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Potential undue short-term pressure from financial markets on corporates: Investigation on European insurance and occupational pension sectors

Search for evidence

Year-end 2018

ADVICE

Background

The European Commission requested the three European Supervisory Authorities (ESAs) to collect evidence and stakeholders' views on undue short-term pressure from financial markets on corporations and eventually recommend policy options for a remedy.

This request from Commission implements the action announced in the sustainable finance action plan ([1]) to foster transparency and long-termism in financial and economic activity by exploring possible drivers of undue short-termism.

Further information on the Commission's request is available directly in the formal call for advice ([2]).

EIOPA focuses its advice on the insurance and occupational pensions sectors and also looks into the possible short-term pressures put on them from financial markets.

The call for advice requests the identification of areas in existing regulations that contribute to mitigating undue short-termism and the identification of areas in which the rules exacerbate short-term pressures. On this point, for consistency, EIOPA relies on its work for the 2020 review of Solvency II, the reports on the review of long-term guarantees (LTGs) measures and the illiquid liabilities project.

([1]) https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0097&from=EN.
([2]) https://eiopa.europa.eu/Publications/Advices/190201-call-for-advice-to-esas-short-term-pressure_en.pdf.

Contents

1. Introduction

1.1. Role of insurers and institutions for occupational retirement provision as long-term investors

1. Life insurers and pension funds are usually considered long-term investors: based on their business models, they receive savings from the households with the promise to paying back earlier in an unexpected event or in a longer term. Predictability of cash flows is key for pricing and efficiently managing the savings received. This predictability is provided by making an appropriate selection of risks that are pooled together and applying the big numbers law to sufficiently large portfolios; such characteristics typically allows these investors to follow longer term strategies.

2. Corporates, in general, benefit from the existence of efficient financial markets to cover their funding needs. Particularly relevant are the investment habits of life insurers and pension funds that ensure sufficiently deep, liquid and transparent markets for long-dated financial instruments.

3. For these reasons, it is key to monitor whether the insurance and institutions for occupational retirement provision (IORPs) sectors continue to fulfil their alleged roles as long-term investors and, in the case of deviations, then investigate the reasons for the deviation and the potential solutions.

4. In addition, it is of utmost importance to ensure that insurers and IORPs are effectively facilitating the complexity of long-term savings or pension decision-making at a collective level and ensuring that premiums and contributions are invested for the long-term on behalf and in the best interest of customers.

5. If insurers and IORPs ceased fulfilling their role as institutional long-term investors, this would eventually have a negative impact on the efficiency of financial markets and hence on financial stability.

6. Further consequences would be likely to be increased short-term pressure on corporates as long as there were not enough transactions of different issuances among informed parties with different maturities.

2. Sources of evidence

7. To ensure proper coverage and that the evidence requested by the European Commission is collected, EIOPA considered information stemming from multiple sources. In more detail, the advice is based on the following elements:

- a review of the related literature with a financial stability perspective, including previous EIOPA publications;
- an assessment of the evolution of the asset holding periods of insurance undertakings based on the quantitative reporting template (QRT) data available ([3]);
- qualitative views gathered from a representative sample of insurance undertakings through an ad hoc survey;
- an evaluation of the investment behaviour of defined benefit/hybrid (DB/HY) and of defined contribution (DC) IORPs ([4]) based on the questionnaires included in the 2019 IORPs stress test templates.

8. In addition, this report includes the views of stakeholders shared with EIOPA in writing or during workshops, such as that held on sustainable finance on 11 June 2019 ([5]).

9. Finally, this investigation considers information already collected by EIOPA on insurance undertakings through the request for information on long-term guarantees and long-term illiquid liabilities ([6]) (mainly on the questionnaire on asset management and holding periods included in the reporting templates ([7])) and the conclusions of EIOPA's *Investment behaviour report* ([8]).

([3]) Details on the methodology section (4.1.1) of the feedback request for the illiquid liability project: https://eiopa.europa.eu/Publications/Consultations/EIOPA-PSC-18_093_Request_for_Feedback_Illiquid%20Liabilities.pdf.

([4]) https://eiopa.europa.eu/Publications/Surveys/DB_reporting%20template.xls and https://eiopa.europa.eu/Publications/Surveys/DC_reporting%20template.xls.

([5]) For further details, please refer to the workshop summary: https://eiopa.europa.eu/Publications/2019-06-11%20SustainableFinanceWorkshopSummary.pdf#search=eiopa%20sustainable%20finance%20workshop%20summary.

([6]) https://eiopa.europa.eu/regulation-supervision/insurance/long-term-guarantees-review.

([7]) https://eiopa.europa.eu/Publications/Administrative/IL_Reporting_Template_2.xlsx.

([8]) EIOPA, *Investment behaviour report* , 2017: https://eiopa.europa.eu/Publications/Reports/Investment_behaviour_report.pdf.

3. Literature review

3.1. Short-termism and long-term investors

10. The financial literature shows that long-term investors can provide a social good by helping global financial markets to function more efficiently, promoting sustainable global economic growth and creating wider social benefits. Among the potential advantages that investors with longer time horizons might have over other investors are their ability to access structural risk premia, to avoid buying high and selling low and to minimise transaction and market disturbance.

11. In the context of the call for advice launched by the Commission, (re)insurers and pension funds, as well as other institutional investors, play a stewardship role that takes into account the impact of their activities (investment, underwriting, lending) on a sustainable economy and environment. Such investors, because of their long-term perspective, can contribute to shaping the future energy landscape and supporting the transition towards a low-carbon economy and sustainable growth solutions.

12. **Financial literature often describes short-termism as the tendency to prioritise near-term shareholder interests and profitability at the expense of the long-term growth of the firm** ([9]). It is important to note that short-term behaviour cannot be simply associated with a short investment horizon; instead, it is the tendency to focus on short-term profits without ensuring sufficient investment for long-term needs and development.

13. At the same time, long-term investors can be subject to structural and internal constraints (e.g. framework and governance constraints). As described in the World Economic Forum report (2011) ([10]), the liability profile, the investment beliefs, the risk appetite and the decision-making structure can influence their investment decisions.

3.2. Short-termism drivers

14. A summary of the available literature on short-termism, such as *Agency, information and corporate investment* (Jeremy Stein, 2001) ([11]), points to concerns over the labour market or short-term stock prices being the major drivers for corporate executives to focus excessively on the short term.

15. Based on the relevant literature, increased media coverage and market volatility, the rise of high-speed computer trading, as well as reduced trading times and transaction costs, have contributed to modifying the investment

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([9]) *Final report of the High-Level Expert Group on Sustainable Finance*, 2018: https://ec.europa.eu/info/publications/180131-sustainable-finance-report_en.

([10]) World Economic Forum, *The future of long-term investing*, 2011: https://www.weforum.org/reports/future-long-term-investing.

([11]) Jeremy Stein, *Agency, information and corporate investment*, 2001: https://www.nber.org/papers/w8342.pdf.

behaviours of market participants. Among other factors, these changes can explain the significant decrease ([12]) in the average holding period of market-traded assets and the greater focus of investors on short-term returns.

16. On the one hand, it is suggested that shorter reporting frequencies damage long-term strategies and views ([13]). On the other hand, high-quality financial reporting improves investment efficiency, reduces information risk and helps estimate future performance; therefore, it can facilitate innovation. The link is stronger for firms with high institutional ownership and low information asymmetry ([14]).

3.3. Short-termism consequences

17. Short-termism behaviour can reduce the company's competitiveness and increase systemic risk if it is generalised. For instance, as cited by many others, *The theory and practice of myopic management* (Natalie Mizik, 2009) ([15]) suggests that excessive focus on short-term objectives may lead to lower investment in research and development (R&D) and marketing and subsequently to reduced value.

18. In addition, as Jeremy Stein (2001) pointed out in *Agency, information and corporate investment* short-term goals may lead managers to underinvest in maintenance, customer loyalty and employee training, among other hard-to-measure assets. Shareholders perceive the result of this underinvestment as outcomes comparable to positive shocks causing higher profits.

19. However, in 'Stock market short-termism's impact', based on the US market, Mark J. Roe (2018) ([16]) concludes that the negative impact from short-termism is weak. In fact, capital is moving from larger, older firms to younger ones, which are doing more R&D than ever. Stock buybacks rose after the financial crisis; examined alone, one might conclude that cash is indeed bleeding out of the system, but long-term borrowing rose in tandem. Low interest rates pushed American corporates into substituting low-interest debt for stock. Post-industrial production needs fewer hard assets; hence, lower investment in such assets allows more spending on R&D.

([12]) *Final report of the High-Level Expert Group on Sustainable Finance,* 2018: https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf.

([13]) FCLT Global, *Moving beyond quarterly guidance: A relic of the past*, 2017: https://www.fcltglobal.org/docs/default-source/publications/moving-past-quarterly-guidance---a-relic-of-the-past.pdf?sfvrsn=77a9268c_2.

([14]) KoEun Park, *Financial reporting quality and corporate innovation*, 2018, University of Massachusetts.

([15]) Natalie Mizik, *The theory and practice of myopic management,* 2009: https://pdfs.semanticscholar.org/404d/45d690cfa3cdf7d58a6352cab3c324214440.pdf.

([16]) Mark J. Roe, *Stock market short-termism's impact*, 2018, University of Pennsylvania Law Review 61(1).

3.4. Policy options to prevent short-termism behaviour in institutional investors

20. In line with the conclusions of the *High-Level OECD Financial Roundtable* (Gert Wehinger, 2011) ([17]), institutional investors should help EU citizens to invest in less liquid and riskier investments and could therefore be a force for change to shift households' reliance on holding investments in cash and bank deposits. Some of the policy initiatives suggested reforming the regulatory framework, encouraging institutional investors to be active shareholders, and even proposed tax incentives.

21. Some studies aim to understand the role of corporate governance in avoiding or creating short-termism. Among others, G. Warren (2014) ([18]) concluded that, if together with the investing circumstances and environment, decision-making processes determine investment horizons, the focus should shift from price drivers towards value drivers, including the use of cash flows. Studies such as that by Gregory Jackson (2010) ([19]) have concluded that, although it is difficult to prove that short-term strategies result in the destruction of long-term values, in some cases the short-term orientations of managers and investors become self-reinforcing. Therefore, Jackson (2010) suggested incentives to shift investments towards more long-term goals (e.g. promoting 'patient capital', increasing the long-term commitments of shareholders or tie managers' remunerations to long-term performances through training and disclosure of long-term oriented metrics). It is worth noting that the Solvency II Directive and Delegated Acts consider both aspects.

22. Any advice for reviewing the private insurance or occupational pensions regulatory framework must take into account the policyholder's, members or beneficiaries as a safeguard of financial stability. It is utmost importance to ensure a fair trade-off between allowing the insurance and pension providers to keep their role as long-term investors and the need to protect the policyholders, members of the pension schemes and beneficiaries from potential insolvencies that inappropriate risk management of these institutions could lead them into ([20]).

23. Therefore, only through appropriate systems of governance, which ensure long-term orientation of managers and disclosure of standardised long-term metrics, could life insurers and IORPs help to mitigate households' limitations such as low financial literacy and behavioural biases when covering the need for long-term savings.

([17]) Gert Wehinger, *Fostering long-term investment and economic growth: Summary of a High-Level OECD Financial Roundtable*, 2011, OECD Journal: Financial Market Trends: https://www.oecd-ilibrary.org/finance-and-investment/fostering-long-term-investment-and-economic-growth-summary-of-a-high-level-oecd-financial-roundtable_fmt-2011-5kg55qw1xlr7.

([18]) G. Warren, 2014, *Long-term investing: what determines investments horizon?*, Centre for International Finance and Regulation.

([19]) Gregory Jackson, *Understanding short-termism: The role of corporate governance*, 2010, Freie Universitat Berlin.

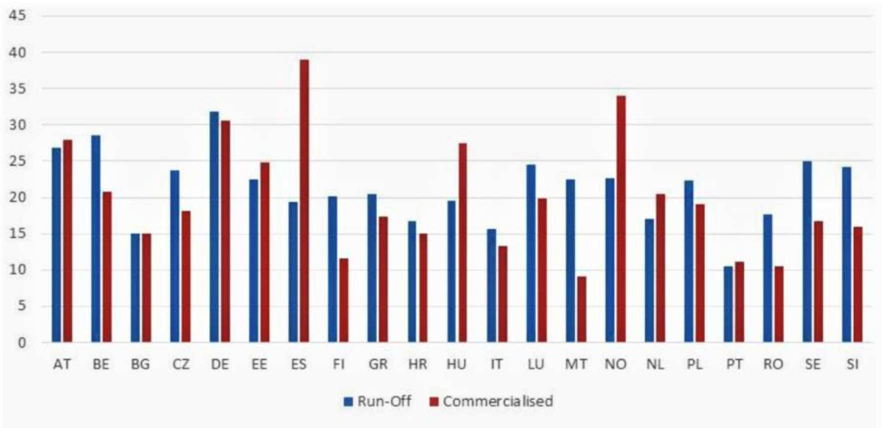
([20]) EIOPA advices to the European Commission: https://eiopa.europa.eu/publications/submissions-to-the-ec.

4. Insurance and occupational pensions businesses evolution

4.1. Life insurance business evolution

24. Consistent with the developments observed in 2016 and 2017, the availability of products with long-term guarantees is mainly stable or decreasing across the European Economic Area (EEA). Ten of the national supervisory authorities observed a decreasing trend because of the low yield environment and incentives given by undertakings for policyholders to switch to unit-linked products. Overall, national supervisory authorities have observed a decrease in the size of guarantees, in particular with regard to interest rate guarantees (see ***Figure 1***).

Weighted-average period for which interest rate guarantee is expected to apply.



Average guaranteed interest rate for life insurance with profit participation.

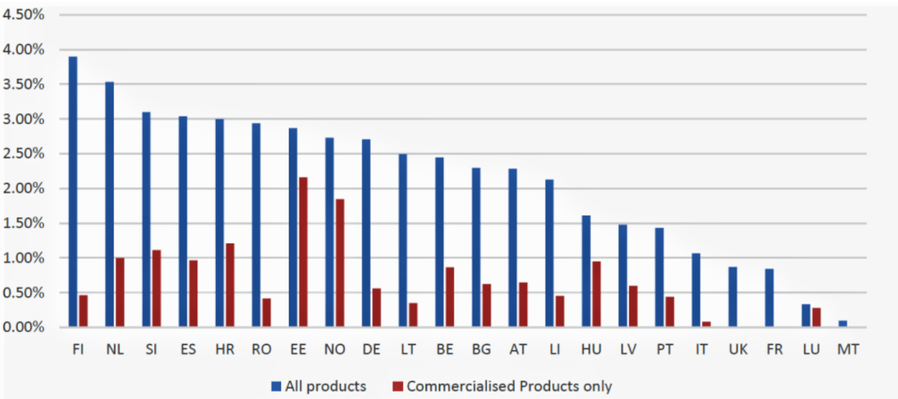


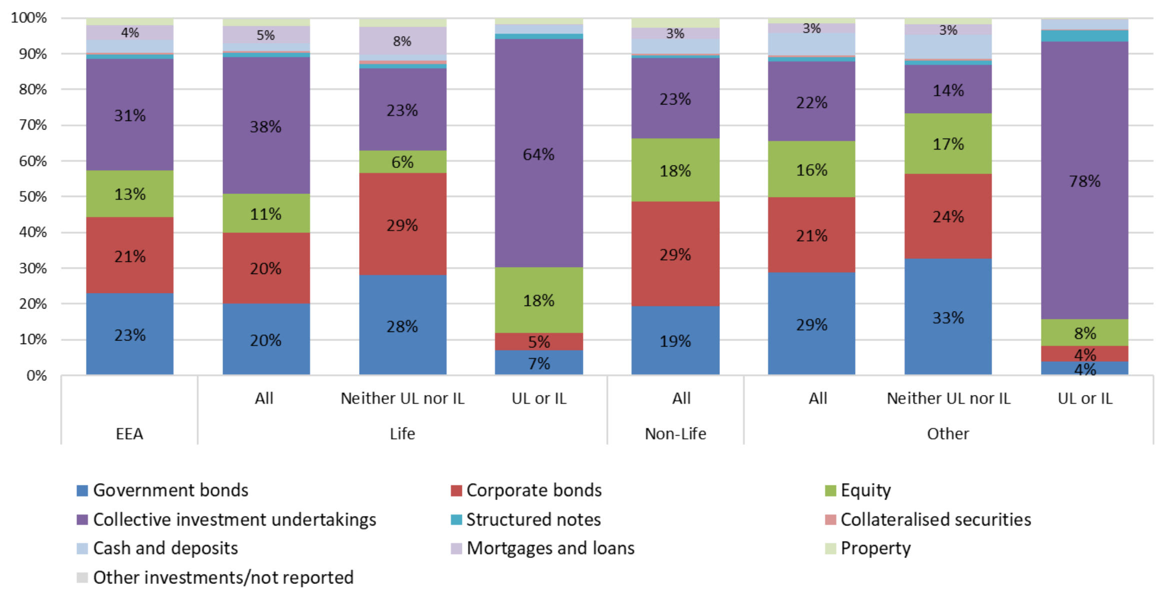
Figure 1: - Source: *EIOPA,* Report on long-term guarantees measures and measures on equity risk, *2018.*

25. In ***Figure 2***, it is possible to see different investment allocation patterns for life index and unit-linked businesses ([21]) characterised by a significantly larger share of participation in collective investment undertakings and a much smaller

([21]) Insurance contracts in which the investment risk is mainly, if not fully, borne by the policyholder.

proportion of direct investments in bonds (either corporate or government bonds). These differences could also lead to different investment behaviour, as these collective investment undertakings usually manage their investments independently according to their own policies and strategies, and therefore their behaviour may differ in terms of investment horizons or holding periods. Participation in collective investment undertakings represents almost 80% of the investment portfolio associated with the life index and unit-linked business of composites and reinsurers. A look through the collective investments would give a more comprehensive picture of the differences in the final investment allocation.

Figure 2: Asset allocation by type of business.



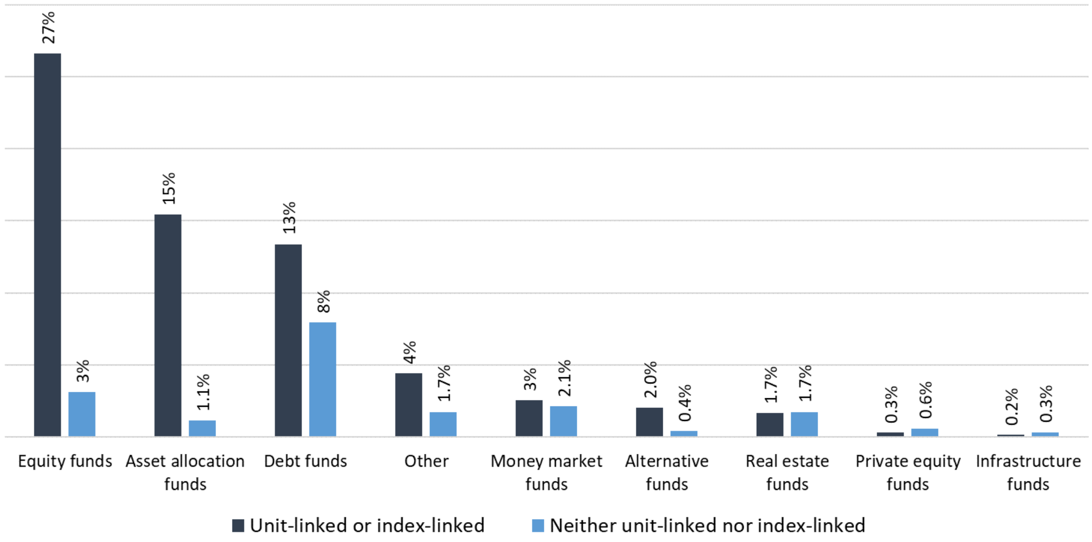
Source: EIOPA, Q4 2018.

26. On average at EEA level, 67% of the index-linked and unit-linked (IL&UL) portfolio is allocated to collective investment undertakings compared with only 19% for all other portfolio types. ***Figure 3*** shows the split in participation in collective investment undertakings by subcategory, based on the statistics on asset exposures ([22]) without applying any additional look through. Collective investments in IL&UL portfolios are predominantly exposed to equity funds while, for the portfolios excluding IL&UL, debt funds are predominant. In figures, excluding IL&UL businesses, the most important subcategories of collective investment undertakings are debt funds (42% of the overall participation in collective investment undertakings), equity funds (16%) and money market funds (8%). In contrast, for IL&UL portfolios, the three most important subcategories of collective investment undertakings are equity funds, asset allocation funds and debt funds. Each of these subcategories represents 40%, 23% and 20%, respectively, of the total participation in collective investment undertakings.

([22]) https://eiopa.europa.eu/Publications/Insurance%20Statistics/SQ_Exposures.xlsx.

27. Investments in equity funds and asset allocation funds represent more than 40% of the total IL&UL portfolio, given the prevalent share of collective investment undertakings in portfolios. Therefore, the investment strategies of such funds substantially drive the investment behaviour of IL&UL portfolios.

Figure 3: Breakdown of collective investment undertakings as share of total assets by subcategory and portfolio type.

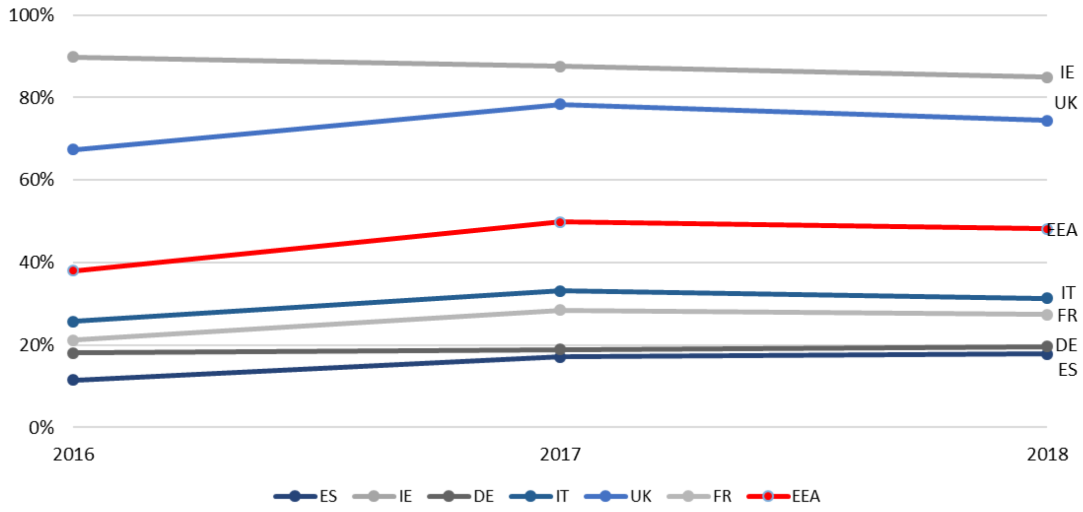


Source: EIOPA, Q4 2018.

28. In terms of recent trends in life insurance business, ***Figure 4*** illustrates, on the one hand, that the relevance of the index and unit-linked business varies significantly among countries ([23]) and, on the other hand, a moderate shift towards a more index- or unit-linked type of business for the biggest markets with a peak in 2017.

([23]) Annex 4 contains the analysis of other EEA countries, based on gross written premiums.

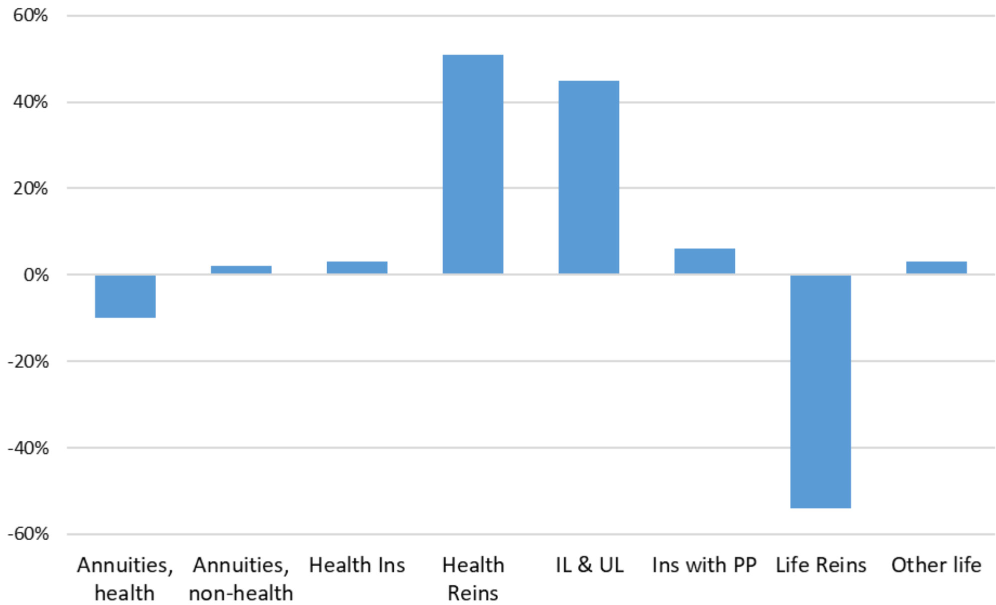
Figure 4: Evolution over time of index-linked and unit-linked premiums as shares of premiums for life insurance undertakings for the top 6 European markets.



Source: EIOPA, Annual Solo.

29. ***Figure 5***, from the *European insurance overview* ([24]), illustrates more clearly the trends in life business in the EEA. In 2017 and 2018, the large increases in health reinsurance and IL&UL insurance premiums drove total growth in terms of gross written premiums (GWPs).

Figure 5: Year on year growth in gross written premium by line of business for life premiums.



Source: EIOPA, European insurance overview, 2018.

([24]) EIOPA, *European insurance overview*, 2018: https://eiopa.europa.eu/Pages/Financial-stability-and-crisis-prevention/Insurance-Statistics.aspx#eio

4.2. Occupational pensions business evolution

30. IORPs are pension institutions with a social purpose that provide financial services. They operate occupational pension schemes for employers to provide retirement benefits to their employees (the scheme members and beneficiaries). IORPs are, however, only a subset of all private pension scheme arrangements available in Europe. A report by the Financial Stability Board Regional Consultative Group for Europe ([25]) estimates that IORPs account for 36% of private pension scheme assets, while the remaining 64% are held by non-IORPs, such as insurance undertakings (48%), pension funds not subject to the IORP Directive (5%) and other providers, such as banks and asset managers.

31. IORPs are large institutional investors with assets amounting to €3,573 billion in the EEA. Therefore, IORPs have the potential to significantly influence financial markets through their investment behaviour.

32. The occupational pension landscape is very fragmented and characterised by significant heterogeneity across the EEA ([26]) (e.g. differences in financial systems, the importance of public pensions and saving for personal pensions, and national specificities).

33. The market development report (EIOPA, 2017) showed a weighted average penetration rate ([27]) of 25%. Only four countries have a penetration rate higher than average as a result of the significant IORP sectors in the United Kingdom and the Netherlands, in terms of both assets and relative importance. This shows the large differences in terms of IORPs and Article 4 ring-fenced funds' importance across the EU. The average penetration rate of EEA countries has remained constant over the past few years. In addition, at national level, the penetration rate has stayed mostly stable. Currently 15% of employees aged between 15 and 64 in the EEA, excluding France and the United Kingdom, are active members of an IORP or Article 4 ring-fenced fund ([28]).

([25]) FSB, R*eport on European private pension schemes: functioning, vulnerabilities and future challenges*, 2017: https://www.fsb.org/wp-content/uploads/P171017.pdf.

([26]) EIOPA stress test, 2019 and *Market development report on occupational pensions and cross-border IORPs*, 2017: https://eiopa.europa.eu/Pages/News/EIOPA-publishes-its-2017-Market-Development-Report-on-Occupational-Pensions-and-Cross-border-Institutions-for-Occupational-.aspx.

([27]) Ratio of assets to gross domestic product (GDP), based on Eurostat 2016 GDP (23 November 2017).

([28]) Article 4 ring-fenced funds refers to the occupational retirement provision business of insurance undertakings covered by Directive 2009/138/EC to which certain provisions of the IORP Directive are applied in accordance with Article 4 of the IORP Directive 2003/41/EC. In that case, all assets and liabilities corresponding to the said business are to be ring fenced, managed and organised separately from the other activities of the life insurance undertaking, without any potential for transfer. Although occupational pension funds are covered by the IORP Directive in the EU most of the time, occupational and personal pensions provided by insurers are regulated by Solvency II. However, Member States may choose to apply certain provisions of the IORP Directive to the occupational pension business of insurers if the business is ring-fenced, in line with Article 4 of the IORP Directive.

34. In addition, the report highlighted an increase in the number of IORPs expanding (or seeking to expand) their cross-border activities ([29]) in additional host countries. Moreover, the number of cross-border IORPs established by service providers to attract multiple unconnected employers is rising in tandem. Taking advantage of economies of scale and reducing costs could be driving forces behind their increases.

35. The 2016 year-end data provide further information on the various schemes available in the EEA; most IORPs offer services to DC schemes alone, although in certain countries they are mainly small DC IORPs ([30]). Without those very small DC schemes, IORPs operating only DB schemes account for more than 54% of the total IORPs. IORPs managing DC schemes account for 28% of the market and 10% of the IORPs provide services to multiple scheme types (DB, DC and hybrid schemes).

36. Because of their historical prominence, the vast majority of IORP assets are related to DB schemes. However, under the current low yield environment, numerous DB schemes have recently struggled to obtain returns in line with the guaranteed levels and have therefore been under pressure.

37. As a consequence, some of these schemes have lowered their pension promises, for example through benefit reductions. Alternatively, in order to de-risk (from a sponsor's perspective) many DB occupational schemes were closed to new members and/or have been replaced (for future accrual) by DC schemes. Similarly, liabilities, technical provisions and other obligations and rights, as well as corresponding assets or cash equivalents thereof, were transferred to other types of providers (e.g. insurance companies).

38. Based on the number of active members, the vast majority of Member States show a shift from DB to DC schemes. As a result of this transition, financial risks and costs are transferred from employers and IORPs to scheme members. Consequently, for DC IORPs the fiduciary duty of investing in the best interests of members (and delivering good outcomes) is even more important, as members bear the investment risk.

39. Among other factors ([31]), increased longevity and low interest rates can explain the shift from DB to DC schemes. The low interest rate environment is making annuitisation unattractive for DC schemes, leading some Member States to abolish compulsory annuitisation and to introduce more flexibility at the point

([29]) However, it should be noted that this is a less significant trend. Based on the market development report (EIOPA, 2017), there are 83 IORPs that operate cross-border. Out of these 83 IORPs, 73 are actively operating on a cross-border basis and 14 of these are active in multiple countries.

([30]) Small IORPs in Cyprus, Ireland and the UK. For further details, see the 2017 market development report: https://eiopa.europa.eu/Publications/Reports/EIOPA-BOS-18-013-2017%20Market%20Development%20Report.pdf.

([31]) For example increased longevity, labour force mobility, uncertainty about the support from sponsors for DB plans, employers unwilling to cover any further promises or guaranties (in addition to paying a specified contribution to the plan on the employee's behalf).

of decumulation. In more detail, some jurisdictions allow DC IORPs to continue investing during the decumulation phase (e.g. beneficiaries who opted for programmed withdrawal). In this way, as the transition from accumulation to decumulation lasts longer, these changes may modify and extend the time horizon of IORPs managing DC schemes. In conclusion, the extension of the IORPs' time horizon should incentivise pension funds more than ever to take a long-term view.

5. Searching for evidence in the (re)insurance sector

5.1. Insurers' investment behaviour

40. EIOPA has looked at the investment behaviour of the insurance undertakings based on the impact of financial circumstances and the prudential regulation, which in addition to setting the capital requirements also establishes the prudent person principle for the insurance investment policies.

41. At the end of the first year of Solvency II implementation, the European insurance sector observed a shift towards longer maturities of their bond holdings due to the fall in interest rates as described in the *Investment behaviour report* ([32]) (based on 2016 year-end data for 87 large insurance groups and four solo undertakings across 16 European countries). Although most of the respondents to the questionnaires reported increases in duration, the vast majority of the groups reported those increases to be small or moderate. More than half of the participants (60%) reported a shift towards more illiquid assets ([33]) to access the illiquidity premium provided by these investments. Indeed, more than half of the respondents (54%) mentioned that the average duration of the government bond portfolio had increased over the past 5 years. The underlying reason was yield enhancement, as confirmed in a number of replies. The majority of the groups (58%) reported that the average duration of the corporate bond portfolio has decreased or remained unchanged over the last 5 years.

42. EIOPA looks into the behaviour of undertakings as long-term investors in relation to the prudential regulation through the series of annual reports ([34]) assessing long-term guarantees (LTGs) measures introduced by the Solvency II Directive to ensure an appropriate treatment of insurance products providing long-term guarantees. In particular, the *Report on long-term guarantees measures and measures on equity risk* (EIOPA, 2018) ([35]) stated that 21 of the European national supervisory authorities did not observe any trend in their national market regarding the behaviour of undertakings as long-term investors.

5.2. Qualitative insurance sector survey

43. EIOPA ran a survey aiming to support the analysis of market practices and gathering insurers' views relevant for investigating potential drivers for short-termism in the insurance sector.

([32]) EIOPA, *Investment behaviour report,* 2017*:* https://eiopa.europa.eu/Publications/Reports/Investment_behaviour_report.pdf.

([33]) For example, debt and equity from private non-exchange traded companies, participation in an infrastructure project, hedge funds.

([34]) EIOPA has reported annually since 2016 and will do so until 2021 on the impact of the application of the LTG measures, and it provides an opinion on the assessment of the measures, even proposing, if necessary, legislative proposals.

([35]) EIOPA, *Report on long-term guarantees measures and measures on equity risk*, 2018: https://eiopa.europa.eu/Publications/Reports/2018-12-18%20_LTG%20AnnualReport2018.pdf.

44. This survey contributes to the collection of evidence to support analysis undertaken by EIOPA in the area of sustainable finance, especially as part of the European Commission's action plan. However, the survey is not intended to monitor compliance with regulatory requirements or informing supervisory decisions.

45. Selected European insurance undertakings were invited to respond to this online survey on a best-effort basis. The answers to this survey should represent the views of the firms; therefore, authorised representatives had to follow the necessary internal governance process. The names of the insurance undertakings are not disclosed and the information is used on an anonymous basis, i.e. EIOPA publications do not name or quote individual institutions based on the answers to this survey. When fewer than three undertakings in a specific jurisdiction responded to specific questions, responses from these jurisdictions are not named individually but grouped under the label 'others'. Representativeness of country results has to be interpreted with prudency, as not all types or sizes of business are equally represented at national level, even if the number of the responses per jurisdiction come from three or more undertakings.

46. The deadline for data submission, initially set on 26 July 2019, was extended for 1 week to allow for resubmissions and further clarifications. Finally, the country-level results have been shared with the national competent authorities (NCAs) for their own analyses.

5.2.1. Sample

47. EIOPA invited a subsample of the European insurance undertakings selected to participate in the long-term illiquid liabilities data request (2018-2019) to participate on a best-effort basis in this survey. The smallest undertakings (in terms of total assets), representing 25% of the insurers selected by the NCAs for the illiquid liabilities data request, had the possibility of responding on a voluntary basis.

48. The sample was considered sufficiently representative of the EEA insurance sector for the purpose of the call for advice. In total, 167 European insurance undertakings and three groups from 30 jurisdictions have successfully completed the qualitative questionnaire. Based on the individual information reported at the end of 2018, the sample accounts for almost 4 trillion in total assets. Furthermore, 40% of the participants are composite insurers, 41% are purely life insurers, 17% are purely non-life and 1% is focused on the reinsurance business. The number of participants per country varies from 1 to 28 companies. Finally, almost 70% of the insurance undertakings in the sample is part of a European group.

49. However, given that responses have been submitted on a best-effort basis from a subsample of firms from the illiquid liabilities survey, eventual size bias has

to be taken into consideration when interpreting the survey's results (e.g. 70% of the participants have assets under management larger than €1 billion) ([36]).

5.3. Analysis of the quantitative reporting template

50. An additional source of information used to provide evidence in this call for advice is the quantitative Solvency II data on assets holdings of the (re)insurance undertakings. The quarter-on-quarter and year-on-year analysis of these data covers government and corporate bonds as well as equities.

51. In particular, the detailed list of assets ([37]) from the third quarter of 2016 until the last quarter of 2018 has been analysed, excluding and including index and unit-linked investments. However, it is worth mentioning that the collective investments undertakings are not included in the current analysis and, as already observed in ***Figure 2***, a large share of the IL&UL portfolio is allocated to such investments. These assets are often managed by eternal funds, and therefore they are independent of the insurance undertakings' behaviour in terms of investment policies and strategies. A look-through of the collective investments may provide insights on the investment behaviours and characteristics driving the IL&UL businesses.

52. The variations (in quantities) of reported list of assets at the asset-by-asset level for equity, government and corporate bonds portfolios, in a 3-month or 12-month period, allow evaluation of to what extent investment in any specific assets has changed. In more detail, comparing the notional value of the bonds or the quantities of the equities of a quarter (or year) with the previous quarter (or year) result in the net number of bonds or equities bought or sold during the quarter (or year) eliminating the bias derived from price changes. These variations are then translated into the market value of assets bought, sold and kept in the relevant timeframe. Finally, in order to consider each variation proportionally compared with the overall portfolio size, the changes in market value are divided by the total investments to evaluate the relative amounts of assets bought, sold and kept in the quarter ([38]). It is important to notice that quarterly figures show more trading activity than the annual ones, as yearly figures do not capture assets that are bought, sold or matured intra-period (e.g. short-term bonds with maturity of less than 1 year or investments bought and sold in two consecutive quarters).

53. These measures allow calculation of the residual maturity, durations, holding periods and turnover ratios. Furthermore, it is possible to identify different investment management practices and understand whether undertakings in

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([36]) For further details, please refer to Annex 2 — Participation and additional results from the survey.

([37]) Model S06.02 from the Solvency II quantitative reporting templates: https://eiopa.europa.eu/Pages/Supervision/Insurance/Data-Point-Model-and-XBRL.aspx.

([38]) For further details on the methodology, please refer to section 4.1.1 of the feedback request for the illiquid liability project: https://eiopa.europa.eu/Publications/Consultations/EIOPA-PSC-18_093_Request_for_Feedback_Illiquid%20Liabilities.pdf#search=Request%20for%20feedback%20illiquid%20liabilities.

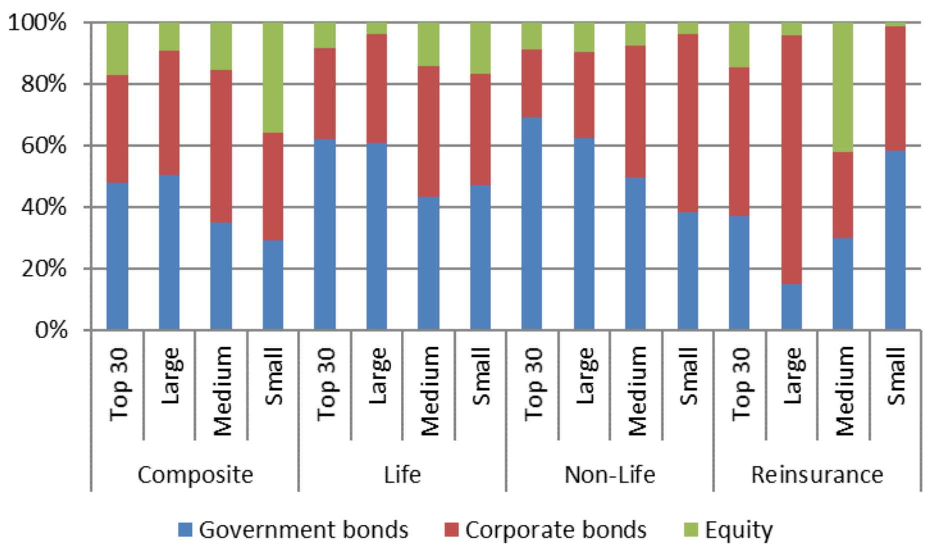
different countries, with different sizes or business types hold on to a greater part of their assets using buy-and-hold or active trading strategies.

5.3.1. Sample

54. The sample size changes over time between 1,346 and 1,396 insurance undertakings and, based on the latest available data (last quarter of 2018), 17% of insurance undertakings in the sample are composite insurers, 25% are purely life insurers, 53% are purely non-life and 5% are focused on the reinsurance business. More than three quarters of non-life companies in the sample fall into the small or medium-sized category ([39]), while small and medium-sized life and composite undertakings represent only 50% of the sample. In terms of total assets, the largest companies in the sample (top 30 and other large) represent close to 97% of the total assets considered in the analyses (government bonds, corporate bonds and equity portfolios).

55. ***Figure 6*** shows that the insurance undertakings generally allocate around half of their portfolios to government bonds, while between 20 and 30% of their assets are invested in corporate bonds and the remaining in equity. It is important to mention that medium-sized and small composite, as well as large and medium-sized, reinsurance companies are characterised by a different portfolio allocation: these companies invest a smaller portion (around 30%) of their assets in government bonds. In more detail, small composite and medium-sized reinsurance companies prefer a more balanced portfolio, while the top 30 reinsurance undertakings mostly invest in corporate bonds.

Figure 6: Allocation of government bonds, corporate bonds and equity portfolios by size and type of undertaking.



Source: EIOPA, Q4 2018.

([39]) For further details on the small, medium and large classification, please see Annex 3 – Analysis of sample QRTs .

5.4. Main findings

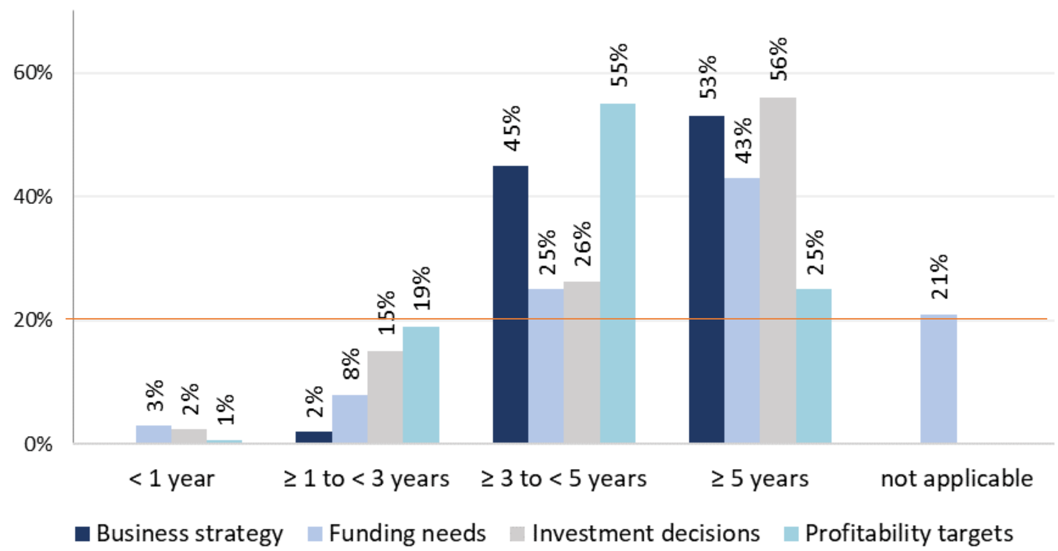
5.4.1. Time horizon underlying the main business activities

56. The responses to the ad hoc survey provide insights on the time horizons considered for different insurer's activities and business types as well as on the drivers determining the actual holding period considered in their investment strategies (e.g. liability structure; profitability; monetary policies and macroeconomic factors; shareholders' interests; or prudential regulation). The first set of questions asked about the time horizons underlying the general activities for the insurance undertakings as a whole.

57. One particular question to participants was about the time horizon driving their business strategy (including liabilities matching), their profitability targets, their funding needs and their investment decisions. The following buckets were suggested as possible answers: less than 1 year, 1 to (less than) 3 years, 3 to (less than) 5 years and 5 years or longer.

58. In general, **around 80%** of the sample declared **horizons longer than 3 years** underlying the main business activities. For funding needs, the share lies below 70%, and one fifth of respondents consider that the time horizon does not determine the funding needs. **More than 80% of respondents** consider that **more than 3-year time horizons** are driving their profitability targets, a majority that is 3- to 5-year horizons and around one quarter more than 5 years (see ***Figure 7***).

Figure 7: Time horizon underlying the main business activities (i.e. business strategy, profitability targets, funding needs or investment decisions).



Source: EIOPA, survey 2019.

59. For the **business and investment strategies**, the driving horizon is **more than 5 years.** However, the responses vary across sizes, business types and countries (see Annex 2 — Participation and additional results from the survey).

a) *Different sizes*

- For instance, the 1- to 3-year horizon drives all the main activities for 20% or more of the small companies representing the largest share of this cohort for the whole sample as well as for the other subsamples separately (i.e. large and medium-sized).
- At the same time, the largest share in the small companies sample (60%) declares that investment decisions are driven by the 5-year or longer horizon and this is the highest share of respondents for the whole sample and the other subsamples separately (i.e. large and medium-sized) for that activity.

b) *Different business types*

- When looking at the business strategies, more than half of the life companies in the sample (54%) take into account a horizon greater than 5 years. At the same time, 53% of the non-life and 48% of the composites' responses focus on the 3- to 5-year horizon.
- In general, the composite companies subsample reflects almost the same responses for all the activities as for the whole sample.
- Life companies and more clearly reinsurers give a slightly higher weight to the 5-year or longer horizon than non-life companies.

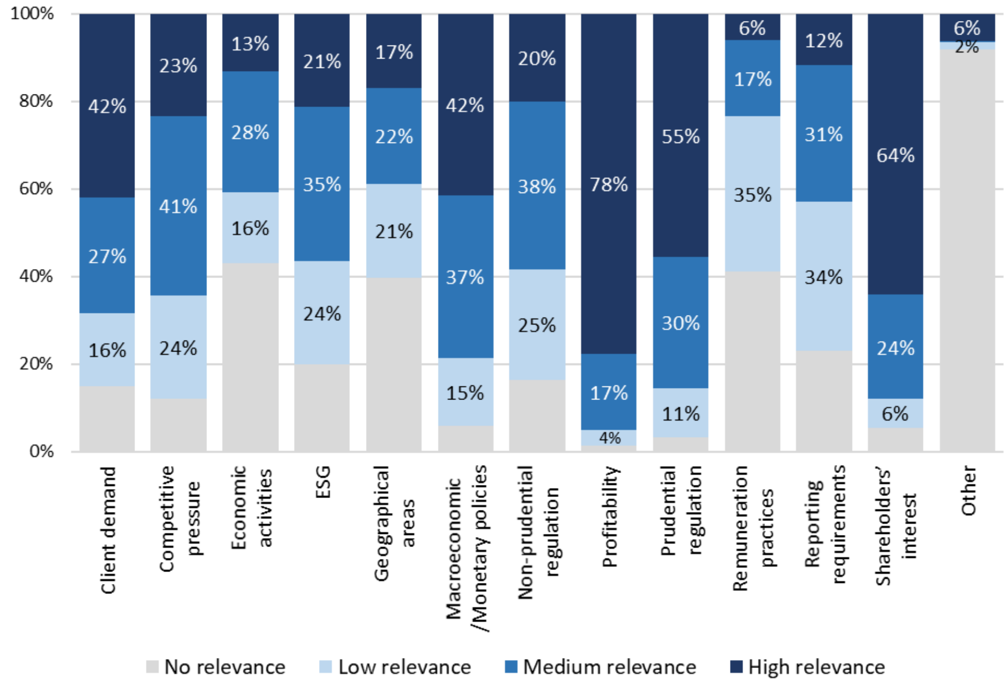
c) *Different countries*

- 5-year or longer horizons drive investment decisions for at least 60% of the respondents in France, Germany, Greece, the Netherlands, Slovakia, Spain and Sweden.
- 3- to 5-year horizons drive investment decisions for 60% or more of the respondents in Italy and Romania.
- 3- to 5-year horizons drive business strategies for at least 60% of the respondents in Austria, Cyprus, Italy, Liechtenstein, Poland and others (including respondents from Belgium, Croatia, Czechia, Denmark, Estonia, Finland, Latvia, Lithuania, Luxembourg, Malta, Norway, Portugal and United Kingdom).
- 3- to 5-year horizons drive profitability targets for 60% or more of the participants in Greece, Poland, Romania, Sweden and others.

60. The participants in the survey were asked to score the most relevant determinants ([40]) of the time horizons for their main activities, selecting one of four the possible options: irrelevant, low, medium or high relevance.

([40]) The questionnaire proposed the following factors: (a) profitability; (b) shareholders' interest; (c) competitive pressure; (d) client demand; (e) remuneration practices in the financial sector; (f) geographical

Figure 8: Relevant factors for the time horizons underlying the main business activities (i.e. business strategy, profitability targets, funding needs or investment decisions).



Source: EIOPA, survey 2019.

61. The **top 3 determinants** for the whole sample are **the profitability aspects, the shareholders' interest and the prudential regulation**. The top 5 include the monetary policies and macroeconomic factors and then the client demand.

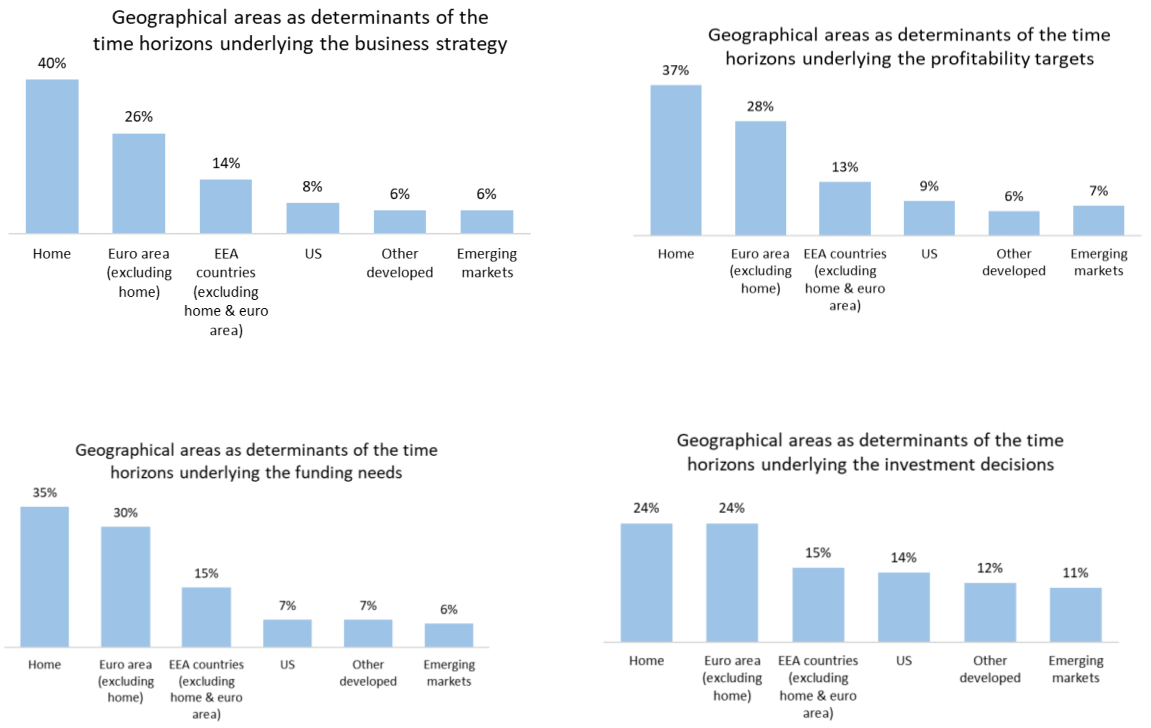
62. There is consistency in the importance of top 3 criteria across different sizes of undertakings. Only the reinsurers sample declared different top 3 factors including shareholders' interest and non-prudential regulation followed by the monetary policies and macroeconomic factors.

63. Monetary policies and macroeconomic factors, in particular the persistent low-yield environment, matter significantly more for respondents in Italy, Greece, Hungary, the Netherlands, Slovenia and Spain. Reporting is particularly relevant for respondents in Lichtenstein. Environment, social and governance (ESG) criteria matter relatively more for respondents in Greece, the Netherlands and Sweden. Finally, client demand has comparatively more relevance for respondents in Spain and the United Kingdom.

areas; (g) economic activities; (h) environmental, social and governance (ESG) criteria; (i) monetary policies/macroeconomic factors; (j) non-prudential regulation (e.g. tax regulation); (k) prudential regulation; (l) reporting requirements (any type of disclosure); (m) other (further specified by the respondents).

64. Notwithstanding the above, it is interesting to discriminate by relevance the second-order factors for which the participants provided further information, such as geographical areas or economic activities.

Figure 9: Geographical areas as determinants of the time horizons underlying the main business activities.



Source: EIOPA, survey 2019.

65. **Geographical areas** are among the least relevant factors to determine the time horizons underlying the activities of the (re)insurance companies (see ***Figure 8***) ([41]). Notwithstanding this low relevance, participants were able to differentiate further the relevance by broad geographical area. This additional information shows the relatively higher relevance of areas such as **emerging markets** or **other developed countries** only as far as **investment decisions** are concerned and to the detriment of the opportunities in the **euro area** or **home**. With respect to the other main activities considered in the questionnaire, such as **business strategy**, **profitability** or **funding aspects**, 60% of the respondents consider the situation in the euro area or home when determining the relevant time horizon.

66. Similarly, **economic activities** are also among the least relevant factors when setting the time horizons underlying the general activities of the (re)insurance undertakings (see ***Figure 8***). In this case, the responses indicated a relatively higher relevance for the **services** activities, which is clearly above any other economic activity.

([41]) The currency aspect is considered relevant to the extent that it is a key factor in the liabilities structure.

5.4.1.1. ESG criteria as factors determining insurers' time horizons

67. Investments that contribute to environmental and social objectives require a long-term perspective. Sustainability may face obstacles against its developing in a context in which incentives, market pressures and prevailing corporate culture prompt market participants to focus on near-term performance at the expense of the mid- to long-term objectives. Short-term pressures could lead corporations to overlook long-term risks and opportunities such as those related to climate change and other factors related to sustainability. Companies facing such pressure could as a result forgo investment in areas important for a successful transition towards a sustainable economy.

68. To evaluate the relevance of the environmental, social and governance criteria, the participants in the ad hoc survey were invited to rate the ESG criteria as factors determining the time horizons of their various business activities.

69. The **governance aspect** is the most relevant factor across different business activities ([42]). It is especially important for determining the time horizon underlying the business strategy and the investment decisions (43% of participants rated the governance factor as highly important in determining the time horizon underlying their investment decisions).

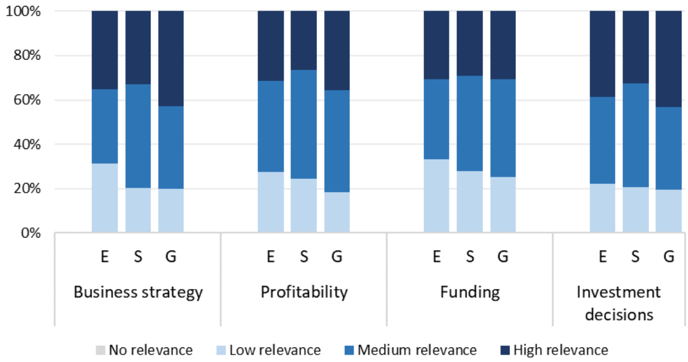
70. The **environmental factor** follows the governance factor: **28-38% of the insurance undertakings** in the survey consider this factor extremely important. A few participants mentioned that the ESG criteria are becoming increasingly important but often are not yet fully embedded into the medium- to long-term planning considerations.

71. Participants reported the **social aspect** as the least relevant of the three ESG criteria when selecting general time horizons. Social considerations are particularly behind the other two criteria in terms of relevance when selecting time horizons for the business strategy and the profitability targets.

72. Generally, the **ESG criteria** were revealed to be quite important when selecting the time horizon of the **business strategy**, the **investment decisions** and the **profitability targets.** The participants emphasised that taking the ESG criteria into consideration makes it easier to estimate the development over time of the expected profits.

([42]) Evidence collected for the Opinion on sustainability in Solvency II showed that time horizons usually defined for business strategy purposes (typically 3-5 years) area still not long enough to accurately reflect risks that will emerge over longer periods, such as climate change risks. Almost all stakeholders supported EIOPA's suggestion for including long-term scenario analysis in their risk management to take into account climate change-related risks. The evidence collected did not lead EIOPA to conclude that stakeholders are currently consistently performing such longer term analysis or that there is any measurable impact on their investment or underwriting behaviour.

Figure 10: ESG criteria as determinants of the time horizons underlying the main business activities (i.e. business strategy, profitability targets, funding needs or investment decisions).

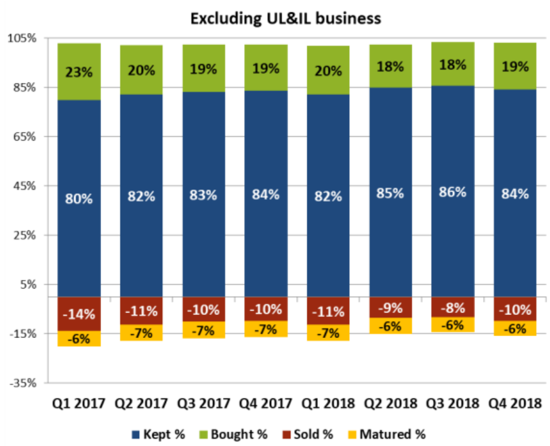


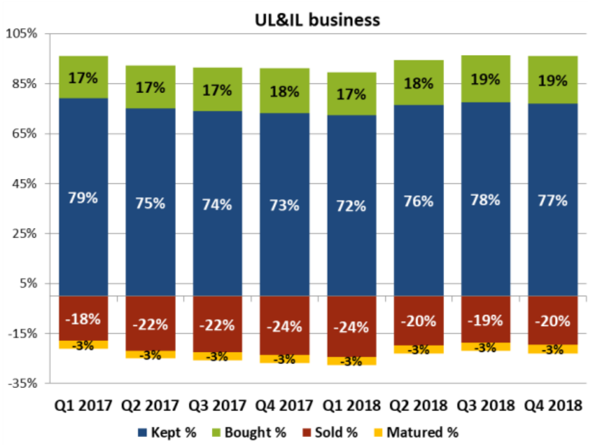
Source: EIOPA, survey 2019.

5.4.2. Rebalancing strategies

73. As explained in more detail in section 5.3, the year-on-year QRT analysis, based on 12 months overlapping windows, allows a better understanding of the different investment management practices. Based on the year-on-year QRTs analysis, at **EEA sample level the rebalancing of the equities and bonds portfolio is quite stable** (see ***Figure 11***). Notwithstanding the additional trading activities captured by the quarter-on-quarter QRT analysis, this trend is also confirmed by quarterly information (based on which 80-97% of the portfolio is usually kept). Identifying different investment behaviours requires drilling the data by country, business type and size and splitting the assets by category, maturity or credit quality step.

Figure 11: Yearly evolution of government bonds, corporate bonds and equity portfolios rebalancing (as share of initial portfolio) excluding and including IL&UL businesses.





Source: EIOPA, Quarterly Solo.

74. Tables 1-3 provide high-level year-on-year statistics for the shares of portfolio kept, sold, bought and matured based on the QRT data collected between 2016 and 2018. Looking at different breakdowns (by type of business, portfolio size and asset type), it can be seen that **composite insurance undertakings have the most stable portfolio**, followed by life, non-life and reinsurance companies. On average almost 76% of the IL&UL equity and bonds portfolios are usually kept and close to one fifth of the portfolio is usually replaced on an annual basis. However, it is important to keep in mind that equity and bonds investments represent between 15% and 30% of the overall IL&UL assets.

Table 1: Summary statistics of rebalancing portfolio strategies by insurance undertaking type.

Q1 2016 Q1-Q4 2018		Excluding IL&UL					IL&UL
		All	Life	Composite	Non-life	Reinsurance	
Kept	*Min*	80%	79%	87%	83%	64%	72%
	Average	83%	83%	85%	81%	70%	76%
	Max	84%	86%	83%	77%	75%	79%
Sold	*Min*	-14%	-16%	-10%	-15%	-25%	-24%
	Average	-11%	-11%	-8%	-11%	-19%	-21%
	Max	-9%	-8%	-7%	-10%	-15%	-18%
Bought	*Min*	23%	16%	15%	20%	27%	17%
	Average	20%	19%	17%	23%	34%	18%
	Max	18%	23%	22%	26%	41%	19%
Matured	*Min*	-7%	-6%	-7%	-8%	-12%	-3%
	Average	-6%	-6%	-7%	-8%	-11%	-3%
	Max	-6%	-4%	-6%	-7%	-10%	-3%

Source: EIOPA, Quarterly Solo.

75. The **reinsurance companies** were revealed to be more active and to prefer lower holding periods compared with other insurance undertakings. At the same time, it is important to recall that reinsurance companies, due to their business activities, have a completely different and more balanced portfolio. On the contrary, **life insurers rely on more stable and predictable portfolios**; they usually match the cash flows deriving from their long-term liabilities with fixed income investments. On average, different types of undertakings sold between 8% and 19% of their portfolios.

Table 2: Year-on-year statistics by portfolio type excluding and including IL&UL.

		Excluding UL&IL			
		All	Government	Corporate	Equity
Kept	*Min*	80%	82%	79%	75%
	Average	83%	85%	81%	81%
	Max	84%	87%	83%	85%
Sold	*Min*	-14%	-12%	-13%	-25%
	Average	-11%	-9%	-10%	-19%
	Max	-9%	-8%	-9%	-14%
Bought	*Min*	23%	17%	19%	18%
	Average	20%	18%	20%	24%
	Max	18%	20%	24%	30%
Matured	*Min*	-7%	-6%	-9%	
	Average	-6%	-6%	-9%	
	Max	-6%	-5%	-8%	

		UL&IL			
		All	Government	Corporate	Equity
Kept	*Min*	72%	67%	64%	74%
	Average	76%	73%	67%	78%
	Max	79%	76%	71%	85%
Sold	*Min*	-24%	-23%	-25%	-26%
	Average	-21%	-19%	-22%	-22%
	Max	-18%	-15%	-15%	-16%
Bought	*Min*	17%	21%	28%	12%
	Average	18%	23%	29%	13%
	Max	19%	26%	32%	14%
Matured	*Min*	-3%	-11%	-11%	-
	Average	-3%	-8%	-10%	
	Max	-3%	-7%	-9%	-

Source: EIOPA, Quarterly Solo.

76. On the one hand, when looking at the bonds and equity investments excluding the assets managed for IL&UL purposes, the **government bonds portfolio**, which represents around half of the total investments, is the **least subject to changes** and is characterised by the **lowest turnover ratio**. On average, when looking at the average share of the portfolio that is kept, the government bond portfolio is followed by the corporate investment and lastly by the equity portfolio. On the other hand, among IL&UL assets, the equity portfolio has the higher share of the portfolio that is kept (78%), followed by government and corporate bonds.

Table 3: Year-on-year statistics by size excluding and including IL&UL.

		Excluding UL&IL				
		All	Small	Medium	Large	Top 30
Kept	*Min*	80%	62%	68%	77%	84%
	Average	83%	67%	74%	81%	85%
	Max	84%	73%	77%	83%	87%
Sold	*Min*	-14%	-21%	-21%	-17%	-10%
	Average	-11%	-18%	-16%	-13%	-9%
	Max	-9%	-15%	-13%	-10%	-7%
Bought	*Min*	23%	31%	27%	19%	16%
	Average	20%	35%	28%	21%	18%
	Max	18%	39%	29%	24%	22%
Matured	*Min*	-7%	-17%	-11%	-6%	-7%
	Average	-6%	-15%	-11%	-6%	-6%
	Max	-6%	-12%	-10%	-6%	-6%

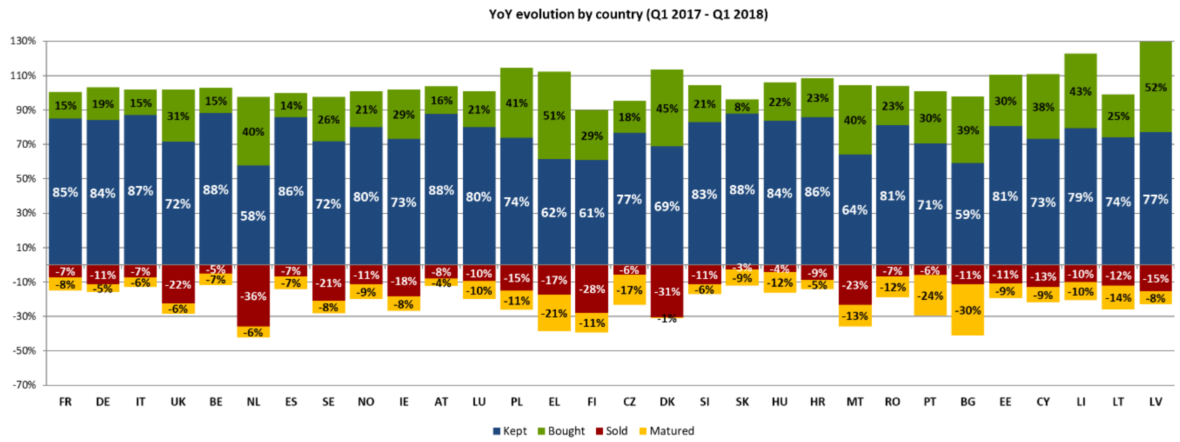
		UL&IL				
		All	Small	Medium	Large	Top30
Kept	*Min*	72%	19%	58%	69%	73%
	Average	76%	45%	69%	72%	78%
	Max	79%	67%	73%	74%	84%
Sold	*Min*	-24%	-65%	-32%	-25%	-26%
	Average	-21%	-40%	-23%	-21%	-21%
	Max	-18%	-21%	-18%	-18%	-15%
Bought	*Min*	17%	13%	25%	27%	11%
	Average	18%	27%	33%	27%	12%
	Max	19%	42%	41%	29%	14%
Matured	*Min*	-3%	-	-12%	-7%	-2%
	Average	-3%	-15%	-8%	-6%	-1%
	Max	-3%	-	-7%	-6%	-1%

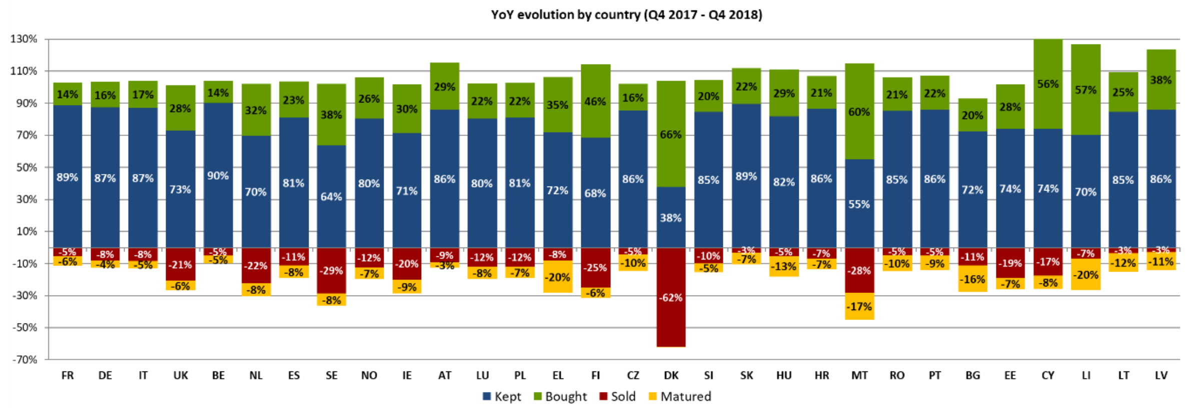
Source: EIOPA, Quarterly Solo.

77. Different sizes of insurance companies, excluding IL&UL assets, sold between 9% and 18% of their portfolios. In more detail, ***Table 3*** shows that, on average, **small insurance undertakings are generally more active**: between 2016 and 2018, they sold 15-21% of their portfolios and they bought 31-39% of their investments. Overall, the share of portfolio kept increases with the size of the insurance undertaking. The **30 largest (re)insurance companies kept, on average, 85% of their investment** compared with only 67% for the smallest companies in the sample.

78. When looking at the year-on-year country results based on Q4 2017 to Q4 2018 and Q1 2017 to Q1 2018 data, it is possible to identify different behaviours: the share of portfolio that is kept varies between 38% and 90% when looking at the most recent data. It is important to notice that the country-specific results may vary significantly based on the time horizon considered as reference; this behaviour is visible, especially for smaller countries, while for countries such as France, Germany and Italy the results remain quite stable. ***Figure 12*** shows that different turnover ratios characterise the European countries: United Kingdom, Netherlands, Sweden, Finland, Denmark and Malta sold more than one fifth of their portfolios, while less than 5% was sold in Belgium, Czechia, Slovakia, Hungary and Portugal.

Figure 12: Year-on-year trends in bonds and equity portfolios rebalancing by country. The countries are ordered based on the total assets.

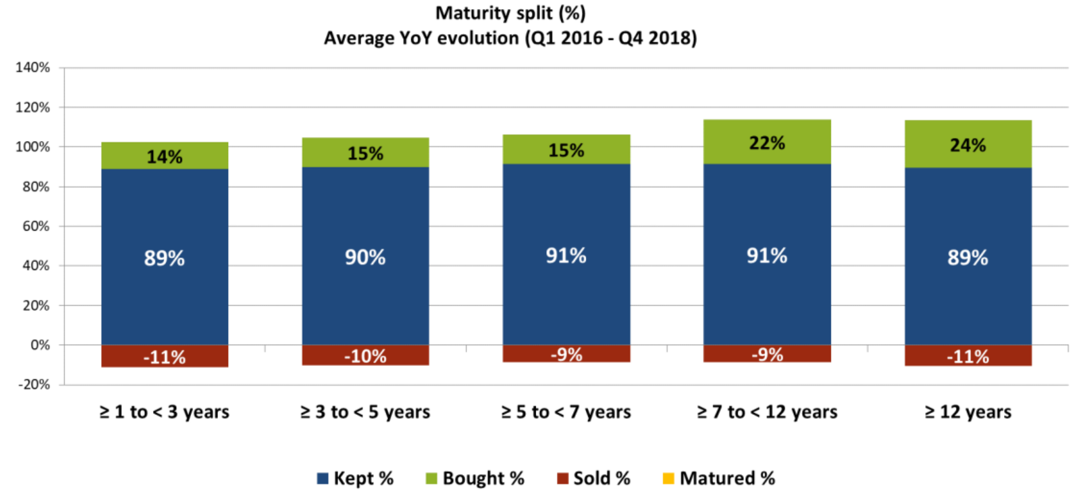


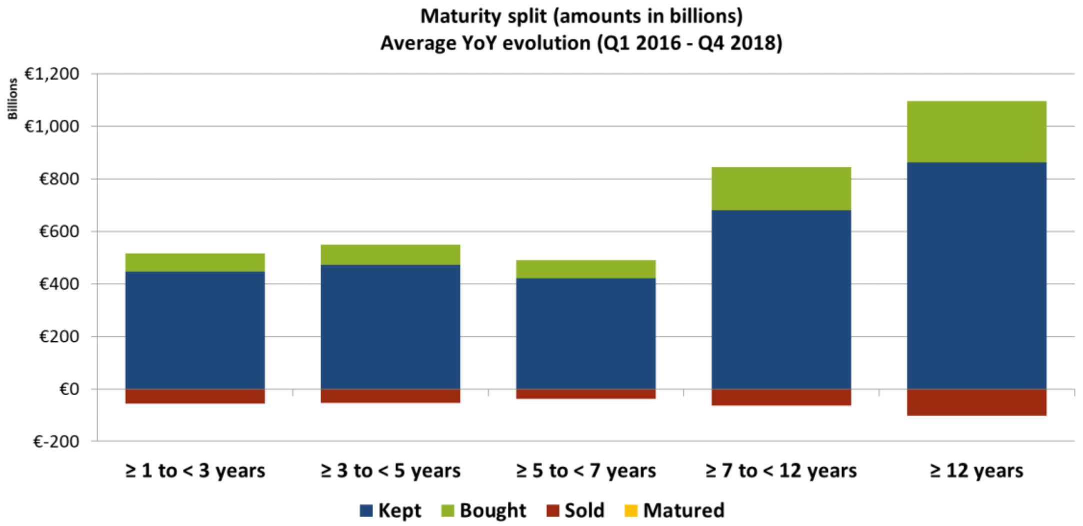


Source: EIOPA, Quarterly Solo.

79. From ***Figure 13*** it is possible to observe that **most of the assets have an average residual maturity longer than 7 years**; at the same time the most stable part of the portfolio has a residual maturity of between 5 and 12 years.

Figure 13: Average year-on-year (YoY) evolution by maturity bucket (as share of initial portfolio and in billions).

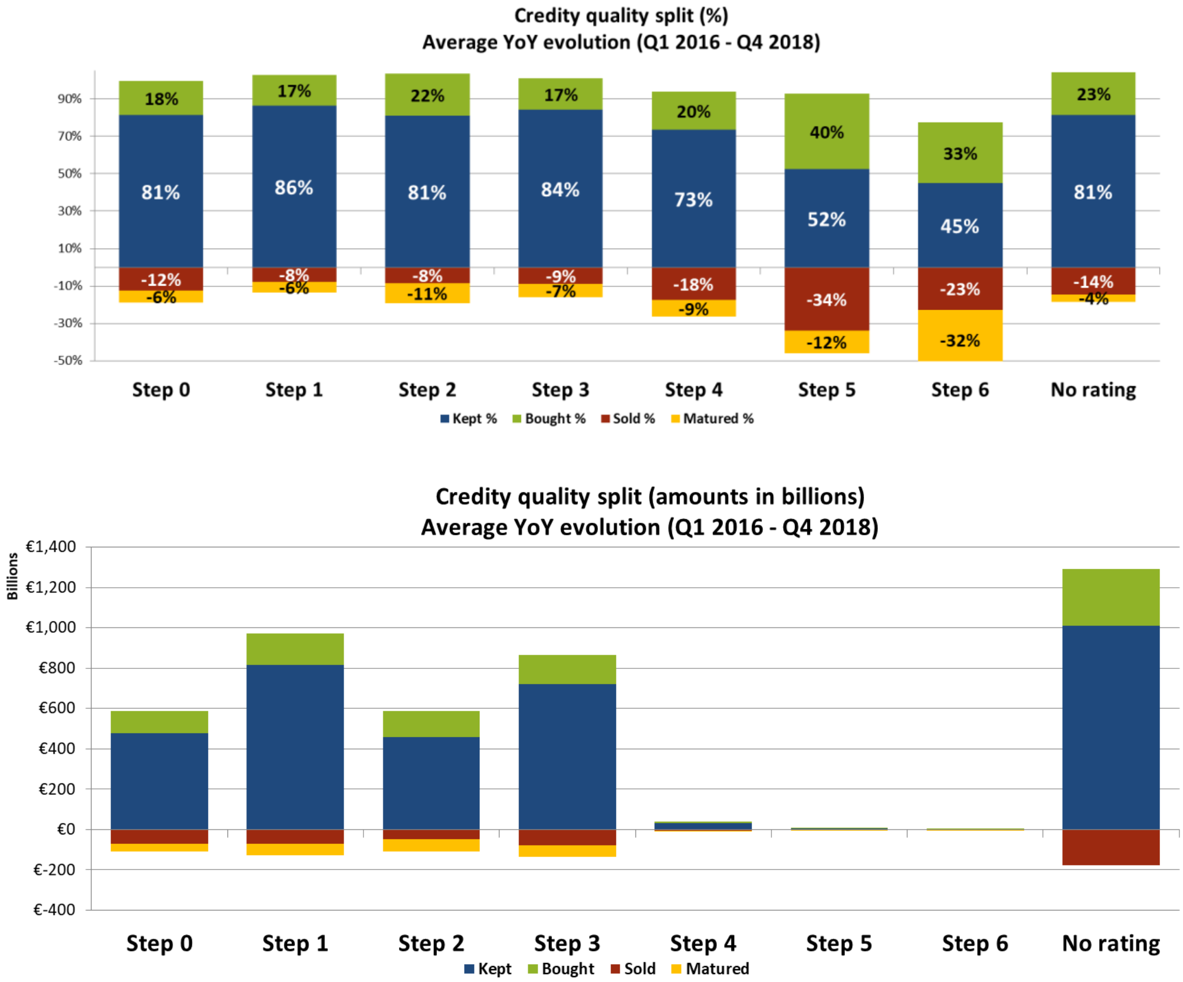




Source: EIOPA, Quarterly Solo.

80. Finally, when looking at the credit quality breakdown, it is important to highlight that, insurers allocate a **large part of the European portfolio to high-rated assets** (step 0 to step 3) and between **80% and 86% of these investments are** usually kept in the portfolio. In contrast, insurers allocate **only a small proportion of the total investments to assets with low credit worthiness** (credit quality steps 3, 4 and 5) and these are usually traded with higher frequency.

Figure 14: Average year-on-year (YoY) evolution by credit quality step (as share of initial portfolio and in billions).



Source: EIOPA, Quarterly Solo.

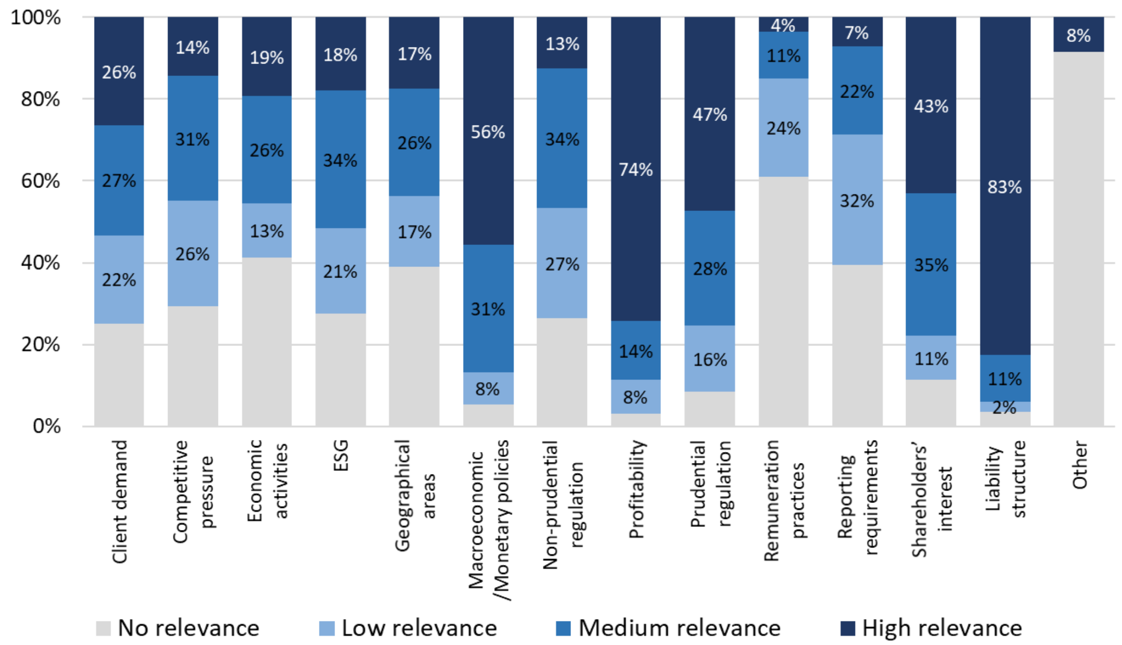
5.4.3. Determinants of the holding periods

81. Given its importance for the investigation at stake, the participants in the ad hoc survey indicated the relevance of the factors, from irrelevant to highly relevant, driving their actual holding period for the bonds and equity portfolios.

82. The holding periods quantified by EIOPA using the available QRT data are complementary to this set of responses (see section 5.4.2).

83. At sample level, the **top 3 determinants for the holding periods are the liability structure** (which naturally reflects the business strategy and the client demand), the **profitability aspects** and the **monetary policies** and **macroeconomic factors**. The top 5 also include the prudential regulation and the shareholders' interest (see ***Figure 15***).

Figure 15: Factors influencing the actual holding periods of the investment strategies.



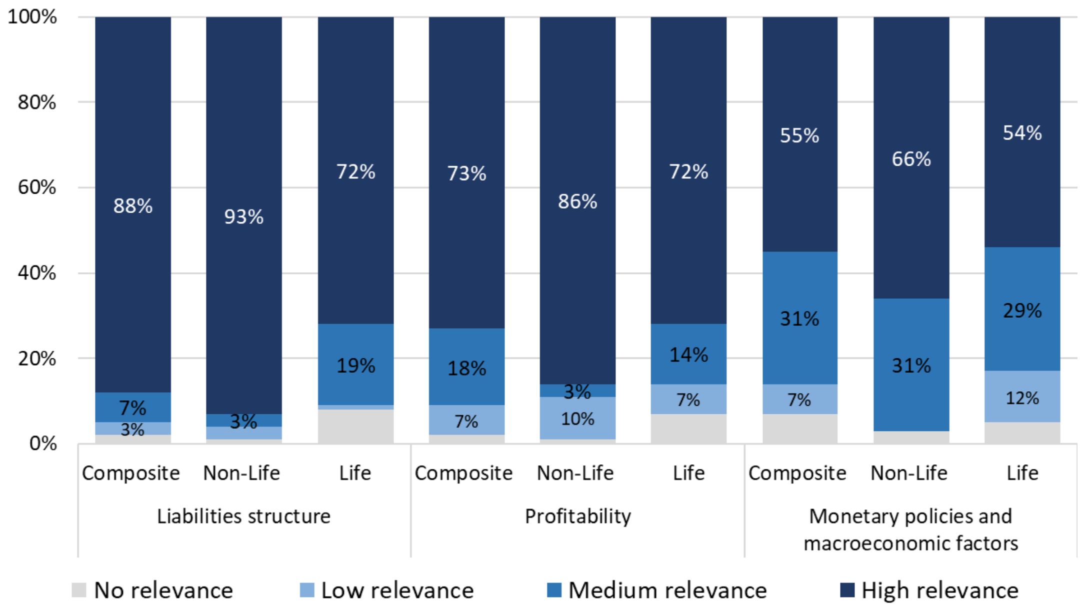
Source: EIOPA, ad hoc survey 2019.

84. Respondents consider the **remuneration policies** and the **reporting requirements** the least relevant when deciding the holding period of the bonds and equity portfolios at the sample level.

85. Although at the EEA sample level the top 3 factors are clearly reported as the most relevant, in some countries any of those factors are reported as significantly less relevant driving the holding periods, e.g. the profitability in countries such as Hungary and Ireland and the monetary policies and macroeconomic aspects in countries such as Austria, Bulgaria, Ireland and Malta.

86. Undertakings of different sizes or business types reported similar relevance factors. However, when looking at the top 3 factors underlying the actual holding period of the investment strategies by undertaking type (see ***Figure 16***), it can be seen that 96% of the non-life companies in the sample consider the relevance of this factor high or medium, followed by composite companies (95%) and life insurance undertakings (91%). With regard to the profitability, as well as the monetary policies and macroeconomic factors, the responses of life undertakings are aligned with the preference of composite insurers, while a larger share of non-life undertakings evaluate these factors as highly relevant.

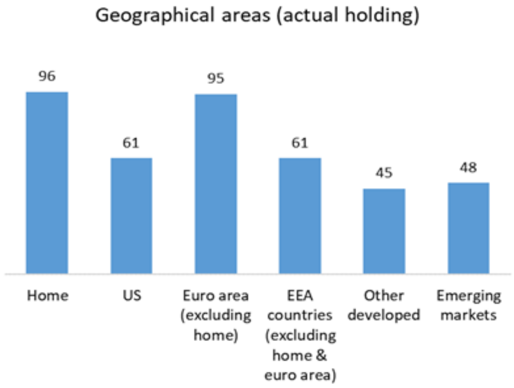
Figure 16: Top 3 factors determining the holding periods of the bonds and equity portfolios by undertaking type.

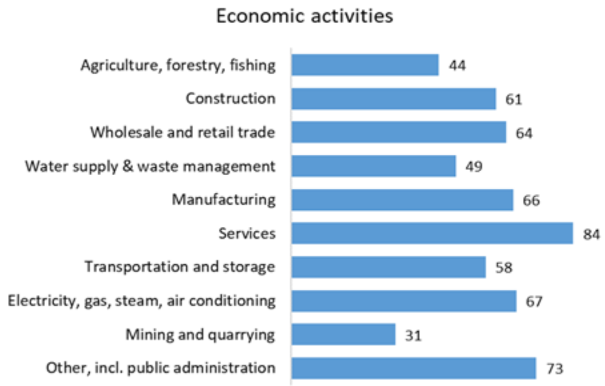


Source: EIOPA, ad hoc survey 2019.

87. In view of the responses, the **geographical areas** or **economic activities** of insurers' investees are not a main determinant of their holding periods (see ***Figure 17***). However, the questionnaire gave the participants the opportunity to provide further information on the different relevance by category of geographical areas or economic activities. As previously observed, when determining the holding period, the primary focus of the insurance undertaking is usually on the liability structure; therefore, investments in specific geographical areas or economic activities may be chosen to match certain characteristics of liabilities (e.g. in term of duration, foreign currency).

Figure 17: Geographical areas (left) and economic activities (right) as determinants of the actual holding periods for investment decisions with regard to bonds and equity portfolios (number of responses).





Source: EIOPA, ad hoc survey 2019.

88. Of the participants who considered that the geographical area may influence the relevant holding period of any investment, most of them highlighted *home* and the euro area followed by the EEA and the United States as determinants.

89. Of the participants who considered that economic activity may influence the relevant holding period of any investment, most of them highlighted services as the main activity, followed by 'other, including public administration'.

90. Finally, **governance is the most determinant factor** when considering the time horizons underlying the main business activities of the three elements in ESG. Environmental is the second, closely followed by the social factor.

5.4.4. Expected trends in the holding period

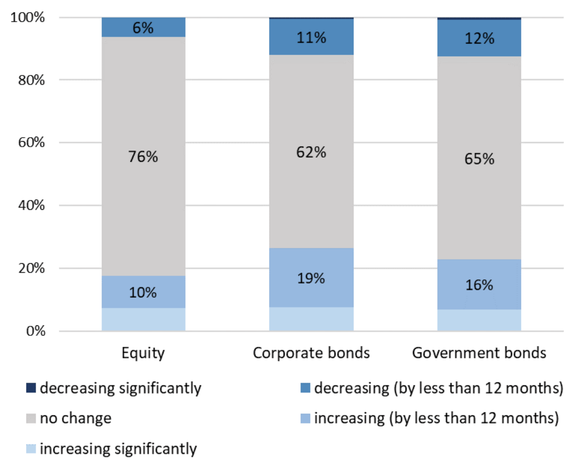
91. As mentioned in section 5.4.3, the characteristics of the insurance liabilities such as **liquidity, cash flow predictability** and **policyholder optionality** determine the holding period. Those key characteristics of the liabilities depend on the existence of disincentives to redeem or to cancel the contracts affecting the number of renewals of insurance contracts (retention rates).

92. In addition, the total concentration thresholds, market views, credit worthiness and developments in the sector in which the counterparties operate may influence the holding period. Several participants mentioned that they enforce 'buy and hold' strategies, but this does not imply a 'buy and forget' strategy: the necessary cash flows, policyholders' behaviour and market developments determine adjustments to the portfolios. In more detail, the holding strategy aims to match the assets with the long-term liabilities, and only a small portion of the portfolio is usually subject to active trading and characterised by a shortened horizon to be able to react to sudden pay-outs.

93. In general, the holding periods differ among asset classes and ratings. Changes in the credit worthiness of the debtor or changes in the outlook of certain countries or sectors may influence insurance undertaking decisions. Finally, risk management considerations could also influence the holding period during the maturity of the instruments.

94. In the next 2 years, the participants expect to keep the holding periods of their portfolios rather stable (see ***Figure 18***). In more detail, investments in equity were revealed to be the most stable: more than three quarters of the participants are planning to keep the holding period constant in the near future. When looking at the bonds portfolio, the share of insurance undertakings that do not envisage any changes remains over 60%.

Figure 18: Expected trends in the average holding period in the next 2 years.



Source: EIOPA, ad hoc survey 2019.

5.4.5. Expected trends in average residual maturities

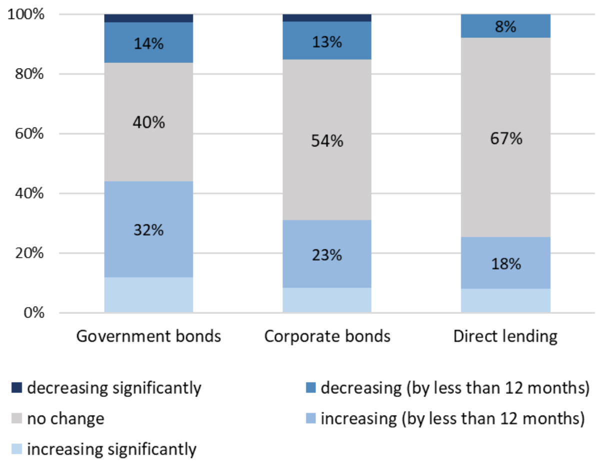
95. The results highlight that **most participants expect to keep stable**, or slightly increase, **their average residual maturity in the next 2 years**. Based on the additional information received, future trends will be mainly driven by changes, if any, in the **insurance liability characteristics** (maturity, liquidity, currency, cash flow predictability) or in the **expected retention rates** and cannot be merely explained by expected changes in assets' performance.

96. **Direct lending business** was revealed as the most stable portfolio: almost 70% of the participants involved in direct lending activities are planning to keep the average residual maturity stable in the near future, while almost one quarter of them expect an increase (slightly or significantly).

97. Based on the answers collected, the **government bonds portfolio** will presumably see a major increase in terms of time to maturity: only 40% of the

sample expect to keep the average residual maturity stable; 17% plan to decrease (slightly or significantly), while the remaining insurance undertakings will increase by less than 12 months (32%) or increase significantly (12%) (see ***Figure 19***). The results are quite widely spread and a common trend cannot be easily identified.

Figure 19: Expected trends in average residual maturity in the next 2 years.



Source: EIOPA, ad hoc survey 2019.

98. The persistence of the low interest rate environment is a possible reason for such different behaviours. Although some insurance undertakings expect to increase the duration of their government bonds to obtain higher yields, others prefer to move their investments towards other asset classes. This difference is even clearer when looking at the composite undertakings. In this case, the share of participants willing to keep stable the time to maturity of their government portfolios falls to 32%; 41% expect an increase in the average residual maturity, while 28% will decrease it (5% of which by more than 1 year).

99. Concerning the **average residual maturity of the corporate bonds portfolio**, more than half of the sample do not expect any changes, 31% of insurance undertakings will increase the duration and the remainder (16%) predict the opposite.

100. In addition to the liability structure and expected retention rates, other factors can influence expectations for insurances. The most relevant time horizon's determinants for the bond portfolios are the **monetary policies and macroeconomic factors, profitability aspects** and finally **prudential regulation and shareholders' interest.** Similar trends were reported by undertakings characterised by different sizes. Finally, for non-life insurance undertakings the relevance of monetary policies, macroeconomic and profitability factors is even more pronounced.

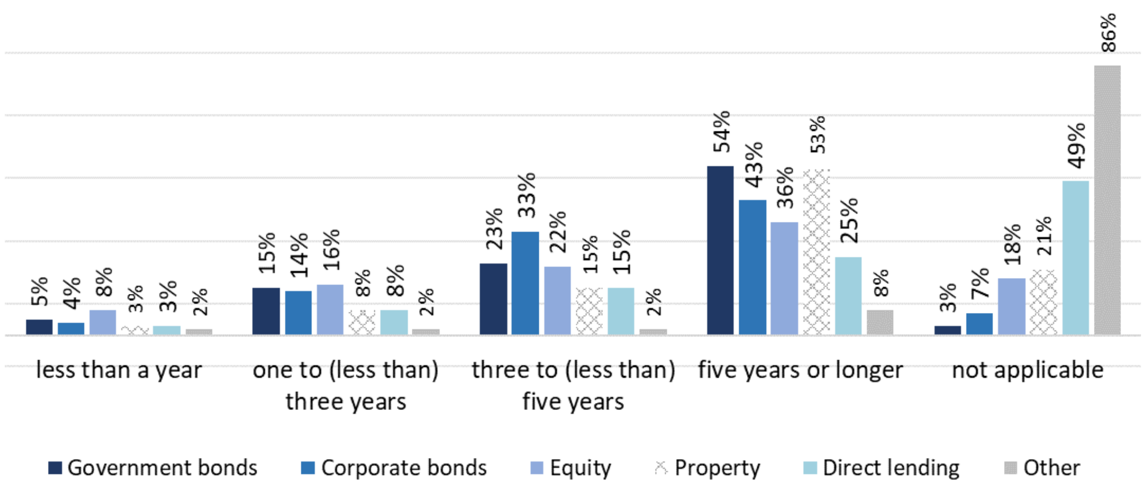
101. When looking at factors driving expectations for trends in the direct lending portfolio, it can be seen that the relevance of the different factors is not that accentuated. In fact, not all insurance undertakings have direct lending strategies.

5.4.6. Risk assessment policies

102. When managing their investments (re)insurance undertakings must assess the associated risks and, for that purpose, they should take into consideration different time horizons. Based on the results of the ad hoc survey, a significant number of participants do consider a time horizon of 5 years or longer during the risk assessment process for the most important asset classes. Although a small portion of the respondents assess the associated risks of investments in equity, corporate a government bonds or property within a time horizon of less than 3 years, more than 50% take into account risks beyond the 3-year horizon.

103. For this particular question on the relevant time horizon considered in the risk assessment, there are significant differences in the responses due to size and business type and country.

Figure 20: Time horizons considered in the risk assessment.



Source: EIOPA, ad hoc survey 2019.

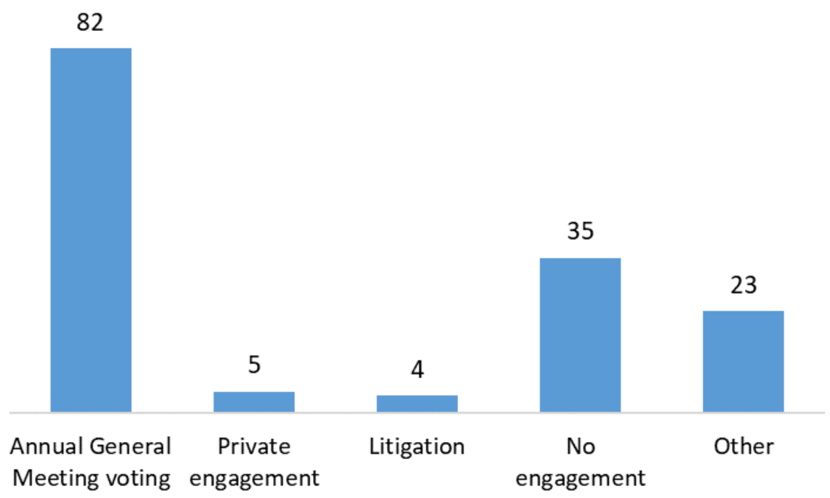
104. Close to **60% of participants** responded that they include **ESG criteria** in their risk assessment process. More than 15% of insurance undertakings in the sample focus explicitly on long-term assets, 5% of which focus specifically on long-term green investments (e.g. responsible investing, investments in green companies, green energy) and exclude from their portfolios companies breaching human rights or polluting the environment. Almost 10% of the participants mostly review illiquid long-term assets classes (e.g. fixed income, equity, real estate, private debt) in their risk assessments to meet sustainability goals. In addition, more than 5% of replies indicate that the ESG criteria, defined within the company, are mainly used to exclude specific assets from their portfolios (e.g. weapons industry, tobacco, coal). Moreover, it is important to note that more than 5% of the participants plan to further develop their risk assessment policies and

practices to include sustainability considerations. Finally, 11% of participants did not answer the questions and the remaining 30% do not include such considerations in their risk assessment processes. For long-term assets, the main reason behind this choice is a strong focus on asset liability matching and on the expected returns taking into account the underlying risks.

5.4.7. Mitigate the risk of short-termism

105. Participants were asked whether they engage with the investee companies to mitigate the risk of short-termism. The responses showed that they engage mainly with investees through their voting in the annual general meeting; however, the next most popular response is no engagement.

Figure 21: Tools to mitigate the risk of short-termism (number of responses).



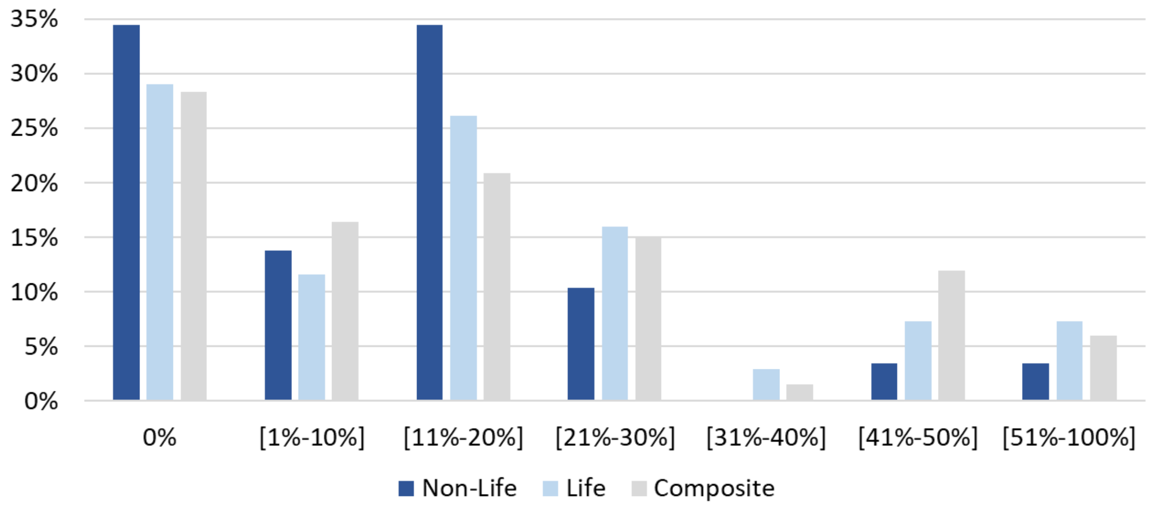
Source: EIOPA, ad hoc survey 2019.

5.4.8. Remuneration practices

106. The financial literature often identifies the remuneration policies of key staff members making the investment decisions in their companies as one potential driver for short-termism. However, the respondents to the survey considered their remuneration practices to be the **factor least affecting** the relevant holding period of investments (see ***Figure 8***).

107. Close to **30% of the sample does not include a variable remuneration component in remuneration practices** and for almost 70% of the participants the variable part does not exceed 20%. Provided that more than 60% of the sample consider remuneration practices not relevant for the holding periods, such percentage necessarily includes insurers reporting variable remunerations but is still not relevant to determine the holding periods.

Figure 22: Remuneration policies by undertaking type: variable remuneration as a share of fixed component.

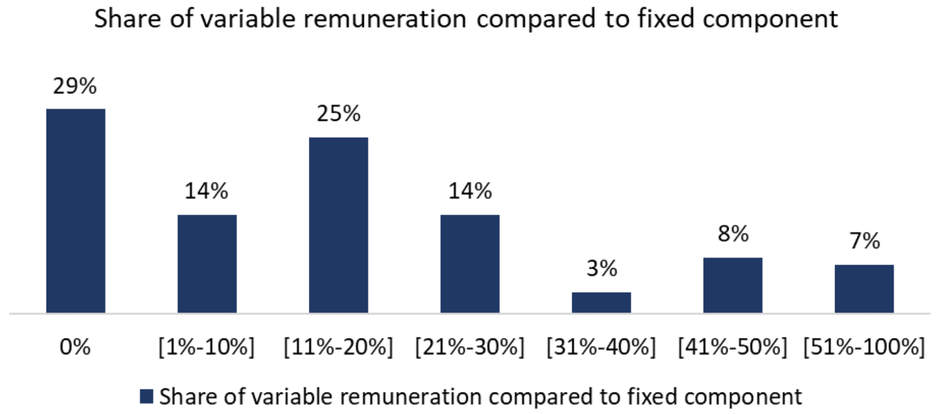


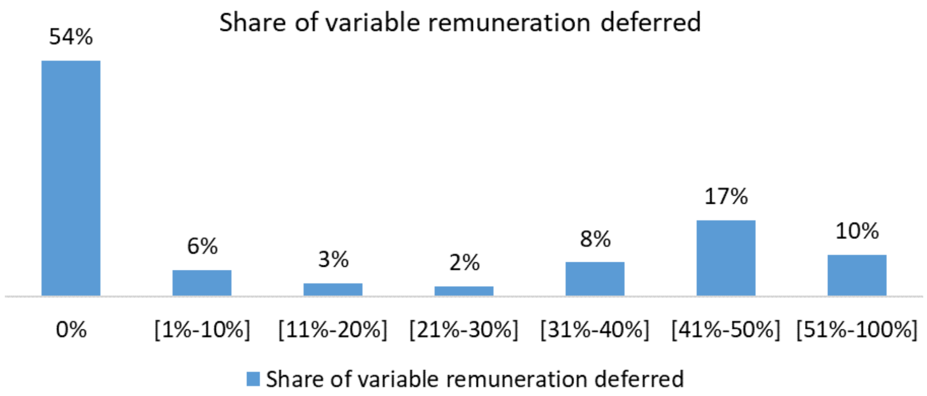
Source: EIOPA, ad hoc survey 2019.

108. Composites and life insurers pay higher variable remunerations as a share of the fixed element than non-life insurers. In addition, for non-life insurers, it is more common to not apply variable remunerations.

109. When looking at the country results, none of the institutions from Austria, Bulgaria, Cyprus, Liechtenstein, Malta, Netherlands, Poland or Slovenia provide a variable remuneration component higher than 30%. By contrast, for 11 insurance undertakings in the sample (four of them located in Italy), the variable remuneration component exceeds 50% of the total and for only two of them the share reaches 100%.

Figure 23: Remuneration policies.





Source: EIOPA, ad hoc survey 2019.

110. To shed some light on the evaluation methods and use of non-financial criteria to determine the variable remuneration component, the participants in the ad hoc survey were asked to provide further information on the relevance of ESG criteria. The sample is almost equally divided between those insurance undertakings that consider ESG criteria to define the variable remuneration component and those that do not take into account such factors. In particular, non-life (re)insurance and insurance undertakings located in Bulgaria, Italy, Netherlands and Slovenia evaluate managers and key staff based on ESG criteria in order to link their remuneration to social and environmental responsibility.

5.4.9. Investment management practices

111. Other investment management practices are evaluated through some open questions such as the more or less intense use of outsourcing or more or less active investment strategies.

112. These are valid choices to optimise the control of costs, performance and risks of investments subject to regulatory compliance. Most of the respondents are of the view that more outsourcing in the investment management and more active investment strategies would lead to more short-termism. This view builds on the observation that outsourced managers seek to deliver more frequent (e.g. quarterly) returns; therefore, externally managed mandates, which imply typically active management, will likely lead to a shorter term outlook.

113. A number of responses also indicated means to avoid behaviour such as assessing the compliance with the investment mandate, setting targets in the context of longer timeframes and evaluating performances and costs against internal and external benchmarks. While 'buy and hold' investment strategies are broadly valid for (re)insurance undertakings, some of the participants responded that active investment management is necessary to generate a competitive return. In addition, some reported that an increased focus on ESG and sustainability factors leads to more active strategies.

6. Investment behaviours from institution for occupational retirement provision

6.1. Sample

114. EIOPA analysed information from IORPs using the qualitative questionnaires and the views of stakeholders gathered during their participation in workshops. The results presented come from the investment behaviour and ESG questionnaires included in the 2019 IORPs stress test templates for both DB/HY and DC IORPs. Balance sheet information from the baseline (pre-stress situation) is used to describe the sample, while the stakeholders views are summarised in section 7.

115. The sample includes 77 DC IORPs across 10 jurisdictions and 99 DB/HY IORPs from 16 countries. The number of participants per country varies from 1 to 20 for the DC subsample and from 1 to a maximum of 18 for the DB/HY IORPs. The IORPs stress test covered all EEA Member States with material IORP sectors, which was determined as exceeding €500 million in assets by year-end 2018 ([43]). At sample level the aggregated participation rate of IORPs, in terms of assets under management, has increased continuously over recent years. The IORPs stress test 2019 aimed to reach a coverage rate of at least 60% of assets for the DB/HY sector and at least 50% for the DC IORP sector per EEA country; however, the biggest European market did not participate in the exercise. In terms of total assets, the Netherlands represents more than 75% of the DB/HY sample, while Italy and Austria combined cover 72% of the DC IORPs subsample (see ***Table 4***).

Table 4: Total investment assets per country as share of total investments assets of the defined benefits/hybrid and defined contribution samples.

Defined benefits/hybrid IORPs

NL	DE	NO	BE	DK	IE	PT	SE	Other
77%	13%	2%	2%	1%	1%	1%	1%	2%

The 'other' category includes IORPs from CY, ES, FI, FR, IT, LI, LU and SI.

Defined contribution IORPs

IT	AT	ES	NL	SK	IE	CY	PT	Other
52%	20%	12%	9%	2%	2%	1%	1%	1%

The 'other' category includes IORPs from EL and LU.

Source: EIOPA, IORPs stress test 2019.

([43]) In the absence of year-end 2018 data, the participating Member States have been determined by using year-end 2017 data. Equally, NCAs were allowed to use year-end 2017 data to determine a representative sample of participating IORPs.

6.2. Main findings

6.2.1. Investment allocation

116. The IORP II Directive ensures an appropriate level of investment freedom. As long-term investors with low liquidity risks, IORPs are in a position to invest, within prudent limits, in non-liquid assets such as shares and in other instruments that have a long-term economic profile and are not traded on regulated markets. In addition, IORPs can benefit from the advantages of international diversification, investments in currencies other than those of the liabilities and in other instruments that have a long-term economic profile. At the same time, IORPs should invest their assets in line with the prudent person principle and in the best long-term interests of members and beneficiaries as a whole.

117. ***Table 5*** provides a high-level overview of the difference in the allocation of assets between DB/HY and DC IORPs; however, the results differ substantially across countries. According to the IORP II Directive, Member States may lay down more detailed rules on IORPs' investment allocation, including quantitative rules, provided they are prudentially justified. Such legal constraints, applied at national level, may explain the large variability in the portfolio allocation across jurisdictions and asset classes. Based on IORPs stress test data, 79% of the DB/HY sample and almost all DC IORPs are subject to legal constraints.

Table 5: Fixed income assets, equity, property and other investments ([44]) as shares of total investments for defined benefit/hybrid and defined contribution samples.

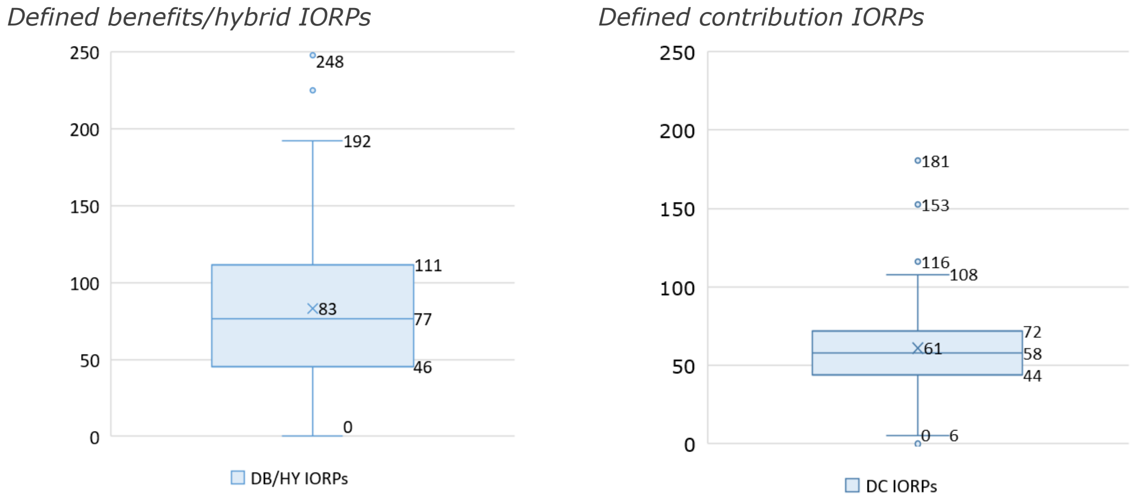
Share of total investments	**DC**	**DB/HY**
Bonds	57%	45%
of which: government bonds	39%	28%
of which: corporate bonds	17%	15%
of which: other bonds (e.g. structured notes, collateralised securities)	1%	2%
Loans and mortgages	0%	4%
Deposits other than cash equivalents	8%	1%
Equities	30%	32%
of which: listed equity	29%	26%
of which: unlisted equity	1%	6%
Property (including for own use)	2%	10%
Other assets	3%	8%

Source: EIOPA, IORPs stress text 2019.

([44]) For example, derivatives, hedge funds and other investments.

118. At sample level, IORPs are highly exposed to fixed income assets ([45]): 50% of the DB/HY investments and more than half of DC assets are allocated to fixed income assets. Both DB/HY and DC IORPs invest around 30% of their assets in equity with large exposure to the US equity market. In Ireland and the Netherlands, the equity investments for the DC sample exceed 50% of total assets. Finally, the investments in property (including the investments for own use) vary significantly across countries from 0% to almost 27% (property investment is more significant in Italy and Finland).

Figure 24: Distribution of the average duration of the bond portfolio at the end of 2018 (months).



Source: EIOPA, IORPs stress test 2019.

119. The average duration of the bond portfolio is 5 years for the DC sample and close to 7 years for the DB/HY sample. When looking at the changes in the investment allocation over the last 5 years, most of the sample (68% of the DB/HY subsample and almost 80% of the DC IORPs) did not actively increase the average duration of their bond portfolios.

120. Almost 60% of the IORPs significantly changed their investment allocation in response to the low interest rate environment. In more detail, 100 IORPs experienced such a trend, 62% of which increased their investments in 'new' asset classes, 59% expanded the allocation to emerging markets, 56% moved towards illiquid assets and close to 50% increased their equity exposure. These IORPs have increased the diversification and re-allocated a small portion of the conventional bonds to alternative fixed income asset or to asset classes or regions that offer higher yield (corporate bonds, emerging markets and alternative investments such as infrastructure, real estate, properties).

121. However, the overall exposure towards riskier assets (e.g. equity and investments in emerging markets) have mostly not increased over the last 5

([45]) Fixed income assets include bonds, loans and mortgages, and deposits other than cash equivalents.

years. At sample level, this general trend could be explained by the fact that a large part of the sample is subject to legal constraints ([46]): investments in specific assets classes may be precluded at national level. Nevertheless, concerning the expansion into emerging markets, the responses of the top 33 IORPs ([47]) reveal the opposite trend compared with the remaining IORPs in the sample.

122. When looking at the DB/HY sample, more than 60% of the participants reported a shift towards illiquid assets (e.g. loans, debt and equity from private non-exchange-traded companies, participation in infrastructure projects, hedge funds) and 'new' asset classes such as property and infrastructure. Nevertheless, this shift has been highlighted by IORPs located in only four European countries (Germany, Netherlands, Slovenia and Sweden).

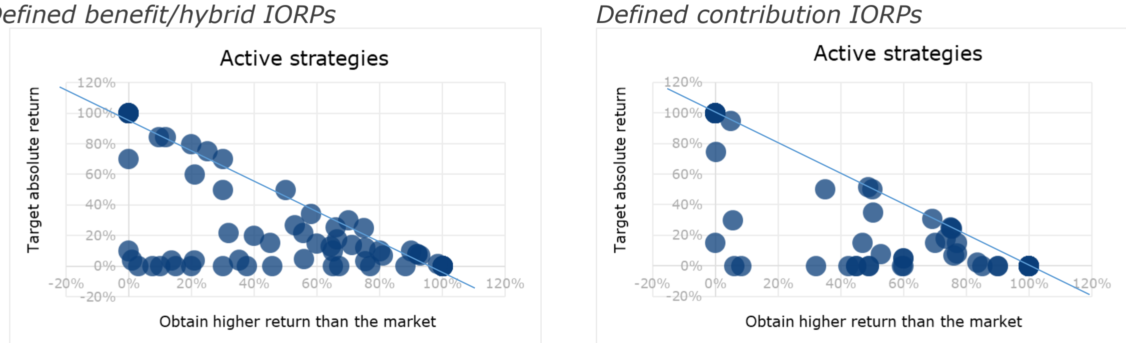
6.2.2. Investment strategies

123. At sample level, on average almost **one quarter of the total portfolio is managed passively** and almost half relies on active strategies that aim to outperform the market, while the remaining quarter of the portfolio is invested with the ambition of achieving an absolute target.

124. Passive strategies aim to reproduce an index in order to earn the same returns as the market. Traditionally, passive portfolios are exposed to lower transaction costs compared with actively managed investments and therefore may facilitate long-term saving.

Figure 25: Active investment strategies.

Defined benefit/hybrid IORPs *Defined contribution IORPs*



Source: EIOPA, IORPs stress test 2019.

125. The DC IORPs results highlight that **more than 50% of the sample actively manage their portfolios**, only 6% rely exclusively on passive strategies and 40% use both techniques. However, the results vary significantly across countries. With regard to the different active investment strategies, ***Figure 25***

([46]) According to the IORP II Directive, Member States may lay down more detailed rules on IORPs' investment allocation (including quantitative rules, provided they are prudentially justified).

([47]) The top 33 IORPs in the sample account for almost 90% of the total assets at sample level. This category is based on 28 DB/HY IORPs and five DC IORPs.

shows that most of the DC IORPs prefer to outperform the market rather than achieving an absolute target.

126. The DB/HY IORPs replies show that 46% of the participants actively manage their portfolios, a minority (10%) rely exclusively on passive strategies and 44% use both techniques. In Greece, Italy and Portugal, most of the participants manage their portfolios exclusively through active investing, while almost 30% of the IORPs in the Netherlands use only passive approaches. Among the participants that manage their portfolios based only on active strategies, the most popular choice is trying to obtain a higher return than the market.

6.2.3. Environmental, social and governance factors

127. The consideration of ESG factors is a requirement stemming from the IORP II Directive, which had to be transposed by January 2019; therefore, the year-end 2018 data used in the stress test do not reflect this change in the regulation, as IORPs were not compelled to take into account ESG factors in their investment policy at that time.

128. EIOPA has looked at ESG factors under several perspectives and further work is currently ongoing. More specifically, the Opinion on the supervision of the management of IORPs' ESG risks, published in July 2019, advises NCAs to encourage IORPs to take into account the long-term impact of their investment decisions on ESG factors in order to support society's sustainability goals. In addition, to foster transparency and increase comparability, the EIOPA Opinion on the use of governance and risk assessment documents in supervision, also published in July 2019, includes an illustrative template of own risk assessment (ORA) and an indication for reporting ESG risks.

129. Based on the answers to the ESG questionnaire, the majority of IORPs have integrated ESG factors even in the absence of a legal requirement: 44% of the sample takes into account ESG factors in assessing their investments and 13% of the sample is currently developing a framework or has declared that their external asset managers indirectly consider the ESG criteria. In more detail, the larger IORPs were revealed to be more prepared: the weighted results based on total assets reveal that the majority (67%) of the sample take into account ESG factors in the current investment assessment; especially those IORPs located in Austria, Netherlands, Norway, Spain and Sweden were revealed to be more advanced.

7. Stakeholders' views

130. During the sustainable finance workshop organised in June 2019, EIOPA had the opportunity to collect views from various stakeholders.

131. Shareholders' expectations and remuneration schemes have been mentioned as potential drivers of short-term pressure on corporates. Pressure from active investors for buy-back programmes and dividend pay-outs from reserves may increase this pressure.

132. However, the participants highlighted that insurance undertakings are mainly long-term investors. In other words, their investment strategy is driven by their liability profile, and therefore the insurance companies are less subject to short-term market pressures. Life insurance, especially, has a long-term business model and it is characterised by stable and predictable liabilities. Therefore, insurers are in a position to hold long-term investments, while not being exposed to unforeseen material pressure to sell those assets in times of distress. Some stakeholders also point to the need to further ensure that this continues to be the case under the 2020 review of Solvency II.

133. Finally, it has been remarked that institutions can import as well as export short-term pressures: the financial institutions are not always originators of short-term behaviour, but they can import the consequences of short-term behaviours from external sources and transfer those to the investees (such as those arising from tax incentives, corporate reporting requirements, funding needs).

8. Potential short-term pressures on insurance and IORPs

134. Financial institutions, like any other corporations, could potentially come under pressure from the markets from which they obtain the funds to support their activities. In the event that the insurers would be under short-term pressure from the financial markets these pressures could be transferred to their customers and investees. Based on the information currently available, EIOPA cannot conclude either that the insurers or IORPs are focusing excessively on the short-term or that they come under pressure from financial markets in that sense.

135. Reinsurers, direct insurers or institutions for occupational retirement provision adapt their investment practices to their business needs as well as to internal and external circumstances like any other investor. These entities typically receive cash in the form of premiums or contributions from the public ([48]) in exchange for the promise to pay back in the future under specific events or circumstances. The triggers, amounts, conditions and timing of those future payments are certainly different among the different type of products, schemes and providers. Such differences determine their investment needs and risk profiles and are reflected in the applicable regulatory regimes, notably in the case of life, non-life insurance or pension schemes. In the meantime and until the payback is due, insurers and IORPs have to administrate and invest significant amounts of money, although not all of them will have the same ability to decide on the specific assets to invest in or when to keep or sell them. Those characteristics of the insurance and pension schemes delineate the mandate and the ability of these entities when investing the cash received as well as defining their liabilities in terms of liquidity. The more illiquid the liabilities are, the less uncertainty in the time horizons for investors and the longer the obligations fall due, the more possibilities there are to invest in illiquid assets and to consider longer investment horizons. These characteristics are also relevant to determine the appropriate instruments used to fund their business activities.

136. EIOPA observed that satisfying funding needs is not reported by insurers participating in the survey as a key factor to determine the time horizon underlying the main activities. However, aspects such as profitability and shareholders' interests, which are directly related to their funding conditions, are ranked among the most relevant factors when determining the time horizons and holding periods. Hence, although the time horizons or holding periods suggested in the survey cannot be considered supporting evidence of pressure for undue short-termism, it is an area of special interest to monitor such behaviour.

137. Section 9 refers to some provisions in the current regulation preventing an excessive focus on the short term when it turns to the funding of insurers and

([48]) For example, they can receive premiums or contributions from policyholders, members and beneficiaries or from corporations or other insurers as in the case of reinsurance activities. It can be from corporations for their employees promoting occupational pensions or providing insurance coverage.

institutions for occupational retirement provision and suggests that this is an important aspect to be discussed with the supervisors.

138. From the responses to EIOPA’s questionnaires, it is clear that macroeconomic circumstances, such as those leading to a persistent low yield environment, have a clear effect on institutions’ investment decisions affecting their liability structure, hence the investment behaviour. These financial conditions are behind the decrease in the products with guarantees, the reduction in the amount of guarantees and the decline in the duration of the guarantees offered.

9. The role of existing regulations in potential short-term pressures

139. The insurance prudential regime is reported in the survey within the determinant factors for the time horizons underlying the insurers' general activities; it is quoted as the third factor, after profitability and shareholders' interests, in order of relevance for determining the time horizon underlying the general activities of insurers. However, according to the responses, it is less relevant for time horizons underlying the investment strategies: it falls to fifth/fourth position when the question is focused specifically on the investment strategies. Its relevance, on this occasion, falls behind factors such as profitability, monetary policies/macroeconomic factors, liability structure and lies very close to shareholders' interests.

140. In conclusion, it is interesting to note that the majority of respondents to the ad hoc survey consider medium- or long-term horizons underlying investment strategies; hence, the prudential regime is not perceived as a potential source of short-termism for the majority of the sample.

9.1. Areas in the regulatory regime that mitigate undue short-termism

141. In this context and following the call for advice, EIOPA reflected on areas in the Solvency II and IORP II Directives, which could potentially contribute to exacerbating or mitigating undue short-termism. The aim of the prudential regime is to protect policyholders, members and beneficiaries from potential bankruptcy, thereby incentivising good risk management practices. It is intrinsic to these regulations to ensure appropriate treatment for long-term business models and therefore avoid incentives for short-termism. For example, the amendments to Solvency II standard formula calibration were introduced with the aim of promoting long-term investment in infrastructure projects and EIOPA advised that they should always be based on risk considerations.

142. There are important developments at EIOPA to assess the efficiency and the need to review relevant provisions, among other aspects to ensure the effective application of these elements of the regime. EIOPA is working to provide the European Commission with the information requested on asset and liability management and with advice for a comprehensive revision of the Solvency II regime and standard formula calibrations.

143. When looking at the regulatory regime for the IORPs sector, it should be kept in mind that the IORP II Directive is based on a minimum level of harmonisation. In addition, Member States can define additional rules to ensure protection of members and beneficiaries and address national specificities. This, therefore, increases the heterogeneity of the applicable regulatory requirements and reduces the comparability of the analysis at sector level.

144. There are, however, areas of the IORP II Directive that aim to increase the information available to members and beneficiaries to provide information on past performance and assist members in making decisions on institutions' suitability for investment options. In more detail, for schemes in which members bear investment risk or can make investment decisions, prospective members shall be provided with information on the past performance of investments (for a minimum of 5 years, or for all the years that the scheme has been operating if that is less than 5 years) and information on the structure of costs borne by members and beneficiaries ([49]).

145. The following is not an exhaustive list of provisions in the prudential regime that could affect short-term or long-term behaviour. It provides some examples focusing on key elements of Solvency II such as market-consistent valuation of assets and liabilities based on a transfer value and the risk-based capital requirements based on a 1-year time horizon, also built on the market valuation. Both are considered to potentially influence insurers towards taking a shorter term perspective; hence, there are provisions to mitigate that in Solvency II calibration.

9.1.1. Market-consistent valuation of insurance liabilities with long-term guarantees

146. From the literature review, the use of market values can be seen as a source of pressure for short-termism and, as such, its prevention was duly addressed in the design of the insurance prudential regime. Solvency II assumes that market prices reflect all relevant risks, whether in the short or the longer time horizon, and therefore market consistent valuation should generate the appropriate incentives. The LTG measures introduced in the Solvency II Directive aim to ensure the appropriate treatment of insurance products that include long-term guarantees in a market-consistent valuation framework. The annual reports that EIOPA has produced since 2016 constitute a comprehensive reference on these measures and their implications for the insurance market.

147. In particular, the *Report on long-term guarantees measures and measures on equity risk* (EIOPA, 2018) ([50]) stated that 21 of the European national supervisory authorities did not observe any trend in their national markets regarding the behaviour of undertakings as long-term investors.

148. ***Figure 26*** illustrates that the average duration of the assets held by undertakings applying the LTG measures is longer compared with the portfolios without any measures. This may be indicative that portfolios including long-term business are prone to using the measures because they are effective and that

([49]) For further details, please refer to EIOPA, *Implementation of IORP II. Report on other information to be provided to prospective and current members: guidance and principle based on current practices,* 2019: https://eiopa.europa.eu/Publications/Reports/EIOPA%20IORP%20II%20Other%20information%20for%20members%20good%20practices%20March%202019.pdf.

([50]) EIOPA, *Report on long-term guarantees measures and measures on equity risk,* 2018: https://eiopa.europa.eu/Publications/Reports/2018-12-18%20_LTG%20AnnualReport2018.pdf.

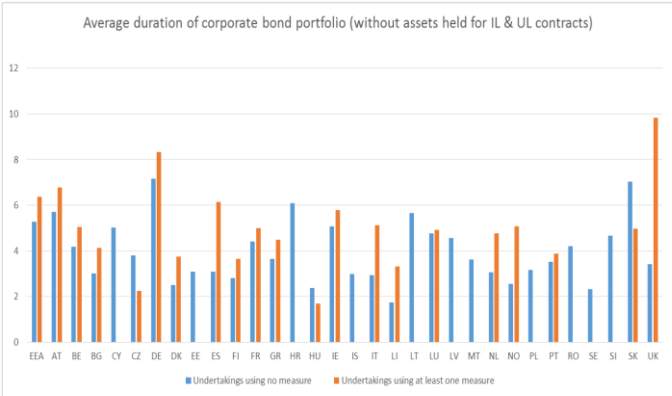
applying at least one measure is reflected in a longer duration of the bond portfolios.

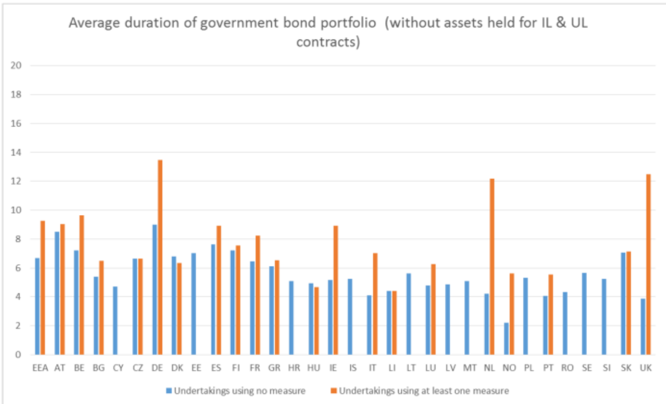
149. LTG measures proved to be effective in the hypothetical scenarios tested in the EU-wide stress tests run by EIOPA, in which these measures seem to provide the financial stability cushion they were meant to give for this particular type of long-term insurance business. In the absence of the alleviating effect of the LTG and transitional measures, insurers may be induced into forced sales and de-risking, possibly pushing asset prices further down, adding to the market volatility and potentially affecting financial stability.

Figure 26: Duration of government and corporate bonds per country and per measure (without assets held for IL&UL contracts).

Duration of government bonds per country and per measure (without assets held for IL & UL contracts)

	Total	VA	MA	TRFR/TTP	No measure
EEA	**9**	**9**	**11**	**11**	**7**
AT	9	9		10	8
BE	10	10		(*)	7
BG	6	7			5
CY	5	(*)			5
CZ	7	7			7
DE	12	13		14	9
DK	6	6			7
EE	7				7
ES	9	9	10	8	8
FI	8	8		8	7
FR	8	8		9	6
GR	7	7		7	6
HR	5				5
HU	5	5			5
IE	6	9		(*)	5
IS	5				5
IT	7	7			4
LI	4	4		(*)	4
LT	6				6
LU	6	6			5
LV	5				5
MT	5				5
NL	12	12			4
NO	5	6		6	2
PL	5				5
PT	5	6		6	4
RO	4	(*)			4
SE	5	(*)			6
SI	5				5
SK	7	7			7
UK	10	11	12	13	4





Source: LTG review report 2018.

150. An additional measure that prevents fire sales of assets in times of exceptional adverse circumstances is the extension of the recovery period. Under the conditions envisaged in the Solvency II Directive, EIOPA should allow, upon request, a further extension of the recovery period for insurance undertakings that otherwise could be forced to sell assets unexpectedly.

151. By contrast, the IORP II Directive does not require the valuation of technical provisions and assets according to market values. Valuation methods that exclude the effect of market volatility from the evaluation of assets and liabilities may therefore be used by Member States. With regard to the technical provisions, the economic and actuarial assumptions need to be prudent and take into account, if applicable, an appropriate margin for adverse deviation ([51]).

9.1.2. Risk-sensitive capital requirements

152. Discussions on whether a risk-sensitive system based on a 1-year time horizon produces incentives to focus on the short term and limits the capacity to take long-term risks is intrinsically linked to the developments of Solvency II's design and calibration. These discussions are not the focus of this analysis, given that, under the 2020 review of Solvency II, EIOPA has been asked to assess whether the methods, assumptions and standard parameters underlying the calculation of the market risk module with the standard formula appropriately reflect the long-term nature of the insurance business, in particular equity risk and spread risk.

153. Looking at the analysis of business trends and the substantial differences in allocation of assets among undertakings operating in different jurisdictions, it does not result in clear evidence that the risk-sensitive capital requirements stated in Solvency II are incentivising the investments in bonds or equities.

154. In this context, EIOPA will identify the characteristics of insurance business and liabilities that enable insurers to hold their investments in the long term and, where appropriate, advise on the need to revise methods, assumptions and standard parameters for calculating the market risk module, reflecting insurers' behaviour as long-term investors.

155. Where undertakings have long-term assets to match long-term liabilities, they should consider whether any change would affect either their ability to hold these assets over that time frame or their expected cash flows.

156. In response to the call for information from the European Commission on asset liability management ([52]), EIOPA will report on the characteristics that enable insurers to hold bonds for the long term in December 2019.

157. While occupational pension funds are most of the time covered by the IORP Directive in the EU, occupational and personal pensions provided by insurers

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([51]) For further details, please see Financial Stability Board (FSB) Regional Consultative Group for Europe, Working Group on Private Pension Schemes, 2017, *Report on European private pension schemes: functioning, vulnerabilities and future challenges*: https://www.fsb.org/2017/10/report-on-european-private-pension-schemes-functioning-vulnerabilities-and-future-challenges/

([52]) European Commission, 2018, Request to EIOPA for information related to Directive 2009/138/EC, Ref. Ares(2018)2252352, 27 April 2018: https://eiopa.europa.eu/Publications/Requests%20for%20advice/Request%20for%20information%202018-04-25.pdf are regulated by Solvency II. The appropriateness of an application of Pillar 1 rules under the Solvency II regime to the long-term pension business is controversial. The Financial Stability Board (FSB) *Report on European private pension schemes: functioning, vulnerabilities and future challenges* (FSB, 2017) summarises the different sensitivities around the application of the Pillar 1 rules to pension funds. Any trade-off should consider the implications for the recourse to sponsor support, the revision of the benefits in the event of insufficient funding and the risks of cross-border regulatory arbitrage. But a comprehensive picture should also take into account implications such as the costs of the solvency capital requirement for the very long-term held to maturity assets backing pension liabilities (even under the derogation of Article 304), the volatility on the asset and liability sides that could affect the coverage ratio and the 1-year horizon underlying the value at risk model.

158. In addition, the FSB report points out that pension funds differ in nature from insurance companies due to the possibility to consider the existence of benefit adjustment and security mechanisms and because these mechanisms speak against the application of Solvency II. Finally, pension funds are unlikely to fail in the timeframe considered in Solvency II, given the very stable nature of the liabilities.

9.1.3. Own funds provisions

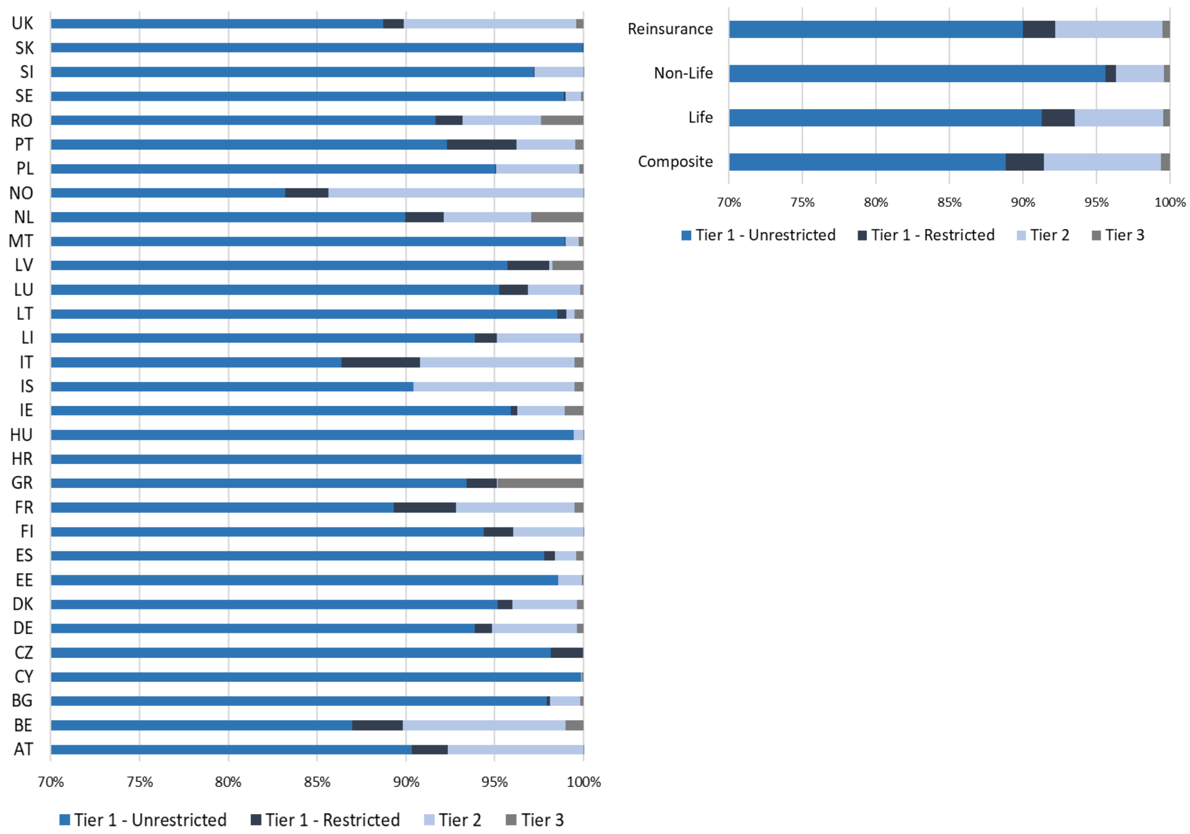
159. Insurance undertakings need to support their business with sufficiently stable funding from the point of view of the ability to absorb losses as well as being sufficiently stable in time.

160. In fact, the prudential regime requires the funding to be permanently available (currently and in the future) in order to be able to absorb losses on a going concern basis, as well as in the event of winding-up. Furthermore, it should be taken into consideration whether the funds are of sufficient duration compared with the duration of the insurance and reinsurance obligations. In addition, the absence of incentives to redeem, mandatory servicing costs or encumbrances, which may undermine the permanent availability to absorb losses, have also to be considered.

161. These requirements are there to preserve insurance businesses from funding or short-term pressures. Insurers have to meet these requirements to obtain supervisory approval and monitor compliance on an ongoing basis in the own risk assessment process to be able to classify these elements within tier 1 or 2. Otherwise, they have to be classified in tier 3. It can be seen in the *European insurance overview*, published annually by EIOPA ([53]), that the vast majority of funds are classified in tier 1 or 2 and therefore are in compliance with the requirement for permanent availability.

([53]) https://eiopa.europa.eu/Pages/Financial-stability-and-crisis-prevention/Insurance-Statistics.aspx#eio.

Figure 27: Tiering of own funds by country (left) and type (right).



Source: EIOPA, European insurance overview 2018.

162. With regard to the IORP II Directive, the technical provisions of IORPs have to be fully funded at all times (54). In addition, IORPs operating pension schemes, in which the IORP itself, and not the sponsoring undertaking, underwrites the liability to cover against biometric risk or guarantees a given investment performance or a given level of benefits hold on a permanent basis additional assets above the technical provisions to serve as a buffer (almost 4.5% of the technical provisions). The own funds should reflect the type of risk and the assets in respect of the total range of schemes operated. Those assets shall be free of all foreseeable liabilities and serve as a safety capital to absorb discrepancies between the anticipated and the actual expenses and profits (55). Member States may require other IORPs to hold such regulatory own funds as well. The IORP II Directive defines detailed rules on the available and required solvency margins.

(54) The home Member State may allow an IORP, for a limited period of time, to have insufficient assets to cover the technical provisions. However, to mitigate potential cyclical behaviour (e.g. fire sales), the underfunding does not have to be eliminated immediately, but a concrete and realistic recovery plan should be adopted.

(55) See Article 15 of the IORP II Directive.

9.1.4. Remuneration policies

163. The financial literature often identifies the remuneration policies for the key staff members making the investment decisions in their companies as one potential driver for short-termism. However, both the Solvency II regime and the IORP II Directive contain elements that aim to regulate remuneration practices and therefore mitigate eventual short-term pressure.

164. More specifically, the fixed and variable remuneration components of the (re)insurance undertakings' key employees have to be balanced ([56]), and a substantial portion of the variable remuneration has to be deferred, taking into account the nature and time horizon of the undertaking's business ([57]). In addition, termination payments shall be related to performance achieved over the whole period of activity and be designed in a way that does not reward failure. In addition, awarding part of the variable remuneration in shares, equivalent ownership or share-linked instruments could ensure alignment between the long-term interest of the insurance undertakings and the objectives of their key staff members ([58]).

165. The IORP II Directive ([59]) establishes that remuneration policies shall be established, implemented and maintained in line with the activities, risk profile, objectives, the long-term interest, financial stability and performance of the IORPs as a whole, and shall support the sound, prudent and effective management of IORPs. Finally, the remuneration policies shall also be in line with the long-term interests of members and beneficiaries of pension schemes operated by the IORPs.

([56]) Article 275(2)(a) of the Delegated Regulation.
([57]) Article 275(2)(c) of the Delegated Regulation.
([58]) EIOPA, Consultation Paper on draft Opinion on the supervision of remuneration principles in the insurance and reinsurance sector, 2019: https://eiopa.europa.eu/Publications/Consultations/Consultation%20paper%20for%20Draft%20Opinion%20on%20Remuneration25-7-2019.pdf.
([59]) Article 23 of the IORP II Directive.

10. Conclusions and recommendations

166. In response to the call for advice, EIOPA has investigated potential sources of undue short-term pressure on corporations stemming from the financial sector. The emphasis of the request is on the potential evidence for short-termism in the financial markets, without giving a concrete definition of what excessive short-termism means in practice. Short-termism can be understood as the general prioritisation of near-term shareholder interests and profitability at the expense of long-term growth. In the absence of further detail, however, it is rather challenging to find quantifiable evidence.

167. EIOPA is of the view that cross-sectoral principles and definitions of long-term investing supported by corresponding benchmarks would contribute to limiting short-term behaviours. Particular attention should be paid to the extreme situations in which obvious unbalances exist between the investment practices and the long-term interests of the insurance undertakings or IORPs.

168. To conclude whether a specific time horizon is excessively short, it is necessary to consider, with granular information, the specific business type and in view of that to define good practices to achieve the desired objectives. This investigation should go as deep as necessary for individual institutions to understand the appropriateness of their term behaviour.

169. It is in the interests of healthy financial markets that there are sufficient investors, with the ability and capacity to manage the associated risks, willing to contribute to the long-term and stable funding of sustainable projects that match their investments needs. Therefore, EIOPA is supportive of insurers and IORPs keeping a long-term investor role, assuming that appropriate risk management is in place to account for all relevant, present and future risks ([60]). However, it always has to be ensured that insurers and IORPs invest in the best interests of policyholders, members and beneficiaries.

Summary of conclusions and recommendations

170. The lack of an appropriate framework and a commonly accepted definition of excessive or undue short-termism prevents the authorities from pointing out and clearly analysing insurance institutions' and IORPs' term behaviours and makes it harder to find clear evidence from which to draw conclusions.

171. There is no clear evidence of behaviours that could be labelled as undue short-termism in insurance and IORPs and which could eventually put pressure on those corporations. Some areas require particular attention though. In the area of remuneration practices, EIOPA is keen to encourage consistent application of the regulatory principles, which prevent excessive short-term focus, such as deferral

([60]) For further information on EIOPA's work stream on investments in infrastructure, please refer to: https://eiopa.europa.eu/regulation-supervision/insurance/investment-in-infrastructure-projects.

of variable remunerations. In the areas of risk management or investment strategy, EIOPA would welcome consideration of risks that could materialise in more than 3 or even 5 years.

172. There is no clear evidence of undue short-term pressures from financial markets on (re)insurance undertakings and IORPs, although their investment behaviour practices are sensitive to macroeconomic circumstances such as the persistent low interest rate environment. Among other factors ([61]), adaptation to macroeconomic circumstances may imply a shift in their role as long-term investors and insurance and pensions providers to their clients. This shift clearly affects the investment behaviour of both insurers and IORPs as well as their allocation of assets; therefore, it is worth investigating whether it may also affect the focus on the shorter term or a reduced capacity to hold assets to maturity.

173. In this context of the absence of an adequate set-up for assessing the existence of undue short-term focus, there are areas for which EIOPA proposes the Commission take further initiatives so that long-term perspectives are adequately considered.

10.1. Conclusions on investment behaviours

174. As per the call for advice, this report reflects the conclusions reached from the research for initial evidence of undue short-termism using the data available for insurance undertakings. This investigation has not found strong evidence for practices or trends that could be considered undue short-term behaviour. Moreover, there is a lack of a commonly accepted definition of what is an adequate time horizon for specific classes of investors that can be used as a benchmark to assess the existence of excessive short-termism.

175. Any attempt to conclude on the adequateness of investment practices of insurers would require an in-depth analysis of the characteristics of the liabilities, which is reported, and intuitively the main driver determining the relevant time horizons and holding periods. However, a granular investigation into asset liability management is being carried out as part of EIOPA’s advice on the 2020 review of Solvency II specifically for insurance.

176. The current investigation covers observations on whether insurance undertakings are shifting the composition of their investment portfolios towards more liquid assets or shortening the holding periods of the key investments or shortening the duration of their main asset portfolios, as those would have been considered a potential source of short-termism, which could lead to pressure.

([61]) With regard to occupational pensions, the shift from DB/HY to DC can mainly be explained by the fact that employers do not want to cover any further promises or guarantees, in addition to paying a specified contribution to the plan on the employee’s behalf.

177. At the sectoral level, EIOPA's *Investment behaviour report* 2017 ([62]) showed that there was no remarkable trend towards more liquid assets at Solvency II's inception. More recently, EIOPA's 2019 *Financial stability report June 2019* (see figure 5.4) [63] confirmed that there is no trend in the investment split towards more liquid assets and that bonds are clearly the dominating asset class, with more than 60% of the total portfolio invested in bonds. By contrast, in the current low-yield environment there is even a decrease in the share of bonds and cash and deposits in favour of less liquid investments such as unlisted equities, property, mortgages and loans over the last 2 years.

178. The results of the IORPs stress test 2019 indicate that IORPs are highly exposed to fixed income assets: 50% of the DB/HY investments and more than half of the DC assets. Furthermore, the average duration of the bond portfolio is 5 years for the DC sample and close to 7 years for DB/HY and it did not increase over the last 5 years. Finally, although almost 60% of IORPs significantly changed their investment allocations in response to the low interest rate environment, at EEA level, exposure towards riskier assets, such as equity or investment in emerging markets, have mostly not increased over the last 5 years.

10.1.1. Conclusion on turnover ratios — rebalancing and residual maturity of assets

179. EIOPA has looked into the turnover ratios and the developments in the main asset holding periods at a sectoral level. In the absence of reliable good practice benchmarks for comparison, it is not possible to conclude that there is evidence of undue short-termism. It can, however, be seen that at the EEA level the estimated turnover ratios and the implied rebalancing frequency of the equities and bond portfolios is quite stable.

180. On average 83% of the portfolio (equity and bonds) is kept for the sample as a whole and 80% as a minimum. Per asset class, on average 85% of the government bonds portfolio is kept and 81% of the corporate and the equity portfolios are kept. Per business type, composites are the most stable type (85% average kept), followed by life (82%), non-life (81%) and reinsurers (70%) for which the sample is less representative. The size of company seems to affect the results as well as differences between countries. The 30 largest (re)insurers in the sample kept on average 85% of their investment compared with only 67% for the smallest.

181. Most of the bonds have average residual maturity longer than 7 years in a year-on-year analysis from 2016. The most stable part of the bonds portfolio, (in which more than 91% is kept on average) has a residual maturity of between 5 and 12 years. Moreover, the assets that are close to maturity (average residual

([62]) EIOPA, *Investment behaviour report*, 2017: https://eiopa.europa.eu/Publications/Reports/Investment_behaviour_report.pdf.

([63]) EIOPA, *Financial stability report,* June 2019: https://eiopa.europa.eu/Pages/News/EIOPA-Financial-Stability-Report-June-2019.aspx.

maturity less than 3 months) are the least material in total amount and characterised by a higher turnover ratio.

182. Based on the survey results, most of the insurance undertakings expect to remain stable or increase their average residual maturity in the next 2 years. The higher increase is expected for government bonds and, because of the persistent low interest rate environment, some insurers prefer to move their investments towards other asset classes. Based on the additional information received, future trends will be mainly driven by changes, if any, in the characteristics of insurance liability (maturity, liquidity, currency).

183. So far, no clear trend can be observed on the duration of insurance liabilities from the figures reported in 2016 and 2017 by the biggest EEA insurance groups excluding IL&UL business.

Table 6: Statistics for duration of life and non-life technical provisions ([64]).

Indicators based on reporting for financial stability purposes							
Item and reference period		**10th percentile**	**25th percentile**	**Median**	**75th percentile**	**90th percentile**	**Number of observations**
Duration of technical provisions, life excluding unit-linked	2016 Q4	7.97	9.97	12.36	15.53	21.35	110
	2017 Q4	7.85	9.88	11.9	15.8	21.42	114
Duration of technical provisions, non-life	2016 Q4	0.64	2.12	3.44	5.03	6.53	91
	2017 Q4	0.92	2.51	3.87	5.33	6.74	94

Source: EIOPA, Annual Solo.

10.1.2. Recommendation to develop a cross-sectoral framework in line with general European objectives to promote long-term investments

184. EIOPA recommends developing a cross-sectoral framework with the aim of promoting long-term investments and supporting sustainable economic growth at European level. General principles should guide the consistent implementation across the financial system of defined objectives in this matter and should help to assess performance against concrete targets as well as potential deviations at sectoral or sub sectoral level. The promotion of long-term focus needs to be

([64]) https://eiopa.europa.eu/Publications/Insurance%20Statistics/FS_Indicators.xlsx.

commensurate with the risks taken, always ensure the viability of individual business models, be compatible with an adequate level of protection for policyholders, members and beneficiaries and the stability at systemic level.

185. This framework should be the base for developing concrete definitions and good practices to identify undue short-termism and to identify measures to promote long-term investment and support sustainable economic growth. The development of a structured set of general principles and concrete indications of the desired target in terms of long-term investment should help to identify deviations or unwanted trends in this particular area.

186. In addition, the framework should respect the principle of freedom of investment and guarantee adequate protection to policyholders, members and beneficiaries at any point. It would be advisable to define clear objectives at the European level to provide guidance on turnover ratios and holding periods, which are proportionate and appropriate to the business needs and specificities of institutional investors such as IORPs and insurance undertakings.

187. In any case, the framework should not rule or prescribe specific or mandatory holding periods or turnover ratios. Rather the framework should facilitate monitoring market practices with commonly defined metrics to evaluate whether (re)insurance undertakings' and IORPs' behaviour are consistent with European objectives and consistent at the cross-sectoral level.

10.2. Conclusions on potential pressures from the financial sector to insurers

188. While insurers and IORPs' regulatory regimes contain provisions to avoid excessive exposure to financial market pressures, there is evidence of the remarkable impact of macroeconomic and financial conditions deriving from the persistent low-yield environment. This macroeconomic circumstance has impacts on profitability, on the value of the technical provisions, on the quantity, amount and duration of the guarantees offered and on asset allocation as well as partially explaining a shift from traditional life business towards IL&UL type of business and from DB towards more DC types of IORPs.

189. Most of the long-term guarantees are given in life contracts, although the proportion of products with guarantees differs by country. In 16 countries, products with at least one guarantee make up over 95% of the life insurance market. In recent years, there has been a trend in the availability of long-term guarantee products, which is mainly stable or decreasing across the EEA. Among others factors, the low-yield environment and incentives given by undertakings for policyholders to switch to unit-linked products can explain this decreasing trend. Overall, national supervisory authorities have observed a decrease in the size of guarantees, in particular interest rate guarantees.

190. EIOPA is investigating broadly the implications of the low-yield environment for the investment behaviour and more particularly potential implications for the role of insurers as long-term investors. Although it is not necessarily the case, it is plausible to think that products with fewer disincentives to redeem the contract and in which policyholders can influence the portfolio's composition and the moment of realisation of the investments (as is the case in a number of IL&UL) may lead to shortening of the holding periods and time horizons. It is premature to draw conclusions without empirical evidence; therefore, EIOPA is working to collect additional information.

191. IL&UL and DC liabilities have characteristics different from those of the other alternatives and may lead to different investment behaviours, potentially in terms of the short- or long-term focus. In the context of consumer protection, the Insurance Distribution Directive and Solvency II Directive set out principles for insurance undertakings to act in accordance with the best interests of their customers and even the assets of unit-linked policies managed by third-party insurance undertakings are not discharged from this duty ([65]). For this purpose, undertakings should have transparent and up-to-date processes for selecting, monitoring and reviewing asset managers and underlying funds and for taking appropriate corrective action, such as replacing asset managers and underlying funds.

192. In the context of the current search for evidence, a number of participants in the survey suggest that the outsourcing of investment management may lead to excessive short-term focus unless the undertakings make an effort to adequately monitor and prevent it. For that purpose, the objectives of the outsourcing of the investment management should be aligned with the general objectives of the insurance undertaking, also taking a short- or long-term perspective.

193. Benchmarks are needed to define the general and the outsourcing objectives long-term performance. These benchmarks are also required to monitor whether deviations exist. While short-term performance benchmarks are very common, if the target period is extended, those benchmarks are not readily available in the markets and, in most cases, have to be developed internally by undertakings. Although internal benchmarks may have merits, as they are tailored to specific needs, they usually are not available to customers of the insurers and their shareholders. It is particularly important in a low-yield environment in the event of a shift towards IL&UL and from DB to DC is that current existing benchmarks are easily accessible to policyholders, members and beneficiaries. It

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([65]) EIOPA, Opinion on monetary incentives and remuneration between providers of asset management services and insurance undertakings, 2017: https://eiopa.europa.eu/Publications/Opinions/Opinion_on_monetary_incentives_and_remuneration_between_providers_of_asset_management_services_and_insurance_undertakings.pdf.

is more appropriate to focus on value creation, rather than immediate shareholders' interests or short-term profitability objectives.

10.3. Conclusions on remuneration practices in the financial sector as potential drivers of undue short-termism

194. Remuneration practices are usually expected to create incentives for specific behaviours in general and are also the subject matter of this search for evidence. In fact, the remuneration principles for the insurance and reinsurance sector stated in the Solvency II Delegated Regulation aim to provide the right incentives for limiting the excessive focus on the short term. In contrast, based on the survey results, insurance undertakings consider this the least relevant for their time horizons.

195. The effective application of those principles requires, for example, adequate balance between fixed and variable components of the remuneration, deferral of a substantial part of the variable components and balanced consideration of financial and non-financial criteria (e.g. ESG factors), including downwards adjustment for exposure to current and future risks.

196. Based on the survey, the use of variable components to remunerate the services of the relevant risk takers in the investment management context is very common. In many cases, the variable component represents a significant share of the fixed part of the remuneration, which indicates a big potential to incentivise behaviour. In addition, many insurers reported no deferral of variable remuneration, which opposes the principles for appropriate remuneration practices in the delegated regulation.

197. The principles are sufficient, clear and relevant in the context of promoting adequate promotion of taking a long-term focus, as they advocate remuneration policies set in a multi-year framework and linked to both short- and long-term performance horizons. Therefore, insufficient deferral of the variable remuneration of those taking investment decisions could incentivise an excessive focus on short-term performance. These practices seem to vary significantly among different business models and Member States, and EIOPA is engaged in ensuring the consistent application of the principles in the regulation ([66]).

([66]) EIOPA, Consultation Paper on draft Opinion on the supervision of remuneration principles in the insurance and reinsurance sector, 2019: https://eiopa.europa.eu/Pages/News/Consultation-Paper-on-draft-Opinion-on-the-supervision-of-remuneration-principles-in-the-insurance-and-reinsurance-sector.aspx.

10.4. Conclusions on the inclusion of risks beyond short time horizons

198. Insurers and IORPs should be particularly aware of the risks that may materialise not only in the next 12 months but also in the years to come, including ESG considerations. Promotion of long-term investment needs to build on adequate information to ensure an appropriate risk assessment and management.

199. From a prudential point of view, EIOPA recently issued advice ([67]) to the Commission and an opinion ([68]) stating that insurers need to consider the near- and medium-term impacts of their investment policies. EIOPA's work focuses particularly on the sustainability risks; however, it can be extended to any long-term consideration and risks.

200. In more detail, the opinion focuses on EIOPA's view of the integration of sustainability risk in Pillar 1 requirements and the possible misalignment arising from the long-term perspective of the sustainability risk and the yearly evaluation of Solvency II capital requirements. In addition, the opinion outlines that market participants tend to believe that they have time to adapt their investment strategy within the next 10-20 years, and thus firms have limited incentives to consider long-term risks such as climate change risk. Where undertakings have long-term assets to match long-term liabilities, they should consider whether long-term risk would impact either their ability to hold these assets over that time frame or their expected cash flows.

201. While acknowledging the challenges related to incorporating sustainability risks within Pillar 1, respondents to the Consultation Paper were generally supportive of the inclusion of sustainability risks in a forward-looking manner, including in EIOPA's Guidelines on own solvency and risk assessment (ORSA). In more detail, stakeholders commented that the ORSA time horizons, usually defined for business strategy purposes (typically 3-5 years), are still not long enough to accurately reflect risks that may emerge over longer periods. In the areas of risk management, investment and underwriting strategy, and investment stewardship, EIOPA thinks it is essential for (re)insurance undertakings to plan for the implementation of measures related to sustainability risks, especially where they will materially affect their business strategies.

202. At the same time, future impacts should also be considered in the same way as environmental aspects, but social- and governance-related implications should be taken into account as well.

([67]) EIOPA, *Technical Advice on the integration of sustainability risks and factors in the delegated acts under Solvency II and IDD, 2019*: https://eiopa.europa.eu/Publications/EIOPA-BoS-19-172_Final_Report_Technical_advice_for_the_integration_of_sustainability_risks_and_factors.pdf.

([68]) EIOPA, *Opinion on Sustainability within Solvency II*, 2019: https://eiopa.europa.eu/Publications/Opinions/2019-09-30%20OpinionSustainabilityWithinSolvencyII.pdf.

10.4.1. Recommendation to facilitate the development of reliable benchmarks for long-term performance and accessibility to the public

203. In the context of an eventual cross-sectoral framework to promote long-term investments within the financial markets, EIOPA recommends provisions facilitating the generation and publication of long-term performance benchmarks. Such benchmarks with an extended target period should be more appropriate for the insurers and IORPs, among other institutional investors, as well as their customers, as they focus on long-term value creation rather than immediate shareholders' interests or excessively short-term profitability objectives.

204. Long performance benchmarks should complement the key information required by various regulations (IORP II Directive or PRIIPs Regulation), providing transparent and objective references for comparing and assessing the options offered to members and clients of retirement or long-term savings products. For example, based on Article 41 of the IORP II Directive, IORPs should ensure that prospective members are informed about the relevant options, the features of the schemes and whether and how ESG factors are taken into account in the investment strategy. Moreover, where members bear investment risks or can take investment decisions, prospective members are to be provided with information on the past performance, taking into account a long-term perspective.

205. EIOPA thinks it would be instrumental for IORPs and (re)insurance undertakings to consider appropriate long-term references to plan for the implementation of measures related to sustainability risks potentially affecting their business models. In any case, those references should be broad and complementary but developed in full alignment with the current developments on sustainability indicators under consideration.

206. The availability of transparent and commonly understandable long-term benchmarks should benefit both providers and customers. In particular, customers of IL&UL and DC IORPs would count with an objective reference to assess the performance of external asset managers based on long-term investment performance, to properly assess the options they are offered such as recommended or minimum holding periods, or the adequacy of penalties for early repayment ([69]).

207. Publicly available long-term performance benchmarks in addition to benefiting consumers would also allow different remuneration practices to be assessed on a more long-term basis and contribute to ensuring the consistent application of remuneration principles.

208. The broader the scope of long-term performance benchmarks, even cross-sectoral, and the more understandable and accessible these benchmarks are, the

([69]) Notwithstanding the existing provisions in Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs).

more useful they become for financial services customers to guide their decisions, and they also help consumers make investment decisions.

Annex 1 — Definitions and categories for the survey

For the purpose of the survey, the participants observed the following definitions:

- *Short-termism*: focus on time horizons prioritising near-term shareholders' interests over long-term growth of the firm.
- *Time horizon*: generic period considered for planning purposes.
- *Residual maturity*: the average remaining time for a category of investments to mature. For the purpose of this survey, residual maturity of equity or property investments should not be considered.
- *Holding period*: the elapsed time between the initial date of purchase and the date on which the investment is sold or matures if held to maturity.

When relevant, participants grouped or categorised their responses according to the following:

- *Geographical areas:*
  (1) Home;
  (2) Euro area (excluding home);
  (3) EEA countries (excluding home and euro area);
  (4) United States;
  (5) Other developed; and
  (6) Emerging markets.

- *Economic activities:*
  (1) Agriculture, forestry, fishing;
  (2) Mining and quarrying;
  (3) Manufacturing;
  (4) Electricity, gas, steam, air conditioning;
  (5) Water supply and waste management;
  (6) Construction;
  (7) Wholesale and retail trade;
  (8) Transportation and storage;
  (9) Services; and
  (10) Other, incl. public administration.

- *ESG criteria:*
  (1) Environmental factors;
  (2) Social factors; and
  (3) Governance factors.

Insurance undertakings provided examples in text boxes of the most important geographical areas, or economic activities or ESG criteria where relevant to their answers.

Annex 2 — Participation and additional results from the survey

Participation in the survey by size and business type

Size	Composite	Non-Life	Life	Reinsurance	Total
Small	2%	1%	1%	0%	4%
Medium	14%	5%	7%	0%	26%
Large	24%	11%	34%	1%	70%
Total	40%	17%	42%	1%	100%

Based on year-end 2018 data, the insurance undertakings with total assets lower than €117,581,752.85 have been categorised as small, the companies with total assets above €1,034,893,461.75 have been classified as large and the remaining institutions fall under the medium category.

Participation in the survey by country

Country	Number of insurance undertakings in the sample [70]
Austria	4
Bulgaria	4
Croatia	3
Cyprus	4
Denmark	3
Finland	3
France	26
Germany	16
Greece	5
Hungary	7
Ireland	9
Italy	7
Liechtenstein	4
Malta	3
Netherlands	9
Poland	9
Romania	7
Slovakia	10
Slovenia	4
Spain	7
Sweden	6
United Kingdom	2
Other	15
Total	**167**

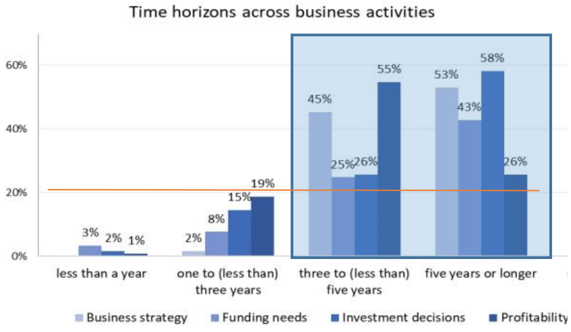
[70] For consistency, the final sample does not include three undertakings reporting as subgroup.

Additional survey results

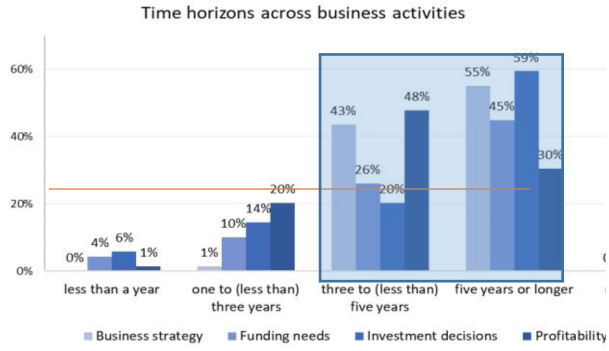
Time horizons

Figure 28: Time horizon driving the main activities by size and business type.

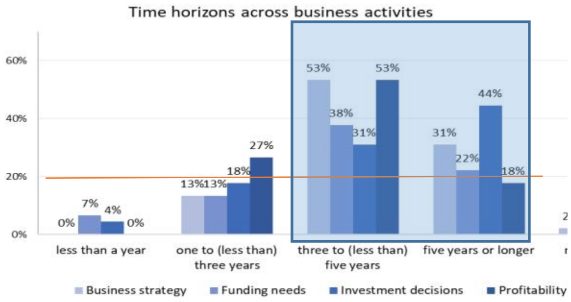
All — Large



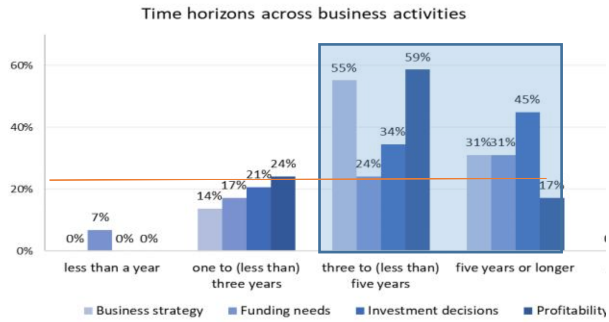
All — Life



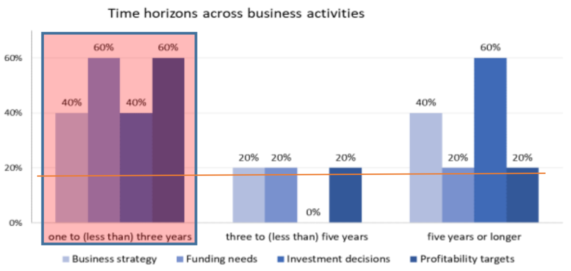
All — Medium



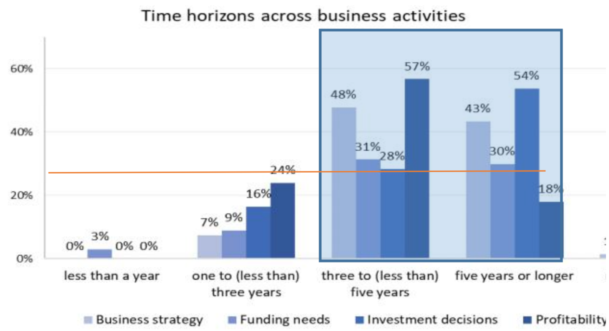
All — Non-life



All — Small



All — Composite

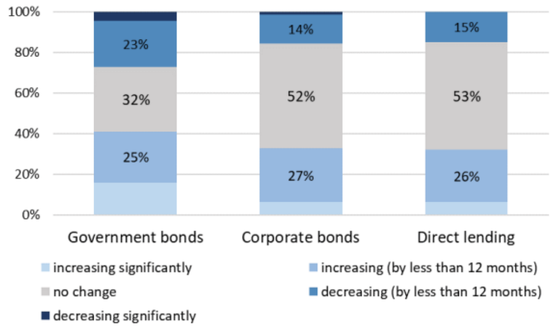


Source: EIOPA, ad hoc survey 2019.

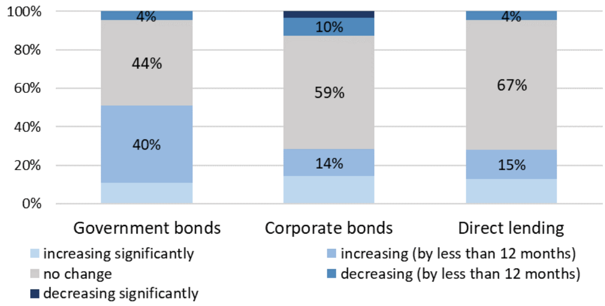
Trends in the average residual maturity in the next 2 years

Figure 29: Expected trends in the average residual maturity in the next 2 years by business type.

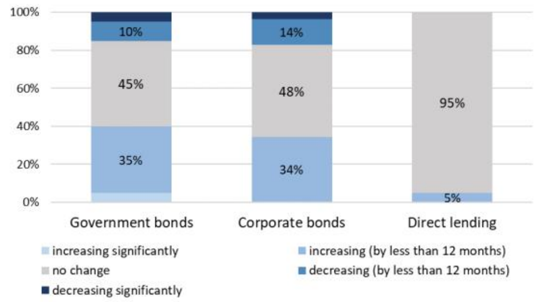
Composite



Life



Non-life

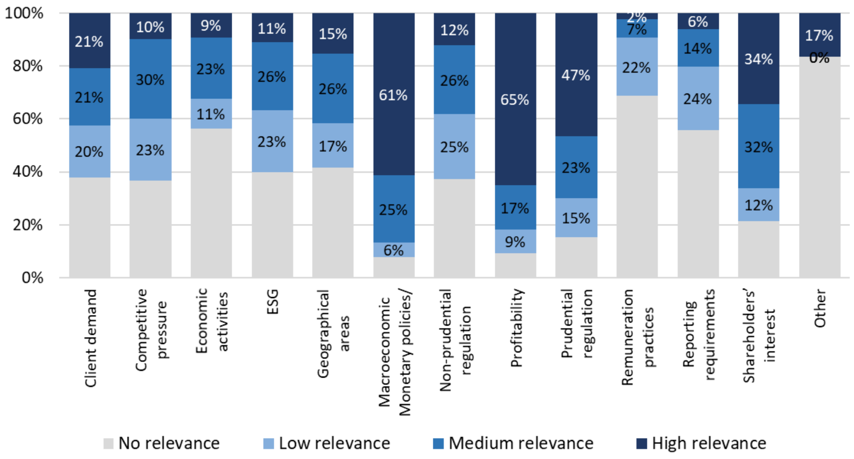


Source: EIOPA, ad hoc survey 2019.

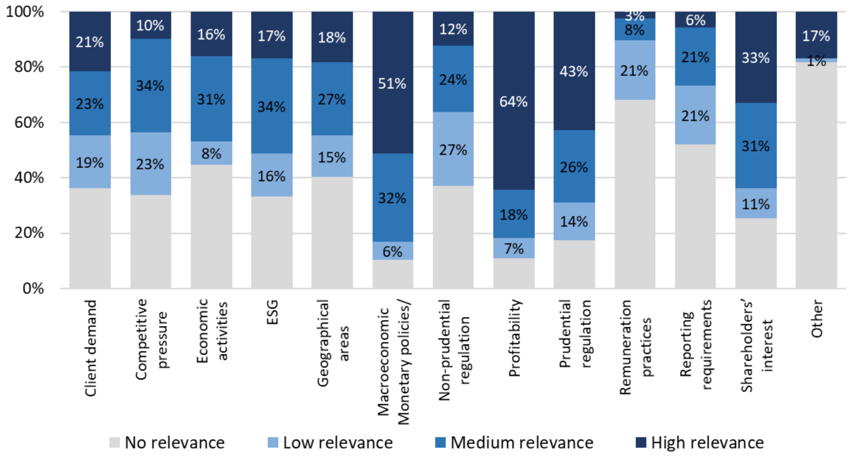
Factors influencing the trends in the average residual maturity

Figure 30: Factors influencing the expected trends in the average residual maturity in the next 2 years by portfolio type.

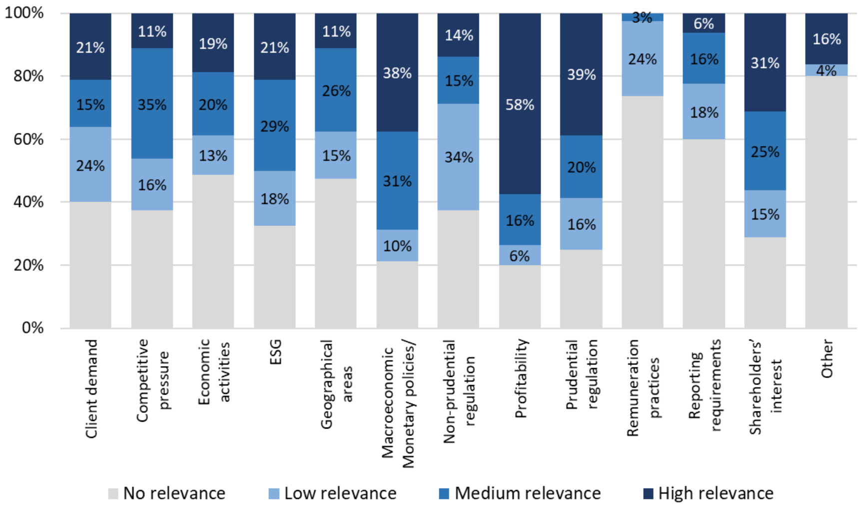
Government bonds



Corporate bonds



Direct lending

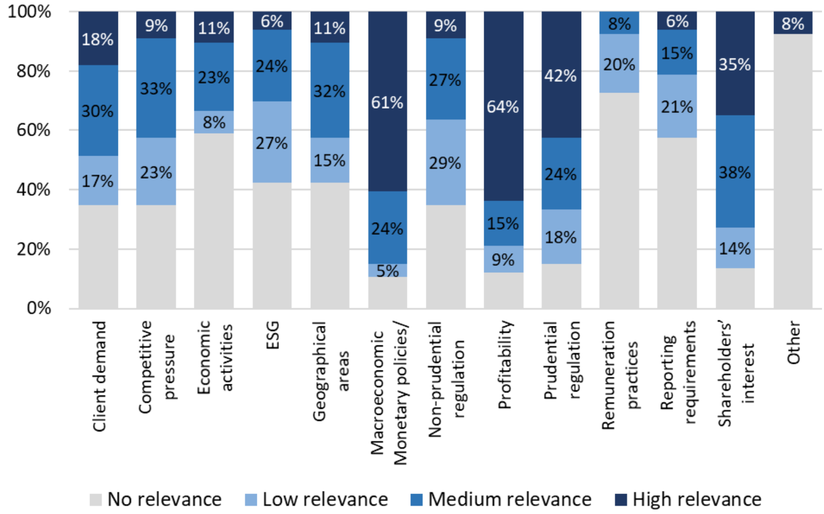


Source: EIOPA, ad hoc survey 2019.

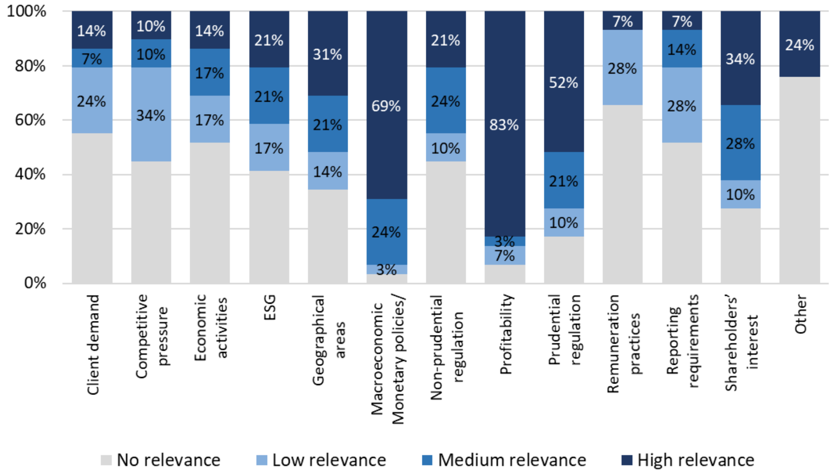
Factors influencing the future average residual maturity of the government bond portfolio

Figure 31: Factors influencing the expected average residual maturity in the next 2 years of the government bond portfolio by undertaking type.

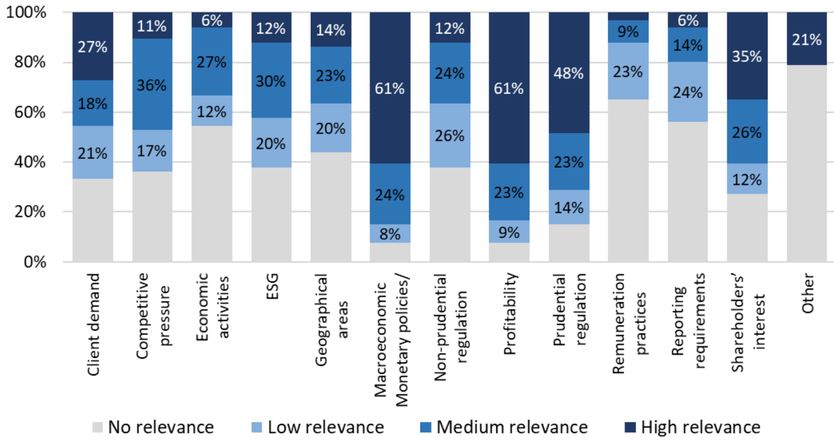
Government bonds — Life



Government bonds — Non-life



Government bonds — Composites

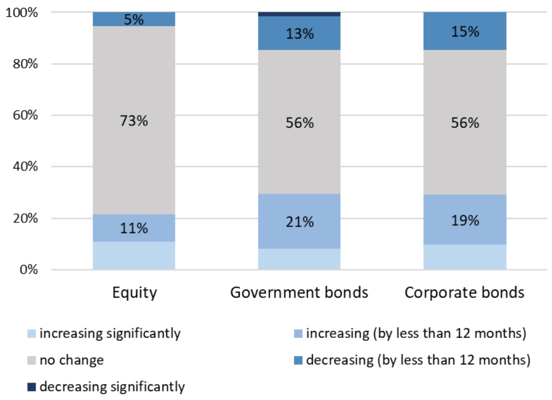


Source: EIOPA, ad hoc survey 2019.

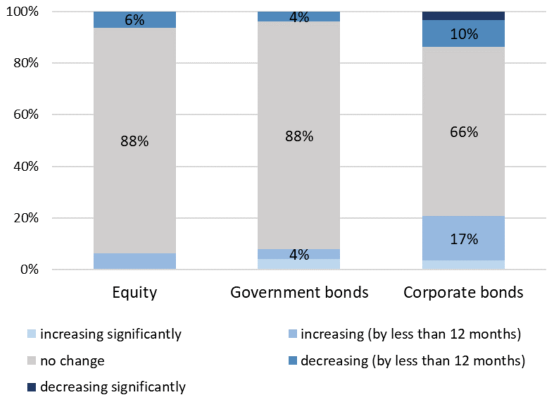
Trends in the holding period in the next 2 years

Figure 32: Expected trends in the holding period in the next 2 years by business type.

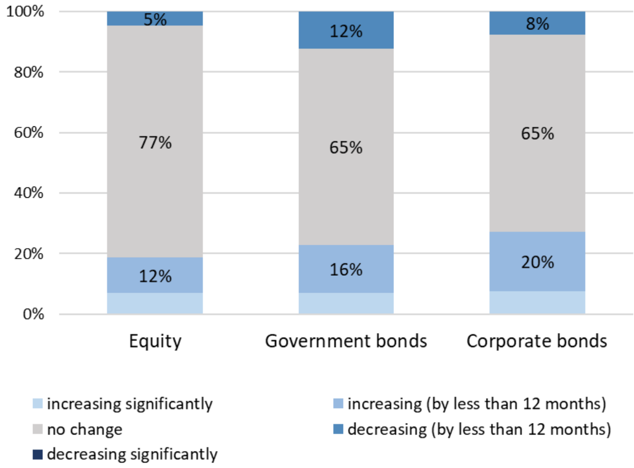
Life



Non-life



Composite



Source: EIOPA, ad hoc survey 2019.

Annex 3 – Analysis of sample QRTs

Sample by quarter

	Number of insurance undertakings
2016 Q2	1357
2016 Q3	1346
2016 Q4	1356
2017 Q1	1396
2017 Q2	1374
2017 Q3	1371
2017 Q4	1374
2018 Q1	1375
2018 Q2	1377
2018 Q3	1370
2018 Q4	1370

Sample table for Q4 2018 by type and country

Country	Composite	Life	Non-Life	Reinsurance	***Total***
Austria	16	6	11	1	***34***
Belgium	19	11	25	1	***56***
Bulgaria	7	2	14		***23***
Croatia	9	3	6		***18***
Cyprus	6	3	16	2	***27***
Czechia	12	1	10	1	***24***
Denmark		1	4		***5***
Estonia	2	1	6		***9***
Finland	2	5	34		***41***
France	29	23	52	4	***108***
Germany		64	152	17	***233***
Greece	17	2	16		***35***
Hungary	10	4	8		***22***
Ireland	1	32	29	22	***84***
Italy	18	28	46		***92***
Latvia	1		4		***5***
Liechtenstein	1	4	2		***7***
Lithuania	2	3	4		***9***
Luxembourg	1	33	14	4	***52***
Malta	2	1	9	1	***13***
Netherlands	1	23	75	3	***102***
Norway	4	5	10		***19***
Poland		24	29		***53***
Portugal	2	7	4		***13***
Romania	6	7	6		***19***
Slovakia	10	2			***12***
Slovenia	9		4	1	***14***
Spain	28	17	42	2	***89***
Sweden	12	9	58		***79***
United Kingdom	3	23	45	2	***73***
Total	***230***	***344***	***735***	***61***	***1370***

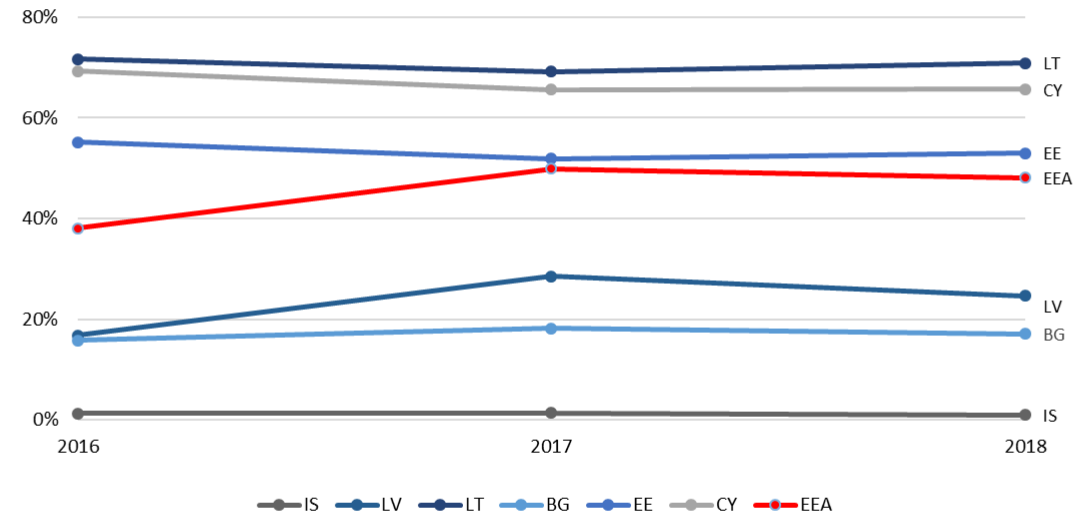
The insurance undertakings included in the sample provided the quarterly list of assets information required under Solvency II in each quarter analysed. The sample has been categorised into four groups based on the average total investments across all quarters:

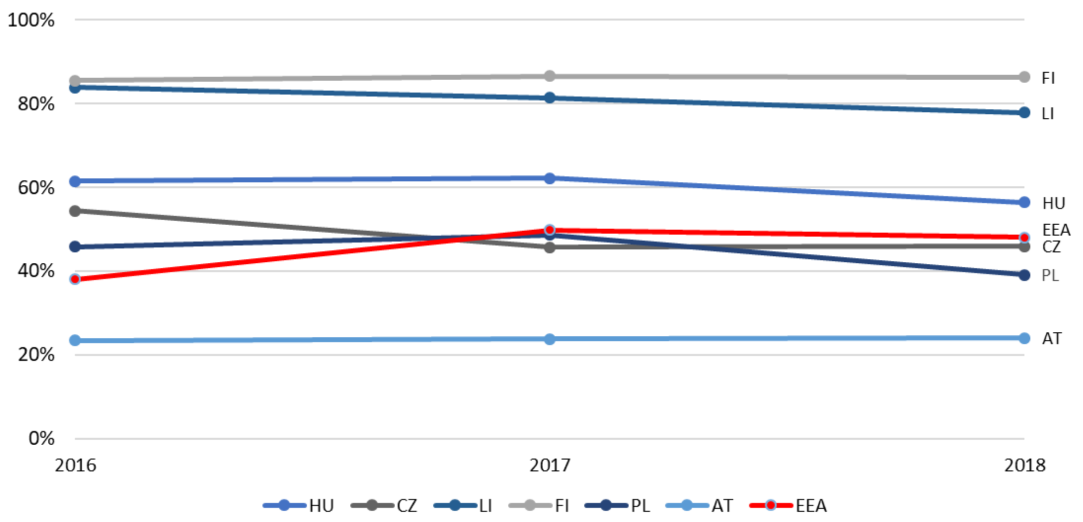
- ***top 30*** (re)insurance companies with average total investment greater than €46 billion;
- ***large*** (re)insurance companies with average total investment between €46 billion and €900 million;
- ***medium*** (re)insurance companies with average total investment between €900 million and €120 million;
- ***small*** (re)insurance companies with average total investment lower than €120 million.

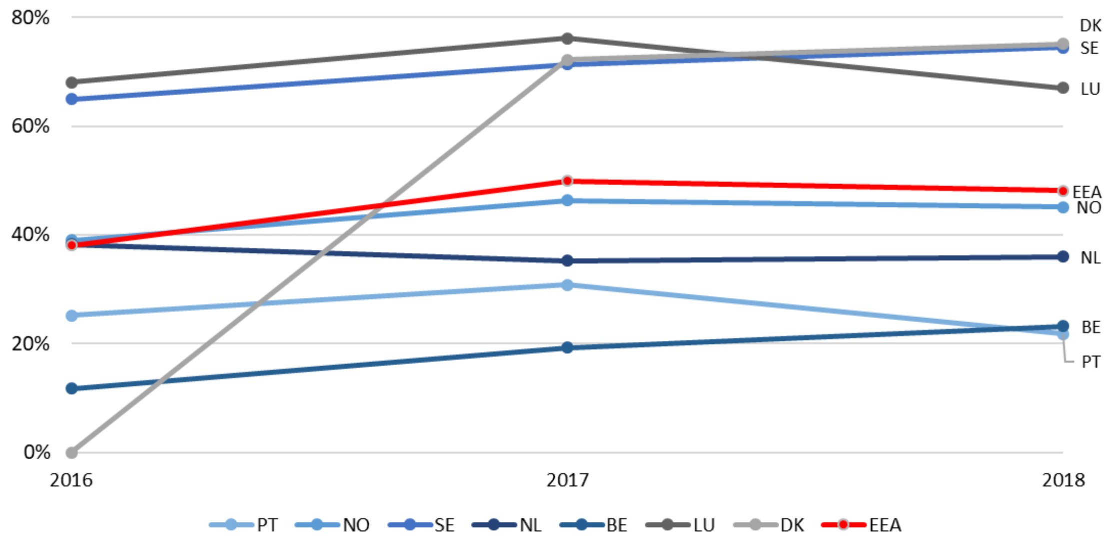
Annex 4 — Life business evolution — further information

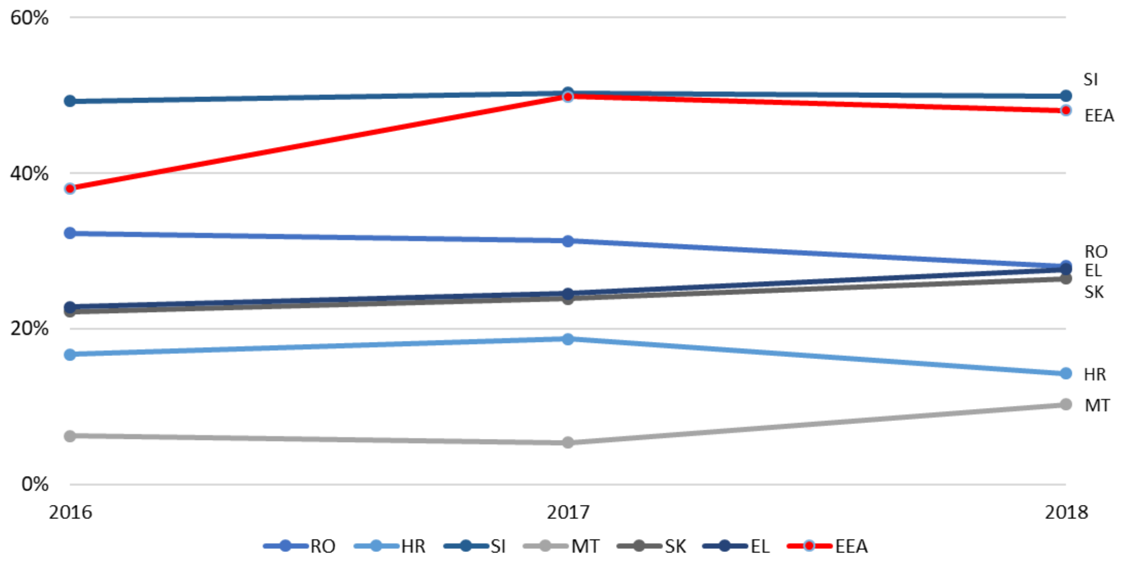
Share of index-linked and unit-linked premiums over time

Figure 33: Trends over time of index-linked (IL) and unit-linked (UL) premiums as share of gross written premiums for life insurance undertakings.







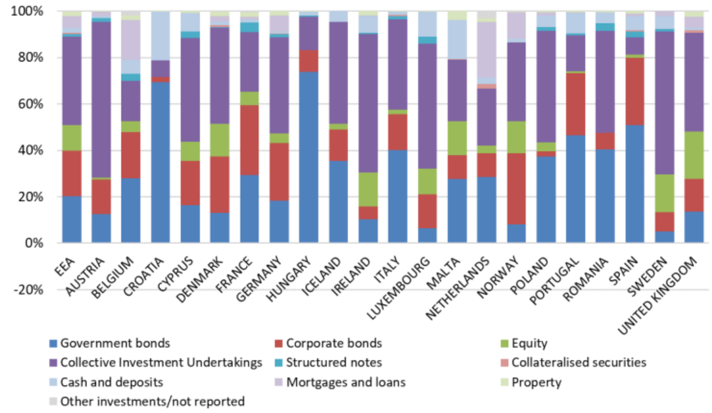


Source: EIOPA, Annual Solo.

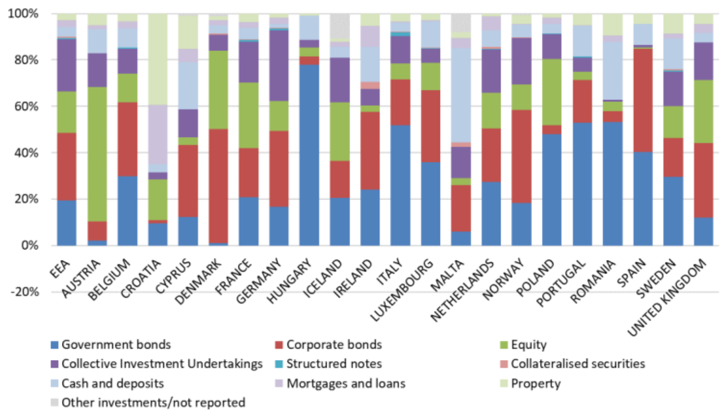
Assets allocation by country and type of business

Figure 34: Asset allocation by country and type of business for 21 EEA countries.

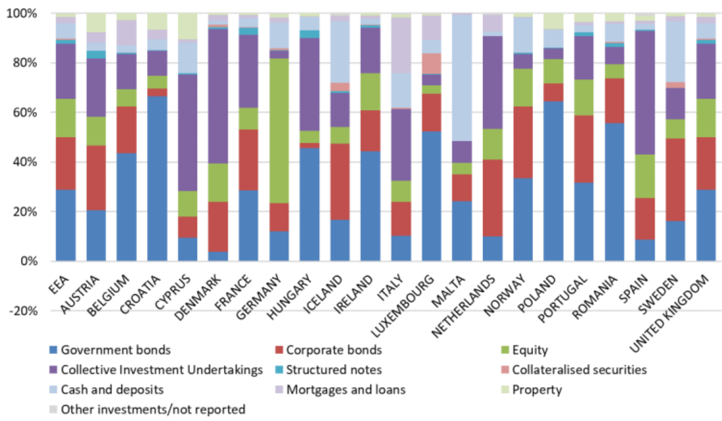
Life



Non-life



Other insurance undertakings (71)



Source: EIOPA, Q4 2018.

(71) The category "Other insurance undertakings" includes Reinsurers and Composites not reported as Life or Non-life in the reporting template S.01.02. Some of the Life, Non-life and Other insurance undertakings are holding companies of insurance groups, reporting at solo level.

Annex 5 – Abbreviations

Countries	
AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czechia
DE	Germany
DK	Denmark
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
HU	Hungary
IE	Ireland
IS	Iceland
IT	Italy
LI	Liechtenstein
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	Netherlands
NO	Norway
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
UK	United Kingdom

General	
CfA	call for advice
Commission	European Commission
DB/HY	defined benefit/hybrid
DC	defined contribution
EEA	European Economic Area
ESA	European Supervisory Authority
ESG	environmental, social and governance
FSB	Financial Stability Board
GWP	gross written premiums
IDD	Insurance Distribution Directive
IORP	institution for occupational retirement provision

General	
LTG	long-term guarantees
MA	matching adjustment
NCA	national competent authority
ORSA	own risk and solvency assessment
PRIIPs	packaged retail and insurance-based investment products
QoQ	quarter-on-quarter
QRT	quantitative reporting templates
R&D	Research and development
SCR	solvency capital requirement
SII	Solvency II
TRFR	transitional on the risk-free rate
TTP	transitional on technical provisions
VA	volatility adjustment
VaR	value at risk
YoY	year-on-year

Life lines of business	
Annuities, health	Annuities stemming from non-life insurance contracts and relating to health insurance obligations
Annuities, non-health	Annuities stemming from non-life insurance contracts and relating to insurance obligations other than health insurance obligations
Health ins	Health insurance
Health reins	Health reinsurance
IL&UL	Index-linked and unit-linked insurance
Ins with pp	Insurance with profit participation
Life reins	Life reinsurance
Other life	Other life insurance

Types of IORP schemes	
Occupational pension scheme	Means a contract, an agreement, a trust deed or rules stipulating which occupational retirement benefits are granted and under which conditions.
DB schemes	DB schemes are defined as: • retirement benefit plans under which amounts to be paid as retirement benefits are determined by reference to a formula usually based on employees' earnings and/or years of service; • schemes that operate like a DC scheme but which target a specified level of benefits at retirement; • schemes that operate like a DC scheme but which guarantee a minimum rate of investment return on contributions paid; a plan that operates like a DC scheme but which guarantees a certain annuity purchase price (annuity conversion factor); • schemes that operate like a DC scheme but which guarantee that at least the sum of contributions paid is returned; • schemes in which benefits are mostly determined by the contributions paid and the results of their investment but that offers minimum guarantees and, in the case of occupational pensions, the employer has the final responsibility for the minimum guarantees.
DC schemes	DC schemes are defined as schemes in which the only obligation of the plan sponsor is to pay a specified contribution (normally expressed as a percentage of the employee's salary) to the plan on the employee's behalf. There are no further promises or 'guarantees' made by the sponsor.
Hybrid schemes	Hybrid schemes are defined as schemes that have separate DB and DC components but which are treated as part of the same scheme.

Annex 6 — Ad hoc survey

3. Participant information

* 3.a - Undertaking name:
200 character(s) maximum

* 3.b - Undertaking identification code (LEI):

* 3.c Undertaking's type:

* 3.d - Country of undertaking:

3.e - E-mail address of the relevant contact person:
@

4. Time horizon (business activities)

*4.a. Which **time horizon*** drives the following general business activities for the institution as a whole?*

	less than a year	one to (less than) three years	three to (less than) five years	five years or longer	not applicable
* Business strategy (including matching liabilities)	○	○	○	○	○
* Profitability targets	○	○	○	○	○
* Funding needs	○	○	○	○	○
* Investment decisions	○	○	○	○	○
* Other (please specify)	○	○	○	○	○

* 4.b. If other, please specify:

4.1. Business strategy

4.1.a. When selecting the time horizon* for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3:

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability	○	○	○	○
* b. Shareholders' interest	○	○	○	○
* c. Competitive pressure	○	○	○	○
* d. Client demand	○	○	○	○
* e. Remuneration practices in the financial sector	○	○	○	○
* f. Geographical areas*	○	○	○	○
* g. Economic activities*	○	○	○	○
* h. ESG*	○	○	○	○
* i. Monetary policies/Macroeconomic factors	○	○	○	○
* j. Non-prudential regulation (e.g. tax regulation)	○	○	○	○
* k. Prudential regulation	○	○	○	○
* l. Reporting requirements (any type of disclosure)	○	○	○	○
* m. Other (please specify)	○	○	○	○

4.1.b. Please select the relevant **geographical areas*** in relation to your answer:

Multiple answers possible

- ☐ Home
- ☐ Euro area (excluding home)
- ☐ EEA countries (excluding home & euro area)
- ☐ US
- ☐ Other developed
- ☐ Emerging markets

4.1.c. Please select the relevant **economic activities*** in relation to your answer:

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities the insurance undertaking is investing to realise a specific objective (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

- ☐ Agriculture, forestry, fishing
- ☐ Mining and quarrying
- ☐ Manufacturing
- ☐ Electricity, gas, steam, air conditioning
- ☐ Water supply & waste management
- ☐ Construction
- ☐ Wholesale and retail trade
- ☐ Transportation and storage
- ☐ Services
- ☐ Other, incl. public administration

4.1.d. **In relation to your answer to question 4.1.a, please indicate the** relevance**, from 0 to 3, of the following** ESG criteria***:**

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors	○	○	○	○
* Social factors	○	○	○	○
* Governance factors	○	○	○	○

4.1.e. If other (m. category), please specify:

4.1.f. Please explain details in relation to your answers:

4.2. Profitability

4.2.a. When selecting the time horizon* for the profitability targets mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3:

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability	○	○	○	○
* b. Shareholders' interest	○	○	○	○
* c. Competitive pressure	○	○	○	○
* d. Client demand	○	○	○	○
* e. Remuneration practices in the financial sector	○	○	○	○
* f. Geographical areas*	○	○	○	○
* g. Economic activities*	○	○	○	○
* h. ESG*	○	○	○	○
* i. Monetary policies/Macroeconomic factors	○	○	○	○
* j. Non-prudential regulation (e.g. tax regulation)	○	○	○	○
* k. Prudential regulation	○	○	○	○
* l. Reporting requirements (any type of disclosure)	○	○	○	○
* m. Other (please specify)	○	○	○	○

4.2.b. Please select the relevant **geographical areas*** in relation to your answer:

Multiple answers possible

☐ Home ☐ EEA countries (excluding home & euro area) ☐ Other developed
☐ Euro area (excluding home) ☐ US ☐ Emerging markets

4.2.c. Please select the relevant **economic activities*** in relation to your answer:

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities the insurance undertaking is investing to realise a specific objective (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

☐ Agriculture, forestry, fishing ☐ Electricity, gas, steam, air conditioning ☐ Wholesale and retail trade ☐ Other, incl. public administration
☐ Mining and quarrying ☐ Water supply & waste management ☐ Transportation and storage
☐ Manufacturing ☐ Construction ☐ Services

4.2.d. **In relation to your answer to question 4.1.a, please indicate the** relevance**, from 0 to 3, of the following** ESG criteria*:

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors	○	○	○	○
* Social factors	○	○	○	○
* Governance factors	○	○	○	○

4.2.e. If other (m. category), please specify:

4.2.f. Please explain details in relation to your answers:

4.3. Funding

4.3.a. When selecting the time horizon* for the funding needs mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3:

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability				
* b. Shareholders' interest				
* c. Competitive pressure				
* d. Client demand				
* e. Remuneration practices in the financial sector				
* f. Geographical areas*				
* g. Economic activities*				
* h. ESG*				
* i. Monetary policies/Macroeconomic factors				
* j. Non-prudential regulation (e.g. tax regulation)				
* k. Prudential regulation				
* l. Reporting requirements (any type of disclosure)				
* m. Other (please specify)				

4.3.b. Please select the relevant **geographical areas*** in relation to your answer:

Multiple answers possible

- ☐ Home
- ☐ Euro area (excluding home)
- ☐ EEA countries (excluding home & euro area)
- ☐ US
- ☐ Other developed
- ☐ Emerging markets

4.3.c. Please select the relevant **economic activities*** in relation to your answer:

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities the insurance undertaking is investing to realise a specific objective (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

- ☐ Agriculture, forestry, fishing
- ☐ Mining and quarrying
- ☐ Manufacturing
- ☐ Electricity, gas, steam, air conditioning
- ☐ Water supply & waste management
- ☐ Construction
- ☐ Wholesale and retail trade
- ☐ Transportation and storage
- ☐ Services
- ☐ Other, incl. public administration

4.3.d. **In relation to your answer to question 4.1.a, please indicate the** relevance**, from 0 to 3, of the following** ESG criteria*:

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors				
* Social factors				
* Governance factors				

4.3.e. If other (m. category), please specify:

4.3.f. Please explain details in relation to your answers:

4.4. Investment decisions

4.4.a. When selecting the time horizon* for the investment decisions mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3:

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability	○	○	○	○
* b. Shareholders' interest	○	○	○	○
* c. Competitive pressure	○	○	○	○
* d. Client demand	○	○	○	○
* e. Remuneration practices in the financial sector	○	○	○	○
* f. Geographical areas*	○	○	○	○
* g. Economic activities*	○	○	○	○
* h. ESG*	○	○	○	○
* i. Monetary policies/Macroeconomic factors	○	○	○	○
* j. Non-prudential regulation (e.g. tax regulation)	○	○	○	○
* k. Prudential regulation	○	○	○	○
* l. Reporting requirements (any type of disclosure)	○	○	○	○
* m. Other (please specify)	○	○	○	○

4.4.b. Please select the relevant **geographical areas*** in relation to your answer:

Multiple answers possible

- ☐ Home
- ☐ Euro area (excluding home)
- ☐ EEA countries (excluding home & euro area)
- ☐ US
- ☐ Other developed
- ☐ Emerging markets

4.4.c. Please select the relevant **economic activities*** in relation to your answer:

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities the insurance undertaking is investing to realise a specific objective (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

- ☐ Agriculture, forestry, fishing
- ☐ Mining and quarrying
- ☐ Manufacturing
- ☐ Electricity, gas, steam, air conditioning
- ☐ Water supply & waste management
- ☐ Construction
- ☐ Wholesale and retail trade
- ☐ Transportation and storage
- ☐ Services
- ☐ Other, incl. public administration

4.4.d. **In relation to your answer to question 4.1.a, please indicate the** relevance, **from 0 to 3, of the following** ESG criteria*:

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors	○	○	○	○
* Social factors	○	○	○	○
* Governance factors	○	○	○	○

4.4.e. If other (m. category), please specify:

4.4.f. Please explain details in relation to your answers:

5. Future expectations (average residual maturity*)

5.a. On a best-effort basis, in the **next 2 years**, how do you expect the **average residual maturity*** of the following portfolios to evolve?

	increasing slightly (by less than 6 months)	increasing (by 6-12 months)	increasing significantly (by more than 12 months)	no (notable) change	decreasing slightly (by less than 6 months)	decreasing (by 6-12 months)	decreasing significantly (by more than 12 months)	not applicable
* Government Bonds	○	○	○	○	○	○	○	○
* Corporate Bonds	○	○	○	○	○	○	○	○
* Direct lending	○	○	○	○	○	○	○	○
* Other (please specify)	○	○	○	○	○	○	○	○

5.b. If other, please specify:

5.c. Please provide the rationale and any relevant information supporting your expectations:

5.1 - Government bonds

5.1.a. According to your response to question 5.a, which of the following factors will imply any change in the average residual maturity of the government bonds portfolio and indicate for the next 2 years its relevance from 0 to 3:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability	○	○	○	○
* b. Shareholders' interest	○	○	○	○
* c. Competitive pressure	○	○	○	○
* d. Client demand	○	○	○	○
* e. Remuneration practices in the financial sector	○	○	○	○
* f. Geographical areas*	○	○	○	○
* g. Economic activities*	○	○	○	○
* h. ESG*	○	○	○	○
* i. Monetary policies/Macroeconomic factors	○	○	○	○
* j. Non-prudential regulation (e.g. tax regulation)	○	○	○	○
* k. Prudential regulation	○	○	○	○
* l. Reporting requirements (any type of disclosure)	○	○	○	○
* m. Other (please specify)	○	○	○	○

*5.2.b. Please select the relevant **geographical areas*** in relation to your answer:*

Multiple answers possible

- ☐ Home
- ☐ Euro area (excluding home)
- ☐ EEA countries (excluding home & euro area)
- ☐ US
- ☐ Other developed
- ☐ Emerging markets

*5.3.c. Please select the relevant **economic activities*** in relation to your answer:*

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities the insurance undertaking is investing to realise a specific objective (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

- ☐ Agriculture, forestry, fishing
- ☐ Mining and quarrying
- ☐ Manufacturing
- ☐ Electricity, gas, steam, air conditioning
- ☐ Water supply & waste management
- ☐ Construction
- ☐ Wholesale and retail trade
- ☐ Transportation and storage
- ☐ Services
- ☐ Other, incl. public administration

5.3.d. In relation to your answer to question 4.1.a, please indicate the relevance, from 0 to 3, of the following ESG criteria:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors	○	○	○	○
* Social factors	○	○	○	○
* Governance factors	○	○	○	○

5.2. Corporate bonds

5.2.a. According to your response to question 5.a, which of the following factors will imply any change in the average residual maturity of the corporate bonds portfolio and indicate for the next 2 years its relevance from 0 to 3:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability	○	○	○	○
* b. Shareholders' interest	○	○	○	○
* c. Competitive pressure	○	○	○	○
* d. Client demand	○	○	○	○
* e. Remuneration practices in the financial sector	○	○	○	○
* f. Geographical areas*	○	○	○	○
* g. Economic activities*	○	○	○	○
* h. ESG*	○	○	○	○
* i. Monetary policies/Macroeconomic factors	○	○	○	○
* j. Non-prudential regulation (e.g. tax regulation)	○	○	○	○
* k. Prudential regulation	○	○	○	○
* l. Reporting requirements (any type of disclosure)	○	○	○	○
* m. Other (please specify)	○	○	○	○

*5.3.b. Please select the relevant **geographical areas*** in relation to your answer:*

Multiple answers possible

- ☐ Home
- ☐ Euro area (excluding home)
- ☐ EEA countries (excluding home & euro area)
- ☐ US
- ☐ Other developed
- ☐ Emerging markets

*5.3.c. Please select the relevant **economic activities*** in relation to your answer:*

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities the insurance undertaking is investing to realise a specific objective (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

- ☐ Agriculture, forestry, fishing
- ☐ Mining and quarrying
- ☐ Manufacturing
- ☐ Electricity, gas, steam, air conditioning
- ☐ Water supply & waste management
- ☐ Construction
- ☐ Wholesale and retail trade
- ☐ Transportation and storage
- ☐ Services
- ☐ Other, incl. public administration

5.3.d. In relation to your answer to question 4.1.a, please indicate the relevance, from 0 to 3, of the following ESG criteria:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors	○	○	○	○
* Social factors	○	○	○	○
* Governance factors	○	○	○	○

5.3. Direct lending

5.3.a. According to your response to question 5.a, which of the following factors will imply any change in the average residual maturity of the direct lending portfolio and indicate for the next 2 years its relevance from 0 to 3:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability	○	○	○	○
* b. Shareholders' interest	○	○	○	○
* c. Competitive pressure	○	○	○	○
* d. Client demand	○	○	○	○
* e. Remuneration practices in the financial sector	○	○	○	○
* f. Geographical areas*	○	○	○	○
* g. Economic activities*	○	○	○	○
* h. ESG*	○	○	○	○
* i. Monetary policies/Macroeconomic factors	○	○	○	○
* j. Non-prudential regulation (e.g. tax regulation)	○	○	○	○
* k. Prudential regulation	○	○	○	○
* l. Reporting requirements (any type of disclosure)	○	○	○	○
* m. Other (please specify)	○	○	○	○

*5.3.b. Please select the relevant **geographical areas*** in relation to your answer:*

Multiple answers possible

- ☐ Home
- ☐ Euro area (excluding home)
- ☐ EEA countries (excluding home & euro area)
- ☐ US
- ☐ Other developed
- ☐ Emerging markets

5.3.c. *Please select the relevant* ***economic activities**** *in relation to your answer:*

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities the insurance undertaking is investing to realise a specific objective (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

- ☐ Agriculture, forestry, fishing
- ☐ Mining and quarrying
- ☐ Manufacturing
- ☐ Electricity, gas, steam, air conditioning
- ☐ Water supply & waste management
- ☐ Construction
- ☐ Wholesale and retail trade
- ☐ Transportation and storage
- ☐ Services
- ☐ Other, incl. public administration

5.3.d. *In relation to your answer to question 4.1.a, please indicate the relevance, from 0 to 3, of the following ESG criteria*:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors	○	○	○	○
* Social factors	○	○	○	○
* Governance factors	○	○	○	○

6. Investment strategies

6.a. *Which of the following* ***factors*** *drive your* ***actual holding*** *period*, please indicate its relevance from 0 to 3:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability	○	○	○	○
* b. Shareholders' interest	○	○	○	○
* c. Competitive pressure	○	○	○	○
* d. Client demand	○	○	○	○
* e. Remuneration practices in the financial sector	○	○	○	○
* f. Geographical areas*	○	○	○	○
* g. Economic activities*	○	○	○	○
* h. ESG*	○	○	○	○
* i. Monetary policies/Macroeconomic factors	○	○	○	○
* j. Non-prudential regulation (e.g. tax regulation)	○	○	○	○
* k. Prudential regulation	○	○	○	○
* l. Reporting requirements (any type of disclosure)	○	○	○	○
* m. Other (please specify)	○	○	○	○

6.b. *Please select the relevant* ***geographical areas**** *in relation to your answer:*

Multiple answers possible

- ☐ Home
- ☐ Euro area (excluding home)
- ☐ EEA countries (excluding home & euro area)
- ☐ US
- ☐ Other developed
- ☐ Emerging markets

6.c. *Please select the relevant **economic activities*** in relation to your answer:*

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities the insurance undertaking is investing to realise a specific objective (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

- ☐ Agriculture, forestry, fishing
- ☐ Mining and quarrying
- ☐ Manufacturing
- ☐ Electricity, gas, steam, air conditioning
- ☐ Water supply & waste management
- ☐ Construction
- ☐ Wholesale and retail trade
- ☐ Transportation and storage
- ☐ Services
- ☐ Other, incl. public administration

6.d. *In relation to your answer to question 4.1.a, please indicate the relevance, from 0 to 3, of the following ESG criteria*:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors	○	○	○	○
* Social factors	○	○	○	○
* Governance factors	○	○	○	○

6. f. *Please provide some (qualitative) information on the **holding period*** considerations within your investment strategy:*

7. Future expectations (average holding period*)

7.a. On a best-effort basis, in the **next 2 years**, how do you expect the **average holding period*** of the following portfolios to evolve?

	increasing slightly (by less than 6 months)	increasing (by 6- 12 months)	increasing significantly (by more than 12 months)	no (notable) change	decreasing slightly (by less than 6 months)	decreasing (by 6-12 months)	decreasing significantly (by more than 12 months)	not applicable
* Equity	○	○	○	○	○	○	○	○
* Government Bonds	○	○	○	○	○	○	○	○
* Corporate Bonds	○	○	○	○	○	○	○	○
* Other (please specify)	○	○	○	○	○	○	○	○

7.1. Equity

*7.1.a. According to your response to question 7.a which of the following **factors** will imply any change in the **average holding period*** of the **equity portfolio** and indicate for the <u>**next 2 years**</u> its relevance from 0 to 3:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability	○	○	○	○
* b. Shareholders' interest	○	○	○	○
* c. Competitive pressure	○	○	○	○
* d. Client demand	○	○	○	○
* e. Remuneration practices in the financial sector	○	○	○	○
* f. Geographical areas*	○	○	○	○
* g. Economic activities*	○	○	○	○
* h. ESG*	○	○	○	○
* i. Monetary policies/Macroeconomic factors	○	○	○	○
* j. Non-prudential regulation (e.g. tax regulation)	○	○	○	○
* k. Prudential regulation	○	○	○	○
* l. Reporting requirements (any type of disclosure)	○	○	○	○
* m. Other (please specify)	○	○	○	○

*7.1.b. Please select the relevant **geographical areas*** in relation to your answer:*

Multiple answers possible

- ☐ Home
- ☐ Euro area (excluding home)
- ☐ EEA countries (excluding home & euro area)
- ☐ US
- ☐ Other developed
- ☐ Emerging markets

*7.1.c. Please select the relevant **economic activities*** in relation to your answer:*

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities <u>**the insurance undertaking is investing to realise a specific objective**</u> (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

- ☐ Agriculture, forestry, fishing
- ☐ Mining and quarrying
- ☐ Manufacturing
- ☐ Electricity, gas, steam, air conditioning
- ☐ Water supply & waste management
- ☐ Construction
- ☐ Wholesale and retail trade
- ☐ Transportation and storage
- ☐ Services
- ☐ Other, incl. public administration

7.1.d. In relation to your answer to question 4.1.a, please indicate the relevance, from 0 to 3, of the following ESG criteria:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors	○	○	○	○
* Social factors	○	○	○	○
* Governance factors	○	○	○	○

7.2. Government bonds

*7.2.a. According to your response to question 7.a which of the following **factors** will imply any change in the **average holding period*** of the **government bonds portfolio** and indicate for the **next 2 years** its relevance from 0 to 3:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability	○	○	○	○
* b. Shareholders' interest	○	○	○	○
* c. Competitive pressure	○	○	○	○
* d. Client demand	○	○	○	○
* e. Remuneration practices in the financial sector	○	○	○	○
* f. Geographical areas*	○	○	○	○
* g. Economic activities*	○	○	○	○
* h. ESG*	○	○	○	○
* i. Monetary policies/Macroeconomic factors	○	○	○	○
* j. Non-prudential regulation (e.g. tax regulation)	○	○	○	○
* k. Prudential regulation	○	○	○	○
* l. Reporting requirements (any type of disclosure)	○	○	○	○
* m. Other (please specify)	○	○	○	○

*7.2.b. Please select the relevant **geographical areas*** in relation to your answer:*

Multiple answers possible

☐ Home ☐ EEA countries (excluding home & euro area) ☐ Other developed
☐ Euro area (excluding home) ☐ US ☐ Emerging markets

*7.2.c. Please select the relevant **economic activities*** in relation to your answer:*

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities **the insurance undertaking is investing to realise a specific objective** (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

☐ Agriculture, forestry, fishing ☐ Electricity, gas, steam, air conditioning ☐ Wholesale and retail trade ☐ Other, incl. public administration
☐ Mining and quarrying ☐ Water supply & waste management ☐ Transportation and storage
☐ Manufacturing ☐ Construction ☐ Services

7.2.d. In relation to your answer to question 4.1.a, please indicate the relevance, from 0 to 3, of the following ESG criteria:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors	○	○	○	○
* Social factors	○	○	○	○
* Governance factors	○	○	○	○

7.3. Corporate bonds

*7.3.a. According to your response to question 7.a which of the following **factors** will imply any change in the **average holding period*** of the **corporate bonds portfolio** and indicate for the <u>**next 2 years**</u> its relevance from 0 to 3:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* a. Profitability	○	○	○	○
* b. Shareholders' interest	○	○	○	○
* c. Competitive pressure	○	○	○	○
* d. Client demand	○	○	○	○
* e. Remuneration practices in the financial sector	○	○	○	○
* f. Geographical areas*	○	○	○	○
* g. Economic activities*	○	○	○	○
* h. ESG*	○	○	○	○
* i. Monetary policies/Macroeconomic factors	○	○	○	○
* j. Non-prudential regulation (e.g. tax regulation)	○	○	○	○
* k. Prudential regulation	○	○	○	○
* l. Reporting requirements (any type of disclosure)	○	○	○	○
* m. Other (please specify)	○	○	○	○

*7.3.b. Please select the relevant **geographical areas*** in relation to your answer:*

Multiple answers possible

☐ Home ☐ EEA countries (excluding home & euro area) ☐ Other developed
☐ Euro area (excluding home) ☐ US ☐ Emerging markets

*7.3.c. Please select the relevant **economic activities*** in relation to your answer:*

Multiple answers possible

This question and other through the survey aim to clarify in which economic activities **the insurance undertaking is investing to realise a specific objective** (e.g. business strategy, investment decision or in relation to foreseen portfolio developments).

For example, with regard to section 4.1 "Business strategy" if the participant selects a relevance between 1 and 3 in question 4.1.a "When selecting the time horizon for the business strategy mentioned in question 4.a, indicate the relevance of the following factors from 0 to 3" for factor g. "Economic activities" then the nested question 4.1.c "Please select the relevant economic activities* in relation to your answer" appears. The insurance undertakings should select all the relevant economic activities in which the institution is investing to achieve its business strategy objectives.

☐ Agriculture, forestry, fishing ☐ Electricity, gas, steam, air conditioning ☐ Wholesale and retail trade ☐ Other, incl. public administration
☐ Mining and quarrying ☐ Water supply & waste management ☐ Transportation and storage
☐ Manufacturing ☐ Construction ☐ Services

7.3.d. In relation to your answer to question 4.1.a, please indicate the relevance, from 0 to 3, of the following ESG criteria:*

(0 means no relevance)

	0 (no relevance)	1	2	3
* Environmental factors	○	○	○	○
* Social factors	○	○	○	○
* Governance factors	○	○	○	○

7.c. Please provide any relevant information supporting your expectations:

8. Risk assessment policies and practices

8.a. For the investments management does your institution consider any **time horizon*** during the **risk assessment** process for the following portfolios?

	less than a year	one to (less than) three years	three to (less than) five years	five years or longer	not applicable
* Equity	○	○	○	○	○
* Government Bonds	○	○	○	○	○
* Corporate Bonds	○	○	○	○	○
* Direct lending	○	○	○	○	○
* Property	○	○	○	○	○
* Other	○	○	○	○	○

8.b. If other, please specify:

8.c. Explain details in relation to your answer. In particular if in the context of the risk assessment the answer differs from the broader one to question 4.a.

8.d. Does your institution consider **long-term** oriented **investments** in the risk assessment process if required to meet **sustainability goals**?

If yes, please explain details in relation to your answer, in particular elaborate on how long-term oriented investments are or can be appropriately considered in the evaluation of expected returns. Otherwise, please explain why long-term value considerations do not play a major role.

Context: Some corporates or debt issuers in which insurers consider to invest (investment opportunities) may need/strive to invest in long-term value drivers – including innovation, human capital, environmental adaptation, etc. –to meet sustainability goals (e.g. a car producer engages in strategies entailing long-term funding needs, to adapt to sustainable business plans). While contributing to environmental and social objectives, those investments may entail higher costs (and potentially lower profitability) in the short to medium-term.

9. Remuneration practices and investment management costs

9.a. Do you have any comments or thoughts on whether applying '**more outsourcing vs less outsourcing**' or '**more active vs more passive**' investment strategies matter in the context of short-termism? If yes, please specify:

9.b. How do you assess whether the investment management costs and remuneration practices are in line with your long-term performance objectives?

e.g. does your company assess current performance and investment management costs against the **benchmark** of 'static portfolio management'?

On the remuneration practices for the key staff members making the investment decisions in your company and those categories of staff whose professional activities have a material impact on the undertakings' investments risk profile (material risk takers):

* 9.c. What is the average share of the variable remuneration component in comparison to the fixed component?

9.d. What is the average reference period on which the variable remuneration component is determined?

9.e. What is the **average share** of the **variable remuneration** component that is **deferred**?

9.f. What is the **average period** on which the **variable remuneration** component is **deferred**?

9.g. Are there **ESG criteria** among the non-financial criteria used to **determine** the **variable remuneration component**? If yes, please explain:

10. Open questions

10.a. Do you have any **comments** or thoughts on the issue of **short-termism**?

10.b. Do you have any comments or thoughts on whether the issue of short-termism may **influence** the trends for spending on employees or on research and development (R&D) or any other **consequences**?

10.c. Do you have any comments or thoughts on the potential undue short-termism **pressures** exercised by insurance undertakings on **corporates**?

10.d. Do you have any comments or thoughts on the potential undue short-termism **pressures** felt by insurers **through capital markets**?

10.e. How do you engage with the investee companies in order to **mitigate the risk of short-termism**?