LONG-TERM AND SUSTAINABLE PENSION INVESTMENTS

A STUDY OF LEADING EUROPEAN PENSION FUNDS

ON BEHALF OF ASSET4
AND THE GERMAN FEDERAL ENVIRONMENT MINISTRY

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1 Summary

Today, the players in the capital markets frequently act with a too short-term timeframe. This is transferred to the investee companies so that even the industry association of the “Chartered Financial Analysts” (CFA) is demanding a renunciation of quarterly thinking, which is getting out of hand. The psychology of the capital markets, too short-term company evaluations and too short-term orientations of the asset managers, are only a few important reasons for the change required to achieve a more long-term orientation in the system. For even Rappaport, the inventor of the “Shareholder Value” ascertained that the emphasis of the “Shareholder Value” had to be based on long-term capital flows generated by the companies.

The 21st century is under the sign of the internationally agreed overall concept of a “sustainable development”. Environmental protection (e.g. with climate change) and the combating of poverty (e.g. by mean of micro-credits) are becoming ever more important topics, as for instance, the Nobel Peace Prizes in 2006 and 2007 demonstrated. The longer the investment horizon of an investor is, the most advantageous it is for him or her to integrate this long-term value driver “sustainability” in his or her investment strategies. Long-term investment orientation and sustainability criteria in the investment process therefore inspire each other.

Pension funds are very important players and frequent pioneers in the financial markets, and funded pensions are continuing to grow in importance. Whereas, for instance, in Germany approx. 85% of the pension incomes are unfunded, only 5% comes from funded corporate pensions and 10% from private pensions. Experts consider a mix of 50% unfunded and 50% funded pensions as more suitable. High growth is therefore to be expected, in particular with the low-cost, corporate pension schemes offered by pension funds. A.T. Kearney is forecasting that the assets in all the corporate pension schemes in Germany will have grown to 4 trillion EUR by 2030.

As a basic principle, pension funds can invest for the long term, as the savings for the pensions of the beneficiaries are available for investments over decades. And the beneficiaries have a strong interest in being able to live out their retirement in an intact environment and in a peaceful world.

That is why this study is examining to what extent pension funds – or more generally: suppliers of funded pensions – (can) contribute to more long-term and more sustainable investments. For the interviews personally conducted by the author, ten European pension funds were selected which on the one hand manage high investment volumes (more than 460 billion EUR overall) and on the other hand are pioneers in the consideration of sustainability criteria. From the viewpoint of the beneficiaries, it can be determined that a surplus of sustainability criteria also brings a more long-term investment orientation compared to other pension funds.

For example, company analyses with a more long-term orientation are demanded by the interviewed pension funds or the asset managers whom they have commissioned so that their market power will also result in more offers of long-term and sustainability information. The quality of long-term sustainability information in the management reports respectively annual reports of the company is currently assessed as worst here. These are also still not sufficiently integrated in conventional company assessments.

In general, a focusing on the most important, industry-specific “Sustainable Development Key Performance Indicators” (SD-KPIs) would correspond closest to the requirements of the pension funds and their asset managers of company evaluations. In the future, the pension fund experts see a high potential for generating above-average returns in SD-KPIs and their integration in conventional company assessments. However, there are currently a large number of different concepts for sustainable investments, which is also the main reason that their results cannot yet be sufficiently compared in the long term. As a basic principle, a comparison of the investment successes should be done over ten or more years. For pension funds, a success benchmark should be an absolute return, (e.g. four per cent above the rate of inflation).

The possible investment horizon of the pension funds interviewed that is available as an investment term is 23 years on average. In actual fact, however, the investments made are kept significantly shorter, six years as a rough average. But also very short-term investments for only a few days, hours or minutes (e.g. with “trading strategies” for shares) are conducted by the asset managers for the pension funds. Without “trading activities” like these, the actual holding term of the asset positions could therefore be significantly longer in the sense of an actual “long-term investor”. This is confirmed by the announcement of the state-owned French bank, Caisse des Dépots et Consignations (CDC) in April 2008 in founding a “long-term investment club”. The Director General of CDC and President of the Board of the French pension fund FRR would like to include other large investors such as pension funds and sovereign state funds. Mandates could be given to asset managers even more frequently that favour long-term oriented investment behaviour. This would also lead indirectly to greater consideration of sustainability criteria.

Incentive structures were analysed that could lead to more long-term investments. Longer-term contracts with the asset managers appear, for example, similarly promising as their co-investments.

With the forms of so-called “engagement” with companies they invest in (called “investee companies” throughout the rest of this document), it was established that active dialogue and the use of shareholder rights and the engagement for long-term remuneration structures that are aiming for sustainability are particularly suited to contribute to the long-term success of the investment funds. Cooperations between different long-term investors, (e.g. smaller and larger pension funds), can increase the success of the engagement with investee companies but also contribute to increasing the number of sustainability assessments offered for companies. Engagement cooperations can also aim for changes in the (political) framework conditions. Most of those interviewed see the removal of an annual guaranteed interest rate for traditional insurance-linked pension funds – as exists for example in Germany and Switzerland – as being suitable for increasing the long-term and sustainable revenues. As a basic principle, long-term and sustainable investments should be promoted by the (legal) frameworks, for example, by means of a reporting obligation with regard to sustainability within the investment processes or an obligation to exercise one’s voting right and corresponding reporting. This would also increase revenues and sustainability in the long term.

One of the most important insights of the study is that the pension funds are increasingly campaigning for generally better frameworks for a sustainable development, (e.g. in politics and companies). This is clearest at the moment in their campaigning for a more stringent climate protection policy. As the sustainability pioneers interviewed are all already invested in companies that would draw above-average benefit from such stricter frameworks, this would also have a particularly positive impact on the revenues of their invested pension assets. This mutually strengthening situation could become one of the most dynamic drivers of politics for sustainable development overall.

In the section of the study on the so-called “fiduciary duty”, it became clear that the primary overriding goals of the pension funds – the generation of a high pension return for the beneficiaries – is closely linked long-term/across-generations with the two core goals of a sustainable development – environmental protection and/or the preservation of natural living conditions and the combating of poverty. If all pension funds within the developed world behaved in a similar manner to the pioneers interviewed, it would result in a high, direct and indirect influence toward the solution of these challenges. The attitudes of the beneficiaries regarding questions of the sustainable investment could be surveyed even more intensively by pension funds. When representative surveys of their own beneficiaries took place, the majority had high to very high rates of agreement with regard to these activities.

From the information fundamentals on fiduciary duty, it is apparent that pension funds must define clear goals regarding a long-term investment horizon and the incorporation on materially important sustainability indicators, since these have an important influence on the revenues of the investee companies. The pension fund experts interviewed also consider clarification by the legislators or regulators as desirable whether sustainability goals need to be taken into consideration by pension funds, as this helps legal certainty.

The assets of the pension funds interviewed are currently invested on average 51% in equities, 34% in bonds and 7% in real estate. The strongest sustainability efforts are therefore to be recorded in particular with equities and bonds. But also in the asset classes real estate, non-stock-exchange listed companies (“private equity”), infrastructure and commodities that are to be increased against the backdrop of a longer-term investment horizon, the pension funds interviewed have already invested three-digit million sums in an explicitly sustainable manner, (e.g. in emerging countries, in “highly rated green buildings”, in “carbon funds” to reduce greenhouse gases, in “CleanTech”, renewable energies, micro-financing and sustainable forest plantations). And there will be a further expansion of the activities in all asset classes. As pioneers of European pension funds were examined in this study, the other suppliers of funded pensions, other pension funds, life insurances, etc., will also increasingly (have to) take on the topic of longer-term and sustainable investments.

2 Introduction

Today, the players in the capital markets frequently act with a too short-term timeframe. In turn, this perspective is transferred to the companies of real economy. There are frequent calls for this trend to be reversed and in some places it has already started.

“Sustainable development” is a long-term concept designed to preserve our natural resources and to combat poverty. These topics are becoming ever more important at a global level, as shown for instance by the two last Nobel Peace prizes that recognised the importance of climate change and microcredit respectively.

The longer the investment horizon of an investor is, the more advantageous it is for him or her to integrate this long-term value driver “sustainability” in his or her investment strategies. Long-term investment orientation and sustainability criteria in the investment process can therefore inspire each other.

Pension funds are very important players and frequent pioneers in the financial markets, and funded pensions are continuing to grow in importance. Whereas, for instance, in Germany approx. 85% of the pension incomes are unfunded, only 5% comes from funded corporate pensions and 10% from private pensions. Experts consider a mix of 50% unfunded and 50% funded pensions as more suitable. High growth is therefore to be expected, in particular with the low-cost, corporate pension schemes offered by pension funds[1]. A.T. Kearney is forecasting that the assets in all the corporate pension schemes in Germany will have grown to 4 trillion EUR by 2030.

As a basic principle, pension funds can invest for the long term, since the savings for the pensions of the beneficiaries are available for investments over decades. And the beneficiaries have a strong interest in being able to live out their retirement in an intact environment and in a peaceful world.

That is why this study is examining to what extent pension funds – or more generally, suppliers of funded pensions – (can) contribute to more long-term and more sustainable investments. Based on a study by the author on the sustainability activities of pension funds from 13 countries worldwide[2], ten European pension funds were selected which on the one hand manage high investment volumes (more than 460 billion EUR overall) and on the other hand are pioneers in the consideration of sustainability criteria. The interviews were conducted by the author in person between February and March 2008 with the following pension funds and interview partners:

Pension fund[3]	Location	Interview partner	Investment volume
ABP	Schiphol	Rob Lake	191 billion EUR
Zorg en Welzijn (PGGM Investments[4])	Zeist	Marcel Jeucken	90 billion EUR
Ethos[5]	Geneva (telephone interview)	Jean Laville, Daniel von Moltke	1.5 billion EUR
ERAFP	Paris	Erik Christiansen	4.7 billion EUR
FRR	Paris	Nada Villermain-Lecolier Raoul Briet	34.5 billion EUR
AP1	Stockholm	Nadine Viel Lamare	23.5 billion EUR
AP4	Stockholm	Annika Andersson Arne Lööw	22.2 billion EUR
USS	London	David Russell	37.9 billion EUR
BTPS (Hermes[6])	London	Colin Melvin	56.9 billion EUR
MetallRente[7]	Berlin	Heribert Karch	1.1 billion EUR

[1] Cf. Hesse, A.: Sustainable Development Management – Policy- and Business Area-Strategies for Banks, Münster 2007, P. 339.
[2] Cf. Hesse, A.: Sustainable investments in pension funds – international comparison, on behalf of Swisscanto, Zurich 2007.
[3] In the further course of the study, only the term “pension fund” is normally used as the standardised form. The differentiations indicated here are omitted.
[4] PGGM Investments manages EUR 90 billion. The main client is the pension fund Zorg en Welziyn (PFZW).
[5] Ethos, the Swiss Foundation for Sustainable Development, was established by two Geneva-based traditional insurance-linked pension funds (“Pensionskassen”) in 1997 and currently includes 79 institutional investors.
[6] Hermes is an institutional assets manager. The owner and largest client is “British Telecom Pension Scheme” (BTPS). Colin Melvin is the Chief Executive of the “Hermes Equity Ownership Services Limited” and answered the questions from the viewpoint of BTPS.
[7] The answers considered refer to the implementation method equity-oriented pension fund (“Pensionfonds”) of the corporate pension scheme. Together with the two other implementation methods, traditional insurance-linked pension fund (“Pensionskasse”) and direct insurance (“Direktversicherung”), MetallRente has generated around 1.1 billion EUR in contributions so far.

The author's particular thanks go to the interview partners for their time spent and their invaluable comments, without which the study would not have been possible. Furthermore, the author would like to thank Peter Kraneveld, International Pension Advisor for Prime BV, for the personal pre-testing of the questionnaire.

The statements of the study are not only of importance for pension funds, but also for life insurance companies and other suppliers of funded pensions who can foster the integration of a more long-term orientation and sustainability in their investments, and thus in the world's economy as a whole.

3 Short-term orientation of financial markets, companies and pension funds and their reasons

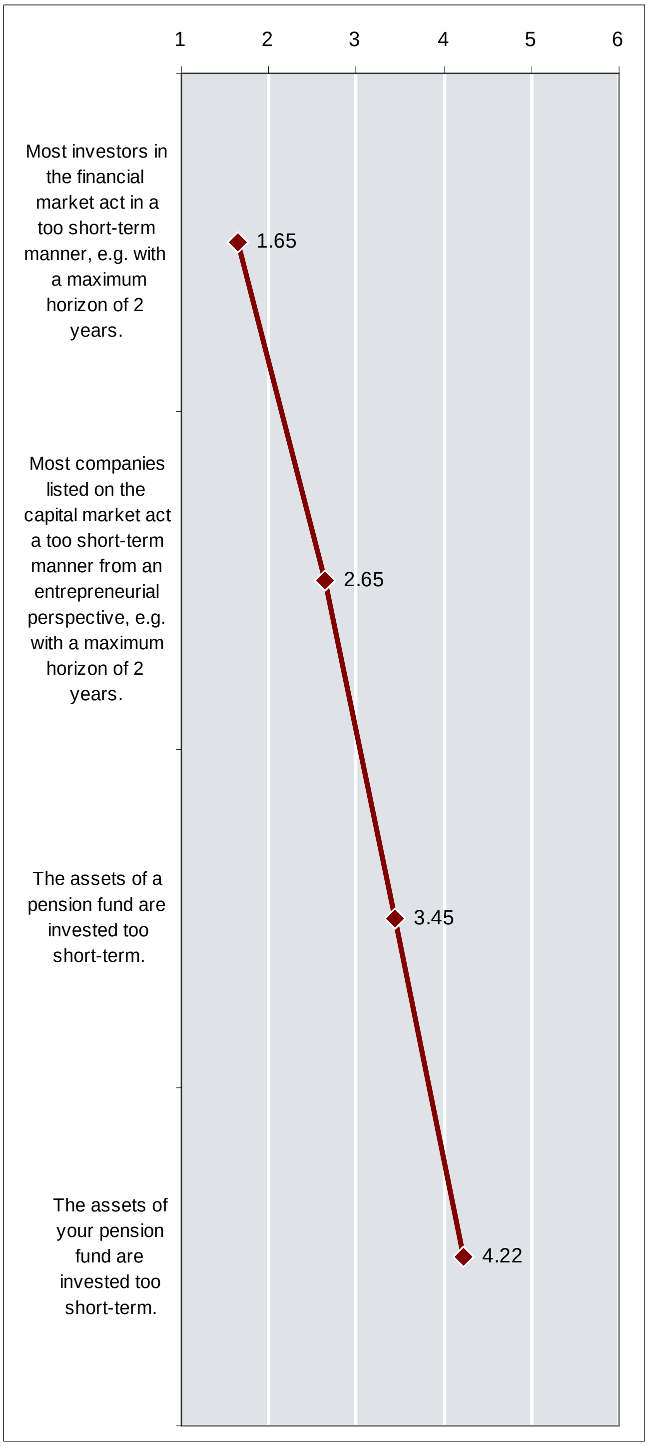
Today, the majority of players in the capital markets frequently act in a too short-term manner. This thesis meets with a very high agreement among the pension fund managers surveyed. That this is fundamentally not a new phenomenon is shown by the following quotation from Charles Henry Dow, the co-founder of the Dow Jones news group:
"Nobody who plants corn digs up the kernels in a day or two to see if the corn has sprouted, but in stocks most people want to open an account at noon and get their profit before night." [End of the 19th century] [8]

As a basic principle, this short-term orientation of investors is also transferred to the investee companies. For the companies normally do what the investors want. If most of these are interested in short-term revenues, this also leads to short-term corporate behaviour. The thesis that the companies listed on the stock exchange tend to act in the short-term, therefore meets with a high degree of agreement. However, in places a differentiation was made between different countries or industries in which the companies have a particularly short-term or long-term orientation.

In a campaign that was unique at the time, the financial analysts' industry association, the "Chartered Financial Analysts" (CFA) with its 86,000 members around the world, strongly advocated in 2006 for a renunciation of quarter-to-quarter thinking in companies.[9]

The thesis that the assets of pension funds are generally invested too short-term was rated neutrally on average, but the individual answers differed greatly. No manager agreed with the thesis fully; otherwise, all the opinions were between 2 and 6. As a tendency, the pension funds are rated from the Anglo-American perspective as acting more in the short-term, whereas they are depicted as investing in the long-term more, for instance, from the French perspective.

Question 1: Would you agree with the following theses?
1 = Fully agree 6 = Totally disagree



[8] http://www.answers.com/topic/dow-jones-co?cat=biz-fin [13.5.2008].
[9] CFA Institute, Institute for Corporate Ethics: Breaking the Short-Term Cycle, Discussion and Recommendations on How Corporate Leaders, Asset Managers, Investors, and Analysts Can Refocus on Long-Term Value, 2006.

The pension funds surveyed are European pioneers with regard to the integration of sustainability aspects in the investment process. As the sustainability concept itself is of a long-term character, it is therefore not surprising that the pension funds surveyed tend to view their assets as being invested too much in the short-term less frequently. Compared to the above assessment of the pension funds in general (3.45), the thesis of too short-term investments of the proprietary assets tends to be rejected by 0.77 assessment points more, with 4.22. But here too there are the same fluctuation bandwidths between 2 and 6. Ethos was unable to answer the last question as sustainable investments services are being provided on behalf of a large number of other pension funds.

As a basic principle, it can be maintained that the more sustainability criteria that pension funds use also inspire a more long-term orientation.

Reasons for a too short-term orientation of the financial markets / companies

In the assessment of the reasons for a too short-term orientation of the financial markets and/or of companies, a quite uniform picture emerges: No reason was viewed by the pension fund managers surveyed as being very important, but all were seen as similarly important with values of 2.2 to 2.9. Changes would have to be made in many places to generate more long-term orientation overall.

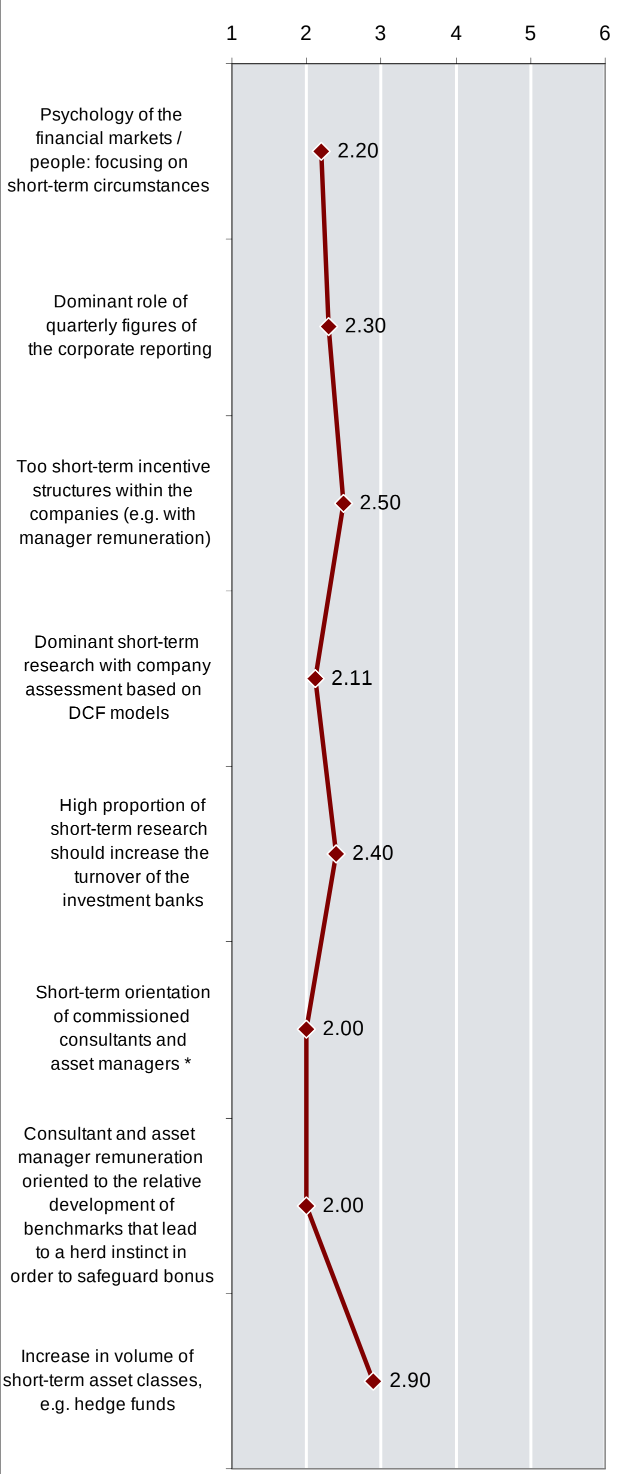
Such changes are, for instance, made more difficult by the fact that the majority of people have a psychological tendency to focus on short-term circumstances. One of the few exceptions is saving for retirement itself, if short-term restrictions are accepted in favour of a long-term goal. That is why pension funds are basically in a position to act with a more long-term orientation.

On the part of the companies, the dominant role of quarterly figures and too short-term incentive structures, e.g. with manager remuneration, are named as reasons which are closely linked to one another. As a tendency, however, the interview partners established that efforts towards “Good Corporate Governance” had contributed at least in part to slightly more long-term incentive structures in companies. As a basic principle, a slightly more long-term orientation can be detected in European companies compared to those in the USA.

On the part of the research suppliers, short-term company assessments are dominant, for instance, in the use of quarterly figures that are easy to determine for “discounted cash flow” (DCF) models. At the same time, short-term research increases the turnover of the investment banks, although consultants and asset managers are also driven by turnover. In these two players, the pension fund managers see the most important reasons for too much short-term investment. They must be given more longer-term mandates with bonus payments oriented to the longer-term, absolute revenue. This also applies for the internal asset managers who are employed in part.

In current practice, however, the FRR, for instance, must heed the statutory requirement for external asset managers to be “regularly” exchanged, which in practice leads to mandates of three to a maximum of four or five years.

Question 2: Please assess the following reasons for a too-short orientation of the companies/financial markets with regard to their significance:
1 = very important 6 = not important



* which is transferred to companies invested in, e.g. three-year return objectives with continuous quarterly performance

Hedge Funds are predominantly deemed to be short-term investors. There are, however, also exceptions to this general statement.[10]. This applies to an even greater extent also for the asset class Private Equity, which in the public perception is also referred to as “locusts” acting in the short-term, in which, however, long-term investments in particular are also made. FRR has defined explicitly in its investment policy that it would not be investing in hedge funds as their too short-term investment horizon does not match the long-term orientation of the fund.

As a basic principle, it can be determined that most of the reasons given above are linked to one another. By definition, long-term investors such as pension funds tend to have more of an opportunity from the start of the chain to move this towards a more long-term orientation and the actual tendency here also resulted from the interviews conducted.

In 1999, however, von Weizsäcker described it as a “tragic irony” that pension funds of all organisations had spread the shareholder value imperative worldwide with short-term thinking and negative consequences for business[11]. It should, however, not be forgotten that Rappaport, the “inventor” of shareholder value, criticised in 1998, in the second edition of his standard work, first published in 1986: “*a short-term earnings orientation”,* “*short-sighted focus on the current stock price”,* “*an obsessive fixation on earnings per share” and stressed* “*emphasis on long-term cash flow is the essence of the shareholder value approach”.*[12]

[10] As a basic principle, hedge funds can be systematised according to three types of strategy: arbitrage strategies, opportunist strategies and company-based strategies. The latter, in particular, can use short (for companies with a non-sustainable focus) / long (for companies with a more sustainable focus) strategies. Another strategic component for hedge funds focusing on sustainability can be the active influencing on more sustainable strategies of the investee companies. There are already a few examples of such hedge funds. Cf. Hesse, A.: Sustainable Development Management – Policy- and Business Area-Strategies for Banks, Münster 2007, PP. 360-362.

[11] Cf. Strässle, R.: (Noch) wenig genutzte Macht [(Power that is (still] little-used], in: Umwelt Focus, October 1999, P. 10.

[12] Rappaport, A.: Creating Shareholder Value – A guide for managers and investors, 2. A., New York 1998, P. 1, P. 3, P. 7 and P. 13.

4 Long-term research and investment strategies

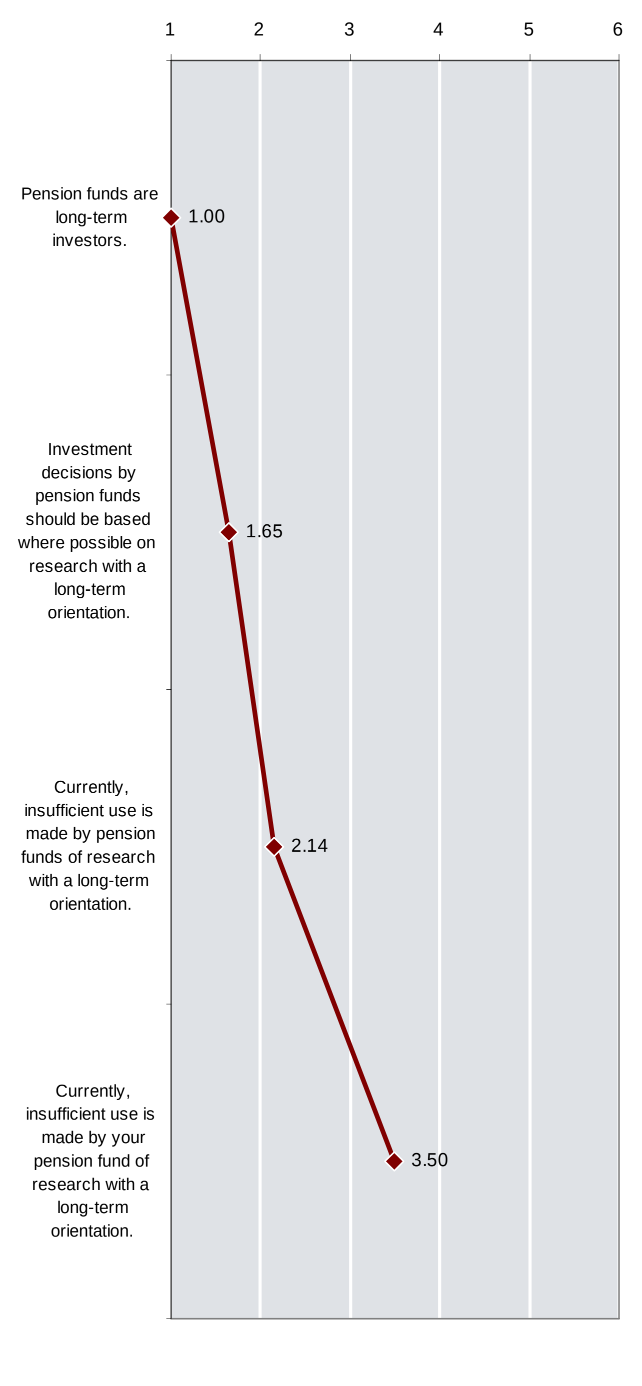
4.1 Need for and use of long-term research

Pension funds are long-term investors. This thesis may appear trivial and also received full agreement from all those interviewed. What appears trivial in theory and from the definition of the long-term task of the pension funds does not, however, mean that the pension funds really do fully act in a long-term and sustainable manner. Otherwise, there would have been no need for a competition by USS for a fictional mandate with the title "Investing Pension Funds as if the Long Term Really Did Matter"[13]. The "Marathon Club" that was created by this drew up a "Guidance Note for Long-Term Investing"[14]. And the Sustainability Leadership Forum also devoted itself to the topic of "From Short- to Long-Term: Who Cares?"[15].

Those surveyed agreed to a large extent with the thesis that the investment decisions of pension funds should be based where possible also on research with a long-term orientation. In places, slight restrictions were made. If for example the asset liability management for some short-term liabilities suggests only short-term investments or for example 10% of the tactical allocation is used for short-term investments such as trading, short-term research is also required for this. Investments intended for the long term also require the right, short-term timing at the point in time that the purchase is made. However, investigations here reveal that timing aspects become less important, the longer the investment horizon is.

Those surveyed agreed that pension funds in general (or most of the external asset managers commissioned by them) still made insufficient use of research with a long-term orientation. The models for sustainable pension investments surveyed here assess the question for their own companies as neutral on average, but with a large variation from full agreement (e.g. from England) to total disagreement (e.g. from Sweden).

Question 3: To what extent would you agree with the following theses?
1 = Fully agree 6 = Totally disagree



[13] Cf. Universities Superannuation Scheme, Hewitt Bacon & Woodrow: Investing Pension Funds as if the Long Term Really Did Matter, London 2004.
[14] Cf. Marathon Club: Guidance Note for Long-Term Investing, London 2007.
[15] Cf. The Sustainability Forum Zürich: From Short- to Long-Term: Who Cares? Institutional Investors, Beneficiaries and Investees in Dialogue, Symposium Report, Zürich 2007.

Basically, research with a long-term orientation is not yet sufficiently available, which represents a very important barrier. The more research is offered for non/extra-financial, long-term and sustainable aspects, the more this research would also be used for the long-term investments of the pension funds, in particular if it had a materially important impact. The pension funds and the asset managers commissioned by them can demand substantially more long-term research with their market clout.

4.2 Quality of available information on long-term company valuation

The availability and high quality of materially important, long-term information are a basic requirement for corresponding long-term company assessment and investments. The quality of the information provided by companies themselves and/or research suppliers has to date only been assessed as satisfactory to sufficient. Therefore, there is still a fundamental need for improvement. One obstacle here is undoubtedly that longer-term, future-oriented, uncertain information is difficult to prepare, (e.g. in scenarios).

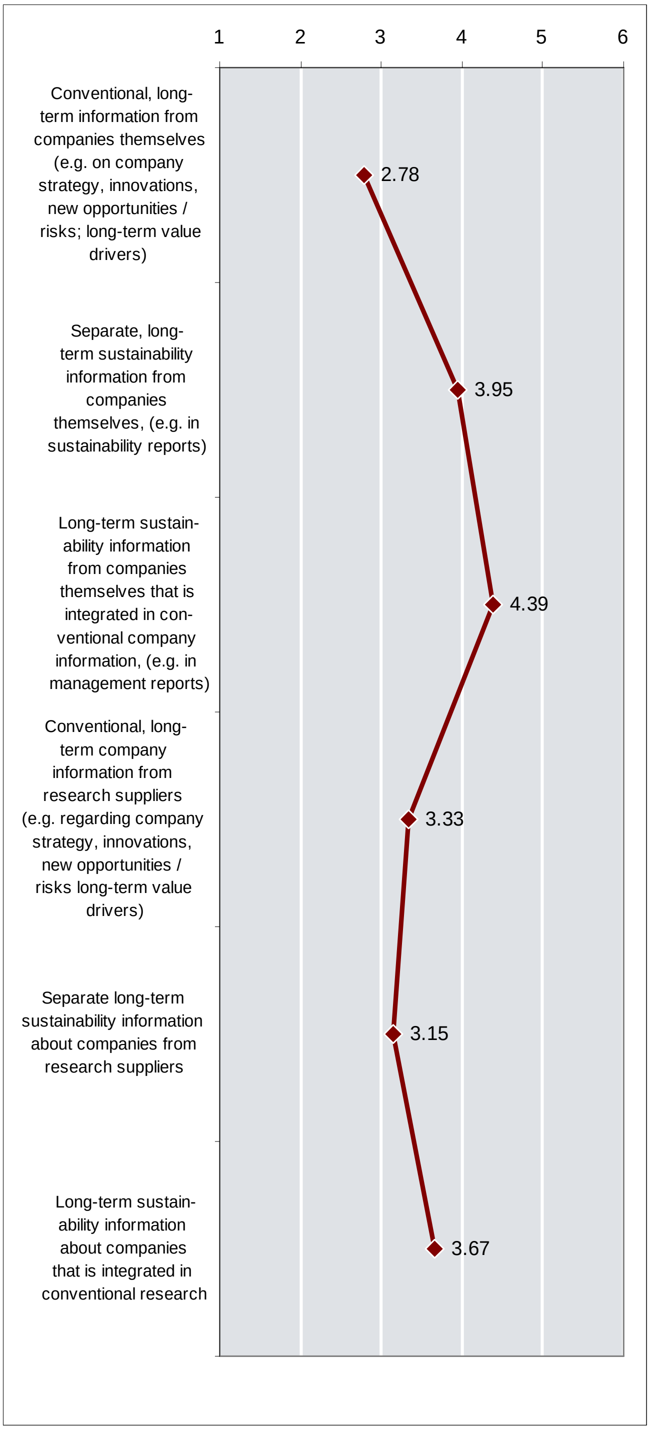
The pension fund managers feel that the conventional, long-term information from the companies themselves is slightly better than the corresponding offerings from research suppliers (2.76 compared with 3.33). In contrast to this, separate and integrated long-term sustainability information is worse on average from the companies than from research suppliers.

Those surveyed highlighted a strong need for catching up, in particular in regard to materially important sustainability information (4.39), as requested only for the last few years, e.g. through the EU modernisation directive and correspondingly adapted legislation of the member countries (i.e. Sections 289, 315 of the German Commercial Code HGB) in management reports from the companies[16]. But also the long-term sustainability information, (e.g. in separate sustainability reports of the companies,) is not rated much better. Although such reports have been published for a long time, they frequently lack brief and well-prepared, materially important information (3.95).

At the current time, the quality of the materially important sustainability information provided by separate research suppliers specialised in this area is rated on average as satisfactory (3.15). This is half an assessment point better than the quality of corresponding information integrated in conventional research (3.67). To some extent, however, efforts can be detected by conventional analysts and their associations (for instance DVFA/EFFAS) to improve the quality here[17].

Question 4: How do you rate the quality of the available, materially important information on long-term company valuation?

1 = Very good 6 = insufficient



16 Cf. Hesse, A.: Added value, long term. Non-financial sustainability key performance indicators on their way into financial reports of German companies, published by Deloitte, Düsseldorf, Munich 2006, PP. 5-6.
17 Cf. DVFA: KPIs for ESG, Frankfurt 2008.

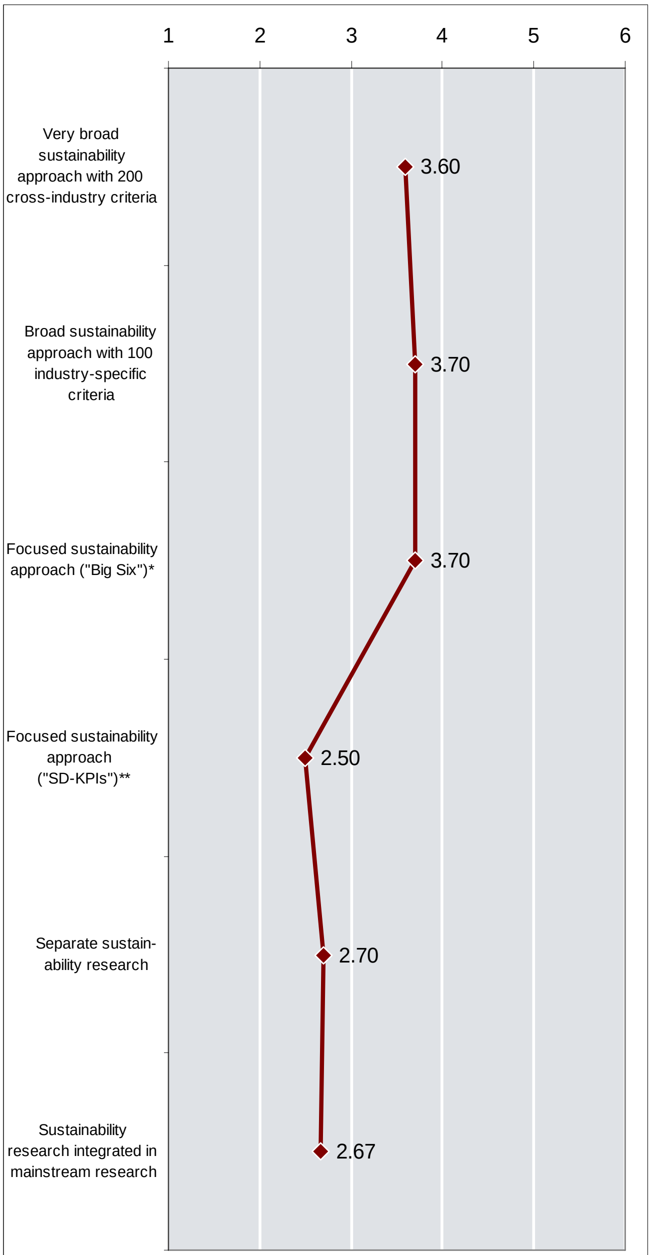
4.3 Current requirements of long-term sustainable research

If the current requirements of active internal or external asset managers for the pension funds are surveyed with regard to long-term sustainable research, two groupings emerge on average: (Very) broad approaches with 100-200 criteria or the "Big Six" approach[18] developed by the author currently correspond to the requirements only moderately. However, the following three approaches meet the current requirements in a good or satisfactory manner: The approach focused on industry-specific "Sustainable Development Key Performance Indicators" (SD-KPIs[19]) and developed by the author as well as separate sustainability research and sustainability research that is integrated in mainstream research (e.g. of the large investment banks).

However, there are currently considerable variances in the assessments of the individual approaches by the different pension fund managers. The largest deviations are to be found for the 200 cross-industry criteria that correspond to the requirements of two funds very closely (1) and to the requirements of two other funds not at all (6). Similarly, there are strong deviations for the broad sustainability approach with 100 industry-specific criteria and the separate sustainability research. The sustainability research integrated in mainstream research is assessed at least by none of the pension fund managers as not meeting the requirements at all (6), while two rate it with "corresponds very closely" (1). The smallest variances in the assessments are to be found for the "Big Six" and the "SD-KPIs concept".

Some pension fund managers said that they would like to see a large number of sustainability indicators at the beginning in a transparent and not too strongly condensed form. In the further course of the investment process, however, the asset managers are usually only in a position to include a few, particularly important indicators in the investment decisions. SD-KPIs are well suited, among others for quantitative use.

Question 5: Which approach corresponds closest to the current requirements of your (mandated) asset manager with regard to long-term sustainable research?
1 = Corresponds very closely 6 = Does not correspond at all



* that is based on interdependencies between the six most important sustainability challenges of the 21st century ("Big Six") for companies: climate change, water scarcity, deforestation/desertification, poverty, loss of biodiversity, global population growth/ migration

** that is based on the the most important sustainable development key performance indicators ("SD-KPIs") of an industry for its business development, position and anticipated development

[18] Cf. Hesse, A.: Big Six – The six most important global challenges for Sustainable Development in the 21st century, Münster 2006 and Hesse, A.: Sustainable Development Management – Policy- and Business Area-Strategies for Banks, Münster 2007, PP. 71-85.
[19] Cf. Hesse, A.: Sustained added value. Information demand of investors and analysts for sector-specific "Sustainable Development Key Performance Indicators" (SD-KPIs) in Management Commentaries (MCs) of German companies, published by Deloitte, Düsseldorf, München 2007 and Baetge, J., Hesse, A.: Best Practices for SD-KPIs – Examples of good use of Sustainable Development Key Performance Indicators (SD-KPIs) in management reports 2006, published by Deloitte, Düsseldorf, München 2008.

Some of the pension fund managers said that the asset managers commissioned by them were not currently receiving any precise specifications as to how they were to integrate long-term, sustainable aspects in the investment process. To date, this has undoubtedly been a contributing factor to the variety of approaches used at the moment for long-term sustainable research. For the future, we need to wait and see whether the variety of approaches will remain on the market or if individual approaches will become less important, while the majority of the others assert their position on the market.

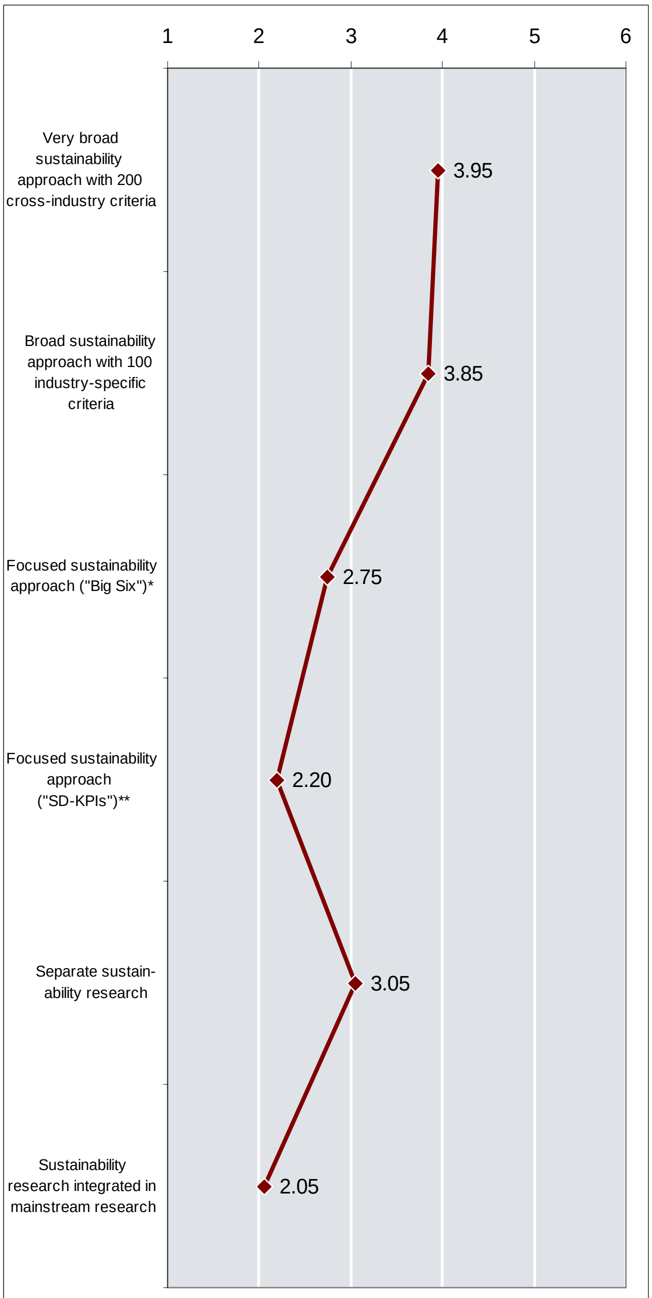
4.4 Long-term, risk-adjusted out- or underperformance of research approaches expected in the future

The overriding goal of most pension funds is the generation of a high risk-adjusted performance for the pensions of the beneficiaries. In this respect, the question regarding the long-term performance effect of sustainability criteria is of particular importance. That is why the pension fund managers were asked which approaches to sustainability research they believed would result in risk-adjusted out- or underperformance in the future in the long term.

In the future, those surveyed expect a slight, risk-adjusted underperformance from (very) broad approaches with 100-200 criteria. However, a risk-adjusted outperformance of focused approaches such as the "Big Six" (2.75) and the "SD-KPIs" (2.20) concepts both developed by the author is expected (cf. footnotes 18 and 19). While a slight, risk-adjusted outperformance effect (3.05) is entrusted to separate sustainability research specialised in this field, the highest risk-adjusted outperformance expectation is for sustainability research integrated in mainstream research (2.05, e.g. the use of selected data from separate, specialised sustainability research providers or data that the bank has collected itself as part of its conventional research). The highest, risk-adjusted outperformance, according to the survey would result from the combination "integration of SD-KPIs in mainstream research". The lowest deviations in the risk-adjusted outperformance estimates of the pension fund managers can also be detected in this combination. The highest variance in the replies was given to separate sustainability research, with two ratings of very probable, risk-adjusted out-performance (1) down to a rating with very probable underperformance (6). One reason for this might be that this approach leaves it open as to whether and how the separate research is then used by an active asset manager with financial mathematics expertise.

It was explained several times that a reduction in risks would be expected from the sustainability criteria. This would lead to a higher, risk-adjusted performance, even if the non-risk-adjusted return remained the same.

Question 6: Which of these approaches to sustainability research do you believe will lead to risk-adjusted out- or underperformance in the future?
1 = risk-adjusted outperformance very probable
6 = risk-adjusted underperformance very probable



* that is based on interdependencies between the six most important sustainability challenges of the 21st century ("Big Six") for companies: climate change, water scarcity, deforestation/desertification, poverty, loss of biodiversity, global population growth/ migration

** that is based on the the most important sustainable development key performance indicators ("SD-KPIs") of an industry for its business development, position and anticipated development

The argument that could often be heard in the past, namely that sustainability criteria could reduce the investment spectrum and thus increase the risk, was only mentioned by one interviewee.

The pension fund managers frequently mentioned the fact that there is currently insufficient sustainability research that is integrated in mainstream research, but that there was a recognisable trend here that the demand was increasingly being met. Should the expectations of the pension fund experts be proven right, this type of integrated sustainability research with a sector-specific focus, for instance, on the “Big Six” or “SD-KPIs” will gain substantially in importance in the future, due to their positive, risk-adjusted performance impact alone. And this will be even more the case since to both the “Big Six” and the “SD-KPIs” concepts is also ascribed a high aptitude for engagement approaches, in other words, the active use of the shareholder rights, (e.g. for universal investors such as large pension funds).

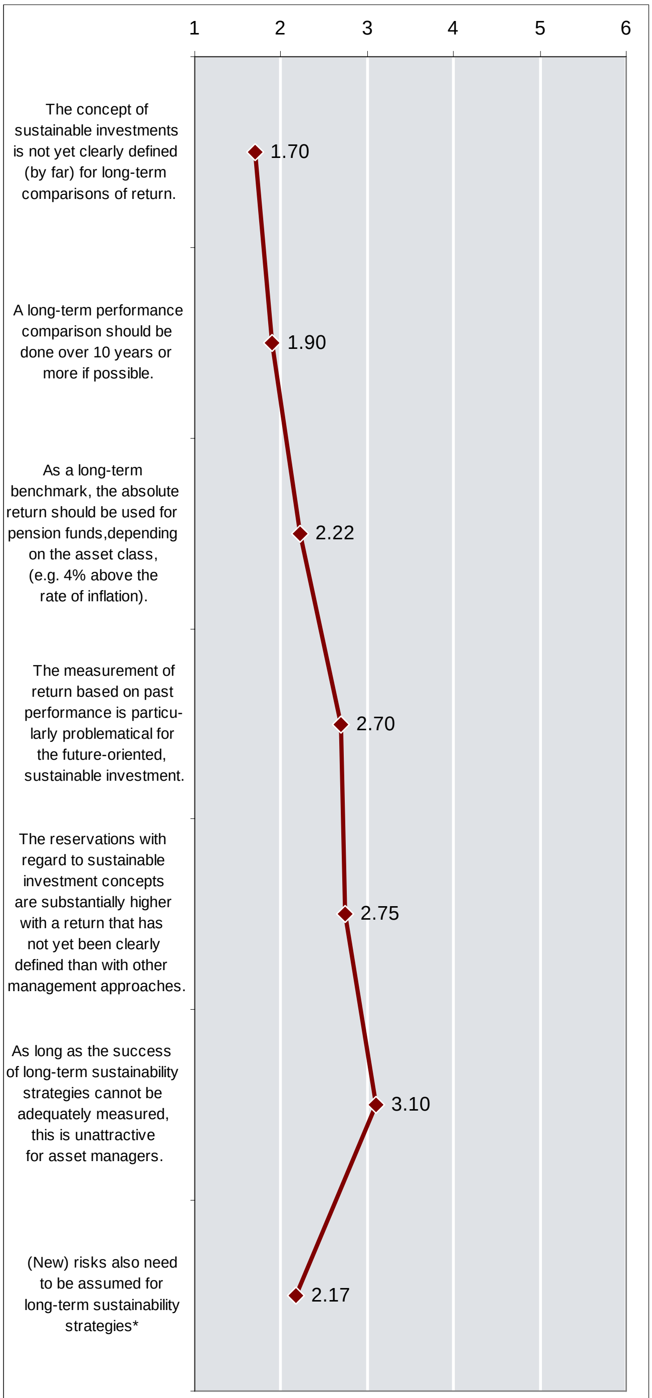
4.5 Performance measurement of long-term, sustainable investment strategies

As a basic principle, the measurement of the investment success is a very important element in the process chain of asset management. However, the performance measurement of long-term sustainable investment strategies is currently still proving to be difficult in places. These and possible proposals for solutions are listed here in the form of theses. The pension fund managers interviewed agreed with all theses, with average agreement figures of 1.7 to 3.1.

The highest level of agreement was given to the thesis that the concept of sustainable investments has not been clearly defined (by far) for long-term comparisons of returns. Two sub-aspects are reflected here. Firstly, a diversity of research and investment styles is combined under the term “sustainable investment”. With regard to the success of the investment, there is the risk of comparing “apples with oranges”. A future possibility for approximating the content of the concepts could be, for instance, focusing approaches on the “Big Six” or “SD-KPIs” named above. Secondly, a long-term measurement of performance is only worthwhile when a concept has been consistently maintained over ten years where possible (cf. thesis 2). As the first sustainable investment approaches did not arrive on the market until around ten years ago and since then have mostly also undergone major changes in content, a measurement of performance is currently problematical in two senses. With the increasing maturity and professionalisation, this should be the most important thesis today but gradually will become less important in the future.

An absolute return should serve as a long-term benchmark. Interestingly, those surveyed were in close agreement with one another. Only one manager rejected this thesis fully (6), otherwise, all the others agreed with values of 1 or 2. The insights of the influential Myners Report appear to have reached the pension managers. Myners stated: “*Objectives for the overall fund should not be expressed in terms which have no relationship to the fund’s liabilities, such as performance relative to other pension funds, or to a market index*” [20].

Question 7: The success of long-term investment strategies according to the sustainability approach cannot be adequately measured. Which of the following statements from this context, do you agree or disagree with?
1 = Fully agree 6 = Totally disagree



* which may result in a higher volatility. The “accepted revenue window” must be expanded.

[20] Myners, P.: Institutional Investment in the United Kingdom: A Review, London 2001, P. 148.

Ultimately, the pension funds must serve their absolute liabilities from a return that is generated absolutely. For example, one fund put this return to be generated absolutely at 4.5% p.a.

The three theses with the lowest agreement rates also had the highest deviations in the answers: for instance, sustainable measurement of the return, based on past performance, can indeed be helpful, but also partly necessitates additional expertise. On the other hand, particularly in the sustainability sector, investments are also frequently made not only in new concepts, but also in new companies, which makes long-term backtracking difficult or impossible. But the conventional “track record” of an asset manager in the past can be taken into account as a criterion for the selection for a sustainability mandate.

Reservations vis-à-vis sustainable investment concepts and their returns would still exist here, but the market is becoming increasingly more mature and the offerings more professional. Two pension fund managers also emphasised that the adherence to the (non- or extra-financial) figures that are a component of sustainable investment concepts is at least as important for them as the financial performance. Performance measurement for sustainable investment concepts, which is still problematical in part, is still deterring some conventional mainstream asset managers from entering the market, but the customer viewpoint is decisive. As a growing group of customers, such as the high-volume pension funds surveyed here, are demanding sustainable investment approaches, the market overall is becoming increasingly more attractive for the asset managers.

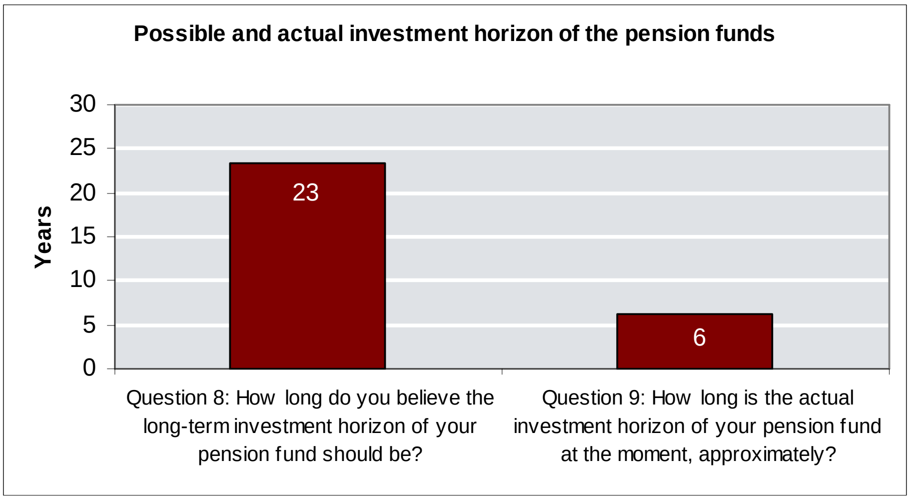
For long-term sustainable investment strategies, in the opinion of all pension fund experts surveyed, the “accepted revenue window” should be extended, for this would facilitate promising, long-term investments in alternative asset classes such as private equity, infrastructure investments and sustainability innovators. The possibly higher volatility could be explained by an increase in communication from the fund. To some extent, an adjustment of the statutory frameworks with regard to the “extended revenue window” would be necessary.

4.6 Possible and actual investment horizon of the pension funds surveyed

The investment horizon is of considerable importance in the development of an investment strategy. It is normally explained with the following similar yet not identical definitions:

(1) The investment horizon incorporates the *period of time* for which a certain sum in assets is *available* for investment (fundamentally, theoretically, as a maximum). The duration of an investment is specified by the investment goal, for instance within the framework of pension investments by the planned pension entry.
(2) The investment horizon incorporates the *period of time* in which an investor intends *to hold* a particular investment with a high probability.

Only if the individual investments are adapted to the investment horizon, can an investment strategy be successful in the long-term. Generally, a differentiation is made between short-term, mid-term and long-term investment horizons. An investment period of more than five years can be seen as a long-term investment horizon. For many asset classes, a minimum investment duration is recommended, for instance three years for an equity fund. As long-term oriented investors, pension funds can basically resort to all available asset classes. Through their systematic selection and weighting, the investment portfolio can be optimised taking into account return and risk aspects. An average contractual term of 30 years results in a high share quota of currently around 80% with the implementation option pension fund (“Pensionsfonds”) of MetallRente, for the majority of those with provision entitlements who are in the savings phase until they turn 56, as part of the strategic allocation.



Question 8 “How long do you believe the long-term investment horizon of your pension fund should be?” was aiming at the above definition (1). Here, the pension fund managers should name the fundamentally possible investment term in years that is available for the assets of their pension fund.

Usually, the pension fund experts orient themselves here to the number of years for which the average savings contributions have been made by the beneficiary, i.e. from the start of the savings phase to the start of the pension being paid out[21]. State pension buffer funds, as for example in Sweden or France that do not (yet) have any direct links to individual beneficiaries, named here correspond to legally set, strategic target values for the duration of the long-term investment horizon. On average, all replies gave rise to a possible investment term of 23 years, whereby the average information fluctuated between a minimum of 10 and a maximum of 30 years. Even for a significantly longer investment horizon of a pension fund, it could be argued that this can demonstrate across generations a similarly high portfolio of assets as young savers are joining the system at the same time as beneficiaries are retiring.

[21] The savings duration of individual beneficiaries varies depending on the duration of their membership of the respective pension fund between around 10 and 50 years.

These results clearly show once again that pension funds can be fundamentally long-term investors. The assets are available to them in the sense of the definition (1) for 10 years or more for investment. This should be taken into account accordingly in the targets of the pension funds, the strategic asset allocation and the Asset Liability Management[22].

To optimise the yield for the beneficiaries in the long-term, taking into account return and risk aspects, long-term asset classes should be selected for the investment portfolio accordingly and be given a high weighting in the portfolio.

Question 9 "How long is the actual investment horizon of your pension fund at the moment approximately?" was based on the above definition (2). Whereas question 8 concerned how long at a maximum the assets are fundamentally available for investment, question 9 therefore addresses the actual holding duration of the asset investments. The average figure indicated by the interviewees here is 6 years. The actual holding term of the asset investments is therefore shorter by a factor of 4 than that which is theoretically possible, but can still be seen as long-term – just. This average figure, however, which only serves as a rough orientation, needs explanation in several respects.

On the one hand, the information fluctuates depending on the pension fund. Funds that are less long-term oriented named holding terms of the investments of between 1 month and up to 5 years, funds with a longer-term orientation of 10-15 years.

Due to the diversification effect of different asset classes, investment is not made solely in asset classes that are particularly suited for a long-term investment horizon. And depending on the asset class, the holding term of the investments differs greatly. Also within an investment class that is suitable for long-term investment, such as shares, the long-term "buy-and-hold" strategy is only one of many investment styles. The commissioned asset managers can also use, for example, very short-term trading strategies for the asset class shares. Through the diversity of investment styles, diversification effects are also hoped for. However, with too many short-term asset classes in the portfolio and also too many short-term investment styles within the asset classes, there is the risk that the long-term investment horizon of a pension fund and its long-term chances will be neglected.

In places, investment behaviour in the past which tended to have a long-term orientation is used as a criterion in the selection process of the asset managers, which can also favour sustainable investment styles. Two interviewees explicitly expressed the opinion that the actual investment horizon should be an economic cycle of around 7 - 8 years. However, it was explained several times by other interviewees that asset managers, once they had been commissioned, would not receive any targets with regard to a shorter or longer holding term. However, performance reviews are frequently held at (too) short-term intervals, e.g. every 3, 6 or 12 months. This leads directly on to the topic of the next section, which demonstrates possibilities through which incentive structures with a longer investment horizon can also be actually achieved.

The Myners Report emphasised that there is frequently a high degree of uncertainty among the asset managers with regard to the length of the investment horizon by which they are assessed. This is the real reason, if it is completely unnecessary, why the asset manager, when in doubt, pursues a short-term orientation so as not to lose his or her mandate. In contrast to this, however, the "trustees" maintained for their part emphatically that they do not insist on short-term performance and this is also not a criterion for changing an asset manager. Overall, therefore, more clarity should be brought about for the long-term performance period that is to be assessed[23].

An interesting development is the announcement by the state-owned French bank, Caisse des Dépôts et Consignations (CDC), in April 2008 that it intended to found a "long-term investment club" for the largest investors worldwide. The Director General of CDC is the President of the Board of FRR and would like, for instance, to include the Norwegian Government Pension Fund (250 billion EUR), which is also active in sustainable investment, and sovereign state funds[24].

[22] Asset Liability Management (ALM) refers to a risk model for continuous, simultaneous, coordinating control of the investments and liabilities of pension funds (and or in general also of assets and liabilities items in the balance sheets of banks and insurances).
[23] Cf. Myners, P.: Institutional Investment in the United Kingdom: A Review, London 2001, P. 2, P. 10 and P. 22.
[24] http://www.responsible-investor.com/home/article/cdc/ [17.4.2008].

5 Incentive structures for more longer-term investments

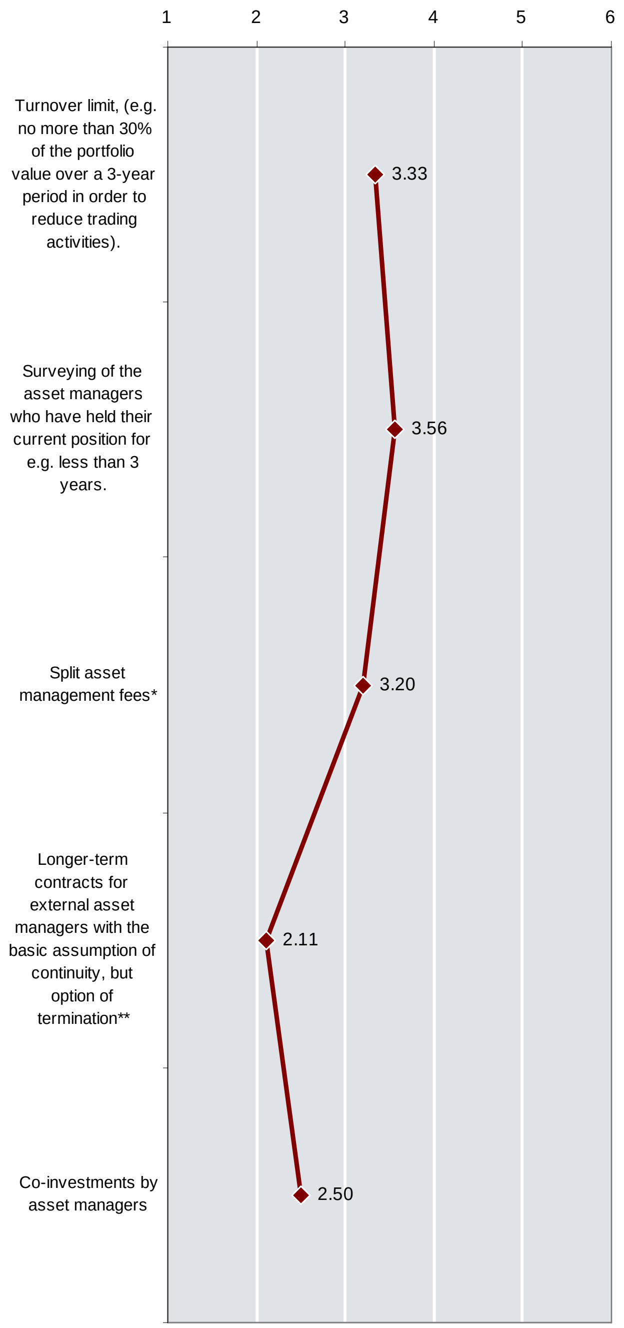
In this section, the pension fund managers were asked to what extent they consider particular incentive structures:
(1) For pension funds vis-à-vis their asset managers,
(2) For asset managers vis-à-vis the investee companies,
(3) Within the investee companies, to be suitable for contributing to longer-term investments

(1) Limiting the trading activities with a “turnover limit” is deemed to be moderately appropriate (3.33) on average by those surveyed. However, the biggest deviations of all proposed measures are to be found here. Two pension fund experts consider them to be highly suitable: Longer-term investments could thus be reached; the indicator low “intensity of trading activities” is also suitable for the pre-selection of asset managers with the style of long-term investors. Two managers, meanwhile, considered the incentive for not suitable: In particular with dramatic changes on the stock exchanges overall or with individual investee companies, the asset managers could possibly not act in a sufficiently flexible manner. Exceptions should be envisaged at least for such cases.

The questioning of the asset managers who had held their positions for less than 3 years, was also rated on average as neutral, with a similarly broad range of variances in the answers. In particular for explicitly awarded “buy-and-hold” mandates this survey is worthwhile. However, there was (still) an insufficient number of such mandates at the present time. More frequently, a longer-term oriented investment spectrum is currently used, within which short-term regroupings and trading activities are also carried out.

Split remuneration for asset managers with a fixed basic share and additional remuneration paid out only with long-term performance is also seen by those surveyed on average as moderately suitable, however, with smaller fluctuations compared to the two measures given above. Some funds (still) do not have any or only a few performance-oriented remuneration systems. The proportion of the basic remuneration must be relatively high so that a relatively low, long-term additional remuneration may not possibly have a sufficient incentive impact.

Question 10: Please assess the following incentive structures with regard to their suitability for contributing to longer-term investments
(1) Incentive structures for pension funds vis-à-vis their asset managers
1 = highly suitable 6 = not suitable



* 1. Basic remuneration of the ongoing costs on a quarterly basis + 2. Additional remuneration based on (out) performance, (e.g. measured by the “absolute return” benchmark, transferred annually to a locked account, paid out at the end of the long-term period)

** more security for asset managers, position brought closer to that of internal asset managers at large pension funds

It is also problematical that, under certain circumstances, a high performance could also be achieved with a large number of short-term investments and thus the additional remuneration actually intended for long-term investments.

The highest agreement rates with the lowest fluctuations were for long-term contracts with asset managers and co-investments of the asset managers, whereby long-term investments do not automatically result here. The current contractual terms of frequently 3-5 years would have to be lengthened, at least to the average length of an economic cycle of 7-8 years. For this, the pension fund management and the "trustees" would have to commit themselves significantly in the sense of their role as long-term investors. Co-investments are particularly suited for asset classes such as private equity.

As a basic principle, it should be established here that the transparency both with regard to the notified (long-term) investment term with the asset manager mandates and also with regard to their incentive and remuneration systems must be significantly increased in the future. Just as pension funds and investors require this from companies they invest in, it must also apply for their own activities in the future.

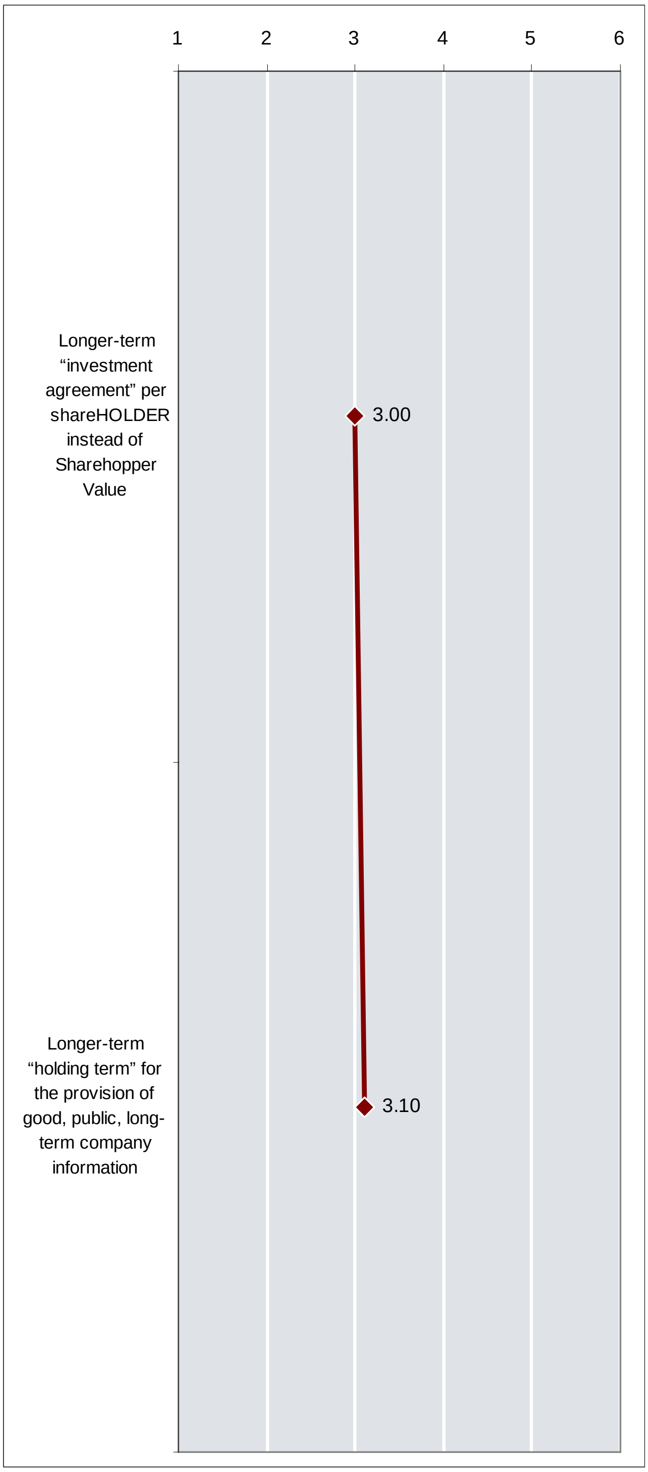
(2) The two incentives suggested by the asset managers for a longer-term orientation with the investee companies were rated on average as suitable to a satisfactory extent. But also with these two points, there were major deviations in the replies, from highly suitable to not suitable.

The differentiation between ShareHOLDER and Sharehopper Value goes back to Walter (Deutsche Bank Research):
„Of course, there are also players in business, and in particular on the financial markets, whose time horizon scarcely extends beyond one day. However, such sharehoppers are not in demand as capital providers, but rather shareholders, in other words, investors who are also prepared to make a longer-term engagement. Institutional investors have long recognized this; today they do not buy any shares of a company, without having examined in detail its business policy and where necessary exerting influence over strategically important decisions. Consequently, the financial markets also do not force from the companies in any way short-term profits maximisation to the detriment of ethical standards. Instead, they demand success strategies that are sustainable in the long term and thus responsible activities" [25]

A counter argument to the idea of a longer-term "investment agreement" per ShareHOLDER Value was that more efficient markets should rather point the way to a more long-term orientation than structures like these. With regard to a good long-term strategy, the companies also needed the pressure from the investors that could possibly be reduced by such an "agreement". A larger share in the company's capital was also required to be able to shape such "agreements" in a worthwhile manner for both sides. At any rate, any "agreement" would also have to envisage exceptions for particular events. Such long-term "investment agreements" are particularly suited, (e.g. for the asset class private equity).

ShareHOLDERS also have a greater interest in good reporting on long-term information from (invested) companies. However, this information should be supplied by the companies anyway. And it must be accessible to the general public to ensure that asset managers are not exposed to the risks of using insider information.

Still Question 10: Please rate the following incentive structures with regard to their suitability for longer-term investments.
(2) Incentive structures for asset managers vis-à-vis companies invested in
1 = Highly suitable 6 = Not suitable

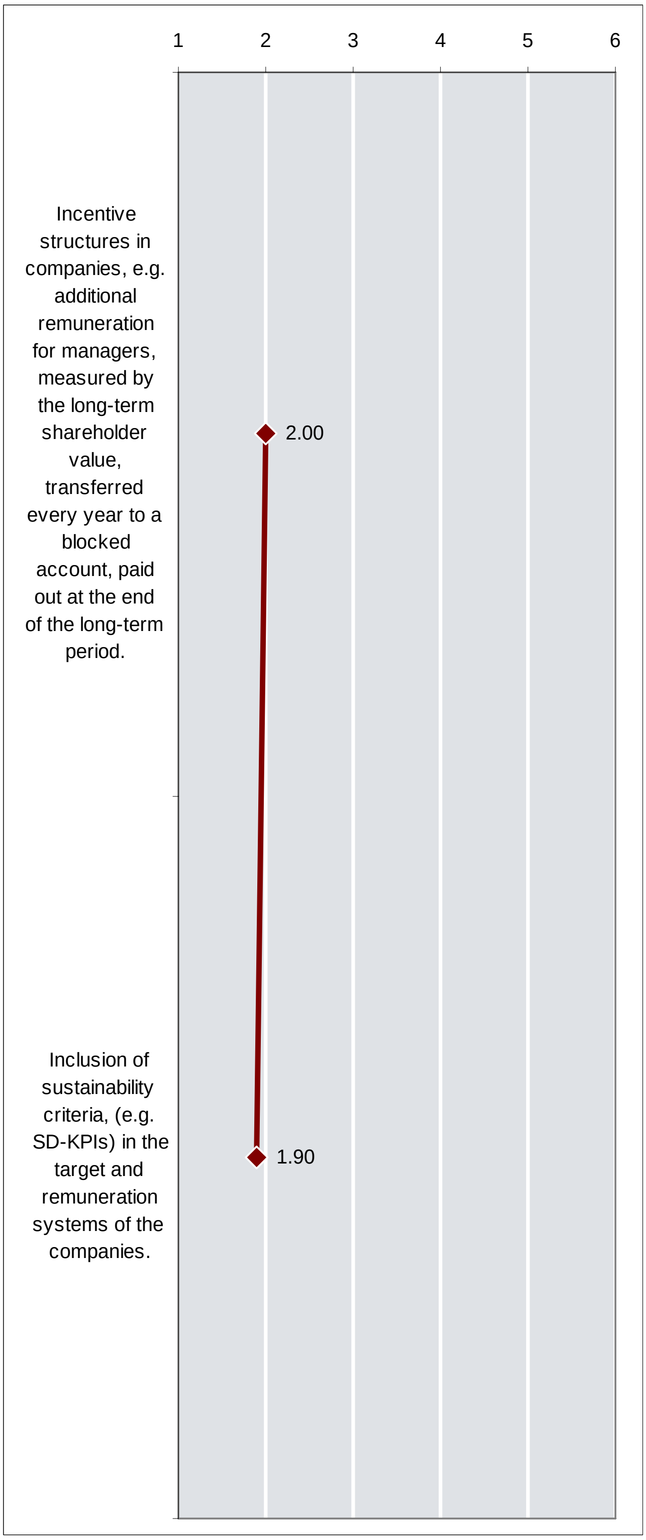


[25] Walter, N.: Wirtschaftsethik im Zeitalter der Globalisierung – störendes Beiwerk im Wettbewerb oder Grundlage des Erfolges [Business Ethics in the Age of Globalisation – disruptive side-show in competition or the basis for success], in: Rheinischer Merkur, 8.6.1999, page not known.

(3) Interestingly, the pension fund experts see the most promising incentive structures for more long-term investments not in their own companies but at the other end of the investment chain, namely within the investee companies themselves. All interviewees consider additional remuneration for managers for shareholder value generated in the long term and the inclusion of sustainability criteria such as the SD-KPIs[26] in the remuneration systems of the companies to range from suitable up to very suitable. However, the long-term remuneration of the managers should not be added to the existing remuneration, but remuneration for short-term successes should be reduced accordingly. For the remuneration of sustain-ability criteria, the restriction was made in part that these would have to be of material importance, as is the case with SD-KPIs.

Overall, it is shown that pension funds need to find their individual mix from the suggested or similar incentive structures in order to generate even more long-term orientation for their investments. These incentive structures need to be communicated transparently by pension funds and asset managers in the future, as it is already demanded of the investee companies and is also well done there to some extent.

Still Question 10: Please rate the following incentive structures with regard to their suitability for longer-term investments.
(3) Incentive structures for asset managers within companies invested in
1 = Highly suitable 6 = Not suitable



[26] Cf. footnote 19.

6 Forms of engagement for long-term, sustainable investments

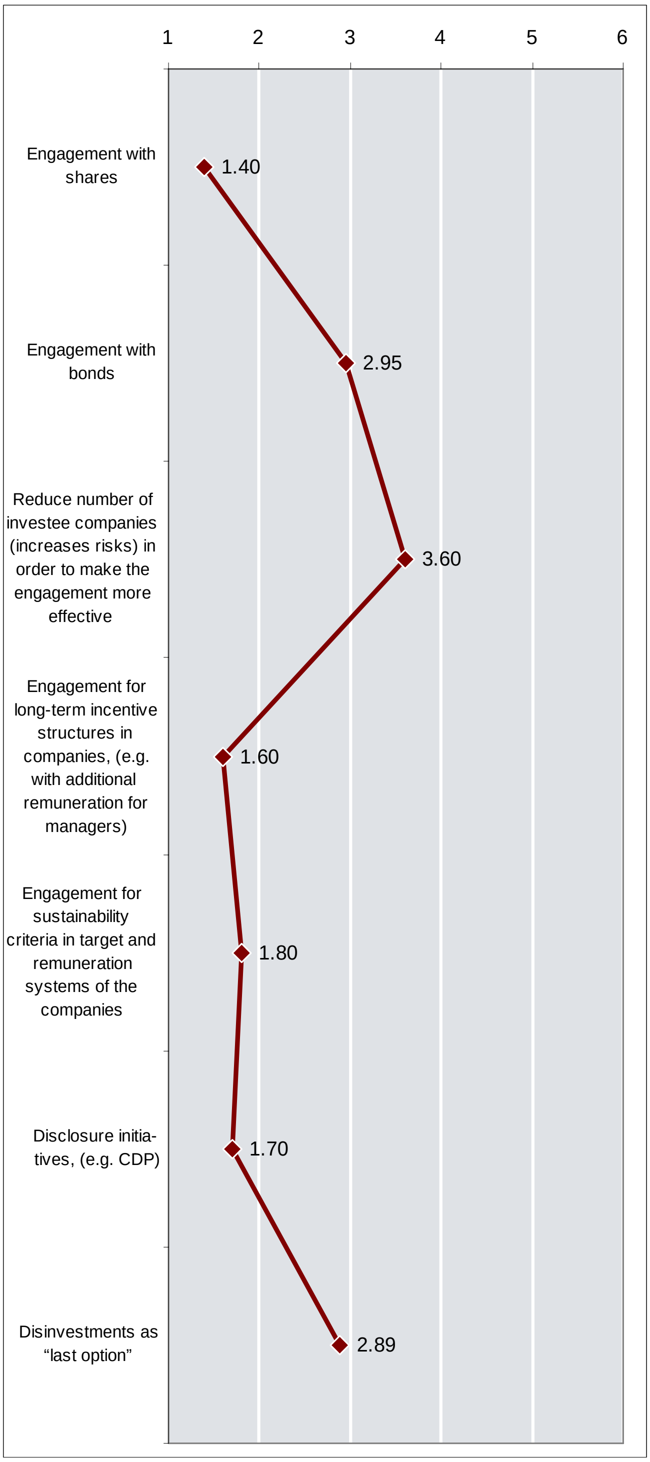
"Engagement" applies internationally – Germany must catch up on large sections of the development – as a possibility for investors to exert influence in order to reduce risks with their investments and/or to increase returns. In this study, a broad range of forms of engagement was surveyed with regard to their suitability for contributing to a long-term, sustainable risk-adjusted performance. The three complexes of questions related to:

(1) Engagement with investee companies
(2) Engagement cooperation of many pension funds in general
(3) Engagement cooperation of many pension funds in particular in order to improve legal frameworks or self-regulation for long-term, sustainable pension investments

(1) Engagement with shares is the classical form of engagement and consists in particular in conducting active dialogue with the management of investee companies and the use of shareholder rights such as motions, speaking and voting rights at shareholders' meetings. As very large pension funds are involved as "universal owners" virtually in all (large) exchange-listed joint stock corporations and they find disinvestment difficult, for reasons of portfolio theory, engagement overlays offer the option here of improving their portfolio without any new weightings or disinvestment. Accordingly, the pension fund experts assess the engagement with shares with low deviations as highly suitable (1.40) on average in order to increase the long-term sustainable, risk-adjusted performance.

The engagement with bonds, to be more precise with the issues of fixed-interest securities, on the other hand, is seen on average as only minimally suitable (2.95), with large deviations in the replies ranging from highly suitable to not suitable. Engagement with the issuers, (e.g. states or companies), is seen as more difficult without the pressure due to shareholder rights, if not impossible. The influence is particularly high in the new issue of a fixed-interest security.

Question 11: Please assess the following forms of engagement with regard to their suitability to contribute to long-term, sustainable risk-adjusted performance.
(1) Engagement with investee companies
1 = Highly suitable 6 = Not suitable



Increasing the number of investee companies, in order to more effectively perform the sometimes costly engagement, is rated with strongly fluctuating figures between 2 and 6 on average as the least suitable measure. Engagement processes are not conducted with all investee companies anyway; rather, they are concentrated after a focused pre-selection of the topics and industries mostly on a two-digit number of engagements per year. For “universal” owners, it is mostly out of the question, as stated above, to reduce the number of investee companies. The situation is different in the private equity sector, where a strong proportion of engagements is frequently part of the business model, or also with “focus funds”, focusing on engagement, as offered by Hermes, for instance.

Engagement for long-term incentive structures in companies and sustainability criteria in target and remuneration systems are rated as very suitable for increasing the long-term, sustainable, risk-adjusted performance, which corresponds to the high incentive impact of these measures in Section 5. It is interesting that the engagement for both measures is seen approximately the same. The sustainability criteria receive only 0.2 points less. A clear trend can be discerned that from the viewpoint of the long-term investors which means that sustainability criteria should increasingly be included in target and remuneration systems of the companies.

Disclosure initiatives, like the Carbon Disclosure Project (CDP), are committed to ensuring more reporting of the companies, for instance in the area of sustainable development. Such initiatives are rated by the pension fund experts on average as highly suitable.

Disinvestments are frequently seen as the last option of an unsuccessful engagement process. At no point were the answers from the pension funds surveyed further apart than in this question: Four funds considered this option as highly suitable, two as not suitable, the others surveyed were in between and thought that it depended on the individual case. Disinvestments were once again out of the question for universal investors; furthermore, the chance would be lost to change something for the better through a engagement. On the other hand, non-sustainable business practices of a company, for instance, could have a negative impact on its long-term performance, so that disinvestments can contribute to increasing the long-term, sustainable, risk-adjusted performance. On average, the measure for this is deemed to be slightly suitable (2.89).

(2) In general, engagement cooperations of many pension funds mean the pooling of assets or other resources for engagement activities. Through pooling, smaller or medium-sized pension funds can also make use of engagement activities for their investments.

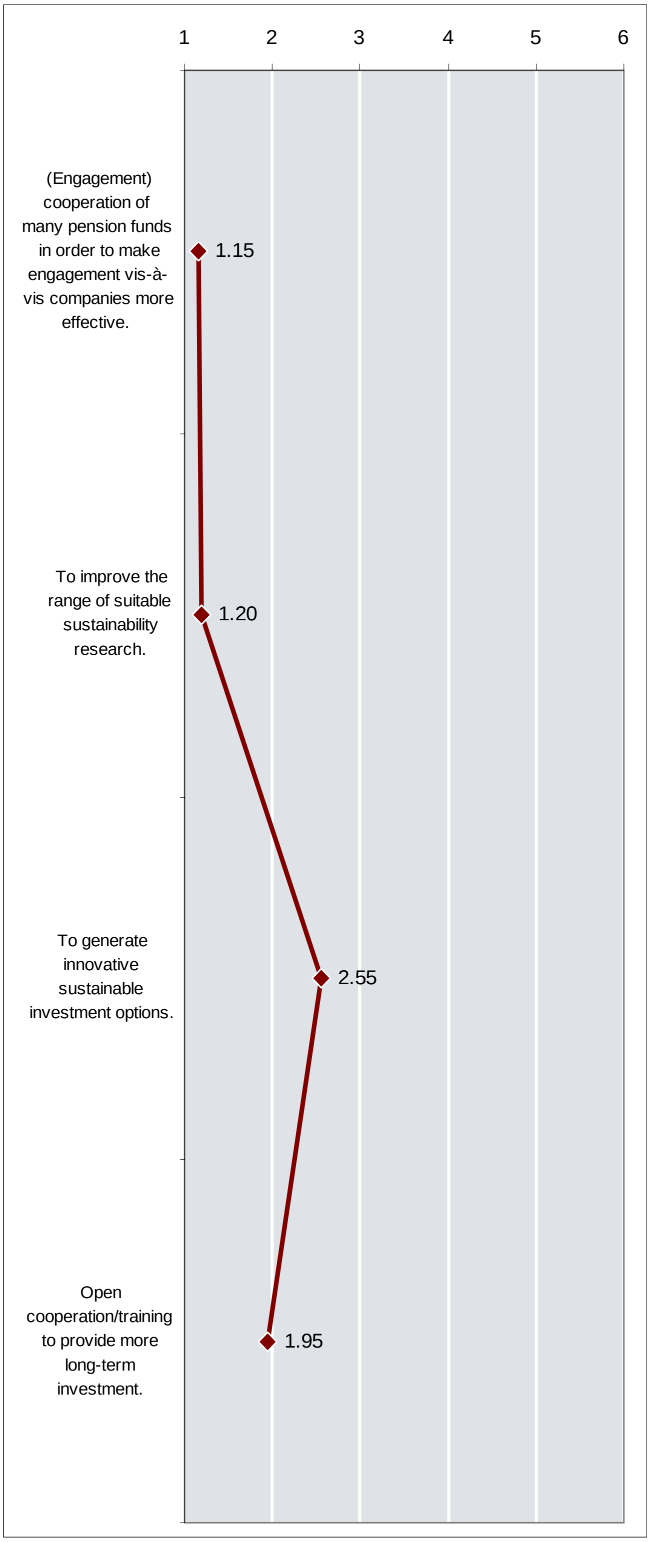
Cooperations between several or many pension funds or also other long-term institutional investors are deemed to be very suitable for shaping the engagement more effectively and thus also increasing the performance. Nine out of ten pension funds exhibited the value 1 here.

A fine example is the successful work of Ethos, the Swiss foundation for sustainable development. It was set up in 1997 by two Geneva-based pension funds and currently incorporates 79 institutional investors. The purpose of the foundation is to promote the consideration of principles for sustainable development and best practice rules in the area of Corporate Governance in investment activities. A more recent example is the "Ethical Council" that was set up by the Swedish pension funds AP1, AP2, AP3 and AP4. Hermes, the fund manager of the British Telecom Pension Scheme (BTPS), is also offering through "Equity Ownership Services (EOS)" engagement services in the direction of corporate governance and sustainable investments for BTPS and other clients with a total of GBP 45 billion (57.9 billion EUR) in assets.

To increase the offer of sustainability research (cf. Section 4), cooperative engagement is also seen as very worthwhile. A fine example of this is the "Enhanced Analytics Initiative" for improved, extra-financial and long-term research that is currently being supported by asset managers with 1.8 trillion EUR in assets.[27]

Cooperations in order to generate innovative, sustainable investment options are rated on average as suitable to a good to satisfactory extent – with a range in the replies from 1 to 5. Competitive reasons can in part be a hindrance to a cooperation. Most recently, CleanTech fund investments from ABP and PGGM can be listed as examples of successful cooperation. Roderick Munsters, Chief Investment Officer of ABP, explained in 2007 to IPE that they were speaking with large, European investors and pension funds in order to generate more innovative "socially-responsible investment opportunities".

Still Question 11: Please assess the following forms of engagement with regard to their suitability to contribute to a long-term, sustainable risk-adjusted performance.¨
(2) Cooperation of many pension funds
1 = Highly suitable 6 = Not suitable



[27] Cf. http://www.enhancedanalytics.com/.

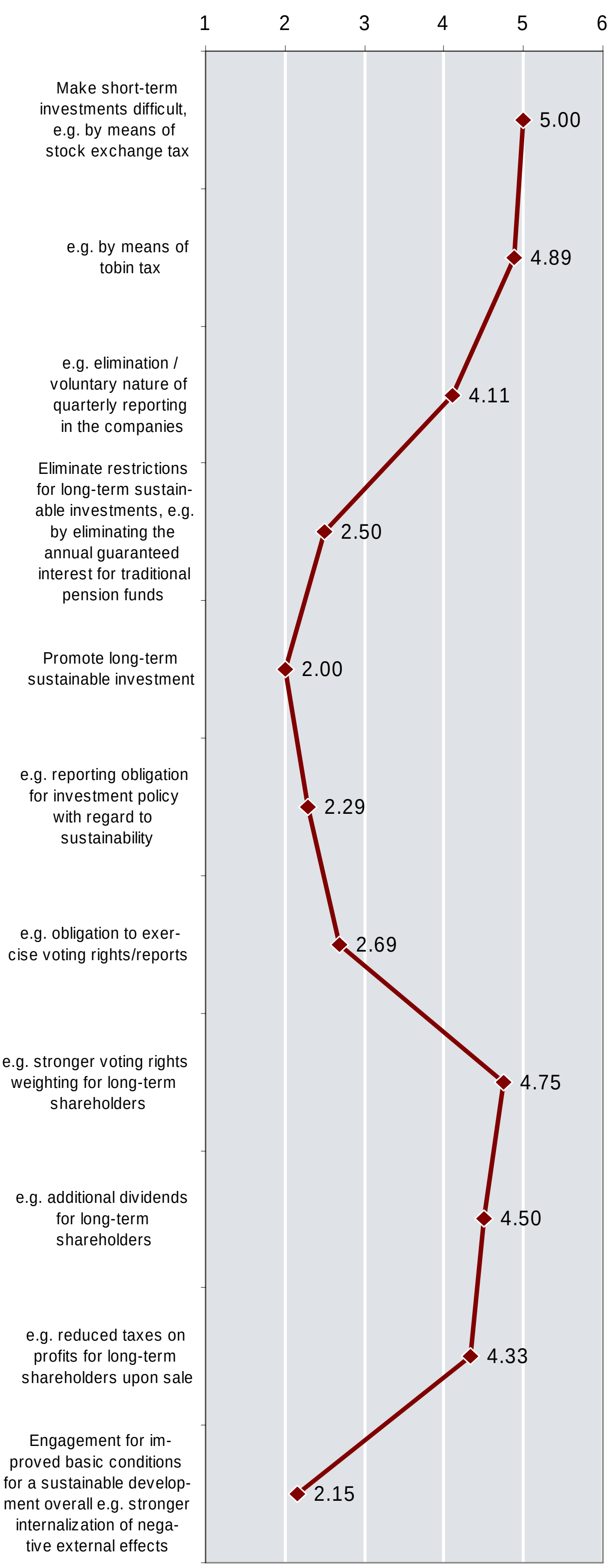
Ultimately, those surveyed see open cooperation and training of pension funds as a generally good opportunity for cooperation in order to find out more about long-term, sustainable investment strategies. As only one example in the sustainability area the "Institutional Investors Group on Climate Change" (IIGCC) offers seminars for trustees.

(3) The (legal) frameworks for long-term sustainable investments can be viewed as deficient in many aspects. Insofar as a conscious influencing of the legal frameworks and/or self-regulation is of strategic importance for the performance of financial services providers in general and pension funds operating in the long-term specifically[28]. Large pension funds and pooled, smaller and medium-sized pension funds have a substantial influence with regard to the special frameworks for pension investments and the general frameworks of the economy overall. This can be used best in engagement cooperations. In this section, it was examined which changes in the (legal) frameworks appear most suitable to contribute to a long-term, sustainable, risk-adjusted performance.

(Legal) frameworks that make short-term investment difficult, e.g. a "stock exchange tax" such as in the United Kingdom or a "Tobin tax" on currency transactions are considered by the pension fund managers to be practically unsuitable. On the one hand, these measures are deemed not to be effective enough, on the other hand the markets themselves should be made more efficient and not distorted by new restrictions. The elimination of the companies' obligation to report on a quarterly basis and/or the voluntary nature thereof is only deemed suitable by three out of ten of those interviewed.

Eliminating restrictions or barriers for long-term, sustainable investments, [e.g. an annual guaranteed interest rate for traditional insurance-linked pension funds ("Pensionskassen") in Germany or Switzerland], is seen by the international pension funds experts as being highly suitable. In Germany itself, it is sometimes argued that the new equity-oriented pension funds that are not encumbered with a guaranteed interest rate and that were only introduced in 2002 could prevail in the long-term over traditional pension funds due to a higher performance. As, however, the larger volumes are still invested / become invested in traditional pension funds, this would suggest a demand for an elimination or at least a reduction of the annual guaranteed interest rate. A board member of the largest traditional German

Still Question 11: Please rate the following forms of engagement with regard to their suitability for contributing to a long-term, sustainable risk-adjusted performance.
(3) Cooperation of many pension funds in order to improve the legal frameworks or self-regulation for long-term sustainable pension investments
1 = Highly suitable 6 = Not suitable



[28] Cf. Hesse, A.: Sustainable Development Management – Policy- and Business Area-Strategies for Banks, Münster 2007, PP. 151-161.

pension fund BVV (approx. EUR 19 billion), Rainer Jakubowski, also criticised the regulation of these pension funds. It reduces the long-term performance and makes diversification difficult. Only through too conservative investments (approx. 80% fixed-interest and only 15% shares and 5% alternatives such as hedge funds or private equity) can the guaranteed interest be generated every year and the stress test of the BaFin (German Federal Financial Supervisory Authority) be mastered. This is leading to substantially lower performance compared with the international pension providers[29] – and to the fact that asset classes corresponding to the long-term horizon such as share investments can currently be included in the portfolio only to a very small extent. The Association of German Banks also similarly demanded in March 2008 that the return orientation be strengthened and the investment regulations of company pensions be standardised.[30] Excursus: Instead, the German government coalition published specific plans in mid-April 2008 for the "investive wage", the fiscal promotion of employee participation in his or her own company and special cross-industry funds eligible for assistance. In addition to high individual risks with company bankruptcies, these options result overall in a further increase rather than reduction in the complexity in company pensions. Due to cannibalisation effects, their existing implementation options are threatened by a substantial setback if the plans are realised, not least since then the employee participation in capital would be more strongly assisted than the existing forms of company pensions[31].

All other engagement goals suggested with regard to more favourable (legal) frameworks aim to promote long-term, sustainable investments. As a basic principle, this goal is generally rated by the pension fund experts as well suited (2.0) to contribute to a long-term, sustainable, risk-adjusted performance. Out of the five specific proposals, however, only two were deemed to be suitable; three were seen as barely suitable.

The pension fund experts see a reporting obligation for the investment policy as best suited with regard to the sustainability for pension funds, as has been introduced first in the United Kingdom and then also in Germany and other countries and was frequently a initial, important impulse for further steps. Obligations that already exist in part at the international level regarding the exercising of voting rights and corresponding public reporting are also seen by those surveyed, with the exception of one person, as being suitable. However, the cost-benefits ration would have to be taken into account, (e.g. through low-cost, web-based solutions). Such published information is still called up very rarely. The information content should cover at least controversial items and agreements at shareholders' meetings.

The pension fund managers view a stronger weighting of votes for long-term shareholders (4.75), as an additional dividend for long-term shareholders (4.50) and lower taxes on share price gains for long-term shareholders when they sell (4.33) as scarcely suitable. However, there are major deviations in the answers. In all cases, the measures were also rated as suitable by several managers. More voting rights for long-term shareholders could lead to majority conditions that are difficult to forecast and tend to be seen as undemocratic and not suitable for a "Good Corporate Governance". Furthermore, tough, industrial interlocking participation could be one consequence that would frequently not be rated as efficient in the long term. Similar reservations were expressed with regard to the additional dividend for long-term shareholders. A concerted effort by ABP and PGGM for a "loyalty dividend" was already rejected once by the majority of the corresponding shareholders' meeting. On the other hand, in another survey two thirds of the "trustees" saw (statutory) regulations to encourage the making of share investments for the long term as desirable: 53% could imagine a stronger weighting of voting rights, 72% higher dividends for long-term shareholders (after e.g. at least 5 years holding term) and 78% lower profit taxes when shares are sold[32].

Excursus: The fiscal exemption which is still valid in Germany for private individuals with regard to share price gains after a speculation period of 12 months will expire at the beginning of 2009 with the new flat-rate withholding rate ("Abgeltungssteuer"). This is a withholding tax on capital income with a flat-rate tax rate of between 25% and a maximum of 28%. It can be recorded here that this change in the tax in Germany will lead to less long-term orientation and less systematic development of private (pension) investments and to possibly falling rather than increasing share quotas. From these important perspectives, therefore, the flat-rate withholding tax should be rejected.

[29] Cf. Wagner, J.: Pensionskassen head criticises BaFin regulation, in: IPE.com, 22.3.2007.
[30] Cf. Federal Banking Association: Securing your living standard in retirement – Plea for funded pensions, Berlin 2008. PP. 38-40.
[31] Cf. Afhüppe, S., Creutzburg, D.: Business attacks investive wage plans, in: Handelsblatt, 17.4.2008, P. 5.
[32] Cf. Gribben, C., Faruk, A., Just Pensions (Hrsg.): Will UK Pension Funds become more responsible? - A Survey of Trustees, January 2004 edition, London 2004, P. 20.

The point “Engagement for improved (legal) frameworks for a sustainable development overall, e.g. stronger internationalisation of negative, external effects” brought a very interesting result. The pension fund experts see this as highly suitable (2.15). The pension funds influence on the financial markets – also as pioneers – will therefore campaign more in the future for generally more sustainable frameworks in politics and self-regulation, which should help this process, which is necessary for sustainable development, become more dynamic. The substantiation is also interesting: As the pension funds surveyed already have a large proportion of long-term sustainable investments in their portfolios, these investee companies will benefit in their performance to a disproportionate extent through more sustainable (legal) frameworks. Negative external effects of carbon dioxide emissions are now internalized with a price, (e.g. through the emissions trading in Europe), and this should also be continued for other environmental products in a similar manner. The pricing would also make sustainable research simpler and more important materially. In Policy Groups of the IIGCC or “The Climate Group”, institutional investors such as the pension funds had already campaigned intensively and successfully for sustainable (legal) frameworks. This process will increase further in dynamics. The following quote on this matter is found in the “Hermes Principles”.

”Externalisation of costs
Principle 10 Companies should support voluntary and statutory measures which minimise the externalisation of costs to the detriment of society at large.
Business, of course, has to work in a competitive environment. This can create the conditions where there is a high incentive for businesses to ‘externalise’ costs – i.e. to make a profit for the company while high costs are incurred by society at large. Since Hermes opposes such activity we ask companies to welcome those frameworks, voluntary where possible, statutory where necessary, which encourage businesses not to externalise costs. This is not to encourage regulation per se. Of course it is important that where regulation exists it recognises the need to allow the greatest possible flexibility which will encourage positive entrepreneurship. However, most investors are widely diversified; it makes little sense for them to support activity by one company which is damaging to overall economic activity. The ultimate beneficiaries of most investment activity include the greater part of the adult population who depend on private pensions and life insurance. It makes little sense for pension funds to support commercial activity which creates an equal or greater cost to society by robbing Peter to pay Paul. Where companies are aware that such conditions exist, it is appropriate for them to support measures to align shareholder interests with those of society at large.” [33]

The proactive attitude of the pension fund managers analysed here regarding the “engagement for improved (legal) frameworks for a sustainable development overall” is also of particular interest because sustainability policy and the investment world had only little contact in the past. Winston Hickox, a Portfolio Manager of the Environmental Initiative of the influential Californian pension fund CalPERS, still joked in 2006 on this topic: *“In fact, I kiddingly offer the thought ’God forbid these groups find one another’.”* [34]

[33] Hermes: The Hermes Principles, London 2006, P. 18.
[34] Hickox, W. H.: Incentives Promoting Patience in Investment, in: The Sustainability Forum Zürich, From Short- to Long-Term: Who Cares?, Zürich 2006, P. 15.

7 Fiduciary duty and sustainable investments

7.1 Information basics on fiduciary duty

The core of fiduciary duty in pension provision is in particular that the trustees make all investment decisions on a risk- and return-oriented basis ("maximisation of performance"), carefully, sensibly and with foresight in the interest of the pension provisions of the beneficiaries, unless other purposes are defined. Primary fiduciaries in the narrower sense are the Board of Trustees ("common law" in USA/UK) and or the "Pension Scheme Management Committee" ("civil law", e.g. in continental Europe). Other participants with similar obligations to those of the primary fiduciaries are asset managers, insurance managers and pension consultants[35]. A distinction needs to be drawn between the term "Fiduciary Duty" and the issue of "Fiduciary Management" in which the decision is taken in particular whether the asset management should be conducted in-house or externally.

For a long time – and with poorly informed market participants this is still the case today – it was disputed whether the consideration of sustainability criteria – often referred to more broadly as "Environmental, Social and Governance" (ESG) factors – breaches "fiduciary duty". Since a study by the leading law firm Freshfields, which attracted a lot of attention, this question has fundamentally been clarified, at least for the nine countries including Germany, France, UK and the USA who were examined as part of this study. Freshfields summarised as follows:
"Conventional investment analysis focuses on value, in the sense of financial performance. As we note above, the links between ESG factors and financial performance are increasingly being recognised. On that basis, integrating ESG considerations into an investment analysis so as to more reliably predict financial performance is clearly permissible and is arguably required in all jurisdictions.
It is also arguable that ESG considerations must be integrated into an investment decision where a consensus (express or in certain circumstances implied) amongst the beneficiaries mandates a particular investment strategy and may be integrated into an investment decision where a decision-maker is required to decide between a number of value-neutral alternatives." [36]

The consideration of sustainability criteria is therefore not a breach of "fiduciary duty". On the contrary, its consideration is permitted and can also be seen as necessary due to the increasing influence on performance of sustainability criteria as part of the fiduciary duty.

Before pension fund, insurance or asset managers formulate corresponding objectives, strategies or measures for the integration of sustainability criteria, fundamental information about the concept of sustainable development or sustainable investments should first be considered within the framework of the information basics. The following questions 12 - 16, are devoted to these basics. Only in question 17 are conclusions drawn from this for the target system of the pension funds.

[35] Regarding in part the very different definition of "Fiduciary Duty" in individual countries cf. Freshfields Bruckhaus Deringer: A legal framework for the integration of environmental, social and governance issues into institutional investment, produced for the Asset Management Working Group of the UNEP Finance Initiative, October 2005.
[36] Ibid., P. 13.

The fundamental definition for a sustainable development originates from the Brundtland Commission and is as follows:

"Sustainable Development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- *the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and*
- *the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs."* [37]

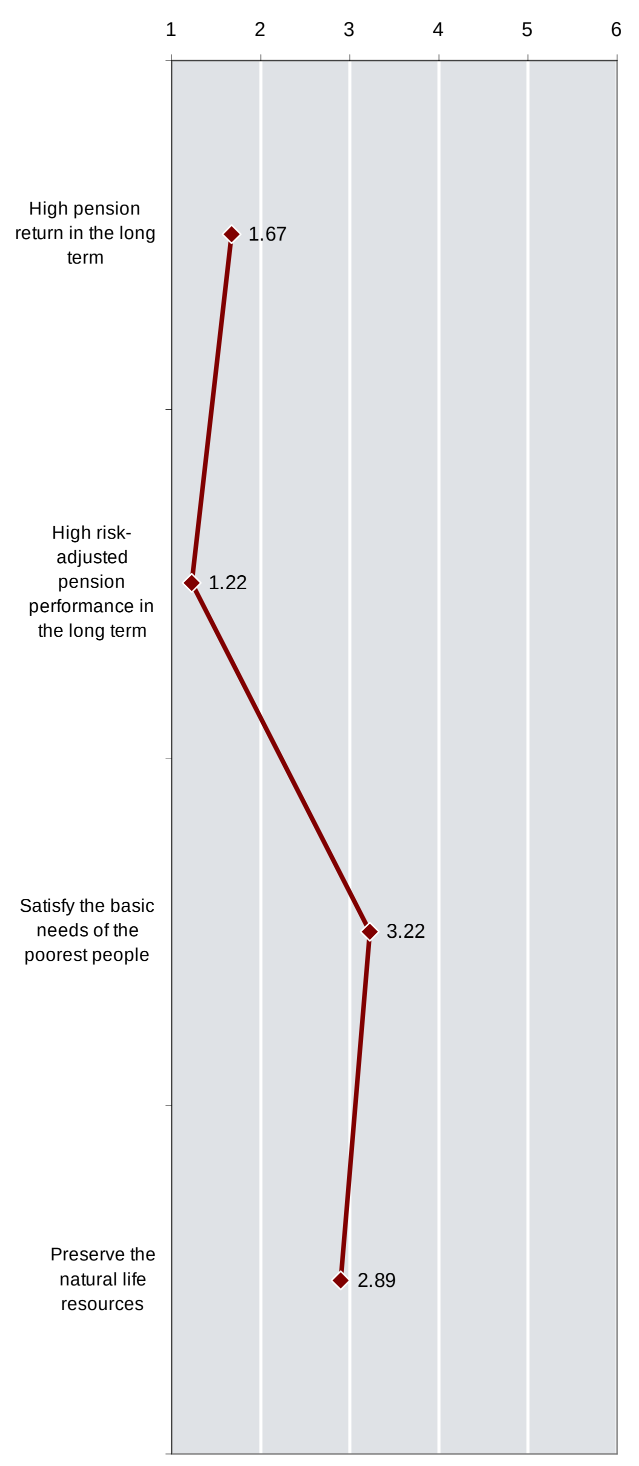
Question 12 therefore questioned the attitudes of the pension fund managers as to how important are the two main goals of the Brundtland Commission "combating of poverty" and "environmental protection" for the beneficiaries of the fund. In addition, the significance of the classical goals "long-term high pension provision return" and "long-term high, risk-adjusted pension provision performance" was determined.

As expected, the two classical goals are assessed as very important, whereby the risk-adjusted performance is deemed to be particularly important. The two core sustainability topics "poverty" and "environmental protection", however, are seen at least on average as relatively important. The variances of the answers however show the full spectrum of the rating possibilities from "very important" to "unimportant". One manager who assessed all four points as "very important" said he had "consciously ignored the apparent conflict in objectives". Today and in the future, across generations, as the sustainability concept and pension funds are determined, all four points would have to be reached equally as they are strongly dependent on one another, in particular in the long term. Another manager who assessed the two sustainability criteria as "not important", thought the four points should not contradict one another in the long term, but that the fund was focusing on a high return and performance respectively for the beneficiaries and was trying at the same time to influence the companies, markets and legal frameworks in such a way that in the future a high performance could increasingly be put on an equal footing with sustainability.

Question 12: How important is it for your pension fund that your beneficiaries:

- generate high pension return in the long-term?
- generate high risk-adjusted pension performance in the long term?
- can spend their retirement in a world in which the basic needs of the world's poorest people are met?
- can spend their retirement in a world in which the natural environment is capable of meeting the present and future needs of all people?

1 = very important 6 = not important



[37] World Commission on Environment and Development: Our Common Future, Oxford 1987, P. 43.

That sustainability has increasingly greater, financial implications and thus needs to be considered from the performance view had been shown in the Freshfields report. Ethos has a special position, the founding purpose of which lay in the fact that the cooperating pension funds wanted to carry out sustainable investments on a pro-rata basis – without the primate of the performance, but as equally weighted goals.

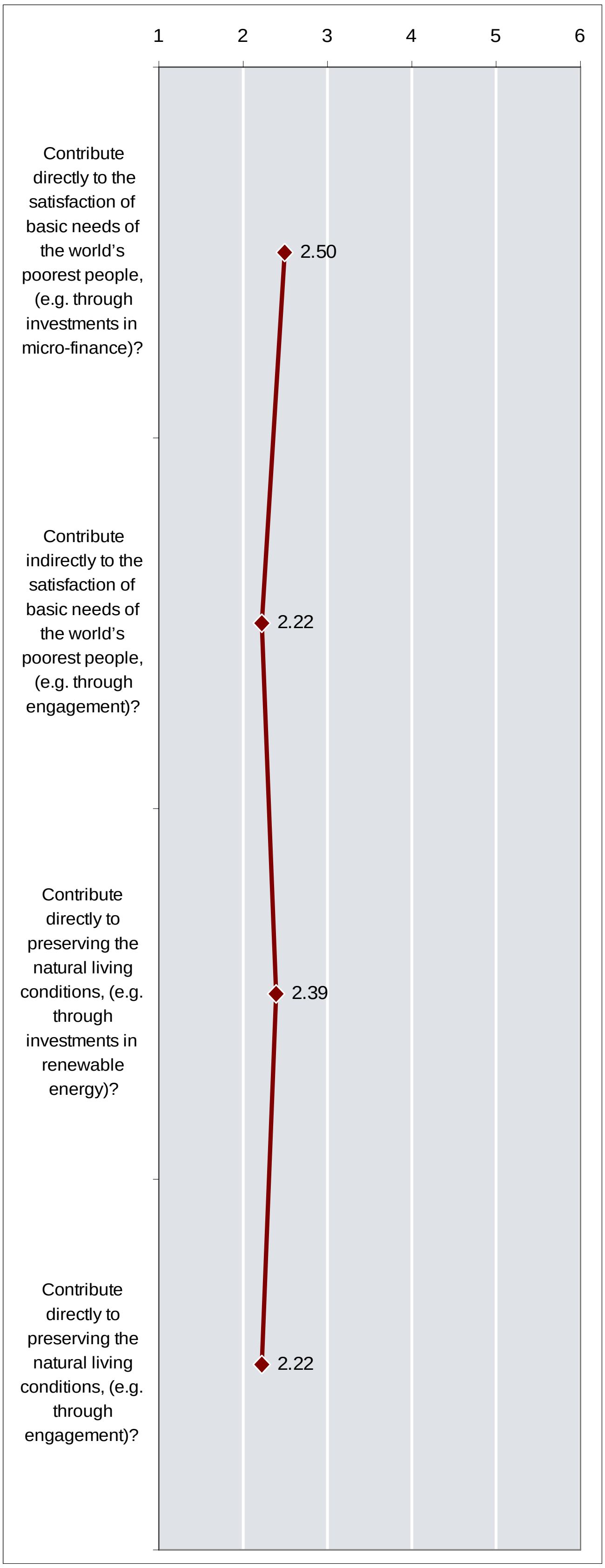
The slightly more important position of “protection of the natural resources” is substantiated in that the beneficiaries tend to think of their own pensioner existence, their children and grandchildren and their nearby environment. Absolute poverty is predominantly continents away, even if it could lead to a destabilisation of the entire world. And without poverty reduction no protection of the natural resources would be possible globally.

Pension funds are high-volume, influential players on the capital markets, (e.g. all British pension funds hold around 25% of the British equity capital). The importance of funded pensions continues to increase in the industrial countries. Furthermore, pension funds are often pioneers, with their innovative (sustainable) styles of investment having a strong influence on investee companies, which are subsequently adapted by other players on the capital market many times over. A good example of the penetration of the overall concept of sustainability among players on the financial markets is the UN "Principles for Responsible Investments"[38] (UN PRI): One year after the establishment of the initiative, it was already supported and signed in 2007 by more than 190 signatories from the capital market with more than 9 trillion USD in assets. While almost exclusively, representatives of pension funds, (i.e. asset owners) sit on the PRI Board, which co-founded the initiative and drives it forward, there are an increasing number of asset managers among the signatories for whom the initiative is explicitly open.

Against this background, the question was posed as to how strongly the pension fund managers themselves estimate the direct or indirect influence of all pension funds in the industrial countries in contributing to solving the core challenges of a sustainable development: "combating poverty" and "environmental protection". The question was under the premise that all pension funds in the industrial countries would be aligned in a similar way to sustainable investment strategies, like the pension funds surveyed with their pioneer role.

In all four points, the pension fund experts see – without any great deviations in the answers – a high influence in the long term, whereby the indirect influence, (e.g. by means of different forms of engagement (cf. Section 6) is rated slightly higher than the (more) direct influence (e.g. via investments in micro-finance institutions or renewable energies). Direct investments were made particularly when the return-risk ratio was the right one. Particularly with the first point of direct fulfilment of the basic needs of the poorest people through investments, there are problems as a result in part of high country risks, (e.g. in Africa). On the other hand, long-term infrastructure investments were also increasingly being made, in addition to micro-finance investments, (e.g. in the water and sanitation infrastructure in emerging and developing countries). A challenge over which the pension funds have neither a direct or indirect influence is the problem of bad governance in some developing countries.

Question 13: How strong do you estimate the long-term influence of all pension funds in the industrial countries?
1 = very high 6 = no influence



[38] Cf. http://www.unpri.org/.

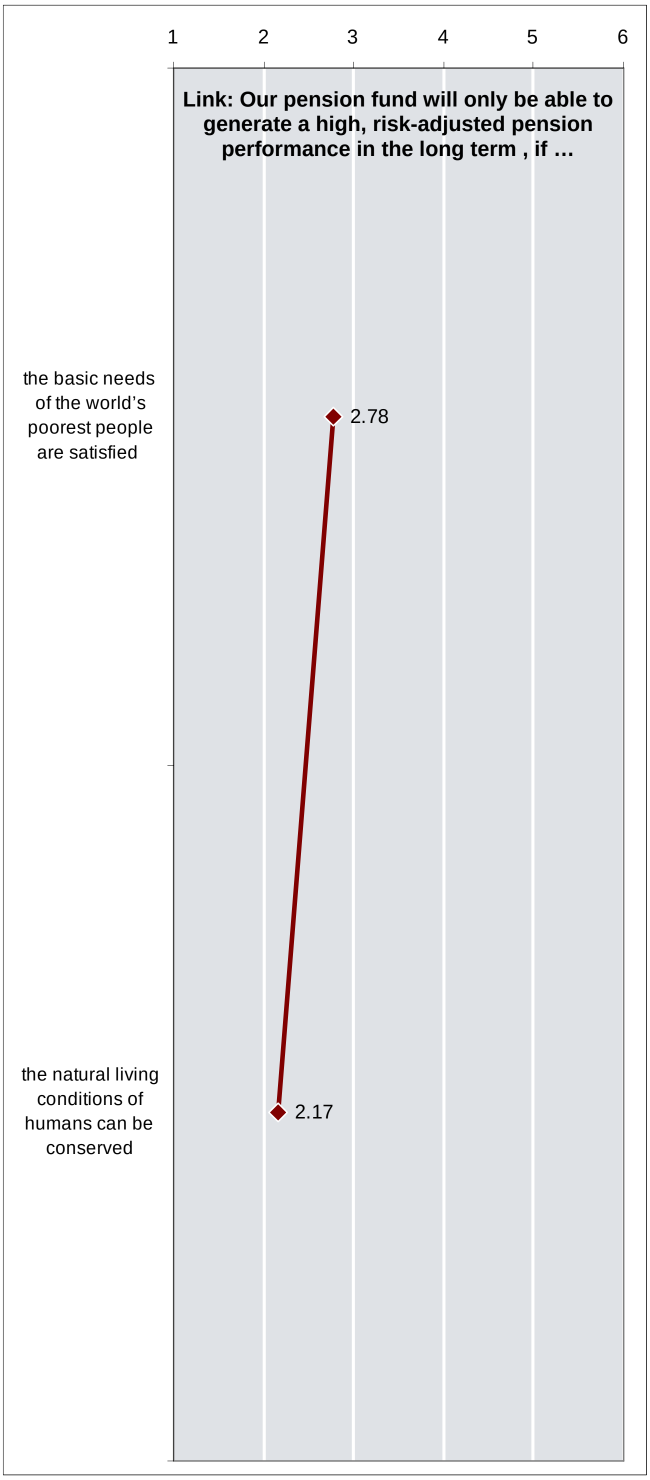
The link between a long-term high, risk-adjusted pension performance and the solution to the two core challenges of a sustainable development "combating of poverty" and "conservation of natural living conditions of humans" was asked directly in Question 14. The interviewees see a close link between environmental protection (2.17), (e.g. in the combating of climate change), and a relatively high link with regard to the satisfaction of the basic requirements of the poorest (2.78).

The pension fund experts, however, had also established this link in Question 12, although this was not directly asked there. Although the verbal explanations to Question 14 in the interviews were thus small, on the other hand, the preliminary commenting also shows the high, long-term significance of the performance link.

With regard to absolute poverty, it was also commented that this leads to performance risks, for example through increased migration and geopolitical risks. On the other hand, positive performance effects could also result through the coverage of basic needs, since satisfying these enormous needs also offers great growth opportunities, for instance, for investee companies, (e.g. by means of "Bottom of the Pyramid" strategies or direct infrastructure investments of the pension funds).

If it is not possible to conserve the natural resources in this century, it will follow systemically that it will no longer be possible to generate a high pension performance or it will not be possible to spend the pension in a manner worth living.

Question 14: How strong is the correlation between the long-term high risk-adjusted pension performance of your pension fund, the satisfaction of basic requirements of the poorest people and the conservation of natural living conditions of humans?
1 = Very strong correlation 6 = No correlation



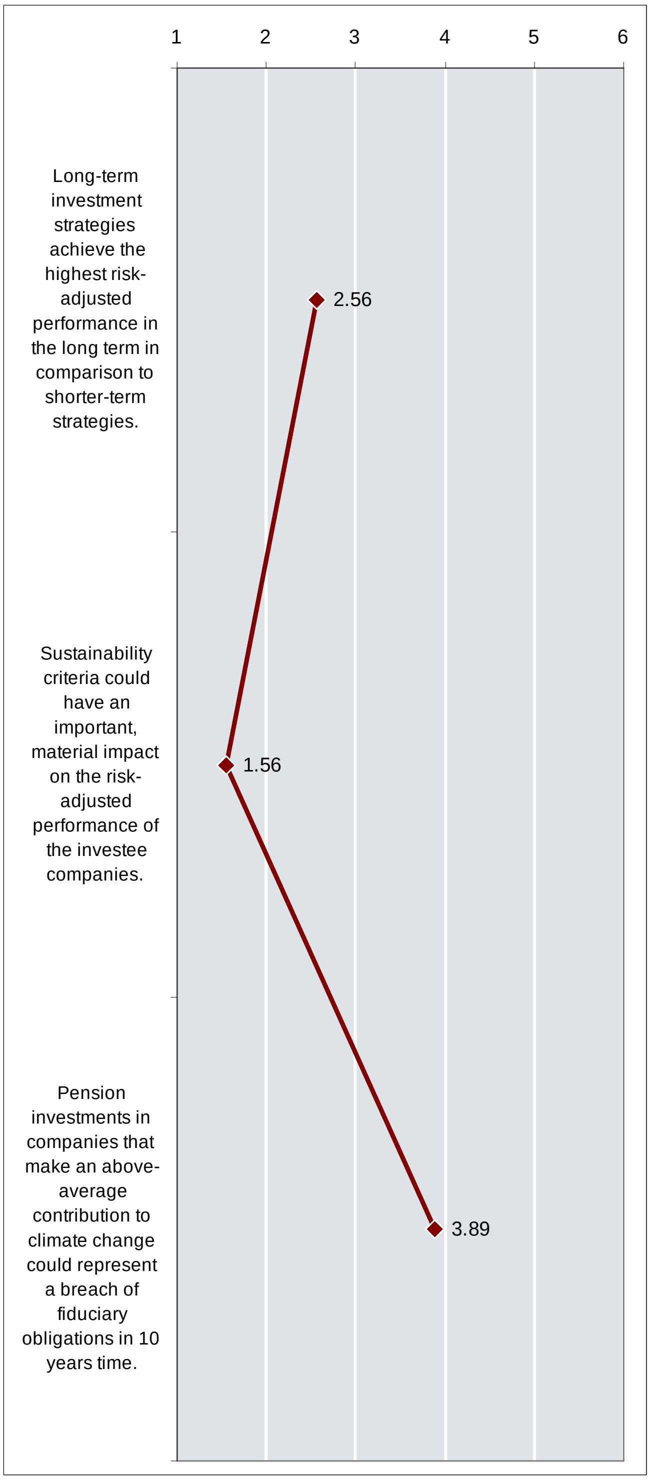
Legendary successful investors such as Carret, Kostolanyi or Bill Miller used long-term investment strategies. They rejected short-term speculation. However, Keynes already described the difficult position of the long-term investor:

"It is the long term investor, he who most promotes the public interest, who will in practice come in for most criticism, wherever investment funds are managed by committees or boards or banks. For it is in the essence of his behaviour that he should be eccentric, unconventional and rash in the eyes of average opinion. If he is successful, that will only confirm the general belief in his rashness; and if in the short run he is unsuccessful, which is very likely, he will not receive much mercy. Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally." [39]

The managers surveyed from the pension funds, even long-term asset owners themselves, agreed with the thesis "Long-term investment strategies achieve the highest risk-adjusted performance in the long term in comparison to shorter-term strategies" with a value of 2.56. As a basic principle, the thesis is correct from the viewpoint of the capital market theory, however, reference was made to the practical diversification of the investment strategies (cf. Question 9 in Section 4.6). Currently, a high performance is being generated with short-term investment strategies too, whether this can also be duplicated in the long term, remains open. Overall, even more long-term strategies could be used for the pension funds and contribute to long-term performance.

A style of investment with very good chances of revenues in the long term is the integration of sustainability criteria in the long-term investment process. The thesis "Sustainability criteria could have an important, material impact on the risk-adjusted performance of the investee companies" met with a high level of agreement among the pension fund experts, with a figure of 1.56. Through the integration of sustainability criteria, negative effects on investee companies in the portfolio can be reduced and positive effects reinforced.

Question 15: Would you agree with the following theses?
1 = Full acceptance 6 = No acceptance



[39] Keynes, J. M.: The General Theory of Employment, Interest and Money, zitiert nach: Myners, P., Institutional Investment in the United Kingdom: A Review, London 2001, P. II.

The Board and Managing Director of Investment of the pension fund PGGM once forecasted on this: *"Ultimately, all institutional investors will invest in a sustainable manner. In the long term, the additional return that can be generated today will disappear. That is the actual goal. Those who get on board first will collect the biggest returns."* [40]

The third thesis of this set of questions goes back to the law firm, Scott & Scott[41]. The modified thesis "Pension investments in companies that make an above-average contribution to climate change could represent a breach of fiduciary obligations in 10 years time" generated neither agreement nor disagreement on average (3.89). There was a broad range of responses: two of those surveyed agreed with this thesis (2), two rejected it completely (6). It is definitely impossible to predict future development. The probability for a corresponding development in the area of the internationally diverse regulations of the "fiduciary duty" within the next ten years could be indicated out of the answers, at a ratio of around 40:60.

It is interesting that particularly in the assessment of the impact of climate change on the investment portfolio of the pension funds, a whole variety of processes are ongoing. For instance, ABP launched an internal research project on the opportunities and risks of climate change for the investments. In 2008, FRR will be examining investment strategies in the area of climate change, including CleanTech investments. And USS published a corresponding publication together with other investors.[42]

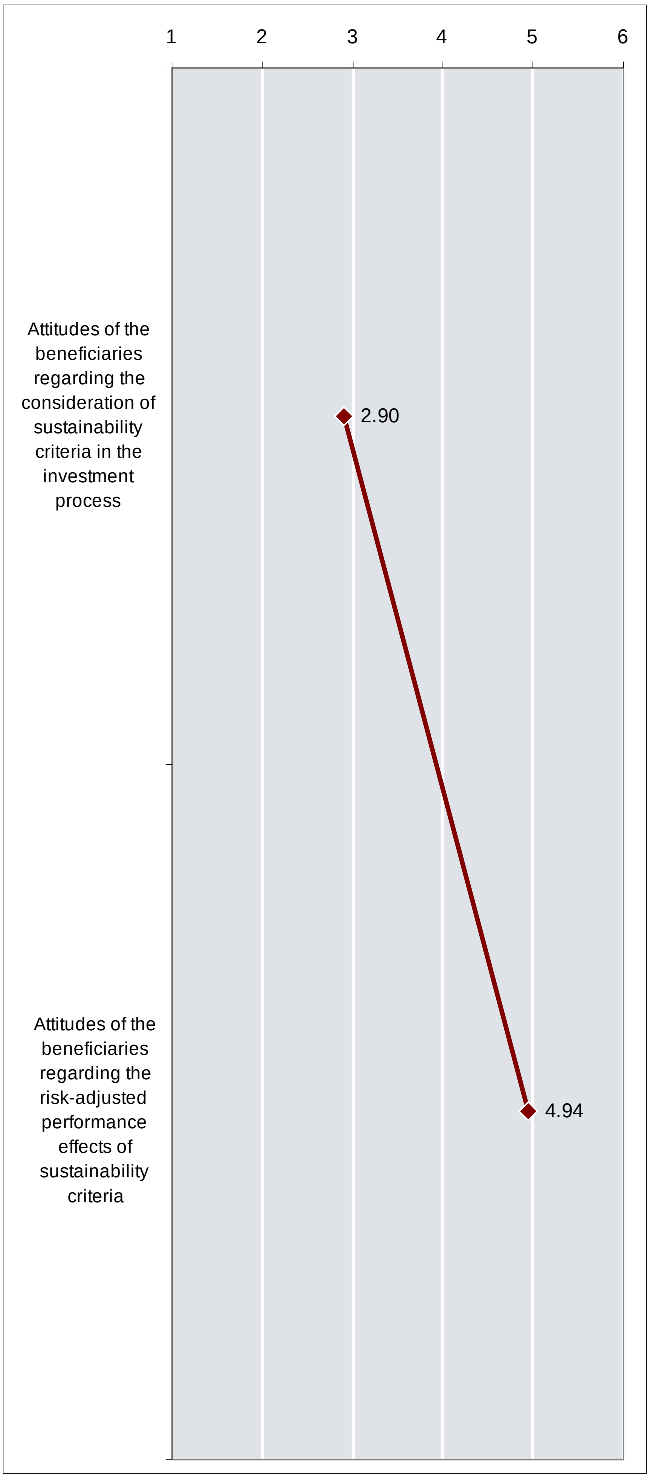
[40] Munsters, R., quoted according to Terasa, O., pension funds and sustainable investment, scoris working paper, Hanover, September 2003, P. 11.
[41] Original wording: "An Open Question For 21st Century Fiduciaries: Is it a breach of fiduciary duty for a trustee or pension manager to allow scheme assets to be invested in non-sustainable companies (e.g. companies causing climate risk)?" Scott, D. R.: Fiduciary Duties: Evolving Into The 21st Century, Presentation slides, Zurich 2006, P. 20.
[42] Cf. Henderson Global Investors, USS, Railpen Investments, Insight Investment: Managing the unavoidable: Understanding the investment implications of adapting to climate change, London 2008.

Within the framework of the fundamental information on "fiduciary duty" it appears necessary to be informed about the attitudes of the beneficiaries with regard to their pension investments. The Freshfields study concluded, among other things, that sustainability criteria must also be taken into account particularly when there is explicit or in certain cases tacit approval from the beneficiaries in this regard[43]. Only half of the leading pension funds surveyed stated that the attitudes of their beneficiaries are known fully (1) or well (2). It is astonishing that only a few pension funds have surveyed their beneficiaries explicitly on this topic. The pension funds which have carried out representative surveys of at least 1% of their beneficiaries stated agreement quotas regarding sustainability criteria with the investments of 33%, 75%, 90% or 100%. In part, this was given the addendum that no lesser performance be generated, whereby there was to be no doubt in the long term in particular of this with modern, sustainable investment approaches for pensions. Other pension funds, however, only mentioned knowledge from generally accessible, representative surveys, such as the following:

In 2001, for 80% of the potential users of private pension investments in Germany it was personally (very) important that environmental aspects be taken into consideration in the investment of the funds. This figure increased to 86%, when the interviewees were asked more specifically about their compliance with environmental legislation, non-production of environmentally detrimental products and observance of human rights. It was even (very) important for 87% that there is a reporting obligation by the pension companies with regard to the environmental impact of the funds invested[44].

A special role is assumed by state-owned buffer pension funds such as FRR in France or AP1 to AP4 in Sweden. Here, representative surveys of the citizens would have to be conducted as these represent the beneficiaries in their entirety. In general, the Swedes, for instance, are seen as particularly proactive in issues of global, sustainable development.

Question 16: Do you know the attitudes of your beneficiaries regarding the consideration of sustainability criteria in the investment process and their risk-adjusted performance effects, e.g. from a survey among all beneficiaries?
1 = Fully aware 6 = Not aware at all



[44] Cf. Ecologic: Ecological aspects of private pensions - Evaluation of the results of a representative opinion survey by EMNID on behalf of the Federal Environment Ministry, Berlin 2001, P. 9 and P. 15-17.

The assessments of the financial know-how of the beneficiaries are considerably poorer. Nine out of ten funds did not trust the beneficiaries at all or barely (4 to 6) to estimate the risk-adjusted performance impact of sustainability criteria. To date, these have been explained to the beneficiaries in the communications from the fund much too infrequently. The education of the population in financial issues also tends to be too low in general. The state is also needed here to contribute to a (sustainable) financial education.

Overall, the bottom-up process could be considerably intensified with training and surveys of the beneficiaries.

7.2 *Integration of long-term orientation and sustainability in the target system of the pension funds*

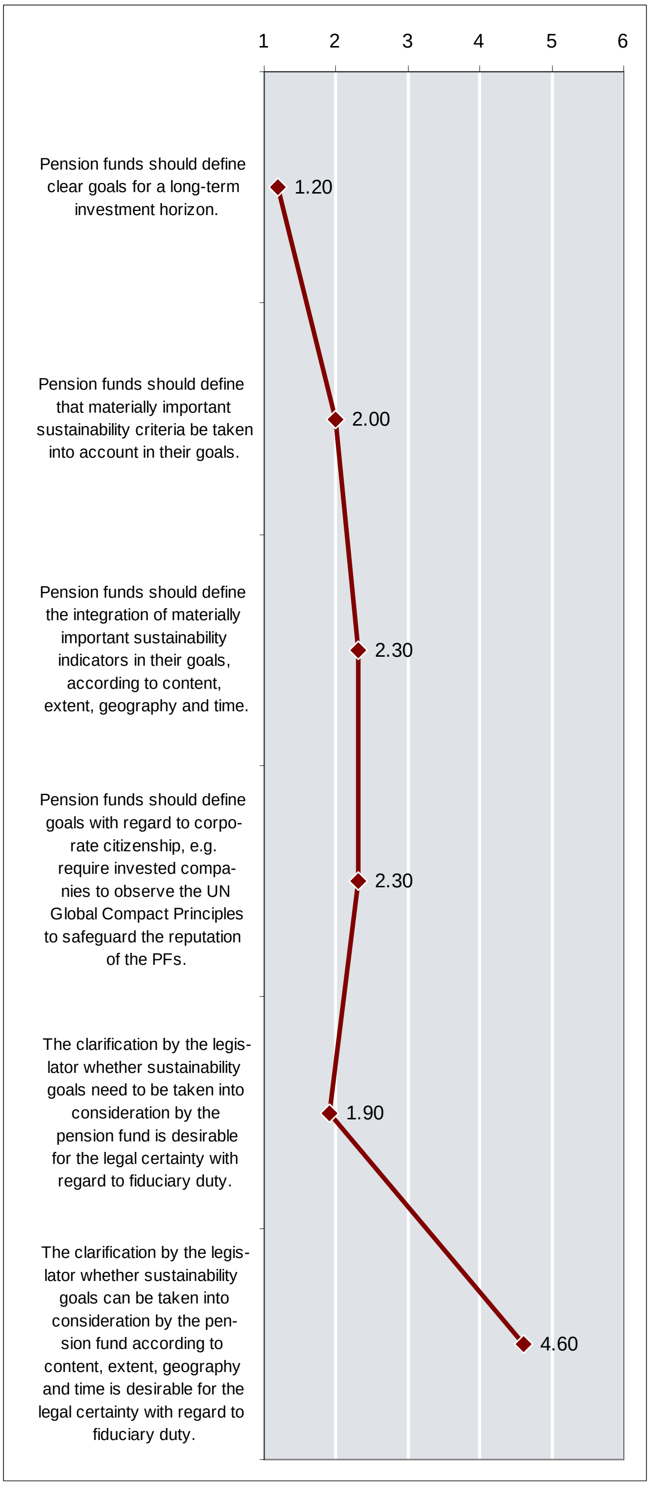
After the information basics regarding "fiduciary duty" have been determined accordingly, (cf. 7.1), these should be taken into account appropriately in the target system of the pension fund.

The uppermost target priority among most of the pension funds surveyed is the long-term generation of the maximum-possible return with an acceptable or minimal-possible risk. From the viewpoint of those surveyed, all pension funds should define clear objectives for a long-term investment horizon (1.2).

As the analysis of the information basics revealed that sustainability indicators can have a materially important impact on the risk-adjusted performance of the investments, in the opinion of the managers interviewed from the leading pension funds, their consideration should also be defined in the target system of the pension fund (2.0). The Sweden AP funds, for instance, are bound by law to take into account ethical and environmental issues without hindering the overriding goal of a high performance.

All pension fund experts agreed (2.3) that a further specification of such general goals should be done, for example with specified goals according to content (e.g. asset classes), extent (share of the portfolio), geographical reference (e.g., investments in industrial or emerging countries) and temporal reference (by when should the goal be reached). For example, MetallRente has defined for its pension fund the integration of sustainability criteria for the entire asset class "shares". And ERAFP has even set the goal of aiming for the full integration of sustainability criteria for shares and bonds and for all asset classes that may be invested in the future. The Board of ERAFP is aiming explicitly for a balance between financial, social and environmental impact. In its target system for shares and bond investments, Ethos has explicitly established that it will not only base its investments on materially important sustainability indicators but also on other important non-/extra-financial criteria "Intangibles", even if these are not (yet) of direct material importance.

Question 17: Would you agree with the following theses regarding objectives within the fiduciary duty of pension funds?
1 = Agree fully 6 = Totally disagree



With the same high weighting (2.3), those surveyed also believe that pension funds should define goals with regard to corporate citizenship of the investee companies. ABP has thus been demanding since March 2008 from the investee companies that they operate in compliance with the "Global Compact Principles"[45] regarding human and labour rights, environment and development as well as corruption. With it, the board of ABP intends to further emphasise the social values and responsibility of the pension fund and at the same time protect the reputation of the pension fund. Other funds also speak here of identity-forming factors for the pension fund and its beneficiaries and also include (e.g. the "OECD Guidelines for Multinational Enterprises")[46] and (inter-)national standards or codes of conduct in their target system. The founding of the "Ethical Council" of the Swedish AP funds 1 to 4 (cf. 6) also serves this target to a large extent. In most cases, it is also consequentially recorded in the objectives that the mandated asset managers have to take the compliance with the corresponding targets into consideration.

The second highest agreement level (1.9) was awarded to the following thesis: "A clarification by legislators whether sustainability targets have to be considered by the pension funds regarding their fiduciary duty is desirable for legal certainty". All countries in which there has not yet been any explicit clarification by the legislators or regulators should clarify this, so that all pension suppliers can have a secure, long-term, strong-performing and sustainable pension.

Whereas it should by all means be prescribed by the legislators or regulators that sustainability goals must be taken into account with the investments, the "how" and the specific design should continue to be decided by the pension fund. However, politics should design the general frameworks for the purpose of sustainable development – where necessary, supported by the pension funds [cf. 6 (3)] – in a more specifically advantageous manner; then the markets and investors themselves could help to shape the development in a more easily sustainable way.

Only one interviewee thought that if the regulation of the "how" was practicable and not too detailed, that it could also be helpful. Regarding the obligation in Belgium regarding a 10% share of explicitly sustainable investments in the portfolio, there was firstly a positive reaction that Belgian was thus demanding that the topic be dealt with more intensively. Secondly, however, this postponed the decision regarding the "whether" and "how" of a complete integration of sustainability criteria in the investment processes.

[45] Cf http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html.
[46] Cf. http://www.oecd.org/department/0,3355,en_2649_34889_1_1_1_1_1,00.html.

8 Asset classes

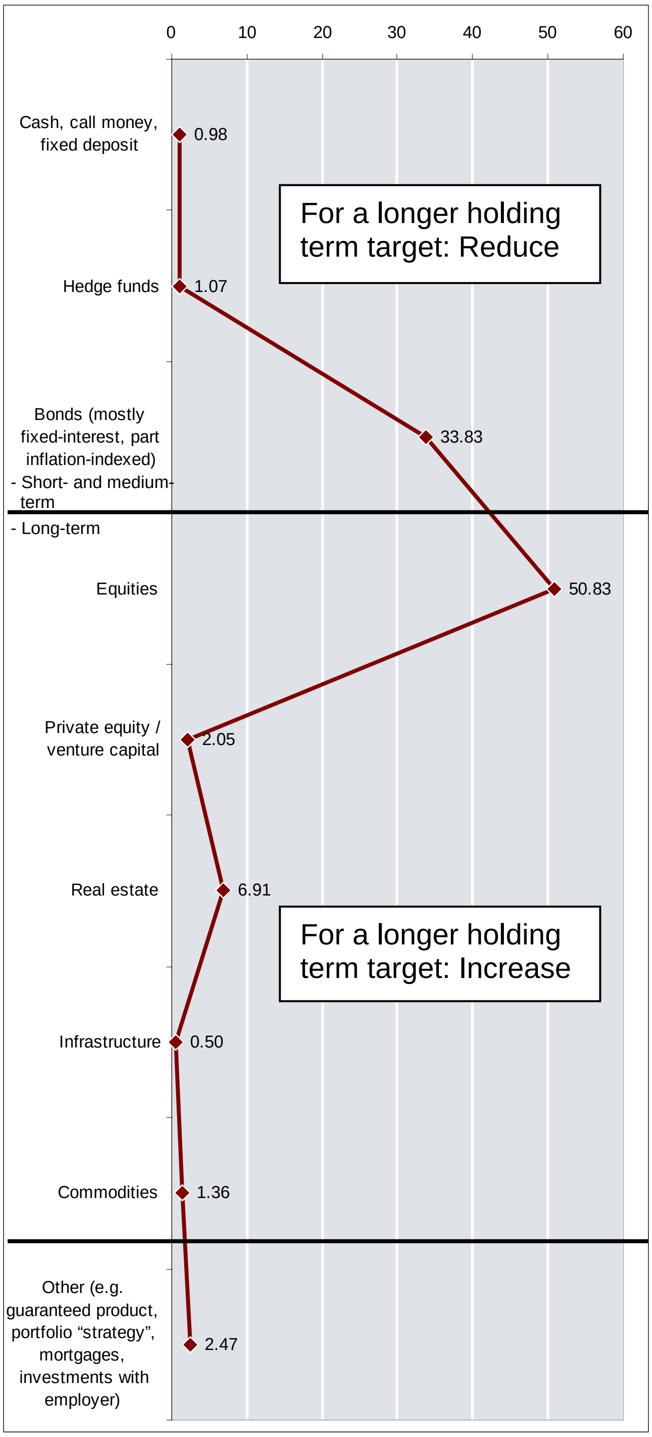
The chart opposite shows the average asset allocation of the ten pension funds surveyed, according to invested asset classes. The asset class “shares” has the largest weighting here and represents a good half of all assets under management (50.83%). The deviations are considerable and range from 14% to an 80% share in the portfolio. The share of bonds in the portfolio is an average of 33.83%. It shows the largest deviations with figures of 5% to 86%. Real estate represents the third-largest asset class, with 6.91%. Here, the spread is between 0% and 18%. These three asset classes represent more than 90% of the invested assets. However, a tendency towards more asset diversification can be discerned. The respectively determined maximum values of the other asset classes are 6.2% for liquid funds such as call money, 5% for hedge funds, 5% for private equity / venture capital, 2.5% for infrastructure and 5% for commodities.

While the average values correspond approximately to the expectations of long-term investors such as pension funds, the largest deviations particularly in the three most significant asset classes are astonishing. For against the backdrop of similarly positioned, long-term investment horizons, a larger convergence around the arithmetic means could have been expected. Legal or regulatory specifications and differences in the investment cultures can undoubtedly be seen as major obstacles on the path towards these average, long-term allocation values that are currently deemed to be “ideal” for the leading European pension funds.

As was determined in Section 4.6, the actual holding term of investments with the investment horizon available to the pension funds could in part be definitely longer. Against this back-ground, the pension fund managers were asked to what extent the asset allocation could possibly shift with an intended longer holding term.

Question 18: How is the asset allocation of your pension fund currently divided into asset classes, approximately?
(Graphic: arithmetic means, in %)

How could the asset allocation of your pension fund be switched in tendency in the future, if longer-term investment horizon (holding term) would be aimed for?



Based on the average asset allocation, with an intended longer holding term, the share of the following asset classes could possibly:

- Be reduced:
    - Liquid funds such as call money,
    - Short and medium-term bonds,
    - Hedge funds[47].
- Be increased:
    - Long-term bonds,
    - Shares,
    - Private equity / venture capital,
    - Real estate,
    - Infrastructure,
    - Commodities.

Furthermore, also with the existing asset allocation, even longer holding terms would be possible within the respective asset classes.

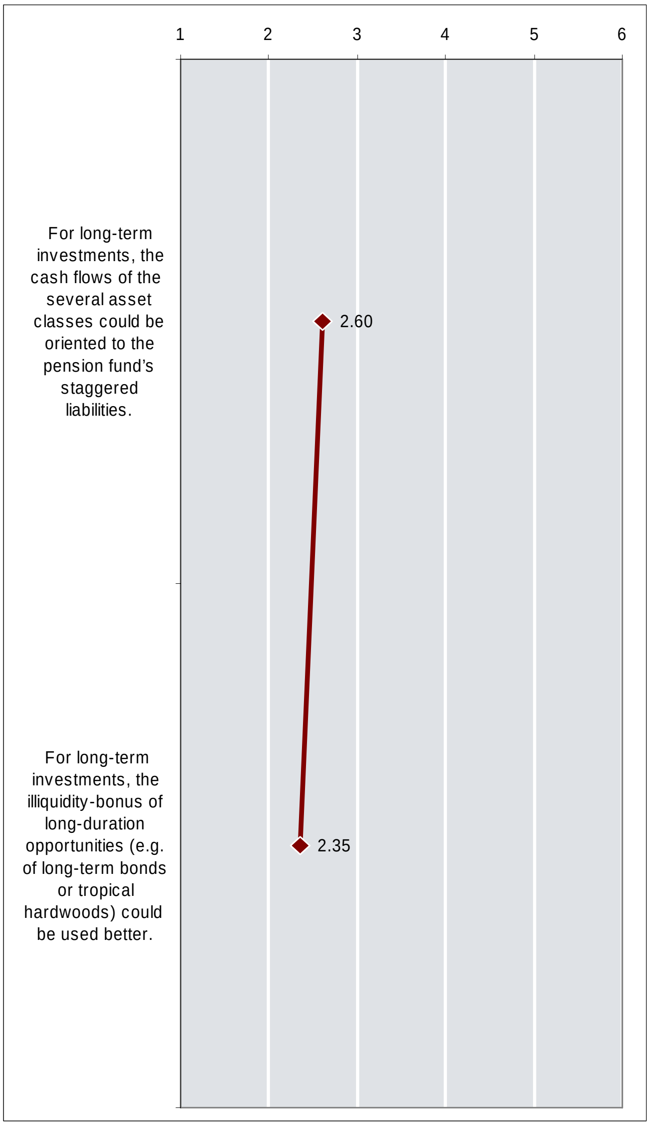
The assessments of the following theses also brought similar results:

- With long-term investments, the cash flows of the different asset classes could be oriented to the staggered liabilities of the pension fund (2.6).
- With long-term investments, the illiquidity bonus of "long duration opportunities" (e.g. of long-term bonds or tropical hard woods) could be used better (2.35).

PGGM uses, for instance, special "illiquid strategies" for structured investments within the asset classes "real estate", private equity and infrastructure.

A stronger use of illiquid asset classes is suitable in particular for the periods of time in which the pension funds do not have to serve any or no high corresponding liabilities. A restricting factor is that pension funds have broadly distributed risks and opportunities, but the investments frequently need to be called up where possible on a daily basis. In this case it is only possible to invest in tropical hard woods e.g. via the stock "Precious Woods", then however without the direct collection of an "illiquidity" bonus.

Question 19: Would you agree to the following theses regarding long-term pension investments in different asset classes?
1 = Fully agree 6 = Totally disagree



[47] It is interesting here that already now 70% of the pension funds do not have any hedge funds in their portfolio and will reduce these further. Hedge funds are seen primarily as too short-term-oriented for long-term investors such as pension funds (but cf. also footnote 10). And FRR has even explicitly excluded this asset class in its investment policy for this reason.

Sustainable innovations in all asset classes

The investments made in 2007 over 10 years and amounting to 60 million USD by ABP and PGGM in the "Global Solidarity Forest Fund" (GSSF) represent a pro-rata sustainable orientation of the asset class "commodities with illiquidity bonus". Here, investment is being made in sustainable forestry in Mozambique[48]. PGGM commissioned further investments in sustainable forest plantations with certification pursuant to the Forest Stewardship Council (FSC). These investments amounted to 200 million USD and were in Asia/Pacific and North and South America with a term of 15 years. An extension by another five years is possible. PGGM views "forestry as a stable investment, not least because trees grow regardless of economic cycles. Timber is one of the few commodities that have appreciated faster than inflation over the long term"[49]. Other pension funds interviewed also showed their considerable interest in investments in "Sustainable Forestry Management" (SFM) for the near future.

For other asset classes, the pension funds surveyed are involved, for instance, in the following sustainable investment innovations:

- Multi-asset class: Long-term oriented sustainability funds for investments in emerging countries, PGGM and Albright Capital (250 million USD[50]).
- Real estate: BT Pension Scheme is developing an investment portfolio for "highly rated green buildings" (500 million GBP).
- Real estate: Hermes "Responsible Property Investment" (RPI) solutions for all real estate activities (12 billion GBP)[51],
- Private equity: ABP and PGGM parts in the Climate Change Capital (CCC)'s "Carbon II" fund for investments in developing countries for the reduction of greenhouse gas emissions (volume of the two CCC funds: > USD 800 million[52]),
- Private equity: CleanTech investments through PGGM and ABP (EUR 500 million[53]),
- Infrastructure: Renewable energy infrastructure funds, ABP with Triodos (EUR 100 million)[54],
- Micro-finance: PGGM with specialised fund managers over 2-3 years (EUR 200 million)[55].

Sustainability criteria are most strongly considered in the equities asset class, which is the portfolio share that is the largest with regard to volume and the most influential based on the shareholders' rights. The variety of approaches (e.g. negative criteria, positive criteria, best-in-class, thematic investments, engagement, active and passive, separate and integrated approaches) cannot be depicted here. For this, and for the second most significant asset class, bonds, reference is drawn to the separate publication of the author in the footnote[56].

As a basic principle, it can be determined that the consideration of sustainability criteria in all the asset classes increases the more long-term the investment horizon – and here in particular in the planned holding term of the assets. All interviewed pension funds are planning an expansion of their sustainability activities in future in particular through

- Expansion in the asset classes involved up to then and/or
- Expansion to further asset classes and/or
- stronger consideration of separate, explicit sustainability mandates and/or
- stronger integration of (materially important) sustainability criteria in the mainstream investment processes and mandates and/or
- strengthening of engagement activities for shares and increasingly also for other asset classes.

[48] http://www.abp.nl/abp/abp/investments/investments/esg/esg_in_practice/Global_Solidarity_Forest_Fund.asp.
[49] http://www.responsible-investor.com/home/article/responsible_investment_mandate_watch/ [2.10.2007].
[50] http://www.albrightcapital.com/content/PressRelease-PGGM-01182007.pdf [18.1.2007].
[51] http://www.hermes.co.uk/real_estate/real_estate_rpi_challenges.htm.
[52] http://www.climatechangecapital.com/pages/carbon.asp.
[53] http://www.responsible-investor.com/home/article/pggm_comes_clean_on_private_equity_investment/ [10.7.2007].
[54] http://www.responsible-investor.com/home/article/abp_builds_in_renewable_energy_infrastructure/ [24.7.2007].
[55] http://www.responsible-investor.com/home/article/abp_builds_in_renewable_energy_infrastructure/ [24.7.2007].
[56] Cf. Hesse, A.: Sustainable investments in pension funds – international comparison, on behalf of Swisscanto, Zurich 2007.

About the author

Dr Axel Hesse has worked as a consultant for SD-M Sustainable Development Management since 2001 and has more than 14 years experience in the area of sustainable investments, e.g. launching of the world's first investment product licensing the Dow Jones Sustainability Index with the HypoVereinsbank in October 1999. He holds a degree in business administration, majoring in asset management, accounting and controlling as well as sustainability management. He did his PhD on "Sustainable Development Management – Policy and Business-area Strategies for Banks" at HHL – Leipzig Graduate School of Management.

In 2002, Hesse developed the "Big Six" concept of the six most important sustainability challenges for the 21st century (cf. footnote 18). In 2006, he determined empirically "Sustainable Development Key Performance Indicators" for ten sectors and introduced the abbreviation "SD-KPIs" (cf. footnote 19). The "Big Six" and the "SD-KPIs" concepts are protected by copyright and adopted in investment products.

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