

Investment Portfolio Market Risks

In general, market risks refer to fluctuations in the financial results and capital base caused by changes in market values of financial assets and liabilities, as well as by changes in the economic value of insurance liabilities. The changes in market values and economic values are caused by movements in underlying market variables such as interest rates, inflation, foreign exchange rates, credit spreads and share prices.

Furthermore, market risks include also the risk of worsening market liquidity in terms of widening bidask spreads and the risk of unexpected changes in the repayment schedules of assets. In both cases the

market values of financial instruments in investment portfolios may change.

The risks caused by changes in interest rates, foreign exchange rates and inflation together with a general trend of credit spreads and equity prices are defined as **general market risks** and are managed by allocation limits and other risk limits.

The risk related to debt and equity instruments issued by a specific issuer can be defined as **issuer specific market risk** that is managed by issuer specific limits.

Interest Rate and Currency Risks

Many external drivers are affecting interest rates, inflation, inflation expectations and foreign exchange

rates as illustrated by the following Interest Rate and Currency Risks chart.

Interest Rate and Currency Risks

External drivers

Economic, social and financial market conditions, international trade flows, political decisions, central bank actions, laws, taxation and regulations

Unfavorable changes in interest rates

Interest rate risk (nominal & real rate)

Changes in fair values resulting from:

- The value of interest rate exposures decreases immediately.
- The future investments are made at unfavorable interest rate levels.

Unfavorable changes in foreign exchange rates

Currency risk

Changes in fair values resulting from:

- The value of foreign currency transaction exposures decreases.
- The base currency value of net investments in foreign subsidiaries decreases.

Negative impact on financial results and adjusted solvency capital

Currency risk can be divided into transaction and translation risk. Transaction risk refers to currency risk arising from contractual cash flows in foreign currencies which are related to insurance activities, investment operations and foreign exchange

transactions. Translation risk refers to currency risk that may realize when balance sheet values or some measures like SCRs expressed in base currency are converted to other currencies.



Equity and Spread Risks

Sampo Group is exposed to price risk dependent on changes in equity prices and spreads arising from its fixed income and equity investments. Equity price and spread movements are affected by general market trends and by risk factors that are related specifically to a certain issuer or a specific issue.

Equity and Spread Risks

External drivers

Economic, social and financial market conditions, laws, taxation and regulations, technical development and innovations

- Changes in issuer's financial position and future prospects
- Changes in market expectation on issuer's financial future
- · Volatility of markets in general

Equity risk

Fair value changes and credit losses resulting from:

- Increasing risk premiums and respective negative changes in valuations are decreasing the fair value of long positions in equity instruments.
- Decreasing risk premiums and respective positive changes in valuations are decreasing the fair value of short positions in equity instruments.

- Changes in issuer's financial position and future prospects
- Changes in market expectation on issuer's probability of default or issue's loss given default
- · Volatility of markets in general
- Terms of debt instruments and related collaterals

Spread risk

Fair value changes and credit losses resulting from:

- Widening credit spreads are decreasing the value of long positions in debt instruments.
- Tightening credit spreads are decreasing the value of short positions in debt instruments.
- Value of collateral differs from expected.
- Ultimately borrower is not able to meet its financial obligations when they fall due.

Negative impact on financial results