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# AAE survey of the low interest rate environment

## Background: Solvency II and low interest rates

Solvency II will come into force on 1 January 2016. Currently, national implementation is still underway. Independent of the ongoing and necessary discussion of adequate valuation parameters the requirements of Solvency II already show positive effects on insurance undertakings and their portfolio of products.

Capital markets offering low interest rates over a long time create a challenge for those undertakings offering products with guaranteed interest rates or having such contracts in their portfolio. The risk inherent in such contracts is influenced considerably by legal or accounting requirements.

The IMF as well as the OECD clearly signalled that the insurance industry is coming more and more under pressure if the phase of low interest rates prevails.

Therefore, the AAE has conducted a survey in its European member associations in order to examine the interplay of this low interest rate environment with the new requirements of Solvency II and the consequences for the insurance industry in Europe.

Depending on the guarantees granted Solvency II has led to different reactions, in particular in the design of insurance products and in capital investment. In some countries undertakings apply for transitionals; in other legislations local statutory accounting rules have been amended when implementing Solvency II.

In its questionnaire the AAE posed the following questions:

1. Which interest rates are guaranteed in your market (inforce and new business)?
2. What are the consequences of persistent low interest rates on the different business lines in your jurisdiction (life, non-life, pension, health)?
3. Is it possible to change the terms and conditions of existing insurance contracts?
4. Is it possible that a company, fulfilling solvency rules in the Solvency II sense, fails based on accounting figures?
5. What kind of priority rules for insurance claims there exists in your legislation in case of bankruptcy?

In a first step the questionnaire has been sent to a selection of member associations; the scope will be broadened to all AAE member associations in a second step. After this exercise, the AAE intends to send a second questionnaire to those associations for which the persistent low interest rates appear to affect the insurance industry to a particular extent.

## First results

A detailed evaluation of all rather heterogeneous answers is still underway but there are first important lessons to be learnt:

Basically, there are three different groups of insurance markets in Europe:

- hardly any guaranteed interest rates, focus on unit-linked business
- substantial interest rates guarantees granted, with possibility to change the terms and conditions of existing contracts
- substantial interest rates guarantees granted with maximum values between 4 and 5%, without possibility to change the terms and conditions of existing contracts (e.g. Belgium, France, Germany). The impact is different and it is a function of the adaptation of local rules where new underwrting may have reduced guaranteed rates decreasing from 20 years (France) or more recently (Germany and Belgium).

In all countries there is a strong tendency towards new products compliant with Solvency II requirements, here the guaranteed interest rates vary between 0 and 3.75%, mostly between 1 and 1.5%.

Higher guarantees are for example granted in Belgium in form of dynamic interest guarantees which means that the period over which the guarantees are granted is considerably shorter. This model is also the model of choice for Germany (not yet implemented).

Usually, guaranteed interest rates are applied on an annual basis till maturity of contract; in some countries there are cliquet options which may even increase the guarantee (e.g. in Italy).

In some countries (e.g. France) the insurance undertakings try to convert existing contracts with interest rate guarantees into unit-linked guarantees.

In Germany, “Protector” (whose scope of business is the administration of transferred portfolios in case of failure of a life insurance company) is financed by the German insurance industry.

The persistent low interest rates cause problems mostly in life insurance but also for pensions.

In many countries the low interest rate environment has a massive impact on capital management. Insurers tend to invest in risk-free long-term assets. This leads to the question of how rising interest rates will affect the insurance industry, be it accounting or be it lack of returns for the insured.

Liabilities of the inforce business will be dominant for at least the next 15 – 20 years even if new business will be compliant with Solvency II requirements. The share of reserves for inforce business with guaranteed interest rates will be considerably higher than what might be expected by the share of inforce business in general.
Another issue is that capital markets do not offer risk free investments with a sufficiently long duration (e.g. Germany).

As a rule, efficient ALM-hedging mechanisms have been implemented (e.g. UK).

In general, old age provisions – life insurance as well as employee benefits – are under serious pressure as the legal and fiscal framework has not yet been adapted to a low interest rate environment – this appears to be a serious problem in all countries involved in this survey.

Also important is that the lapse rates may increase when interest rates are rising again. This observation should be examined further in the context of longevity.

As a rule, most countries follow Solvency II requirements in their local statutory accounting framework so that a divergence appears rather unlikely.

In Germany and France, however, this may be possible as local accounting requires additional reserves without taking into account Solvency II transitionals.

As a general rule, priority rules apply to insurance claims.

## Next steps

The AAE will continue to examine in detail:

- the consequences of Solvency II on capital investment
- the expectations of the insured (as well as the political arena) on as regards real-value developments
- the changes in product design
- the effects of transitionals
- the interplay of Solvency II with local statutory accounting

with the objective to provide further insights and orientation for the actuarial profession as well as EIOPA for the forthcoming years.

This document including its annex presents a preliminary analysis which will be extended to all AAE members associations in the next step. Possible questions to those associations where the impact of the persistent low interest rates is particularly huge could address:

- the duration gap
- the options customers have regarding the guaranteed interest rate in inforce business (and which adaptation mechanisms exist)
- the changes on the asset side as a result of the valuation in a low interest rate environment (including the presumed lost capability of inflation compensation)
- the consequences for old-age provisions in general
- the transitionals and their effect on new business (compliant with Solvency II)
- the risk of rising interest rates

All this directly leads to the question whether a regulatory limitation of guaranteed interest rates for new business is reasonable as long as the low interest rate environment prevails. In case of increasing interest rates Solvency II will not prevent undertakings from offering higher guarantees. Other issues to be discussed further are future forms of capital investments, i.e. infrastructure investments, which are already under scrutiny by the AAE.

The AAE will continue to deal with the questions sketched above in the next Insurance Committee meeting which will take place in Bucharest later this year.

<table>
<tr><td colspan="2">0. How important is business with guaranteed interest rates in your market?</td></tr>
<tr><td colspan="2">a) Please give an estimate of the share (if possible please distinguish between single premium and regular premium contracts)</td></tr>
<tr><td>Austria</td><td>- In inforce business (life incl. pensions) 35%<br>- In new business (life incl. pensions) 20%</td></tr>
<tr><td>Belgium</td><td>- In inforce business (premiums) 84%<br>- In new business 80% (premiums)</td></tr>
<tr><td>Bulgaria</td><td>- In in-force business 45-50% (premiums)<br>- In new business 25-30%(premiums)<br>*regarding life market in Bulgaria as defined by FSC; numbers shown are estimated</td></tr>
<tr><td>Denmark</td><td>I don’t have the numbers to fill out the above, but can give an indication based on the 2009- versus 2013-numbers. Over the past 5 years the share of provisions for contracts with high guarantees has declined – especially due to “re-selection” with consent of the policyholders, where they give up the guarantees for other kind of compensations. The typical contract in Denmark is with regular premium. The following depicts the percentage of technical provisions in the market:
<table>
<tr><td></td><td>guarantees > 4 pct.</td><td>0 pct. < guarantees ≤ 4 pct.</td><td>No guarantees / 0 pct.</td></tr>
<tr><td>2009</td><td>37%</td><td>51 %</td><td>12%</td></tr>
<tr><td>2013</td><td>17%</td><td>45%</td><td>38%</td></tr>
</table></td></tr>
<tr><td>Finland</td><td>- In inforce business (premiums 7 %) 40 %<br>- In new business Less than 5 %</td></tr>
<tr><td>France</td><td>- In inforce business (premiums) 90%<br>- In new business 80% (premiums)</td></tr>
<tr><td>Germany</td><td>- In inforce business (premiums) 60%<br>- In new business (premiums) 30% (contracts) 40%</td></tr>
<tr><td>Ireland</td><td>Shares shown are for companies which write variable annuity business relative to the entire market (domestic and offshore). Shares do not include products with implicit interest rate guarantees such as Term Assurance or Annuities.<br>- In inforce business c10% of Life Assurance Business Liabilities<br>- In new business <10% of new business premium (Annual Premium Equivalent)<br>(See also general issues on question 0)</td></tr>
<tr><td>Italy</td><td>The “with profit” new business in the 2014 represented about the 77% of the whole life insurance market, 22% is due to linked products (almost all are “unit linked”) and about 1% to other types of contracts. About 90% of the new business are single premiums.</td></tr>
<tr><td>Lithuania</td><td>- In inforce business 25% (premiums)</td></tr>
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| | - In new business 37% (premiums) |
| Norwa y | - In inforce business < 80% (premiums)<br>- In new business < 20% (premiums) |
| Poland | - In inforce business 7%<br><br>- In new business 1% |
| Swede n | - In inforce business 70% (premiums)<br>- In new business 70% |
| UK | There are some guaranteed interest rates (either implicit or explicit) in the UK market. |
| **b)** | **What is the highest guaranteed interest rate in your market, and what is the typical level companies are today offering?** |
| Austria | The highest guaranteed interest rate in inforce business for life insurance is 4%. The value has been reduced several times (in line with Article 20 of the DIRECTIVE 2002/83/EC of 5 November 2002 concerning life assurance) reacting to the development of capital markets.<br>The average interest rate guarantee for the portfolio is typically slightly below 3%.<br>The maximum guaranteed interest rate for new business is now 1.5%.<br>Undertakings' new business with guaranteed interest rates is predominantly offered with this rate. |
| Belgiu m | The historical highest long term rate for in force contracts is 4,75%. Today a typical guaranteed interest rate amounts between 1,50% and 0,50%, but guaranteed interest rate of 3,75% is again possible !.<br>Other trend : until 2004 guaranteed interest is applied till maturity of contract (60 of 65 years of the insured). Today the period over which the guarantee is granted is shorter (10 years, 8 years+1day, ,5 years, 1 year) : dynamic interest guarantee. |
| Bulgari a | There are in-force contacts with 5-6% GIR (or even more) issued in past, but mostly it is used to have 4% GIR.<br>For the last 10 years maximum allowed GIR is set to 3.5% and has not been changed legally. Though, as current typical level might be considered 2-2.5%. |
| Denma rk | The highest we have seen are guarantees from the 70'ies with up to 16% guaranteed interest rates, but most of them must have run out by now. In the 80'ies 4,5% was the most common rate, and it has been gradually reduced since then. At the moment the maximum interest rate for insurance contracts is set by law to 1% per, but a new draft of this legislation suggests to reduce it further to 0%.<br>The far most commonly offered is however either a "benefit-guarantee" or a market rate linked contract. |
| Finland | The highest you can offer is 2,5 %. Typical level is 0 %. |
| France | The policies sold before 2000 are more subject to high guaranteed interest rates. These rates can reach 4.5 % for policies distributed before 1990. Guaranteed interest rate between 2 % and 4.5 % still represent an important part of life insurance obligations.<br>French companies however continuously lowered their guaranties with the diminution of interest rates. The guaranteed interest rate currently offered are generally equivalent to the annual fees mentioned in the contracts. The net guaranteed remuneration of savings is thus rather low. |
| Germa ny | The highest guaranteed interest rate in inforce business is 4%. The value has been reduced several times (in line with Article 20 of the DIRECTIVE 2002/83/EC of 5 November 2002 concerning life assurance) reacting to the development of capital markets. The average |

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| | interest rate guarantee for the portfolio is typically slightly above 3%.<br>The maximum guaranteed interest rate for new business is now 1.25%.<br>Undertakings' new business with guaranteed interest rates is predominantly offered with this rate. |
| Ireland | Interest rate guarantees are generally implicit and not immediately evident. |
| Italy | If we look at the "in force" business, there are sporadic cases, not significant in terms of technical provision, with the 5%. guaranteed interest rate (policies sold in the seventies).<br>There are still significant portions of portfolios with a financial guarantee equal to 4% (policies sold in eighties/ninenties).<br>The current level of guaranteed rate currently sold on the market is between 0% and 1% (see above). |
| Lithuania | The highest guaranteed interest rate in inforce business is 4%.<br>The typical guaranteed interest rate for new business is 1.75%. |
| Norway | Pension funds/Life insurance: Highest interest rate for pension fund is 4% for benefits accrued decreased to 3% for new accrual after 2008, then to 2,5% from 2012. New accrual after 2014 cannot guarantee interest rate higher than 2%. |
| Poland | The highest about 5-6%, currently typical is about 2-3%. |
| Sweden | The highest guaranteed interest rate in inforce business is 5%. The value has been reduced several times reacting to the development of capital markets. The average interest rate guarantee for the portfolio is typically slightly above 3%.<br>The maximum guaranteed interest rate for new business is now around 1.25%.<br>Undertakings' new business with guaranteed interest rates is predominantly offered around this rate. Most new business today is written as single premiums in series. That is the guaranteed interest rate is only agreed for premiums paid, and hence is not guaranteed for future premiums. |
| UK | - |
| **c)** | Under what conditions can the guarantee be exercised? (at the end of the contract term, at surrender, paid-up etc.) |
| Austria | The guaranteed interest rate in life insurance is the yearly rate that is necessary to build up the technical provisions according to local GAAP. In case of maturity or surrender, the technical provision is paid out. Hence the guarantee is not exercised by the policy holder at a certain point of time, but is in fact a yearly guarantee with a rate dependent on the beginning of the contract that cannot be changed by the insurer until maturity of the contract. |
| Belgium | In Belgium the guaranteed rate can be exercised at any time : it is a permanent guarantee over the full period. Surrender penalty during first 8 years can depend on difference between spot rate and guaranteed rate. |
| Bulgaria | |
| Denmark | The guarantees apply as long as the customer meets the agreement entered into and it ensures the customer a minimum payment in associated with the contract payment period. There is some kind of conversion if one stops or defers payments, but the guarantee will not be canceled. They do however, if you surrender the policy or reschedule it to market rates. |
| Finland | |
| France | |
| Germany | |
| Ireland | - |
| Italy | In general, if we look at the "in force" contracts in the year 2014, we see that policies older than 10 years have expensive mechanisms of consolidation and financial guarantees (most of them "cliquet" mechanisms, with an yearly option exercise) and guaranteed interest rates significantly high (3% or 4% for those older than 15 years). The option is paid in these cases: |

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| | death, surrender, coupons, maturity.<br>More recent contracts have less impacting guarantees mechanisms (so-called "best of" where the option is payable only at maturity or in case of death, or the financial guarantees is paid over a specific term and then is renegotiated). Even in these cases, the guaranteed rate is aligned with the TMG “in force” at the issue (or renegotiation) date of the contract. |
| Lithuania | It is usual that guarantees are exercised in all cases: maturity, surrender, paid-up, etc. |
| Norway | Pension funds/Life insurance: the guarantee should be fulfilled by the end of each accounting year. |
| Poland | At the end of the contract term, at surrender, paid-up. |
| Sweden | The guarantees can be exercised at the end of the contract term which includes payment of benefits / retirement period.<br>At surrender most often other lower guarantee conditions are excercised |
| UK | - |
| **1.** | **How would you describe the consequence of persistent low interest rates on the different business lines in your jurisdiction? life, non-life, pension, health** |
| Austria | Low interest rates are affecting statutory accounting as well as Solvency requirement. Technical provisions in life insurance are calculated prospectively. To meet the requirements of statutory accounting undertakings need to earn each year a return on their investments that is at least as high as the guaranteed interest rate. Today’s capital markets do not offer risk free investments with a sufficiently high return. In previous years, undertakings have invested in long-term assets and increased asset duration considerably. These assets still generate the return needed today and for some future years.<br>Solvency II: As the duration of liabilities in life insurance is typically longer than of assets, low interest rates have a stronger impact on the valuation of the technical provisions than on the valuation of the assets. Own funds are decreasing. Fulfilling SCR requirements might not be possible.<br>Changing tariffs for future business does not help in short term. Liabilities of inforce business will dominate at least next 15 – 20 years.<br>Low interest rates affect life, pension and health insurance (which is long-term in Austria).<br>Non-life contracts in Austria are mainly on short-term basis but there exists some portfolios in Austria with larger shares on longer term (10 years) non-life policies. |
| Belgium | On non-life STL business the impact is very important. In workmen's compensation insurance a lifelong annuity is paid out and is linked to inflation.<br>On life business there still exists a lot of contracts with guaranteed interest rate up to 4,75%. This rate is absolutely guaranteed and cannot be changed. On some contracts this high rate is even guaranteed on future premiums.<br>On the Employee Benefits side another issue is currently being discussed in Belgium w.r.t. Defined Contribution plans. According to social law, the employer who grants a pension commitment to his employees has to guarantee a minimum interest rate of 3,25% of the employers contribution and 3,75% on the employee's contribution. This guaranteed rate is only exercised at the departure of the employer or at the end of the contract and is an average that should be guaranteed over the whole period of the contract per employee. The issue here is that this minimum rate must be guaranteed by the employer. In the current low interest rate environment very few employers are willing to do so as the insurance companies only guarantee between 1,50% and 0,5% typically.<br>Currently there are discussions going on the change this 3,25%/3,75% guarantee to a more flexible rate. However, nothing has been decided yet.<br>In general we can say that the current low interest rate environment has a huge impact on the Belgian insurance market. Historical high guarantees still make a large part of insurers reserves and these guarantees are very strict and hard to change.<br>Reinvestment is considered as a major risk on contracts with high guarantees of the past. |

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| Bulgaria | Life insurance is the sector most affected by low interest rates. Non-life insurance is also affected but this is practically only in motor third party liability (because of the long tail).<br>Solvency II: Low interest rates have a stronger impact on the valuation of the technical provisions than on the valuation of the assets. Own funds are usually decreasing. Fulfilling SCR requirements might more difficult.<br>Changing tariffs for future business does not help in short term. Liabilities of in-force business will dominate at least next 10 – 15 years. Future business with lower guaranteed interest rates will slow down the reduction of the average interest rate in the portfolio. |
| Denmark | The most obvious consequence is the above mentioned change into market rate linked products. Of course the reduced effect of discounting erodes the earnings potential, but it is not a big issue. In Denmark the principle of fair-value accounting has been in force for over a decade, so companies are used to managing volatile balance sheets. |
| Finland | Life insurance is the sector most affected by low interest rates. Also, as is clear from answers to question 0, the problems are in legacy business. In that area it is essential to get permission from the supervisor to utilize the transitionals when moving towards S II.<br>Non-life insurance is also affected but this is practically only in the lines of business (workman's compensation and motor third party liability) paying compensations as annuities.<br>In pensions Finland relies heavily on the first pillar. The issues are very different from usual life and pension insurance and they are not handled here.<br>Health insurance is practically non-existent in Finland, at least in the form typical of Central European countries. |
| France | On average, fixed interest rate bonds represent for life and non-life actors respectively 73 % and 61 % of their asset portfolios. The current situation of persistent low interest rates influences therefore considerably their financial income.<br>Under the current regulation, it also influences significantly the discounting of some life and non-life technical provisions (particularity for annuities), increasing solvency needs and generating ALM risks. This effect will be largely strengthened with the entry into force of the new Solvency 2 regulation.<br>The current persistent low interest rates situation also conducts life actors to invest in an adverse global financial environment and to ether dilute their asset return either increase their credit risk. The low profit margins obtained from the current saving activities therefore largely questions the viability of this model. |
| Germany | Low interest rates are affecting statutory accounting as well as Solvency requirement.<br>Technical provisions are calculated prospectively. To meet the requirements of statutory accounting undertakings need to earn each year a return on their investments that is at least as high as the guaranteed interest rate. Today's capital markets do not offer risk free investments with a sufficiently high return. In previous years, undertakings have invested in long-term assets and increased asset duration considerably. These assets still generate the return needed today and for some future years.<br>Matching of duration of assets and liabilities is not possible and not even advisable because of the following<br>• There is no deep, liquid and transparent market for long duration investments. Undertakings have offered guaranteed interest rates especially in their deferred annuity business with durations of more than 50 years<br>• Surrender Values are guaranteed, only minor adaptation possible (according to Contract Law)<br>In case of sudden and sharp increase of interest rates, undertakings have to face the risk of fire sales. Liquidity risk is an additional reason for undertakings not to close the duration gap.<br>Solvency II: Low interest rates have a stronger impact on the valuation of the technical |

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| | provisions than on the valuation of the assets. Own funds are decreasing. Fulfilling SCR requirements might not be possible.<br>Changing tariffs for future business does not help in short term. Liabilities of inforce business will dominate at least next 15 – 20 years. Future business without guaranteed interest rates will slow down the reduction of the average interest rate in the portfolio. |
| Ireland | Life and pensions<br>Under current solvency regulation, low interest rates influence significantly the discounting of life technical provisions, increasing solvency capital requirements. To the extent that labilities can be matched with fixed interest assets of suitable term and quality, reserve changes can be offset by asset growth. Unit linked policyholder liabilities are directly matched by unit-linked fund assets. Other product liabilities are generally well matched.<br>For legacy business incorporating interest rate guarantees, low interest rates increase the difficulty of implementing effective de-risking strategies.<br>Reduced investment returns consistent with a low interest rate environment make it harder for insurers to compete with alternative investment products, e.g. bank deposits, reducing new business volumes and profitability. This environment also pushes insurers to seek higher returns in other asset categories which are likely to carry higher credit risk.<br>Non-Life and Health<br>From a reserving perspective, the issue is less significant for health and non-life reserves (though the introduction of Payment Protection Orders, expected in the near future, will accentuate the issue for non-life).<br>For underwriting and pricing, low interest rates lessen the ability to support underwriting activities with investment returns. This has the practical effect of increasing prices. |
| Italy | Life: medium/high impact (it depends on the ALM strategy adopted). Italian segregated funds allow to manage in an efficient way the minimum return guarantees through a conservative asset allocation.<br>Over the years the share of life policies whose contract value is guaranteed has progressively grown. These products are more attractive when Government Bonds yields are low and/or decreasing.<br>Non life: low impact;<br>Pension: low/medium impact due to a low volatility of cash flows and option restrictions for policyholders.<br>Health: low impact; |
| Lithuania | Low impact on non-life and health businesses.<br>Life and pension businesses are affected through lower discount rates (increasing liabilities) and low return from fixed income assets. Companies are forced to accept losses, because they are not able to earn investment return at least at the guaranteed interest level or have to accept more credit and market risks though it does not help much in current environment. So far profit margins of the covers and administration fees present in guaranteed interest products cover the missing/unearned part of guaranteed interests, but if low interest rates environment continues for a long time then these margins may not be enough to cover guaranteed interests and companies may start making loss from these business lines.<br>Sales of products with guaranteed interest rates are growing since other saving alternatives (e.g. term deposits) offer much lower interest rates. |
| Norway | Non-life: persistent low interest rates will increase the need for better underwriting results, as the financial incomes will decrease. This may lead to premium increases, especially in long-tail business. On the other hand, low interest rates imply low inflation which can reduce claim cost. As technical reserves for outstanding claims are discounted under the Solvency II regime, lower interest rates lead to less reduction in claims reserves and less gap compared to the previously undiscounted reserves before the introduction of Solvency II, which again |

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| | may reduce taxes to be paid.<br>Pension funds/Life insurance: higher risk premiums, lower increase for pensions and vested benefits. The premium for interest rate guarantee may increase when interest rates are getting lower. Transfer to other type or products: DC without any guarantee. |
| Poland | In non-life companies have to focus on technical result as investment results were the main driver of profit in recent years. In life products with guarantees are not a big part of insurance portfolios so it should not have a big impact on the market. |
| Sweden | Low interest rates are affecting statutory accounting as well as Solvency requirement.<br>Surplus funds will be generating bonus payments as an addition to guaranteed payments but these payments are for most insurance companies not guaranteed (i.e. can be withdrawn before payment) and hence a part of own funds. Hence losses on the technical provisions due to lowered market rates will be paid by these surplus funds. The origin of the surplus funds can be said to be :<br>- The result of historical yield on investments above the guaranteed interest rates<br>- Each new premium is usually connected to guarantee rates lower than current discount rates and hence the provisions connected to each premium will be lower than the premium and the day one profit will become part of own funds.<br>- We have seen the same type of product formulated in terms of conditional bonus and the day one profit will then not become a part of own funds but rather of the collectively nonallocated capital and as such this capital will have a risk absorbing capacity in solvency II terms.<br>By the way in Sweden we formally don't leave a guarantee for the interest rate. Instead we guarantee the monthly amount during the payment period, which in turn is calculated with the "guaranteed" interest rate.<br>Technical provisions are calculated prospectively. Matching of duration of assets and liabilities is not possible and not even advisable because of the following<br>- There is no deep, liquid and transparent market for long duration investments. Undertakings have offered guaranteed interest rates especially in their deferred annuity business with durations of more than 50 years<br>Solvency II vs accounting : The same type of behavior is observed since balance sheets is valued essentially according to the same principles.<br>Changing tariffs for future business does not help in the very short term since it will not affect existing capital but it will affect most future premiums since ususally no guarantees are formulated for those premiums. |
| UK | The impact of persistent low interest rates is more material to Life Insurers and Pensions than Non-Life, unless the latter have significant unmatched long term liabilities such as Payment Protection Order (PPO) and latent claims, e.g. Asbestos.<br>Immediate annuities implicitly guarantee a yield to the policyholders, but, so long as it is matched by appropriate assets, then it is only credit risk that the companies are running, with the consequential duration risk if any assets default.<br>Deferred annuities still exist in the back books of insurers, mainly With-Profits products. With-Profits endowments and pension plans (including deferred annuities) probably amount to several hundred billion of liabilities and will typically guarantee maturity values (and sometimes, the annuity conversion rates that would then apply – thought much of this risk is now hedged).<br>Low interest rates boost asset shares but also increase cost of guarantees. With-Profit offices in the UK have been managing to the market value of guarantee for over 10 years (and calculating 1-in-200 year costs) and so there is a well-developed framework of managing such guarantees. Some offices have big hedging programmes in place, as well as mechanisms to share the increase in cost of guarantees with asset shares through increased charges or deductions for guarantees. |

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| | Those With-Profits UK companies with operations in mainland Europe are impacted by the low interest rates due to large exposure to guaranteed annuity rates with prolonged durations.<br>Protection business is also influenced by interest rates since the profitability of whole life business is dependent on the lapse rates assumed at later life (when the reserve is positive) and hence the discount rate at which these profits can be valued.<br>Sustained fall in interest rates can have significant, but hopefully manageable, impacts on the current solvency position for many life insurers under the current regulatory regime due to asset liability management (ALM) policy and hedging programmes. Under Solvency II, the position is more complicated by the introduction of risk margin on policyholder liabilities due to the impact of discounting.<br>Potential longer term implication of prolonged low rates might include:<br>Top line growth could be impacted if prolonged low rates results in a reduction in the attractiveness of the products offered by insurers.<br>Reduced profitability if margins are compressed.<br>Increased need to further diversify investments and potentially move into more illiquid and/or longer duration assets in order to increase potential returns.<br>Insurers own legacy defined benefit pension liabilities could become more onerous, putting additional pressure on profitability and reducing capital availability. |
| **2.** | **Is it possible to change the terms and conditions incl. interest guarantees of existing insurance contracts? If so, on what grounds? Is this also happening in practice?** |
| Austria | A change of terms and conditions and especially of the guaranteed interest rate is not possible. |
| Belgium | No, in Belgium it is not possible to change the term and conditions of existing insurance contracts unless a specific law would be introduced.  Companies can not change on a unilateral basis, an agreement of the policy holder is required. |
| Bulgaria | Only if the clients benefit from the change and the change is consensual. |
| Denmark | Yes, it is possible through the above mentioned “re-selection” with consent of the policyholders, and a lot of companies have exploited is possibility in recent years. |
| Finland | Finnish Insurance Contracts Legislation (free translation):<br>”…<br>Premiums and other terms and conditions in life insurance can be changed only when there are special grounds for these changes resulting from general claims experience or changes in interest rates and the content of the insurance contract does not materially change when compared to the original contract<br>…”<br>This means that there are possibilities to change terms and conditions based on claims experience or interest rates. However, the application of this has not been extensively tested, probably because of competitive pressures. Also applying this would probably be challenged in the courts making the situation somewhat unclear – even though it is generally thought that applying this piece of legislation should be straightforward in the current situation. |
| France | Every policy can be modified with the agreement of the underwriter of the contract.<br>French actors are now trying to progressively convert their historical activities into the more profitable unit-linked guarantees. The remuneration offered are also less attractive (2.5 % in 2014). They remain however exposed to the important guaranteed interest rates offered through old contracts, which were not modified. |
| Germany | According to Insurance Supervisory Law a change of terms and conditions and especially the guaranteed interest rate is only possible as last resort to prevent companies from going bankrupt. In such a case of emergency, the regulator can – theoretically - change the terms of an existing contract. The preferred solution, however, would be a transfer of the affected |

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| | portfolio to another company.<br>The German insurance industry has founded a life insurance company (Protector) whose scope of business is the administration of transferred portfolios in case of failure of a life insurance company. The undertaking is financed by the insurance industry.<br>Contract Law also theoretically offers the possibility to change terms of an existing contract to prevent policyholders from being jeopardized by adverse development of risks. There is no experience in the market whether such an adaptation would also be possible because of low interest rates. The previous version of this particular article in the law was restricted to shortfalls in biometrics.<br>According to Commercial Law in combination with Insurance Supervisory Law since 2011, undertakings have to establish additional reserves for contracts with a guaranteed interest rate if that is higher than a reference rate. This reference rate is calculated as a ten years arithmetic average of a reference period of ten years of zero-coupon-Euro-swap rates with a duration of ten years. However, financing this additional reserve is a great challenge because of the unexpected dramatic decrease of the yields available from capital markets and as a direct implication of the reference rate (as defined in 2.). Undertakings may need to use hidden reserves in their assets to finance this additional expenditure. |
| Ireland | It is not generally possible to change policy terms and conditions without securing individual policyholder agreement.<br>Transfers of books of business can in certain cases be effected by order of the courts without individual policyholder agreement, but subject to a significant set of conditions to ensure commitments can be met after such transfers.<br>Existing contracts can be modified with the agreement of the policyholder. This has usually been limited to adding additional policy benefits (e.g. increased death benefits).<br>Some terms and conditions do include the right to increase certain charges on certain conditions without policyholder agreement, but such increases do not represent a change in terms and conditions. |
| Italy | No.<br>There are some types of policy currently on the market (the so called PIPs, i.e. Pension Individual Plans) that contain, since the inception date, some agreement of change of specific contract parameters like the TMG or demographic tables. The contract specifies the terms and conditions under which changes can take place.<br>Another option is to change the contracts conditions already sold with the instrument of the “transformation” of the policy (the Technical Provisions are invested as a single premium in a different policy), however, subject to the approval of the policyholder. This solution is a private negotiation that have to be closed policy by policy. |
| Lithuania | There is no such possibility. |
| Norway | Non-life: Normally no contracts with interest guarantees. Terms and conditions are adjusted at the next renewal, for most contracts on an annual basis.<br>Pension funds: not possible for contracts opened for new accrual. For vested benefits, it is possible to convert to risk capital with no guarantee on return.<br>An example are the so-called FMI contracts (“Fripoliser med investeringsvalg”): A paid up policy has an interest guarantee in average of 3.5%. Starting from 1 September 2014, a policyholder can convert his/her policy to a unit linked paid up policy. The policyholder will – when converting – let go of the interest guarantee, and can choose how to administer the pension funds in the policy. For the time being about NOK 1.5 billion have been converted into this product. |
| Poland | No such possibility. |
| Sweden | For existing capital : No<br>For future premiums : Yes – most often<br>Older parts of the business volumes also guarantees future premiums |

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| | but since most of the business is occupational pensions rotation on the labour market limits the value of these guarantees and they are premiumwise transformed to the present guarantee level in about a 10 year period.<br>Some companies with low solvency has suggested new lower guarantee levels with corresponding higher bonus rates to customers who may chose these suggestions on a voluntary basis. |
| UK | Some offices have mechanisms to share the increase in cost of guarantees with asset shares through increased charges or deductions for guarantees. |
| **3.** | **Is it possible that a company, fulfilling solvency rules in the Solvency II sense, fails based on accounting figures?** |
| Austria | As accounting standards for local GAAP differ considerably from the valuation principles of Solvency II, at least in theory it might happen that a company fulfilling solvency rules could end up failing under local GAAP.<br>Under Austrian GAAP assets are not shown at market value, but at book value, and liabilities are calculated and discounted using the calculation basis that was used at the beginning of the contract (i.e. not risk-free and not best estimate). Additional reserve are necessary in local GAAP for life insurance e.g. because of the low interest environment and for old annuity tables that do not contain sufficient margins. |
| Belgium | This can be possible in very specific situations, but is highly unlikely. The opposite can be possible. |
| Bulgaria | According to Code of Insurance a company is declared bankrupt if own funds are not sufficient to cover the Minimum Capital Requirement and a short-term recovery plan cannot be established.<br>A company fulfilling solvency requirements cannot be declared bankrupt because of accounting figures. |
| Denmark | The Danish FSA is currently working on a new executive order aligning the Danish accounting rules to Solvency II. The planned entry into force date is 1st of January 2016, so by then there the above shouldn't be possible. As of now it would also be very unlikely. |
| Finland | Finnish company legislation as such has rules that when company accounts show that all equity is used then the company needs to be declared bankrupt. Finnish insurance company legislation is a special law in relation to company legislation.<br>In Finland insurance accounting is derived from the Insurance Accounts Directive and for example technical provisions in accounting differ from technical provisions used in Solvency II. Also many other valuation principles differ from each other in accounting and in solvency calculations. Therefore, at least in theory, there is the possibility that a company fulfilling solvency rules could end up in a situation where company accounts turn bad.<br>However, in such a situation Finnish legislation requires that the company should prepare a solvency calculation. If the solvency calculation shows that the company is after all solvent the company will not be declared bankrupt.<br>That is, a company fulfilling solvency requirements cannot be declared bankrupt because of accounting figures. |
| France | Under Solvency 2 regulation, the bankruptcy of an insurance company can be due to an inability to respect it solvency needs or to a payment default. An adverse net position regarding French accounting standards is not enough do declare a bankruptcy. |
| Germany | According to Insurance Supervisory Law a company is declared bankrupt if own funds are not sufficient to cover the Minimum Capital Requirement ("Garantiefonds") and a short-term recovery plan cannot be established.<br>If an undertaking fulfills the Solvency Requirements, there is an additional risk resulting from Commercial Law. If an undertakings has to increase the (statutory) technical provisions considerably - e.g. based on the requirements mentioned under 2) - this might lead to excess indebtedness in statutory accounting. |

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| | This risk can incur in case of a rise of interest rates in capital market. This might improve the Solvency position of the undertaking. However, strengthening of reserves under statutory accounting might still be required. The above-mentioned reference rate is calculated as a ten-year average and will therefore react at a delayed point in time. This can lead to the requirement to increase the technical provisions even in this scenario, where the financing mechanism might no longer work. |
| Ireland | No. The ultimate arbiter of insurance company solvency is the Central Bank of Ireland, which will assess solvency in line with the Solvency II regime. |
| Italy | According to Insurance Code a company is declared bankrupt if own funds are not sufficient to cover the Minimum Capital Requirement ("Garantie fonds") and a short-term recovery plan cannot be established.<br>In Italy, long-term contracts (whole life, endowment, annuity and so on) are widely sold. These contracts benefits are linked to the interest return of a segregate fund with a minimum guarantee (from 0% to 4%). In case of persistent low interest rates, the undertaking could not be able to guarantee the minimum interest rate for some life insurance contracts (with guarantee and profit sharing).<br>Therefore, considering the current level of guarantees in the undertaking portfolio offered to the policy-holders, a decrease of the loss absorbing capacity of technical provisions would be registered. In addition, the interest rate yields used to discount CFs are lower than the interest rate returns arisen from the segregate fund. This may lead to an increase of the technical reserves affecting the accounting figure in the SII Economic Balance sheet.<br>So, the general answer is no because Solvency II economic balance sheet seems to be subjected to more severe rules. |
| Lithuania | There are minimal levels of the capital set in the Company Law. Different actions shall be taken in case of breaching these levels (up to a bankruptcy). Accounting figures matter in this case. Solvency II capital includes future profits that is not reflected in accounting. Therefore theoretically it is possible that a solvent company according to Solvency II requirements fails on accounting figures. |
| Norway | Although in theory not completely impossible, it is difficult to imagine a situation where the difference should become so big that a company would fail to according to IFRS, while at the same time fulfilling solvency II rules. It rather seems probably that IFRS may give a seemingly better impression of the company's situation.<br>Non-life: mainly the solvency II principles will be applied for accounting purposes.<br>Life: here the customer's accounting principle will be applied in accounting. |
| Poland | Based on market shares it seems it is not a problem. |
| Sweden | I should say no since the same principles are applied to both balance sheets and in principle "market" aluation also of technical provisions. Maybe you can say that capital requirements differ but …. |
| UK | Life insurance companies are particularly exposed to interest rate and credit risk due to the long-term nature of many of the products. Companies aim to match assets and liabilities across the life of the liability. The impact of lower rates on UK life insurance companies is relatively limited if they have strong ALM practices, which means relatively minor mismatches in the duration of assets and liabilities. Therefore, from a solvency perspective, the impact may be manageable, especially if the low interest rate environment is not sustainable.<br>From a technical provisions point of view, low interest rates increase the valuation of liabilities. Since it also increases asset values, this in turn increases both capital resources and capital requirements. To the extent that the company is well-matched, these should largely cancel each other out. However, where there are asset/liability mismatches, then the firm is exposed to re-investment and longevity risks. Capital requirements increase from discounting these positions at lower rates. |

| **4.** | **What kind of priority rules for insurance claims there exists in your legislation in case of bankruptcy?** |
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| Austria | Insurance claims have priority over other claims of the company. Insurance Law requires an insurance coverage fund, which is at any time sufficient to cover all liabilities resulting from insurance contracts (under local GAAP). |
| Belgium | In case of bankruptcy the first priority is given to the tax authorities and social security authorities. In a second order, the insurance contract holders. |
| Bulgaria | A transfer of insurance obligations to another company is generally preferred. Insurance claims have in bankruptcy priority over other claims to the company. |
| Denmark | We have an ”Executive Order on Registration of Assets”, which requires all insurance companies to keep a register of assets at a value, which shall, at all times, as a minimum, correspond to the value of the total insurance provisions. In case of bankruptcy the Danish FSA may required the regiser to be deposited and used to cover insurance claims. |
| Finland | Insurance claims have in bankruptcy priority over other claims to the company. Claims related to accidents for residential property have priority over other insurance claims in a non-life insurance company. In case where the company still has enough assets covering all insurance contracts the first alternative is always to try to transfer insurance contracts and assets covering them to another company. |
| France | A transfer of insurance obligations to another company is generally preferred.<br>Preferential debts are recognized in case of bankruptcy. Direct or indirect debts toward State and employees are firstly considered, just before obligations towards policyholders and other creditors. |
| Germany | Insurance claims have priority over other claims of the company. Insurance Law requires an insurance coverage fund, which is at any time sufficient to cover all liabilities resulting from insurance contracts. |
| Ireland | An insurance policy claimant has priority over other creditors in the event that an insurer becomes insolvent.<br>In addition, an Insurance Compensation Fund has been established in Ireland to facilitate payments up to a defined maximum to policyholders in relation to risks in the State where an Irish authorised or an EU authorised non-life insurer goes into liquidation and the approval of the High Court has been obtained for such payments. |
| Italy | According to the art. 258 (“Treatment of insurance or reinsurance claims”) of Code of Private Insurance (Legislative Decree n. 209 of 7 September 2005) assets representing technical provisions for life and non-life business which, on the date of the compulsory winding up measure, are recorded in the relevant book shall be used to reimburse as a matter of priority liabilities arising out of the contracts to which they refer.<br>Generally, the Italian pension insurance products are made up in the form of special funds, separate and independent from the assets of the undertaking. They are exclusively intended to the payment of benefits to beneficiaries. They cannot be used to cover the claim costs requested by the creditors of the company in case of failure of the latter. |
| Lithuania | According to the Insurance Law in case of bankruptcy of insurance company assets covering technical provisions may be used only for covering insurance claims and other obligations stemming from insurance contracts. There is only one exception that up to 10% of the assets covering technical provisions may be used to cover bankruptcy administration costs. |
| Norway | According to legislation «banksikringsloven» § 4-11 (2), claims under insurance contracts linked to direct insurance, including interest income, have priority compared to other claims, also those regarding taxes or statutory claims. |
| Poland | The government fund (UFG) returns 50% of policy value, not more than 30.000 EUR in case of life policies. |
| Sweden | Insurance claims have priority over other claims of the company. Insurance Law requires an insurance coverage fund, which is at any time sufficient to cover all liabilities resulting from |

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| | insurance contracts. |
| UK | The rules which apply to winding up of an insurer provide that direct insurance debts (e.g. monies owed to an insurer's own policyholders) are to be paid in priority to all other unsecured debts, except staff remuneration and pensions contributions. This rule does not however apply to policyholders of other insurance companies which the insurer has reinsured. In practice, unit-linked policyholders are often protected because the reinsured company will have taken security in the form of a floating charge which effectively puts its unit-linked policyholders into the same position as the direct policyholders of the reinsurer. |
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| Generally on 0 | |
| Ireland | Guaranteed interest rates are much more of an issue for long term (life) products than for non-life products (which in Ireland are short term and, with the exception of the comment in question 1 below, carry no long term guarantees). Unless stated, comments below relate to life business.<br>The Irish domestic life new business market consists of the following main product types:<br>- Unit linked annual and single premium with no interest rate guarantees<br>- Term assurance, and other long term protection business at guaranteed and non-guaranteed rates, with implicit interest rate guarantees which are based on available yields at outset and generally closely hedged<br>- Annuities with built in interest rate guarantees based on available long term yields at policy commencement and generally closely hedged<br>The following types of product are also offered:<br>- Structured products, with product features based on assets purchased by insurance companies from suitable providers and policyholder counterparty exposure to underlying asset provider (and not insurance company)<br>- Unitised with profits products, with annual and terminal bonuses declared based on performance of underlying assets. Surrender values not generally guaranteed other than at certain durations, with non-guaranteed surrender values reflecting underlying asset values at the time of surrender.<br>- Short term protection business (life, health and disability)<br>There are some blocks of pension business which offer policyholders the option of guaranteed annuity rates at retirement. This business stopped being sold some years ago.<br>Business with implicit guaranteed interest rates is important in the Irish domestic life market but there is minimal if any business with explicit guaranteed interest rates for which the insurance companies are liable. Implicit interest rates offered are generally actively hedged with assets of suitable duration and/or reinsured.<br>The Irish offshore life new business market consists of the following main product types:<br>- Unit linked annual and single premium with no interest rate guarantees<br>- Variable annuity business. These are unit linked products offering long term optional interest rate guarantees. Terms offered are dependent on interest rates at the time of product sale and generally hedged, though with varying degrees of depth of hedging. Guarantees are offered in a number of different forms so that the level of interest rate guaranteed may not be evident.<br>The following types of product are also offered:<br>- Short term protection business (life, health and disability)<br>In the offshore facing market, the variable annuity product is the category which offers the greatest exposure to interest rate guarantees.<br>Some historic business, primarily legacy business which was written from other European territories but which was transferred into and is now regulated from Ireland, offers significant interest rate guarantees. This is not believed to be material in the context of the overall market. |

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| Italy | In Italy, the interest rate sensitive life insurance business, is based on “with profits” policies (the so called “rivalutabili”). Most of them are endowment and whole life covers and almost all are single premiums.<br>The maximum guarantee (the so called TMG) is fixed at 60% of the average Italian 10-year government bond yield at inception. The maximum guarantee rate sold in the last two years has generally been between 0% and 1% with lower rates with “cliquet”1 mechanism, where the guarantee is paid out annually instead of at maturity or in case of death.<br>The rates of return obtained from these specific segregated funds, the so called “Gestioni Separate”, are computed on the basis of book values and realized gains / losses.<br>In particular, the return is calculated annually as the ratio of the sum of coupons, dividends and realized capital gains/losses over the average stock of underline assets, and is allocated, in whole or in part, to the accrued value of the contractual benefit.<br>Surrender charges vary by company, but generally decrease with the duration of the contract. However, there is no adjustment for market value of the assets backing these policies. |

1. A “cliquet option” or ”ratchet option” is an exotic option consisting of a series of consecutive forward start options.[1] The first is active immediately. The second becomes active when the first expires, etc. Each option is struck at-the-money when it becomes active.[2]