Finansinspektionen's Regulatory Code

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Finansinspektionen's Regulations governing insurance companies' choice of interest rate for calculation of technical provisions;

decided on 10 November 2008.

Finansinspektionen prescribes the following[1] pursuant to section 49 of the Insurance Business Ordinance (1982:790) and section 4 of the Regulation (1995:1600) regarding financial statements of credit institutions, securities firms and insurance companies.

Chapter 1. Scope, definitions and exceptions

Section 1 These regulations apply to insurance companies and pension funds when they choose an interest rate for the calculation of technical provisions.

Insurance companies and pension funds shall apply these regulations in order to calculate life insurance provisions for life insurance or disability insurance. A non-life insurance company shall apply these regulations in order to calculate the technical provisions for annuities emanating from non-life insurance.

These regulations are not applicable to insurance companies when the policyholder bears the financial risk.

Section 2 In these regulations, *insurance company* refers to insurance companies and mutual benefits societies.

In these regulations, *covered bonds* refer to covered bonds according to the Covered Bonds (Issuance) Act (2003:1223).

Section 3 Finansinspektionen has the authority to make exceptions to these regulations on special grounds.

Chapter 2. Calculation of discount interest rate curve for choice of interest rate for occupational pension insurances

Section 1 An insurance company shall choose an interest rate curve for the discounting of future cash flows (discount interest rate curve) for occupational pension insurance which is the average of the interest rate curves stated in section 2, first and second paragraphs.

[1] See the Directive 2002/83/EC of the European Parliament and of the Council of 5 November 2002, concerning life assurance (EGT L 345, 19.12.2002, p. 1, Celex 32002L0083) and the Directive 2003/41/EC of the European Parliament and of the Council of 3 June 2003 on the activities and supervision of institutions for occupational retirement provision (EGT L 235, 23.9.2003, p. 10, Celex 32003L0041).

An insurance company shall base its choice of interest rate for the discounting of future cash flows on the duration of the cash flows to be valued. The company shall choose an interest rate based on the point on the discount interest rate curve that corresponds to the duration of the cash flow to be valued.

Section 2 The first interest rate curve referred to in section 1, first paragraph, is determined in accordance with an appropriate interpolation between the existing remaining durations of the current market interest rates on treasury bills or government bonds.

The second interest rate curve referred to in section 1, first paragraph, shall be chosen either from current market interest rates for the agreement of exchange of interest payments, (swap rates), or from current market interest rates on covered bonds. The interest rate curve shall be determined via an appropriate interpolation between the interest rates of the existing remaining durations.

The interest rate curve in the second paragraph above shall be based on the interest rate of the existing remaining durations that corresponds at a minimum to the remaining durations used in the interest rate curve in the first paragraph. Where there are neither swap rates nor interest rates on covered bonds with an existing remaining duration that corresponds at a minimum to the remaining duration used in the interest rate curve in the first paragraph, the longest of these two shall be used.

Section 3 An insurance company shall choose the market interest rates in section 2, first and second paragraphs, based on the currency in which the company’s insurance liabilities are payable. The market interest rates shall be determined as zero-coupon rates, i.e. the interest rate with addition of the value of future coupons. The financial instruments on which the market interest rates are based shall be liquid and have credit and counterparty risks that do not materially deviate from other corresponding financial instruments.

Section 4 For an insurance company that has cash flows with durations exceeding the longest duration on the interest rate curve determined pursuant to section 2, the discount interest rate curve for these longer durations are to be calculated pursuant to sections 5–6.

Section 5 An insurance company shall determine the differences between the interest rate curves in section 2, first and second paragraphs, for the longest existing duration based on the shorter of the two interest rate curves and for this duration reduced by one year or two years respectively. The company shall calculate the average difference by determining the average of the absolute values of these three differences.

Section 6 Where the higher of the two interest rate curves in section 2, first and second paragraphs, has a longer duration than the lower interest rate curve, the discount interest rate curve for these longer durations is determined to be the higher of the two interest rate curves reduced by half of the average difference pursuant to section 5. The discount interest rate curve for durations that exceed the longest duration for the higher of the two interest rate curves is determined to be constant and shall correspond to the interest rate of the longest duration that has been determined in this section.

Where the lower of the two interest rate curves in section 2, first and second paragraphs, has a longer duration than the higher interest rate curve, the discount interest rate curve for these longer durations is determined to be the lower of the two interest rate curves increased by half of the average difference according to section 5. The discount interest rate curve for durations that exceed the longest duration for the lower of the two interest rate curves is determined to be constant and shall correspond to the interest rate of the longest duration that has been determined in this section.

Section 7 An insurance company that cannot divide the cash flows according to durations may apply the discount interest rate curve's value pursuant to sections 1–6 at an average duration. The average duration shall be calculated based on the future cash flows discounted by an interest rate pursuant to section 2, first paragraph. If the duration cannot be calculated in this manner, the company may make an approximation in an appropriate manner.

Section 8 For an insurance policy with index-linked benefits, an insurance company shall estimate the adjustment of the cash flow that the future index-linking is expected to result in. The adjusted cash flow shall be discounted by the interest rate according to sections 1–7. As a measure of the adjustment, the company should use the market-related expectations about future inflation which are expressed as differences in zero-coupon rates between the nominal and real government bonds, however always taking into account the characteristics of the index-linking.

Section 9 An insurance company may apply the highest discount interest rate curve that can be determined according to Chapter 3 for occupational pension insurance, instead of what can be determined according to this chapter.

Chapter 3. Calculation of the discount interest rate curve for choice of interest rate for insurance other than occupational pension insurance

Section 1 For insurance policies that are not a contract for an occupational pension, an insurance company shall choose the interest rate curve for the discounting of future cash flows (discount interest rate curve) via the appropriate interpolation between the existing durations of current market interest rates on treasury bills or government bonds.

An insurance company shall choose an interest rate for the discounting of future cash flows based on the duration of the cash flows to be discounted. The interest rate shall correspond to a maximum of the value of the discount interest rate curve determined pursuant to this chapter.

Section 2 For an insurance company that has cash flows of which the durations exceed the longest duration for the interest rate curve determined pursuant to section 1, first paragraph, the discount interest rate curve for these longer durations shall be determined pursuant to sections 3–4.

Section 3 An insurance company shall determine the discount interest rate curve for durations pursuant to section 2 based on an appropriate interpolation between the existing durations of either current market interest rates for the agreement of change of interest payments, (swap rates), or current market interest rates on covered bonds, provided that it at a minimum has the longest duration that can be established according to section 1, first paragraph. A deduction shall then be calculated pursuant to section 5.

Section 4 Where there are no existing durations for market interest rates pursuant to section 3 which exceed the durations for market interest rates pursuant to section 1, first paragraph, the discount interest rate curve for durations pursuant to section

2 shall be determined to be constant and shall correspond to the interest rate for the longest duration for the interest rate curve pursuant to section 1, first paragraph.

Section 5 An insurance company shall determine the differences between the interest rate curves in section 1, first paragraph, and section 3 for the longest existing duration based on the shorter of the two interest rate curves, and for this duration reduced by one year or two years respectively. The company shall calculate the average difference by determining the average of the absolute values of these three differences.

The discount interest rate curve for the durations that exceed the longest duration for the interest rate curve pursuant to section 1 is determined as the interest rate curve according to section 3 reduced by the average difference according to the first paragraph. The discount interest rate curve for durations that exceed the longest duration for the interest rate curve according to section 3 is determined to be constant and shall correspond to the interest rate of the longest duration that has been determined in this section.

Section 6 When choosing the market interest rates in section 1 and section 3, the insurance company shall take into account the currency in which the company's insurance liabilities are payable. The market interest rates shall be determined as zero-coupon rates, i.e. the interest rate with addition of the value of future coupons. The financial instruments on which the market interest rates are based shall be liquid and have credit and counterparty risks that do not materially deviate from other corresponding financial instruments.

Section 7 An insurance company that cannot divide the cash flow according to durations may apply the discount interest rate curve's value according to sections 1–6 at an average duration. The average duration shall be calculated according to the future cash flows discounted by an interest rate according to section 1, first paragraph, or an approximation of this interest rate.

Section 8 For insurance policies with index-linked benefits, an insurance company shall estimate the adjustment of the cash flow that the future index-linking is expected to result in. The adjusted cash flow shall be discounted by the interest rate pursuant to sections 1–7. As a measure of the adjustment, the company should use the market-related expectations about future inflation which are expressed as differences in zero-coupon rates between the nominal and real government bonds, however always taking into account the characteristics of the index-linking.

These regulations shall enter into force on 11 November 2008, whereupon Finansinspektionen's Regulations (FFFS 2008:6) governing insurance companies' choice of interest rates for calculation of technical provisions shall be repealed.

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