time and to take advantage of the opportunities which come from a transition to a carbon-neutral economy.

In turn, this analysis is of great importance to the work of the 2020+ Roadmap and to the long-term agenda in matters related to climate change and the financial sector.

1 BACKGROUND

On 3rd of July 2019 the Ministry of Finance announced the creation of the Public-Private Roundtable on Green Financing, whose objective is to set out a long-term agenda of dialogue and joint working between the government, regulators and financial market institutions in order to incorporate the risks and opportunities of climate change and its impact on the environment into business strategies and decision-making.

This initiative is one of the objectives of the first National Financial Strategy facing Climate Change in Chile, which was published by the Ministry of Finance in December 2019.[1]

The Roundtable is led by the Ministry of Finance and is made up of representatives from the Financial Market Commission (CMF, for its acronym in Spanish), the Central Bank of Chile (BCCh, for its acronym in Spanish), the Ministry of the Environment (MMA, for its acronym in Spanish), the State Bank of Chile (BE, for its acronym in Spanish), the Pensions Superintendence (SP, for its acronym in Spanish), the Santiago Stock Exchange, the Association of Pension Fund Administrators (AAFP, for its acronym in Spanish), the Association of Banks and Financial Institutions (ABIF, for its acronym in Spanish), the Association of Insurers (AACH, for its acronym in Spanish), the Chilean Association of Investment Fund Administrators (ACAFI, for its acronym in Spanish) and the Association of Mutual Fund Administrators (AAFM, for its acronym in Spanish).

The activities carried out by this Roundtable have the support of the Inter-American Development Bank (BID, for its acronym in Spanish), the United Nations Environment Programme Finance Initiative (UNEPFI) and the British Embassy.

As a result of this initiative's activities, financial sector entities, by way of the associations which they belong to, signed the Green Agreement, which sets out the main management principles, as well as commitments by sector, related to the risks and opportunities resulting from climate change.

Furthermore, the subscribed financial authorities issued a Statement on the relevance of managing these issues for financial stability – one of the results of the Roundtable's work during 2019.

In the framework of the Work Plan set out during the execution of the Roundtable in 2019, in the months of August and September the Ministry of Finance conducted a survey of financial entities under the supervision of the CMF and the SP. Its findings constitute an essential tool for identifying gaps in relation to the management of the risks and opportunities associated with climate change and, as a result, these findings will contribute to the creation of a joint, long-term Roadmap for implementing the principles and commitments of the Green Agreement.

This Roadmap seeks to raise awareness about the relevance of climate change to decision-making in the financial sector, to identify gaps in the local market with regards to international standards, to define and adopt measures to bridge these gaps and to share international best practice on green financing.

[1] This document is available at **www.hacienda.cl**

This report uses certain concepts which should be defined in order to ensure the correct reading of its findings:

INVESTMENTS PORTFOLIO

Portfolio of investment of own funds and funds from third parties in contracts, instruments or financial products.

CLIMATE RISK

The possibility of suffering losses as a result of physical or transition risk.

PHYSICAL RISK

The risk of suffering losses caused by the occurrence of either extreme climate events or changes in climate patterns in the long term.

TRANSITION RISK

The risk of suffering losses as a result of the process of adjustment to a low-carbon emissions economy (e.g. climate policy, technology, regulation or market adjustments, among others).

ENVIRONMENTAL RISK

Arising from the losses associated with litigation or fines as a result of an activity which causes harm, degradation or any other type of damage of an environmental nature.

2 OBJECTIVES

2.1
GENERAL OBJECTIVE

The main objective of the survey which the Ministry of Finance conducted with the financial sector was to determine the degree to which climate change was incorporated as a relevant variable in the business strategy of entities in the financial industry.

2.2
SPECIFIC OBJECTIVES

- To measure the level of knowledge and awareness within financial entities present in Chile of the impact of climate change on their operations.
- To identify the measures which the financial sector has adopted to measure, evaluate and manage the risks and opportunities associated with climate change.
- To establish the information and training needs of the sector in order to incorporate climate change into decision-making.

3 METHODOLOGY


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3.1
DESIGNING THE SURVEY

Three types of surveys were designed: one for the general insurers, another for banking and a third for the life insurers[2] and investors[3]. From here on, each group will be referred to as an industry.

The surveys were created by the Chilean Ministry of Finance with the support of the Inter-American Development Bank (BID, for its acronym in Spanish). Each one of the three types of surveys contained 6 sections. The survey which was conducted with the General Insurers had 44 questions, while the surveys conducted with banking, the Life Insurers and the investors had 34 questions.

Some questions were multiple choice; as a result, the total of the percentages for some options can exceed 100%.

The questions were divided into the following sections:

I. Understanding and valuing the risks and opportunities associated with climate change: in this section we identify the entities' level of awareness of the impact which climate change could have on their strategy and financial results.

II. Governance: this section seeks to establish the level of involvement of the Board and the entities' upper management in matters related to climate change.

III. Strategy and opportunities related to climate change: the questions in this section try to find out whether climate change is seen as an opportunity in entities' portfolio design.

IV. Risks related to climate change: this section aims to identify the perception of those surveyed about the economic sectors which are most exposed to climate risks – physical and transition – and the incorporation of said risks into decision-making and portfolio administration.

V. Measuring, reporting and dissemination: this section seeks to establish whether entities have metrics and objectives related to the risks and opportunities of climate change in their credit, investment and subscription operations.

VI. Closing comments: this section contains questions which refer to the role of each entity and of the financial regulator in light of the financial aspect of climate change.[4]

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[2] Life Insurers carry out activities related to subscription to insurance and have a wide portfolio of investment, therefore the same survey was conducted with them as with investors.
[3] Investment Funds, Mutual Funds, Pension Funds and Intermediaries in the Stock Market.
[4] For the purposes of this Report, these responses are being kept aside.

3.2
TARGET GROUP

The target group of this survey were entities which belong to the following categories:

- General Fund Administrators:
  - **I.** Investment fund administrators associated with the Chilean Association of Investment Fund Administrators (ACAFI, for its acronym in Spanish).
  - **II.** Mutual fund administrators associated with the Association of Mutual Fund Administrators (AAFM, for its acronym in Spanish).[5]
- Pension fund administrators associated with the Association of Pension Fund Administrators (AAFP, for its acronym in Spanish).
- General insurers and life insurers associated with the Chilean Association of Insurers (AACH, for its acronym in Spanish).Bancos asociados a la Asociación de Bancos e -
- Banks associated with the Association of Banks and Financial Institutions (ABIF, for its acronym in Spanish) and the State Bank of Chile.
- Intermediaries in the stock exchange who operate through the Santiago Stock Exchange.

The percentage of market participation of the entities who responded to the survey by category was as follows:

Table No 1. Market participation of the entities surveyed by category

CATEGORY	PERCENTAGE IN RELATION TO THE TOTAL	PERCENTAGE
Pension fund administrators	Assets administrated by the pension fund industry	**100%**
Banking	Assets administrated by the banking industry	**96%**
General fund administrators	Assets of the mutual fund and investment fund industries	**64%**
Life Insurers and General Insurers	Premiums issued by the Life Insurers/General Insurers [6]	**31%**
Intermediaries in the Santiago Stock Exchange	Assets traded in the Santiago Stock Exchange	**29%**

5 Throughout this report, this category will be referred to as General Fund Administrators.
6 In both industries, the percentage is 31%.

3.3
CONDUCTING THE SURVEY AND COLLECTING THE FINDINGS

The survey was sent by the Ministry of Finance to the Associations and the Santiago Stock Exchange on the 8th of August 2019, who sent it to each of their associates and the securities intermediaries in the case of the Santiago Stock Exchange. The banking responses were received and tabulated by the ABIF and sent to the Ministry of Finance; the responses of the Insurers were received by the AACH and tabulated by the Ministry of Finance; and the responses of investors were received by the ACAFI, the AAFM, the AAFP, the AACH – for the Life Insurers – and the Santiago Stock Exchange, and tabulated by the Ministry of Finance.

In order to maintain confidentiality, the responses received were anonymous and the findings were presented in an aggregate form.

4 FINDINGS

Antártica Chilena / Jay Ruzesky

4.1
UNDERSTANDING AND VALUING THE RISKS AND OPPORTUNITIES ASSOCIATED WITH CLIMATE CHANGE

72% of the entities surveyed believe that climate change is a risk which affects or could affect their solvency or the entities' current or future results. The following table presents the percentages of positive responses in each category of entities surveyed.

Table No.2. Percentage of entities who believe that climate change is a risk which affects or could affect their current and/or future solvency or results (such as the return on investment portfolios)

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING	INTERMEDIARIES IN THE STOCK MARKET
67%	92%	63%	69%	40%

Continuing with this question, of the total number of entities who responded in the affirmative, 22% believe that the effects of climate change are already showing in their results, and 30% believe that said effects could materialize in the space of 1 to 5 years, 25% between 6 and 10 years, 6% between 11 and 15 years and 15% believe that climate change will have repercussions for institutions in over 15 years.

Graph No 1. Timeframe in which the entities believe that the effects of climate change could affect the current and/or future solvency or results of their company

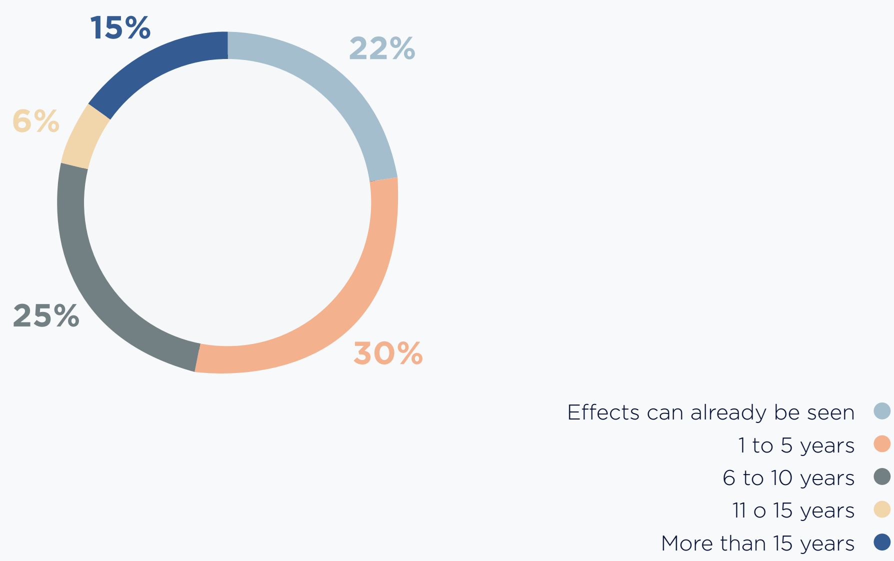


Table No 3 presents the distribution of responses by category

Table No 3. Timeframe in which entities believe that the effects of climate change could affect the current and/or future solvency or results of their company

TIME PERIOD	PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING	INTERMEDIARIES IN THE STOCK MARKET
Efectos ya vistos	25%	36%	0%	22%	0%
De 1 a 5 años	25%	45%	0%	33%	50%
De 5 a 10 años	25%	18%	73%	11%	0%
De 11 a 15 años	25%	0%	0%	11%	0%
Más allá de 15 años	0%	0%	27%	22%	50%

The total of the responses may exceed 100%, given that percentages are rounded off to the second digit

In terms of the perception of climate change as a systemic risk, 64% of those surveyed believe that this phenomenon is a risk which could affect financial stability in Chile.

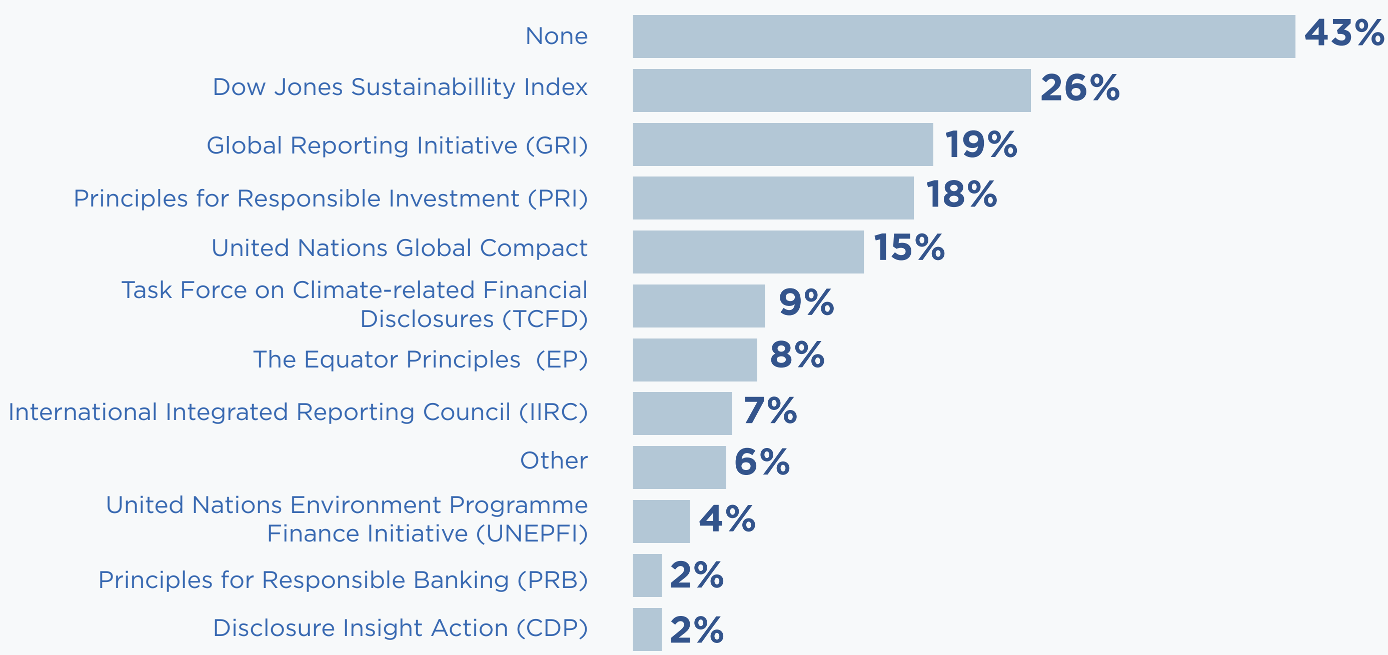
In the following table, information concerning this issue is divided by category.

Table No 4. Percentage of entities who believe that climate change could affect financial stability in Chile

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING	INTERMEDIARIES IN THE STOCK MARKET
50%	82%	72%	54%	60%

On the other hand, in terms of entities being subscribed to initiatives for the reporting and dissemination of information related to climate change or Environmental, Social and Cooperative Government criteria (ASG), 43% of those surveyed stated they were not part of any such initiative (see Graph No 2 for the initiatives), 26% are part of the Dow Jones Sustainability Index, and 19% are part of Global Reporting Initiative. The following two graphs present the participation of those surveyed in each option presented in this question[7].

Graph No 2. Percentage of the entities who belong to an initiative for the reporting and dissemination of information related to climate change or Environmental, Social and Cooperative Government (ASG, for its acronym in Spanish) criteria.

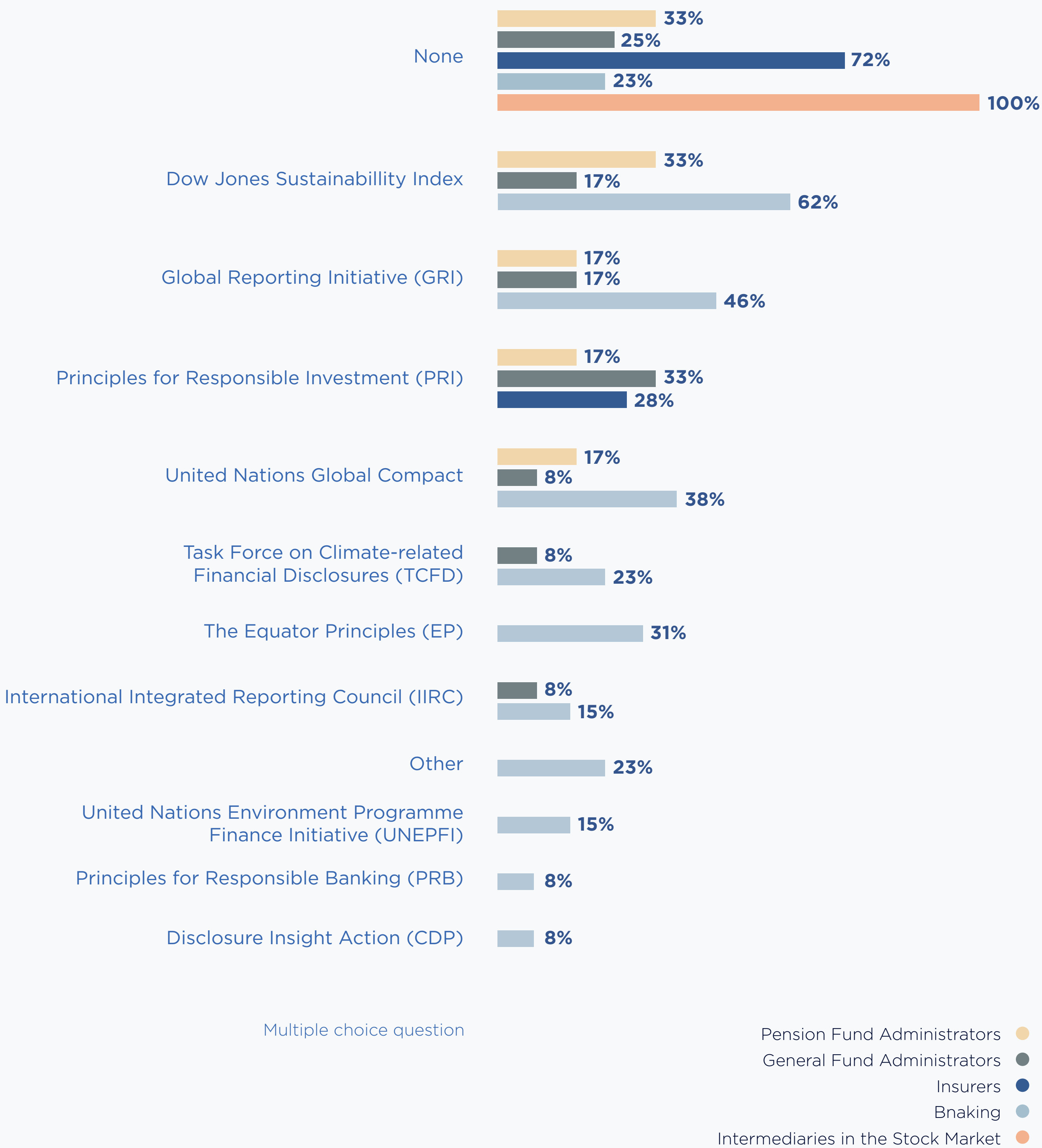


Multiple choice question

[7] Initiatives which were selected at least once are reported.

Below, Graph No 3 presents the information separated by category.

Graph No 3. Percentage by category of entities subscribed to initiatives for the reporting and dissemination of information related to climate change or Environmental, Social and Cooperative Government (ASG, for its acronym in Spanish) criteria.



4.2
GOVERNANCE

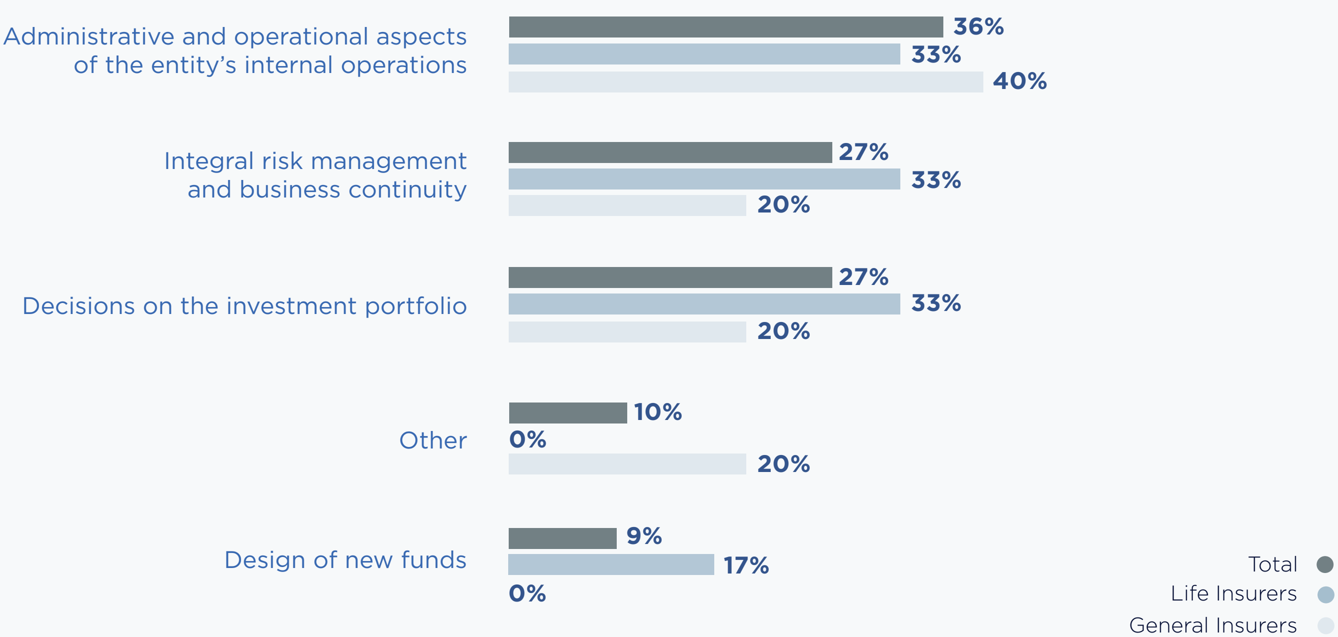
48% of the financial entities indicated that they have a policy or strategy which explicitly incorporates climate change. Table No 5 reflects the findings by category.

Table No 5. Percentage of entities who have a policy or strategy which explicitly incorporates climate change

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING	INTERMEDIARIES IN THE STOCK MARKET
83%	**50%**	**37%**	**54%**	**0%**

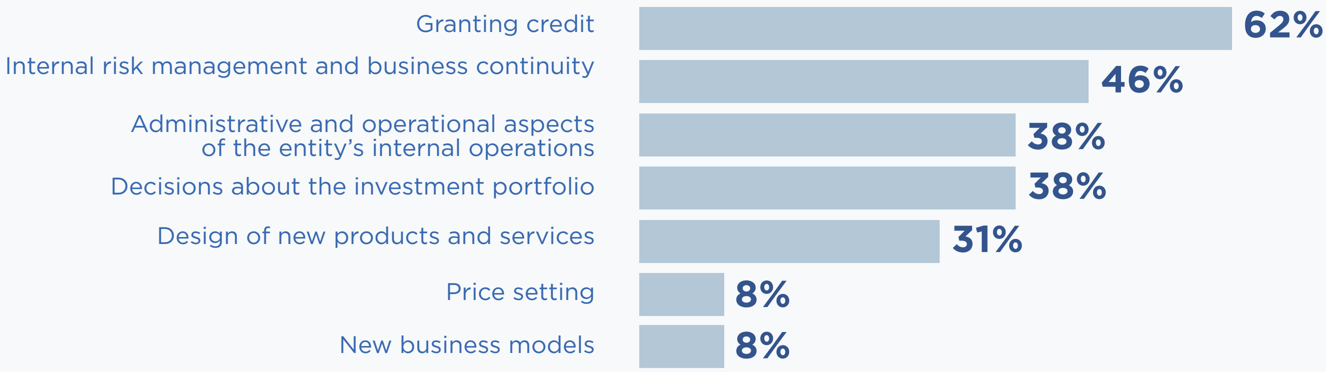
Taking only the entities that have a policy or strategy which considers climate change, the following three graphs, separated by industry (insurers, banking or investors), present the aspects of the business model in which the risks and opportunities associated with climate change are taken into account.

Graph No 4. Aspects of business development in which insurers are taking into account the risks and opportunities associated with climate change



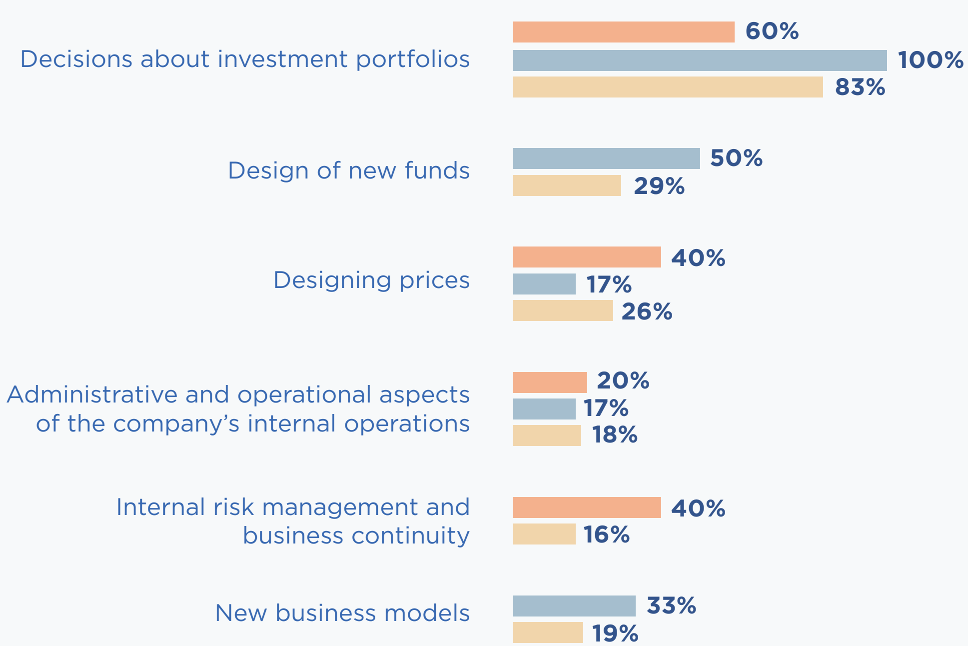
Options which were not selected by those surveyed are not included in the graph: New business models; Setting of premiums/prices; Design of new products/portfolios; Decisions about market objectives established by subscription credit. Multiple choice question.

Graph No 5. Aspects of business development where banking is taking into account the risks and opportunities associated with climate change.



The option 'other' is not included in the graph because it was not selected by those surveyed. Multiple choice question.

Graph No 6. Aspects of business development where investors are taking into account the risks and opportunities associated with climate change



Intermediaries in the Stock Market are not included in this graph because they did not respond to this question. The option 'other' is not included in this graph because it was not selected by any of those surveyed. Multiple choice question.

Pension Fund Administrators
General Fund Administrators
Total

31% of the entities surveyed indicated that the Board has revised the strategy related to climate change (where it exists), or has shown interest in finding out about the risks and opportunities associated with climate change in the last 24 months. The following table show the percentage of the entities surveyed who indicated that their Board has revised this strategy and/or touched on this topic in their sessions.

Table No 6. Percentage of the entities by category where the Board has either revised the strategy or policy which refers to climate change (where it exists) or has looked into climate change, its risks and opportunities for the entity, in the last 24 months.

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING	INTERMEDIARIES IN THE STOCK MARKET
50%	**27%**	**27%**	**38%**	**0%**

Among those surveyed who responded positively to the previous question, the positive responses which best describe the level of involvement of the Board with regards to the risks and opportunities associated with climate change, and their corresponding percentages, can be seen below.

Table No 7. Positive responses which best describe the level of involvement of the Board with regards to the risks and opportunities associated with climate change

	The Board includes the risks and opportunities associated with climate change as an integral part of their responsibility for the administration of the entity in the long term.	The Board takes into account the risks and opportunities associated with climate change in the strategic planning of the entity.	The Board considers the risks and opportunities associated with climate change as relevant and, in addition, establishes objectives and strategic indicators related to this.	The Board supervises the implementation, progress in the objectives and the meeting of indicators established in relation to the risks and opportunities related to climate change.	The entity is currently building new competencies at the Board level with regards to the risks and opportunities associated with climate change.
Pension Fund Administrators	**67%**	**0%**	**0%**	**33%**	**0%**
General Fund Administrators	**0%**	**0%**	**0%**	**0%**	**100%**
Insurers	**0%**	**0%**	**0%**	**0%**	**100%**
Bankers	**40%**	**40%**	**0%**	**60%**	**40%**
Total	**19%**	**11%**	**0%**	**20%**	**63%**

Intermediaries in the Stock Market are not included because none of those surveyed responded to the question.
Multiple choice question.

Taking a closer look at this section, we can see that 44% of those surveyed have assigned a team member, lead, or committee with specific responsibility for the issue of the environment and climate change. Table No 8 divides this information by category.

In the case of the Insurers, the table only includes Life Insurers, since, for General Insurers, the question asked was 'Is the monitoring of climate risks and indicators established by the institution to measure the plans in this area reported to the Board?' In this case, 20% responded positively to the question.

Table No 8. Percentage of entities who have designated a team member, lead or committee with specific responsibility for the issue of the environment and climate change

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING	INTERMEDIARIES IN THE STOCK MARKET
33%	45%	33%	77%	0%

Of those entities who responded positively to the previous question – not including the General Insurers –, 48% stated that the team member, lead or committee reported its decision to the Board. In Table No 9 this question is divided by category.

Table No 9. Percentage of team members, leads or committees (where they have been assigned) that report their decisions to the Board

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING
50%	29%	100%	50%

Intermediaries in the Stock Market are not included because none responded to the question.

4.3
STRATEGY: OPPORTUNITIES RELATED TO CLIMATE CHANGE

46% of the entities consulted confirmed that they had identified business opportunities associated with climate change which allow them to contribute to the transition to a low-carbon economy. Table No 10 shows this information divided by category.

Table No 10. Percentage of entities that have identified business opportunities associated with climate change which allow them to contribute to the transition to a low-carbon economy

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING	INTERMEDIARIES IN THE STOCK MARKET
33%	**64%**	**45%**	**46%**	**0%**

The following tables (11, 12 and 13) show the percentage of entities from each industry that have carried out activities to take advantage of the opportunities resulting from climate change in the last 5 years.

Table No 11. Percentage of entities from the insurance industry that have carried out activities to take advantage of the opportunities resulting from climate change in the last five years.

GENERAL INSURERS			
Policies related to energy efficiency and renewable energy projects	Microinsurance, catastrophe insurance and parametric insurance	Green, Sustainable and/or 'Impact' Bonds	None
20%	**20%**	**20%**	**40%**
LIFE INSURERS			
Green, Sustainable and/or 'Impact' Bonds	Financing activities for adaptation to climate change – resilience: restoration, conservation, environmental recovery, sustainable agriculture, adaptation based on ecosystems, projects for the reduction of risk from disasters, among others	Financing of green markets, products and services with low GG emissions,[8] biocommerce, organic products, among others	None
20%	**20%**	**17%**	**83%**

Only the options which were selected are presented. Multiple choice question.

[8] Greenhouse Gases

Table No 12. Percentage of banks that have carried out activities to take advantage of the opportunities resulting from climate change in the last 5 years

Green, Sustainable and/or 'Impact' Bonds	Technical assistance for clients to identify opportunities and to create bankable projects/ operations (the structuring of non-conventional projects, energy audits, engineering detail, market studies to identify and break down barriers, etc.)	Credit for energy efficiency and renewable energy projects	Credit for sustainable construction and/or 'green' Mortgages	Credit for built-in management of residual solids, liquids and gases, disposal and use of residue	Financing of activities for adaptation to climate change – resilience: restoration, conservation, environmental recovery, sustainable agriculture, adaptation based on ecosystems, projects for the reduction of risk from disasters, among others	Financing of ecotourism activities, organic products, green markets and services which are low in GG emissions, biocommerce, among others
46%	**38%**	**46%**	**15%**	**38%**	**23%**	**15%**

Multiple choice question.

Table No 13. Percentage of entities in the investment industry that have carried out activities to take advantage of the opportunities resulting from climate change in the last 5 years

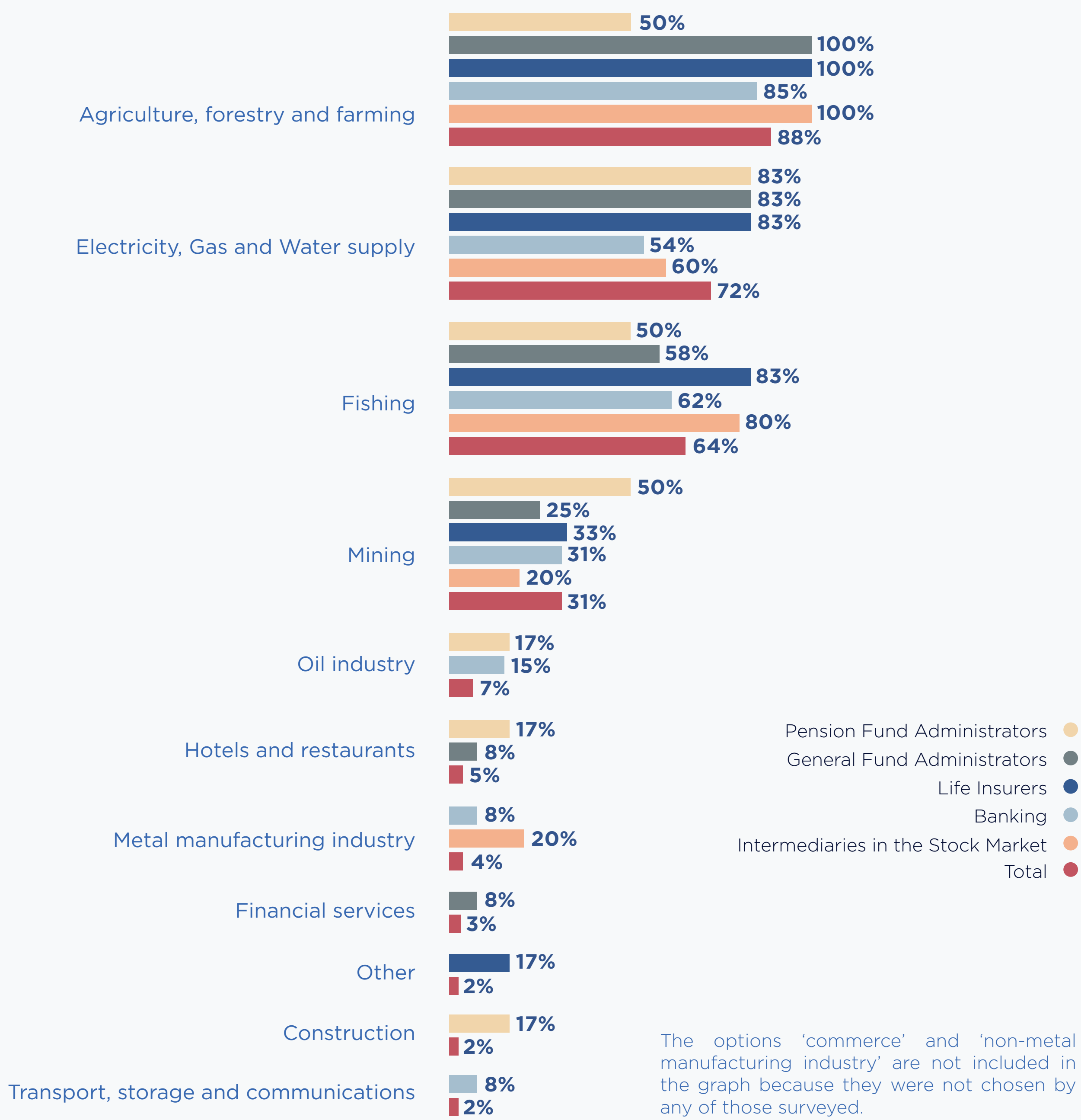
Commercial strategies for deepening and widening the market and training programmes for increasing the resilience of sectors, projects, and segments most exposed to climate impact	Green, Sustainable and/or 'Impact' Bonds	Technical assistance for clients to identify opportunities and to create bankable projects/ operations (structuring non-conventional projects, energy audits, engineering detail, market studies to identify and break down barriers, etc.)	Financing of activities for adaptation to climate change – resilience: restoration, conservation, environmental recovery, sustainable agriculture, adaptation based on ecosystems, projects for the reduction of risk from disasters, among others	Financing of green markets, products and services with low GG emissions, biocommerce, organic products, among others	Other	None
5%	**22%**	**5%**	**5%**	**0%**	**10%**	**54%**

Multiple choice question.

4.4
RISKS RELATED TO CLIMATE CHANGE

As a first step towards understanding the perception of the risks associated with climate change, economic sectors are presented here that, according to entities that responded to the survey (with the exception of the General Insurers),[9] are most exposed to the physical risks (Graph No 7) and the transition risks (Graph No 8) related with climate change.

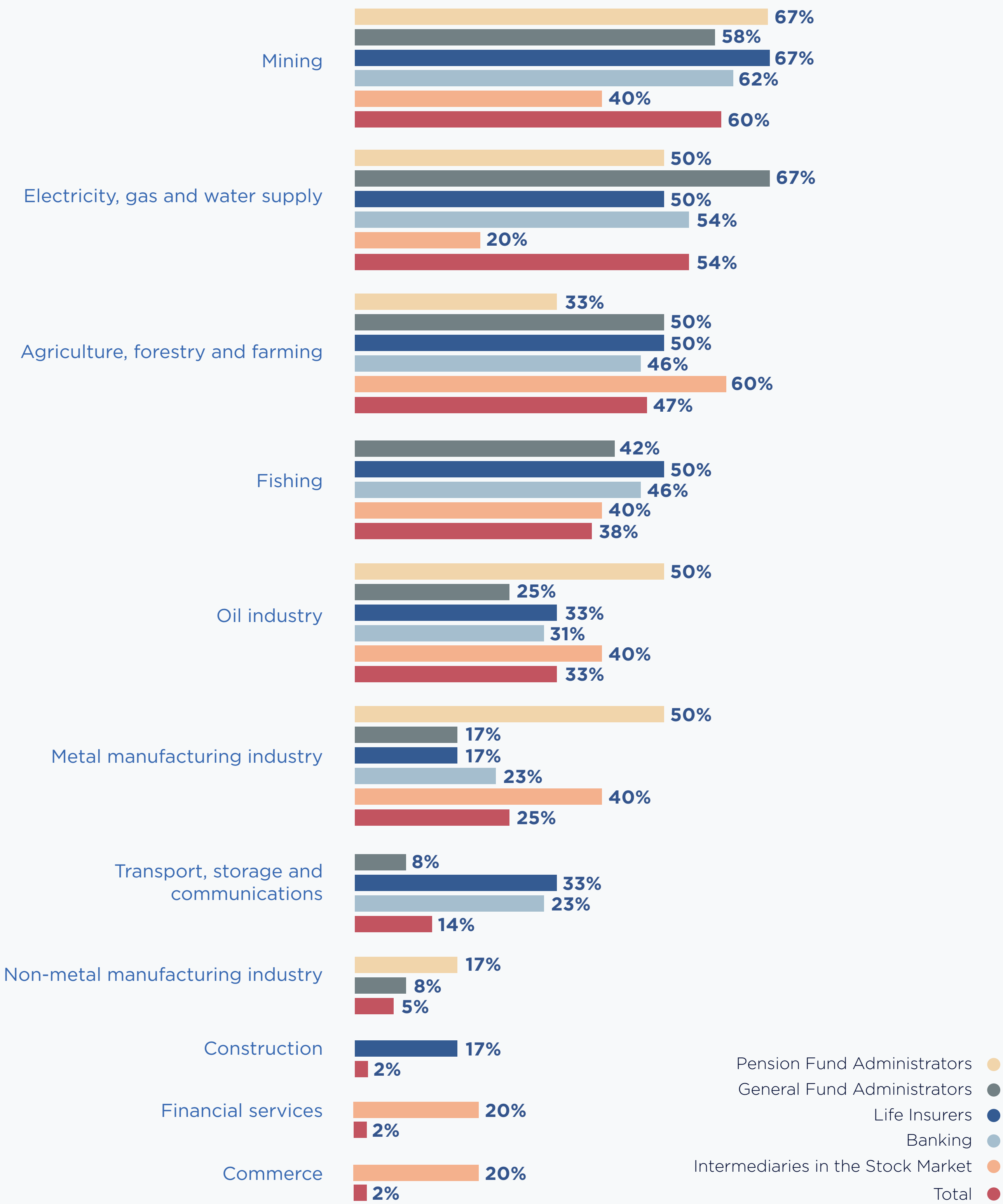
Graph No 7. Economic sectors which the entities (excluding the General Insurers) believe are the most exposed to the physical risks associated with climate change



The options 'commerce' and 'non-metal manufacturing industry' are not included in the graph because they were not chosen by any of those surveyed.
Multiple choice question.

[9] These entities are not included since, in the corresponding survey, they were asked the same question, but based on type of activity (investment or subscription).

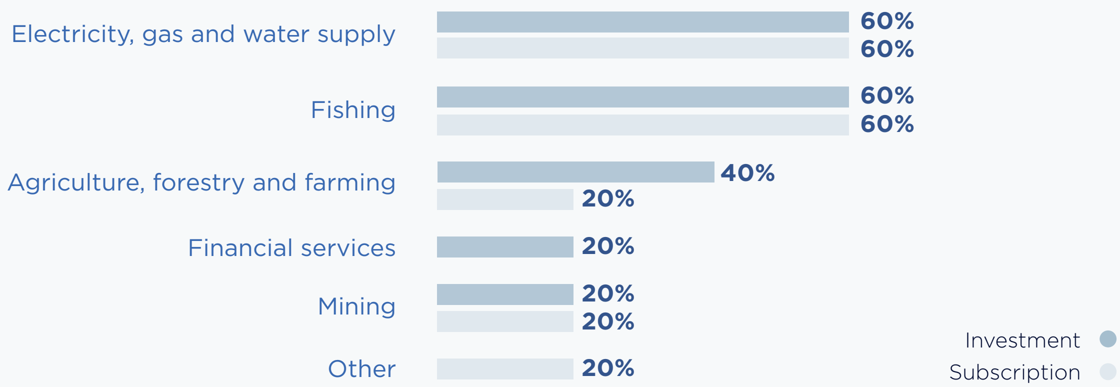
Graph No 8. Economic sectors which entities (excluding the General Insurers) believe to be most exposed to the transition risks associated with climate change.



The options 'Other' and 'Hotels and restaurants' are not included in the graph because they were not selected by any of those surveyed. Multiple choice question.

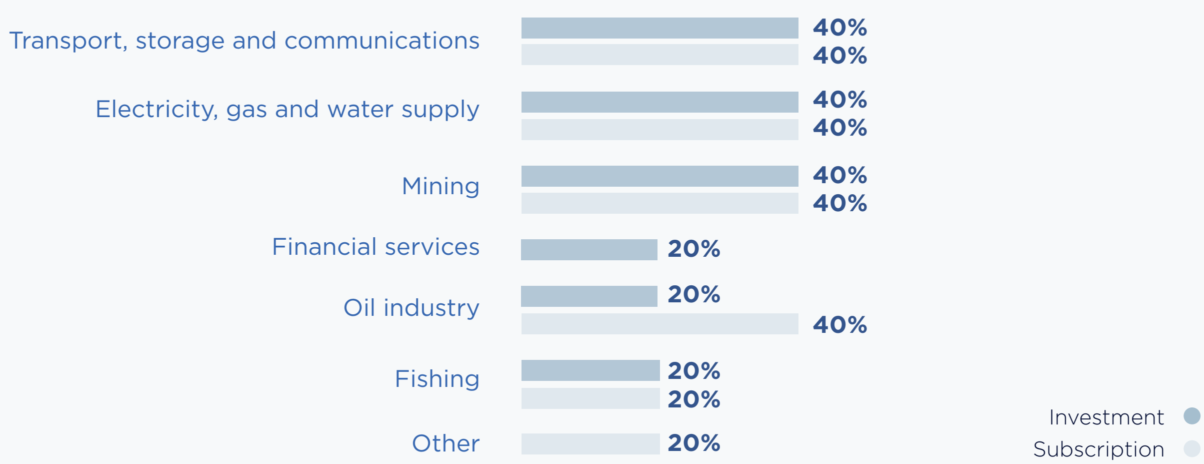
The General Insurers were asked the same two previous questions, with the difference that it was divided into investment and subscription decisions.[10] Graph No 9 presents the economic sectors which the General Insurers believe to be most exposed to the physical risks of climate change, divided between the investment and subscription decisions. Graph No 10 presents the same information, but for the transition risks.

Graph No 9. Sectors which the General Insurers believe are most exposed to the physical risks, divided into investment and subscription decisions.



The options which were not selected by those surveyed are not included in the graph: Metal manufacturing industry; non-Metal Manufacturing Industry; Oil Industry; Construction; Commerce; Hotels and Restaurants; and Transport, Storage and Communications. Multiple choice question.

Graph No 10. Sectors which the General Insurers believe are most exposed to the transition risks, divided into investment and subscription



The options which were not selected by those surveyed are not included in the graph: Metal manufacturing industry; non-Metal Manufacturing Industry; Construction; Commerce; Hotels and Restaurants; and Transport, Storage and Communications. Multiple choice question.

[10] For example, in the case of Physical risks, the following questions were asked: 1) In terms of your investment decisions, which economic sectors are most exposed to the Physical Risks associated with climate change, in the company's view?, and 2) In terms of your subscription decisions, which economic sectors are most exposed to the Physical Risks associated with climate change, in the company's view?

In terms of the incorporation and management of the risks associated with climate change by the financial institutions in decision-making on investment,[11] 45% of the institutions indicated that they do this in relation to the physical risks, while 53% do this in relation to transition risks.[12]

In the following tables, the percentages of those surveyed who stated that they incorporate and manage physical risks (Table No 14) and transition risks (No 15) are presented by category.

Table No 14. Percentage of the entities which incorporate and manage physical risks in their decision-making on investment

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING	INTERMEDIARIES IN THE STOCK MARKET
33%	34%	55%	62%	20%

Table No 15. Percentage of entities who incorporate and manage transition risks in their decision-making on investment

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING	INTERMEDIARIES IN THE STOCK MARKET
67%	42%	55%	69%	20%

Additionally, 18% of the entities had rejected investments as a[13] consequence of evaluating the physical or transition risks, taking advantage of these opportunities in US$ 84 MM. Table No 16 presents the percentage of entities surveyed by category who have rejected investment operations as a result of the evaluation of those risks.

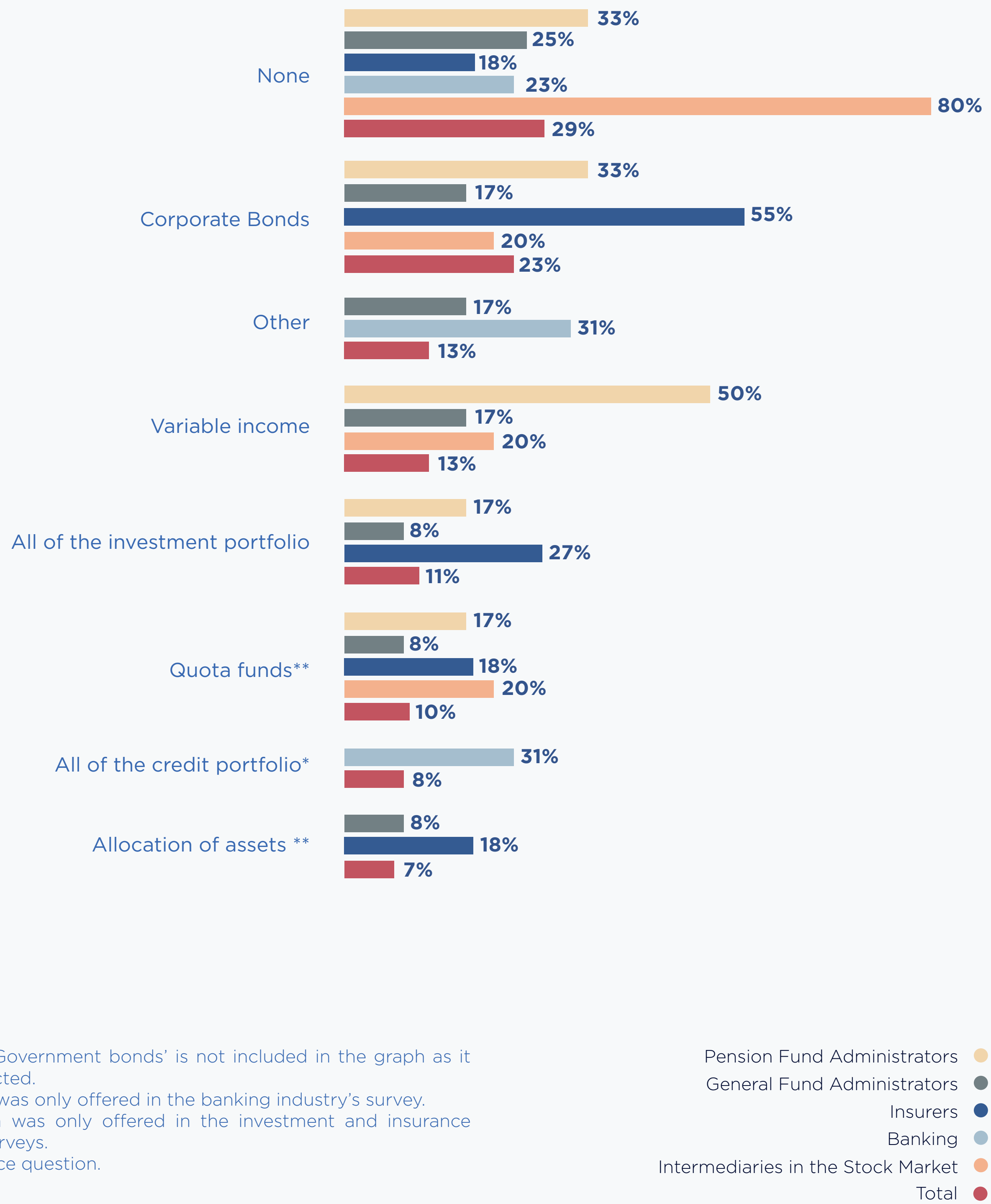
Table No 16. Percentage of entities which have rejected investments as a result of the evaluation of physical or transitional risks

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	INSURERS	BANKING	INTERMEDIARIES IN THE STOCK MARKET
0%	27%	0%	38%	0%

11 In the survey for the banking industry, instead of "(...) decision-making on investment" it made reference to "(...) decision-making on matters of credit or portfolio administration".
12 For these questions, attachments were provided with lists of examples of Physical and Transitional Risks.
13 In the survey for the banking industry we asked about "(...) credit or investment operations".

Graph No 11 shows credit and investments categories in which financial institutions manage the physical and transitional risks related to climate change.

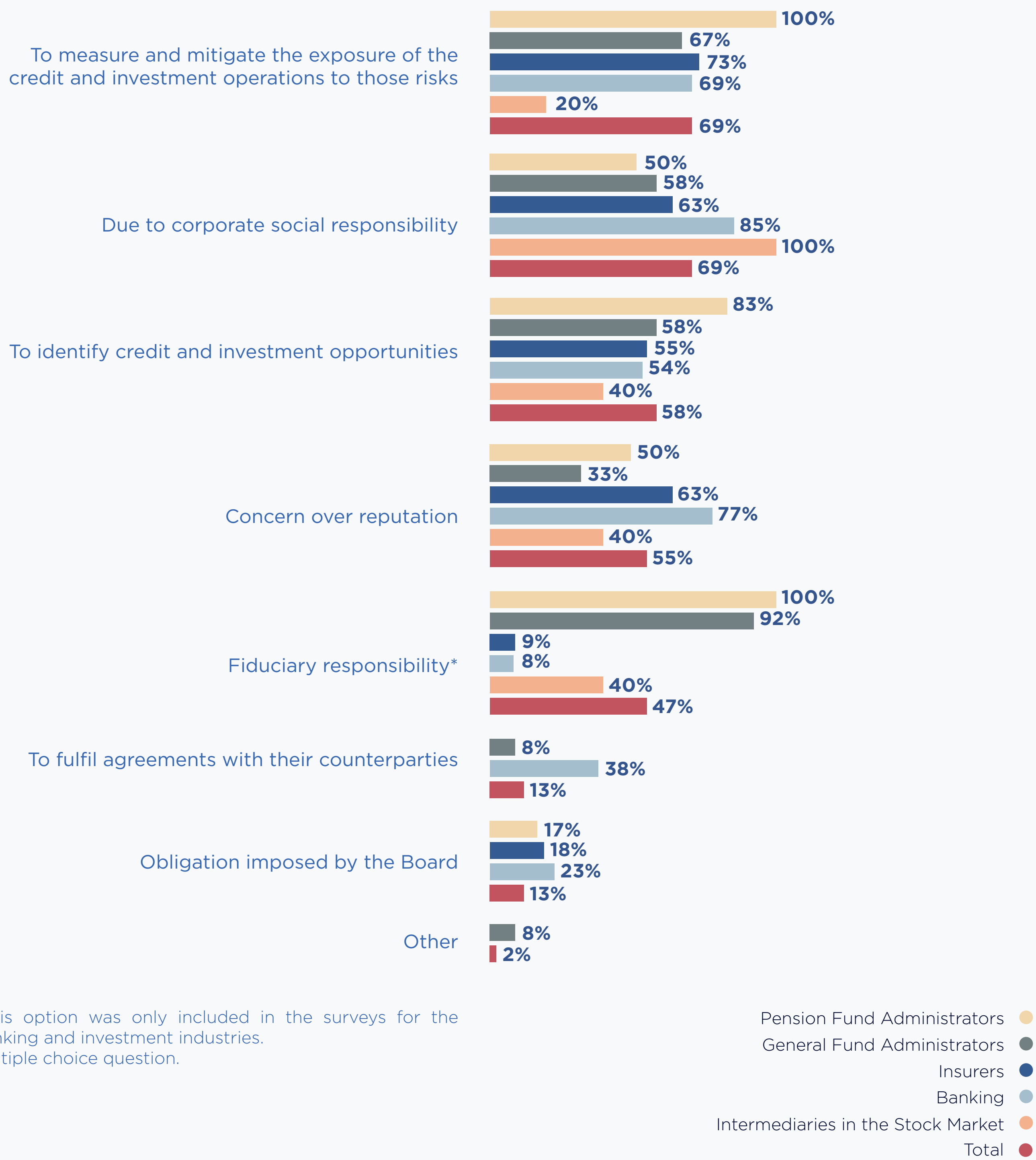
Graph No 11. Credit and investments categories in which financial institutions manage the physical and transitional risks related to climate change



The option 'Government bonds' is not included in the graph as it was not selected.
*This option was only offered in the banking industry's survey.
**This option was only offered in the investment and insurance industries' surveys.
Multiple choice question.

Graph No 12 shows the reasons which best describe the motivations of the entities surveyed by category for managing the risks associated with climate change in their operations.

Graph No 12. Reasons why entities managed the risks associated with climate change



*This option was only included in the surveys for the banking and investment industries.
Multiple choice question.

In terms of the sources of information which the entities use (excluding the General Insurers)[14] to identify the risks related to climate change in credit or investment decisions (as appropriate), the next two tables show the corresponding percentage for each option given, by category and in total.

Table No 17. Main sources of information which the entities (excluding General Insurers) use to identify the risks related to climate change in investment or credit decisions, as appropriate

	The companies' strategy	Public data from government sources	Public data available from private sources or from the companies themselves (for example, GRI, IIRC, etc.).	Data requested from the companies in relation to these topics	Rating by third parties, indexes (for example, DJSI, FTsee4Good, etc.).	Interviews with companies' representatives	The entity does not identify the risks related to climate change in decision-making
Pension Fund Administrators	67%	17%	67%	17%	17%	17%	17%
General Fund Administrators	50%	17%	42%	58%	42%	58%	25%
Insurers	33%	50%	50%	17%	33%	0%	50%
Banking	54%	69%	54%	62%	38%	54%	23%
Stock Market Intermediaries	0%	20%	40%	40%	0%	0%	40%
Total	47%	38%	50%	46%	32%	38%	28%

Multiple choice question.

Table No 18. Main sources of information which General Insurers use to identify the risks related to climate change

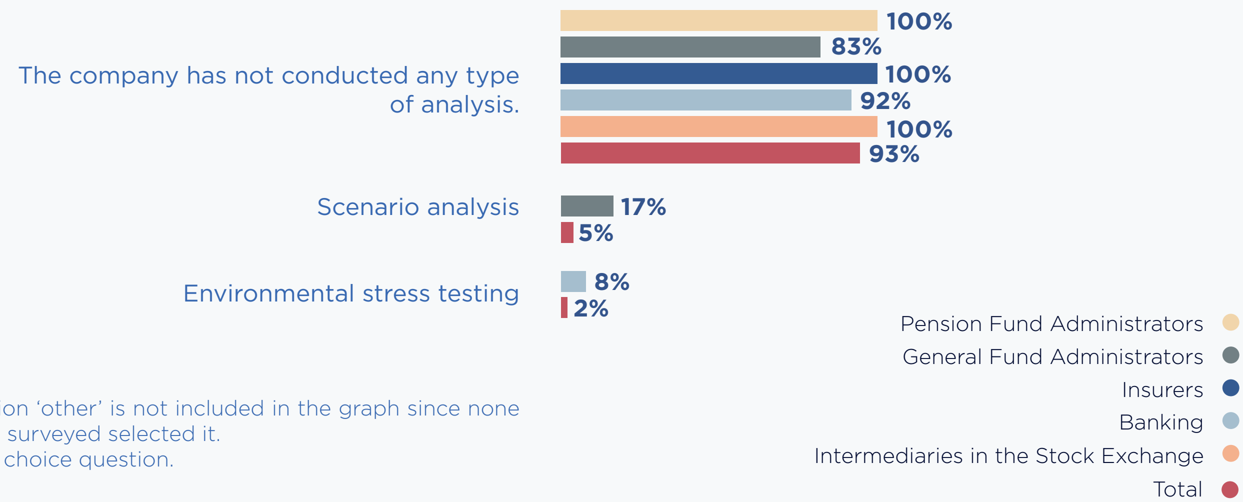
	Information requested from the companies in relation to environmental performance	Sector guides for identifying environmental risks and exposure to climate change associated with specific industries	The entity does not consult additional sources of information
Total	20%	40%	60%

Options not selected by those surveyed are not included in the table: Public environmental data from government sources; Public environmental data available from private sources or from the companies themselves (for example, GRI, IIRC, etc.); rating by third parties, indexes (for example, DJSI, FTSee4Good, etc.); Interviews with companies' representatives.

14 These entities are not included since, in the corresponding survey, different questions were asked.

With regards to the methodologies for evaluating the impacts of the risks associated with climate change which could present a threat to the entities' general portfolio, investment portfolio and/or business plan, 93% of the entities have not conducted said type of analysis. Graph No 13 shows the options provided for this point and the total percentage response by category.

Graph No 13. Methodologies used by the entities to evaluate the implications of the risks associated with climate change which could present a threat for the portfolio, investment portfolio and/or business plan.



The option 'other' is not included in the graph since none of those surveyed selected it.
Multiple choice question.

Below, Table No 19 presents the main obstacles for the effective integration of risk analysis related to climate change in decision-making on credit and investment, and the corresponding percentage which each entity stated that it was an impediment for doing so.

Table No 19. Main obstacles for the effective integration of risk analysis related to climate change in decision-making on credit and investment

	Lack of knowledge of the potential impacts of climate change on the activities of clients and counterparties	Lack of understanding of the legal, environmental responsibility in view of climate change which affects clients and counterparties	Clients and counterparties' lack of knowledge on the ways to mitigate risks related to climate change	The information about the companies' exposure to climate change is not relevant to decision-making	Other
Pension Fund Administrators	33%	33%	0%	0%	67%
General Fund Administrators	92%	42%	33%	25%	8%
Insurers	36%	9%	9%	9%	45%
Banking	77%	31%	31%	15%	15%
Intermediaries in the Stock Market	60%	20%	40%	20%	0%
Total	65%	28%	23%	15%	25%

Multiple choice question.

4.4.1
SPECIFIC QUESTIONS FOR THE GENERAL INSURERS

This subsection sets out an analysis of the questions related to subscription insurance decisions, which were only included in the survey sent to the General Insurers.

- 20% of the companies have measured, in some capacity, their investment portfolio's exposure to the risks related to climate change, stating that this is done by sector.
- 20% of the General Insurers have professional, external advisers for their portfolio who provide guidelines on the risks associated with climate change and other, related issues for the investment process.
- 60% of the companies do not have a model or procedure for the management of the environmental risks and risks related to climate change in decision-making on investment. Among those who do, 50% use it in all their investment portfolio, while the other 50% use it to cover corporate bonds.

Table 20 shows the percentage which corresponds to each option for the question 'does the company have a model or procedure for identifying and evaluating the risks related to climate change in insurance or reinsurance contracts?'

Table No 20. Does the company have a model or procedure for identifying and evaluating the risks related to climate change for insurance or reinsurance contracts?

Yes, physical risks resulting from a change in the frequency and intensity of climate events are included	Yes, transitional risks resulting from a reduction in insurable interest in some sectors are included	Yes, risks related to civil responsibility which could intensify due to a possible rise in litigations are included	Yes, the entity calculates the maximum likely loss of insurance products in the face of a natural catastrophe caused by climate	The entity does not evaluate climate risks in insurance and reinsurance contracts
20%	**20%**	**20%**	**20%**	**40%**

Multiple choice question

- 20% of the companies had measured, in some way, their investment portfolio's exposure to the risks related to climate change, stating that this is done by sector.
- 60% of the companies have detected a relevant rise in costs related to the occurrence of extreme climate events or resulting from a long-term change in climate patterns over the last 15 years.
- 40% of those surveyed in this category had increased their premiums or rates, limited their cover or suspended subscription insurance in geographical areas or specific sectors due to catastrophes caused by climate change.

Below, Table No 21 presents the implements which the companies have used or would consider using to manage the risks related to climate change, and the corresponding percentages per response.

Table No 21. Implements which the companies have considered for managing the risks related to climate change

Use of exclusion lists to avoid subscription or investment in projects, regions or sectors considered to be environmentally risky	Establishing caps per sector for concentration and exposure for subscription and investment	Verifying and monitoring companies that are selected for subscription or investment to ensure they are obeying the laws, regulations or environmental permits	The company did not use any of these implements
20%	**40%**	**40%**	**40%**

The table does not include options not selected by those surveyed: Research on the environmental record of companies that are selected for subscription or investment; Support from a technical expert within the entity to conduct an environmental review of the subscription or investment options; Categorizing subscription and investment decisions and prioritizing them for analysis, based on the level of environmental risk and in light of climate change (low, medium, high risk); Other – please state.
Multiple choice question.

4.5
MEASURING, REPORTING AND DISSEMINATION

4.5.1
Findings from the Life Insurers, Banking and Investment categories

10% of the entities surveyed had a clear and uniform definition for identifying and classifying credit or investment operations which contribute to the mitigation of, and adaptation to, climate change. Table No 22 presents the information divided by category.

Table No 22. Percentage of entities in each category that have a clear and uniform definition for identifying/classifying the credit and investment operations which contribute to the mitigation of, and adaptation to, climate change

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	LIFE INSURERS	BANKING	INTERMEDIARIES IN THE STOCK EXCHANGE
0%	8%	20%	15%	0%

8% of those surveyed have an information system which allows them to identify, classify and manage credit and investment operations which contribute to the mitigation of, and adaptation to, climate change. Table No 23 presents this information separated by category.

Table 23. Percentage of the entities that have an information system which allows them to identify, classify and manage the credit and investment operations which contribute to the mitigation of, and adaptation to, climate change

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	LIFE INSURERS	BANKING	INTERMEDIARIES IN THE STOCK EXCHANGE
0%	8%	20%	8%	0%

None of those surveyed stated that they shared or reported on the material financial risks and opportunities related to climate change associated with their portfolio of credit and investments.

With reference only to banking, Table No 24 presents the percentage of entities surveyed that have objectives and indicators for placing credit in companies or projects with low carbon emissions, or gradual emissions reduction, or not placing credit in carbon-intensive sectors.

Table No 24. Percentage of Banking entities that have objectives and indicators for placing credit in companies or projects with low carbon emissions, or gradual emissions reduction, or not placing credit in carbon-intensive sectors

Yes, on the portfolio level	Yes, in specific client categories	Yes, in specific economic sectors	No, but the entity is considering setting objectives	It has not been considered
0%	15%	23%	23%	54%

9% of the entities surveyed had set out climate objectives with integrated goals in management incentives on the level of employees, areas and/or processes. The two categories of entities that responded positively were the Life Insurers and Banking, with 33% and 15% respectively. Table No 25 presents this information separated by category.

Table No 25. Percentage of entities in each category that have climate objectives with integrated goals in management incentives on the level of employees, areas or processes.

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	LIFE INSURERS	BANKING	INTERMEDIARIES IN THE STOCK EXCHANGE
0%	0%	33%	15%	0%

Of the entities who responded positively to the previous question, 100% have targets for mitigating the carbon footprint by employee/area/process; 50% of the Life Insurers have green assets in product placement (with the aim of financing green projects), and 50% of the banks have green liability product placement (deposits, green bonds, etc.).

16% of the entities surveyed publish specific documents which set out their strategy in response to climate change. Table No 26 presents the information separated by category.

Table No 26. Percentage of entities in each category that publish specific documents detailing their response to climate change.

PENSION FUND ADMINISTRATORS	GENERAL FUND ADMINISTRATORS	LIFE INSURERS	BANKING	INTERMEDIARIES IN THE STOCK EXCHANGE
0%	0%	17%	46%	0%

4.5.2
Results of the General Insurers

17% of the entities surveyed in this category have a Board that believes that the level of information sharing related to climate change is proportional to the materiality of the risks and opportunities which their subscribers and investors face.

40% have objectives and indicators for investment in activities, sectors or assets with low carbon emissions, or divestment from carbon intensive assets. 20% do not, but are considering setting them, and 40% have not considered it.

20% of the General Insurers have developed metrics for evaluating the risks and opportunities associated with climate change in their subscription decisions on individual contracts. 40% have not, but are reviewing industry practices to establish a standard, and another 40% have not considered designing metrics.

Findings Report: survey of the risks and opportunities associated with climate change for Chile's financial sector

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