## **RISK MANAGEMENT**

Vienna Insurance Group's core competence is dealing professionally with risk. The Group's primary business is assuming risks from its customers using a variety of insurance policies. The insurance business consists of consciously assuming diverse risks and managing them profitably. One of the primary responsibilities of risk management is to ensure that the obligations assumed under insurance policies can be satisfied at all times.

In general, all Group companies are responsible for managing their own risks. The VIG corporate Risk Management department provides framework guidelines in all major areas for these companies. The requirements set in the investments and reinsurance areas are particularly strict.

The primary requirement for effective risk management is a risk management system that is consistent throughout the Group and a risk policy, and risk strategy set by management. The objective of such risk management is not complete avoidance of risk but rather a conscious acceptance of desired risks and the implementation of measures to monitor and possibly even reduce existing risks based on economic factors. The risk-return ratio is therefore a key measure that must be optimised in order to guarantee adequate security for the policyholder and the insurer itself while giving due consideration to the need to create value.

Risk management responsibilities in VIG are bundled together in independent organizational units and by a well-established risk and control culture, each individual employee contributes to successful management of risk. Transparent, verifiable decisions and processes within a company are very important aspects of its risk culture.

## Risk strategy

The strategic orientation of the Company is based on a business strategy, capital strategy and a comprehensive risk strategy. The risk strategy specifies appropriate risk management measures for significant risks and is based on the following principles that are applicable Group-wide:

#### RISKS THAT ARE NOT ACCEPTED

- Risks from the insurance business are not accepted if they cannot be adequately measured. This includes, in particular, the areas of third party liability insurance for genetic engineering and atomic energy.
- With respect to investments, risks are not accepted if insufficient know-how is available to measure the risks, e.g. weather derivatives or forward transactions for foodstuffs, or if they could generate potentially unlimited losses.

# RISKS ACCEPTED WITH RESTRICTIONS

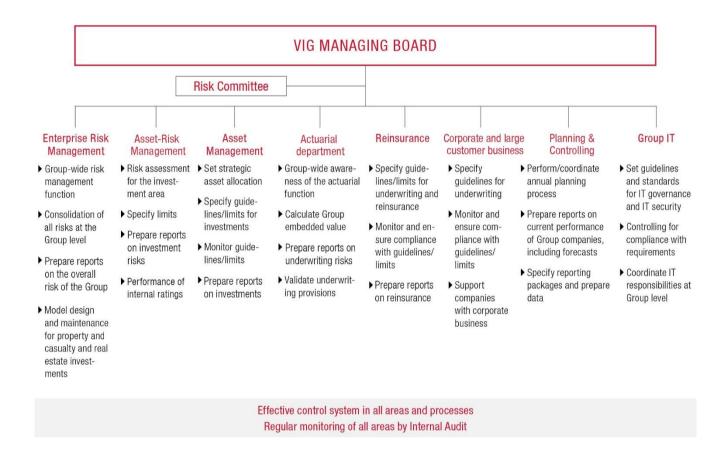
- Operational risks must be avoided as far as possible, but have to be accepted to a certain extent as they cannot be fully excluded or the costs for avoiding them exceed the expected losses.
- Observe and act in accordance with the prudent businessman rule in connection with investments.

## RISK-MINIMISING MEASURES

- Establish functional risk governance by maintaining and promoting a high level of risk awareness.
- Reinsurance is a key instrument for hedging against large losses (tail risks), particularly in the property and casualty area
- Limit market risk taking into account underwriting obligations.

# Organisation of the risk management system

The risk management organisation is well integrated into VIG's organisational structure. All departments that assume responsibilities in the risk management system report either to the Managing Board or an individual member of the Managing Board. A short overview of the risk management organisation is provided in the chart below before the responsibilities and roles of the units involved are described.



### MANAGING BOARD

The Managing Board has overarching responsibility for risk management. This centralised approach is also shown by the reporting lines of the corporate departments in which the Solvency II governance functions (Risk Management, Actuarial, Internal Audit and Compliance functions) are located. Judit Havasi is the contact person for risk management matters in the Managing Board.

The Managing Board as a whole is also responsible for the following areas related to risk management:

- Set up and promote risk management
- Define and communicate the risk strategy, including risk tolerances and risk appetite
- Approve corporate risk management guidelines
- Take the risk situation into account in strategic decisions

### RISK COMMITTEE

The VIG Managing Board established the Risk Committee to ensure regular discussions of current matters relating to risk management across functional areas within the organisation and an exchange of information on the risk situation between the members of the committee (representatives of the units involved in risk management and the Compliance function) and the Managing Board. The Risk Committee meetings take place at least quarterly and are chaired by Managing Board member Judit Havasi. The Risk Committee reports to the Managing Board after its meetings.

## ENTERPRISE RISK MANAGEMENT (ERM)

The Enterprise Risk Management department reports to the Managing Board and is responsible for Group-wide risk management. The head of the department performs the Risk Management function and reports to the Managing Board. Judit Havasi is the contact person in the Managing Board.

ERM provides a Group-wide aggregation solution with extensive reporting and partial modelling approaches for calculating solvency capital. Calculation of the solvency capital requirement during the year, analysis of risk-bearing capacity using proprietary analysis tools and reviewing the internal control system are other important activities performed by the department.

The department also assists the Managing Board with updating the corporate risk strategy, improvements to the risk organisation and further corporate risk management topics.

### ASSET-RISK MANAGEMENT (ARM)

The ARM department reports to Managing Board member Franz Fuchs. The primary responsibility of the department is to analyse, assess and monitor risks associated with investments, in particular with respect to the Group's solvency result and financial result. For this purpose, the department specifies Group-wide standards and methods, implements a central asset inventory system and specifies and monitors risk budgets for the investments of the individual companies. The department is also responsible for developing and maintaining an internal rating approach for banks.

### ASSET MANAGEMENT

The Asset Management department reports to Managing Board member Martin Simhandl. One of the key responsibilities of the department is to define a strategic orientation for the investments of each VIG insurance company and for the Group as a whole, and to specify an investment strategy and investment process aimed at ensuring that current income is as high as possible, but also as secure as possible, while simultaneously taking advantage of opportunities to increase the value of investments. Guidelines and limits are used to manage investments in the Group. Regular reports are also provided for investments, limits and income.

### ACTUARIAL DEPARTMENT

The Actuarial department reports to the Managing Board. Managing Board member Franz Fuchs is the contact person. The head of the department performs the Actuarial function required by Solvency II. The department is therefore responsible, in particular, for the duties related to the Actuarial function. The Actuarial department also calculates the embedded value for the life and health insurance and prepares profitability analyses and company valuations. The department assists actuarial collaboration and functional networking.

# REINSURANCE

The Reinsurance department reports to Managing Board member Peter Höfinger. The department coordinates and assists all Group companies and their reinsurance departments with reinsurance matters in the non-life business (property and casualty, third party liability and accident insurance) by preparing and applying guidelines. The department also administers Group-wide reinsurance programmes in the non-life lines of business. The primary objective is to create a safety net to

provide continuous protection for all of the companies in the Group against the negative effects of catastrophes, individual large losses and negative changes in entire insurance portfolios.

### CORPORATE AND LARGE CUSTOMER BUSINESS

The Corporate and Large Customer Business department reports to Managing Board member Peter Höfinger and underwrites insurance contracts for large Austrian and international customers. The department also assists subsidiaries with resources and know-how. The aim is to achieve a uniform underwriting philosophy and approach in all Group companies that perform such business.

### PLANNING & CONTROLLING

The Planning & Controlling department is an important part of the integrated risk management approach and reports to Managing Board member Judit Havasi. The department coordinates business planning over a 3-year horizon. The standardised reports include key figure and variance analyses for planning, forecasts and ongoing performance of VIG Holding and other Group companies. Regular monthly premium reports, quarterly reports for each company (aggregated at the country and Group level) and cost reports are prepared.

### INTERNAL AUDIT

The Internal Audit department reports to the Managing Board. Managing Board Chairwoman Elisabeth Stadler is the contact person in the Managing Board. The Internal Audit department systematically monitors operating and business processes, the internal control system of all operational business areas, including compliance with legal requirements, and the functionality and adequacy of risk management. The Internal Audit department operates continuously and reports directly to the Managing Board. The head of the department performs the Internal Audit function required by Solvency II.

## **GROUP IT**

The Group IT department reports directly to Managing Board member Judit Havasi. The department is responsible for IT management at the Group level (IT strategy, IT governance, IT security, IT Group projects, etc.), for assisting Group companies with large IT projects, and for developing Group-wide guidelines and common standards. The Austrian business organisation assists Group IT with this by providing outside IT and telephony services.

### Risk management processes

Many risk management processes have been established in the individual departments of the risk management organisation to cover the entire risk management cycle from risk identification to risk assessment, risk control and risk monitoring. These processes are governed by a number of internal guidelines. This ensures that VIG's risk exposure is appropriately recorded and taken into account when business decisions are made.

#### RISK IDENTIFICATION

The risk management process begins with the identification of risks. This is performed using a standardised process that is supplemented by ad hoc analyses. A comprehensive reporting process ensures that newly identified risks and the effects of extraordinary events are appropriately included in the risk profile.

## RISK ASSESSMENT

A number of assessment methods are used to assess identified risks. Assessment is primarily based on internal models and the standard model and is performed annually and during the year. If the standard formula is used for assessment, an

appropriateness check is also performed. The total risk is determined by aggregating the assessed risks, taking into account diversification effects between the risks. The results of the own risk and solvency assessment, the embedded value for the life and health insurance, findings from the S&P capital model and value-at-risk calculations for the investments area are also taken into account in the risk assessment.

### RISK CONTROL

The risk strategy, planning, reinsurance programme, risk budgets and risk-bearing capacity are the most important elements of risk control.

The Managing Board reviews the risk strategy each year and makes any modifications needed. The ERM department assists the Managing Board with this.

The Group Controlling department is responsible for performance of an annual planning process and subsequently for monitoring day-to-day business development of the Group insurance companies. Regular reports are used for this purpose, including variance analyses and forecast accounts for the financial year. The planning horizon is three years. The planning data is used in the ORSA and forms a starting basis for calculating future expected solvency.

The Reinsurance department coordinates the Group-wide reinsurance programme and manages the annual renewal process for natural catastrophe coverage. The ERM department assists the Reinsurance department in validating the external natural catastrophe models used and evaluating the effectiveness of reinsurance coverage using the internal non-life model.

The Asset Risk Management department specifies quarterly risk budgets for investments. These budgets are then also used to limit the value-at-risk for the investments.

## RISK MONITORING

The solvency corridor defined at the Group level and the Group-wide limit system for risk-bearing capacity form the basis for continuous monitoring of the solvency situation of the Group and subsidiaries.

Compliance with the securities guidelines, risk budgets and key figures is also continuously checked and monitored. Monitoring is performed by means of periodic fair value measurements, value-at-risk calculations and detailed sensitivity analyses and stress tests and determining the solvency capital requirement during the year.

Liquidity risk is managed and monitored by matching the investment portfolio to insurance obligations. Operational and strategic risks which might be caused by deficiencies or errors in business processes, controls and projects, or changes in the business environment, are also continuously monitored by the internal control system.

Periodic risk monitoring is documented, for example, in the quarterly reports provided to the Managing Board following the meetings of the Risk Committee and forms the starting point for any further analyses or corrective control measures.

# **Risk categories**

Because of its activities, VIG is exposed to a large number of financial and non-financial risks. The overall risk of the Group can be divided into the following risk categories:

#### MARKET RISK

Market risk is the risk of losses due to changes in market prices. Changes in value occur, for example, due to changes in yield curves, share prices, exchange rates and the value of real estate and participations.

#### CREDIT RISK

Credit risk quantifies the potential loss due to a deterioration of the situation of a counterparty, against which claims exist.

### **UNDERWRITING RISKS**

Vienna Insurance Group's core business consists of the transfer of risk from policyholders to the insurance company. Underwriting risks in the areas of life insurance, health insurance and non-life insurance are primarily the result of changes in insurance-specific parameters, such as loss frequency, loss amount or mortality, as well as lapse rates and lapse costs.

#### OPERATIONAL RISKS

Operational risks may result from deficiencies or errors in business processes, controls or projects caused by technology, staff, organisation or external factors.

### REPUTATION RISK

Reputation risk is the risk of negative changes in business due to damage to a company's reputation.

#### LIQUIDITY RISK

This category includes the risk of VIG not having sufficient assets that can be liquidated at short notice to satisfy its payment obligations.

## STRATEGIC RISKS

Strategic risks can arise due to changes in the economic environment, case law, or the regulatory environment.

# Managing significant risks

In addition to the risks in the property and casualty balance sheet unit and real estate investments that are modelled using the partial internal model, the following risks must be noted due to their great importance for VIG:

- the interest rate risk as part of market risk, which primarily results from sales of long-term guarantee products,
- the asset default risk inherent in investments, which can be assigned to credit risk and indirectly to market risk,
- life insurance lapse risk, which can occur due to an increase in cancellation rates.

### MARKET RISK

Vienna Insurance Group is exposed to market risk, that is, the risk of suffering losses as a result of changes to market parameters. For VIG, interest rates and issuer spreads are the most relevant parameters for market risk. Ignoring investments held for the account of and at the risk of policyholders, Vienna Insurance Group's investments consist largely of fixed-income securities. The majority of these securities are denominated in euros and Czech koruna. Consequently, interest rate fluctuations and exchange rate changes in these currencies primarily have an effect on the value of these financial assets.

The management of investments is aimed at providing coverage for insured risks that is appropriate for the insurance business and the maturities of VIG liabilities.

Market risk affecting earnings is controlled by calculating value-at-risk at regular intervals based on the "Investment and Risk Strategy" guideline for securities and comparing it to the limit relative to the risk budget. Value-at-risk is determined using a variance/covariance calculation. VIG statistically estimates the variances and covariances from market data.

Depending on the purpose of the application, VIG performs value-at-risk calculations for different sub-portfolios. Confidence levels vary between 95.0% and 99.5%, and the holding period varies from 20 to 250 days. Due to the nature of the portfolio, interest rate and spread components make the largest contributions to value-at-risk. As a plausibility check of the calculations, the value-at-risk for the most important sub-portfolios is determined using both the parametric method described above and the historical calculation method.

The following table shows the value-at-risk (at a 99% confidence level) for VIG financial instruments that are measured as available for sale or at fair value through profit or loss.

Value-at-Risk	31.12.2017	31.12.2016
in EUR millions		
10-day holding period	292.6	381.7
20-day holding period	413.8	539.8
60-day holding period	716.8	935.0

Market risk is divided into interest rate, spread, share price, currency, real estate and concentration risk. For VIG, interest rates, spreads and share prices are the most relevant parameters for market risk.

### Interest rate risk

The main source of interest rate risk for VIG is the sizeable portfolio of policies with guaranteed minimum interest rates, which includes pension and endowment insurance, and the resulting investments. For existing life insurance policies, VIG guarantees a minimum interest rate averaging around 2.18% p.a. (2.31% p.a.). If interest rates fall below the guaranteed average minimum rate for any length of time, VIG could find itself forced in the future to use its capital to subsidise reserves for these products and consequently increase them through profit or loss as a result of the adequacy test.

### Spread risk

Spread risk arises from all assets and liabilities whose values depend on changes in the size of credit spreads over the riskless yield curve. Duration and the creditworthiness of the debtor are the main factors determining the amount of spread risk. Diversification and a uniform limit system for investments in fixed-interest instruments are used to limit this risk at the portfolio level.

### Share price risk

Among other things, Vienna Insurance Group's share investments include participations in a number of Austrian companies and equity positions in other companies whose shares trade primarily on the Vienna Stock Exchange or stock exchanges in the Eurozone or CEE region. A deterioration of the current economic situation could result in the share portfolio losing value.

Shares serve to increase earnings over the long term, provide diversification and compensate for long-term erosion in value due to inflation. VIG assesses share price risk by considering diversification within the overall portfolio and correlation with other securities exposed to price risk. Risk diversification within VIG's share portfolio is mainly achieved by geographic diversification primarily in the home markets of the Group and in the Eurozone. Share investments are predominantly made by the Austrian companies.

#### Currency risk

To diversify its portfolio, the investment area also makes use of international capital markets and, to a very small extent, foreign currencies. VIG's high degree of involvement in the CEE region results in currency risks at the Group level in spite of matching local currency investments made at the local level.

#### Concentration risk

Internal guidelines and Vienna Insurance Group's limit system are used to keep concentrations within the desired safety margin. Consultation across business lines provides for a comprehensive view of all significant risks.

Investments show a small risk concentration for Erste Group Bank across all asset classes. This is due to the strategic partnership with Erste Group Bank and VIG consciously accepts this risk. Exposure is regularly assessed and monitored by the risk management processes that have been established.

### CAPITAL MARKET SCENARIO ANALYSIS

This analysis is carried out annually for all VIG companies in order to check the risk capacity of the investments. The following table shows the stress parameters and the effects on IFRS capital of each scenario for 31 December 2017 (not including deferred taxes, deferred profit participation or deferred mathematical reserve).

Reduction in market value	Scenario 0	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
of shares	0%	-20%	-10%	-20%	-20%	0%
of bonds	0%	-5%	-3%	-5%	0%	-5%
of real estate	0%	-5%	-10%	0%	-10%	-10%
Market value of assets less liabilities (in EUR millions)	7,818.7	5,671.2	6,081.6	6,018.0	6,755.4	5,694.1

In scenario 1, the fair value of shares, bonds and real estate all decrease sharply at the same time – ceteris paribus. The fair value of the assets is always still significantly higher than the value of the liabilities after stress.

# CREDIT RISK FROM INVESTMENTS

When managing risks related to credit quality, a distinction must be made between liquid and tradable risks (e.g. exchange-listed bonds) and bilateral risks, such as, for example, time deposits, OTC derivatives, loans, private placements and securities accounts/depositories. The risk is monitored by means of ratings and limited by diversification limits at the portfolio level.

Consideration is only given to those issuers or contracting parties whose credit quality or reliability can be assessed by VIG, whether on the basis of analyses performed by the Group, credit assessments/ratings from recognised sources, provision of security (e.g. guarantor's liability) or the possibility of recourse to reliable mechanisms for safeguarding investments.

Under the investment guidelines of the material Group companies, bond investments (which represent the largest share of investments) are made almost entirely in the investment grade range. Investments in non-investment grade bonds are only made in individual cases and in accordance with decisions made by the Managing Board of the local company. The goal is to achieve the greatest possible diversification among individual issuers, to avoid accumulation risks, to ensure good average creditworthiness, to control foreign currency effects and to make the majority of investments in mid to long-term maturities in order to reflect the maturity profile of the liabilities as efficiently as possible.

### Use of ratings

The "second best rating" method specified under Solvency II is used as a rating method. The latest (issue or issuer) rating from each of the three major rating agencies is used to determine the second best rating.

If the latest rating is an issuer rating, and this rating cannot be directly used due to a difference in quality of the security (e.g. senior unsecured debt rating and a lower tier 2 bond), the rating is adjusted downwards appropriately. The adjustment is one notch down for lower tier 2 bonds and two notches down for upper tier 2 or tier 1 bonds.

This results in up to three valid ratings for each bond. These ratings are then ranked according to increasing probability of default and the rating with the second-lowest probability of default taken as the "second best rating". If the ratings in first and second place have the same probability of default, these two ratings are the "second best rating". In cases where a rating has only been assigned by one rating agency, due to a lack of other information, this rating is used as the "second best rating".

### CREDIT RISK FROM REINSURANCE

VIG cedes a portion of assumed risks to reinsurance companies. This transfer of risk to reinsurers does not, however, relieve VIG of its obligations to policy holders. VIG is exposed to the risk of reinsurer insolvency. VIG therefore designs its reinsurance programme carefully and monitors reinsurer rating changes.

## UNDERWRITING RISKS

Underwriting risks are divided into life insurance, non-life insurance and health insurance (incl. accident insurance) and are managed by the International Actuarial department, a team of actuaries. This department subjects all insurance solutions to in-depth actuarial analysis covering all lines of insurance business (life, health, and property and casualty).

The Actuarial function in the International Actuarial department coordinates the Group-wide determination of underwriting provisions to prepare the economic balance sheet in accordance with Solvency II.

Life underwriting risk and health underwriting risk similar to life

Life underwriting risk includes lapse risk, cost risk, disability risk, morbidity risk, longevity risk, mortality risk, catastrophe risk and audit risk. VIG's main risks in this area are lapse risk and cost risk, as well as biometric risks, such as life expectancy, occupational disability, illness and the need for nursing care.

To account for these underwriting risks, VIG has formed provisions for future insurance payments. VIG calculates its underwriting provisions using recognised actuarial methods and assumptions. These assumptions include estimates of the long-term interest rate trend, returns on investments, the allocation of investments between equities, interest-bearing instruments and other

categories, net income participations, mortality and morbidity rates, lapse rates and future costs. The Group monitors actual experience relating to these assumptions and adjusts its long-term assumptions where changes of a long-term nature occur.

To minimise lapse risk, VIG uses an effective complaint management department, qualified advisors and customer loyalty programmes to increase customer satisfaction and avoid cancellations. Policyholder cancellation behaviour is continuously monitored so that targeted measures can be taken if unfavourable changes occur.

VIG uses regular analyses, targeted product design and detailed underwriting guidelines to address these risks. A variety of reinsurance contracts also exist that help to reduce the general level of risk. A broadly diversified product portfolio in all life and composite companies and a well-mixed customer base in the CEE region minimise risk concentrations.

Non-life underwriting risk and health underwriting risk similar to non-life

Risk in the non-life sector is divided into premium risk, reserve risk, lapse risk and catastrophe risk. Property and casualty underwriting risks are primarily managed using actuarial models for setting rates and monitoring the progress of claims, as well as guidelines regarding the assumption of insurance risks.

Health underwriting risk is primarily concentrated in the Austrian companies. In the CEE markets, motor third party liability has a high volume compared to the other lines of business. This risk concentration was consciously accepted in order to enter these markets. VIG's strong market position and above-average growth prospects in the CEE region will help growth in the other lines of business, thereby reducing the concentration in motor third party liability.

The environmental catastrophes that have been becoming increasingly common in recent years, such as floods, mudslides, landslides and storms may have been brought about by general climate change. The number of claims caused in this way may continue to rise in the future.

VIG forms provisions for claims and claims settlement expenses and regularly monitors them in order to effectively cover the risk associated with the insurance business. This risk is also significantly reduced by ceding reinsurance.

#### LIQUIDITY RISK

Efficient asset liability management can be used to prevent liquidity shortages. Investments and obligations are analysed regularly to identify liquidity needs. These analyses, together with clear investment requirements (limit systems) and a conservative investment policy, help to appropriately manage liquidity risk. The Treasury/Capital Market department performs regular monitoring of cash flows and prepares quarterly reports on insurance company liquidity changes. The reports from the companies include the cash flows from operating activities, investing activities and financing activities. The department evaluates and analyses the data.

To ensure that every company continues to have adequate liquidity in the future, Group guidelines specify liquidity management standards that must be observed by every company. Among other things, these standards require a regular examination of current and future cash inflows and outflows.

The derivative liabilities do not represent a risk for VIG's liquidity, since the expected cash flows are covered by the underlying instrument.

The financing liabilities are largely due to the non-profit societies (see page 203). Since the properties of the non-profit societies are almost fully rented, no liquidity risk is seen in connection with servicing the financing liabilities.

#### OTHER RISKS

VIG's business activities result in other risks, primarily non-financial risks that are assessed and managed as part of risk management. These include, in particular, operational risks, as well as reputation risks and strategic risks.

In addition, a comprehensive internal control system (ICS) ensures that adequate risk control infrastructure has been set up for non-financial operational risks and is regularly checked for appropriateness and effectiveness. The ICS itself is comprised of all measures and control activities used to minimise risks – particularly for the areas of accounting and compliance, but also for other operational risks. It extends all the way from specially established processes, organisational units such as accounting and controlling, all the way to guidelines, regulations and individual controls within processes, such as automated audits or use of the "four-eyes" principle.

## Aspects of the legal tax framework affecting earnings

Changes to tax law may negatively affect the attractiveness of certain VIG products that currently enjoy tax advantages. For example, the introduction of laws to reduce the tax advantages of the Group's retirement benefit products or other life insurance products could considerably diminish the attractiveness of those products.

## Regulatory environment

VIG is subject to domestic and foreign (insurance) supervisory regulations. These regulations govern such matters as:

- Capital requirements of insurance companies and groups
- Admissibility of investments as security for underwriting provisions
- Icences of the different VIG companies
- Marketing activities and the sale of insurance policies and
- Cancellation rights of policy holders

Changes to the statutory framework may make restructuring necessary, thus resulting in increased costs.

# Developments in Central and Eastern Europe

The expansion and development of business operations in the countries of Central and Eastern Europe is a core component of VIG's strategy. It has a very strong presence in these countries. The prescribed risk guidelines ensure consistent risk management in all CEE countries in the Group.

## Risks due to mergers and acquisitions

In the past, VIG acquired a number of companies in Central and Eastern Europe or acquired participations in these companies. Mergers of Group companies are considered if the synergies that can be achieved outweigh the benefits of multiple market presences. Mergers and acquisitions often bring challenges in terms of corporate management and financing, such as:

- The need to integrate the infrastructure of the acquired or merged company, including management information systems, and risk management and controlling systems,
- handling unsettled matters of a legal or regulatory nature and associated legal and compliance risks resulting from the merger or acquisition,
- integration of marketing, customer support and product ranges, and
- integration of different corporate and management cultures.

When performing mergers, a number of additional risks must be taken into account in the strategy, in particular process and organisational risks.

# Portfolio changes in the life line of business

	Endowment insurance (not incl. risk insurance)		Risk insur	rance	Annuity insurance		
	No. of policies	Amt. insured	No. of policies	Amt. insured	No. of policies	Amt. insured	
	Quantity	in EUR '000	Quantity	in EUR '000	Quantity	in EUR '000	
As of 31.12.2016	2,073,030	23,157,036	1,822,867	56,776,128	558,922	11,616,022	
Exchange rate differences	0	113,576	0	666,232	0	8,684	
As of 1.1.2017	2,073,030	23,270,612	1,822,867	57,442,360	558,922	11,624,706	
Changes in scope of consolidation	4,808	36,432	13,824	39,361	0	0	
Additions	142,344	1,924,643	488,543	32,596,507	29,084	930,929	
New business	139,798	1,811,417	471,885	28,420,290	28,987	803,694	
Increases	2,546	113,226	16,658	4,176,217	97	127,235	
Changes	1,893	27,116	-10,362	-1,548,389	1,464	-16,062	
Changes in additions	25,725	766,340	25,860	1,011,627	9,737	393,093	
Changes in disposals	-23,832	-739,224	-36,222	-2,560,016	-8,273	-409,155	
Disposals due to maturity	-102,657	-1,113,326	-139,907	-21,974,750	-15,167	-196,213	
Due to expiration	-82,995	-992,835	-135,862	-21,899,147	-13,763	-168,603	
Due to death	-19,662	-120,491	-4,045	-75,603	-1,404	-27,610	
Premature disposals	-102,654	-1,187,429	-415,861	-3,674,797	-20,294	-415,144	
Due to non-redemption	-3,120	-53,662	-22,397	-205,696	-899	-22,250	
Due to lapse without payment	-19,821	-191,770	-219,367	-2,465,715	-2,160	-61,507	
Due to redemption	-80,286	-865,905	-174,080	-957,484	-17,233	-245,652	
Due to waiver of premium	573	-76,092	-17	-45,902	-2	-85,735	
As of 31.12.2017	2,016,764	22,958,048	1,759,104	62,880,292	554,009	11,928,216	

	Unit-linked and index	-linked insurance	Government sponsor	ed pension plans	Total		
	No. of policies	Amt. insured	No. of policies	Amt. insured	No. of policies	Amt. insured	
	Quantity	in EUR '000	Quantity	in EUR '000	Quantity	in EUR '000	
As of 31.12.2016	1,922,683	16,349,678	466,918	9,513,466	6,844,420	117,412,330	
Exchange rate differences	0	338,732	0	-166	0	1,127,058	
As of 1.1.2017	1,922,683	16,688,410	466,918	9,513,300	6,844,420	118,539,388	
Changes in scope of consolidation	412	523	0	0	19,044	76,316	
Additions	275,807	2,422,130	11,930	598,188	947,708	38,472,397	
New business	250,810	2,352,347	11,878	324,746	903,358	33,712,494	
Increases	24,997	69,783	52	273,442	44,350	4,759,903	
Changes	2,625	-14,653	146	-70,788	-4,234	-1,622,776	
Changes in additions	44,768	2,352,587	9,530	154,503	115,620	4,678,150	
Changes in disposals	-42,143	-2,367,240	-9,384	-225,291	-119,854	-6,300,926	
Disposals due to maturity	-31,862	-191,249	-1,468	-27,963	-291,061	-23,503,501	
Due to expiration	-27,845	-158,508	-942	-18,838	-261,407	-23,237,931	
Due to death	-4,017	-32,741	-526	-9,125	-29,654	-265,570	
Premature disposals	-202,899	-1,635,053	-24,761	-515,166	-766,469	-7,427,589	
Due to non-redemption	-34,520	-98,852	-283	-13,035	-61,219	-393,495	
Due to lapse without payment	-78,872	-636,119	-432	-5,290	-320,652	-3,360,401	
Due to redemption	-78,515	-649,336	-24,123	-286,488	-374,237	-3,004,865	
Due to waiver of premium	-10,992	-250,746	77	-210,353	-10,361	-668,828	
As of 31.12.2017	1,966,766	17,270,108	452,765	9,497,571	6,749,408	124,534,235	

# EMBEDDED VALUE SENSITIVITY ANALYSES FOR THE LIFE AND HEALTH INSURANCE BUSINESSES

The following table shows the sensitivities for changes in the assumptions used to calculate the embedded value for the life and health insurance businesses and value of new business as of 31 December 2017:

Embedded value for the life and health insurance business	Austria/Germany	Change	CEE	Change	Total	Change
	in EUR '000	in %	in EUR '000	in %	in EUR '000	in %
Base value	2,539,936		1,964,651		4,504,586	
Increase in yield curve 1%	285,281	11.23	-70,254	-3.58	215,027	4.77
Decrease yield curve 1%	-563,677	-22.19	61,473	3.13	-502,204	-11.15
Decrease in share and real estate values 10% as of the reporting date	-140,897	-5.55	-17,006	-0.87	-157,903	-3.51
Increase in share and real estate volatility 25%	-91,041	-3.58	-1,214	-0.06	-92,255	-2.05
Increase in yield curve volatility 25%	-32,407	-1.28	-1,056	-0.05	-33,463	-0.74
Decrease in administrative expenses 10%	87,208	3.43	55,261	2.81	142,469	3.16
Decrease in lapse rates 10%	-236	-0.01	73,054	3.72	72,818	1.62
Decrease in mortality rates for endowment and risk insurance 5%	13,426	0.53	53,385	2.72	66,811	1.48
Decrease in mortality rates for annuities 5%	-12,215	-0.48	-372	-0.02	-12,587	-0.28
No volatility adjustment	-36,802	-1.45	0	0.00	-36,802	-0.82

Value of new business	Austria/ Germany	Change	CEE	Change	Total	Change
	in EUR '000	in %	in EUR '000	in %	in EUR '000	in %
Base value	40,223		112,742		152,965	
Increase in yield curve 1%	4,175	10.38	-2,476	-2.20	1,699	1.11
Decrease in yield curve 1%	-14,349	-35.67	4,650	4.12	-9,699	-6.34
Decrease in administrative expenses 10%	1,982	4.93	7,036	6.24	9,018	5.90
Decrease in lapse rates 10%	4,217	10.48	13,514	11.99	17,731	11.59
Decrease in mortality rates for endowment and risk insurance 5%	1,570	3.90	8,739	7.75	10,309	6.74
Decrease in mortality rates for annuities 5%	445	1.11	666	0.59	1,110	0.73
No volatility adjustment	-819	-2.04	0	0.00	-819	-0.54

The sensitivities are based on the same management rules and policyholder behaviour as the base case. Each sensitivity is calculated separately. If two events occur simultaneously, the effect is not necessarily equal to the sum of the individual sensitivities.

# Provisions in the property and casualty line of business

### **GENERAL INFORMATION**

If claims are asserted by or against policyholders, all amounts that a company in VIG's property and casualty line of business pays or expects to have to pay to the claimant are referred to as losses, and the costs of investigating, adjusting and processing these claims are referred to as "claims settlement expenses". VIG has formed provisions by lines of business, extent of cover and year for each Group company to pay for losses and claims settlement expenses due to claims under its property and casualty insurance policies.

Losses and claims settlement expenses can be divided into two categories: reserves for known but still outstanding claims and reserves for claims that have been incurred but have not yet been reported, or the correct amount has not been reported ("IBNR", "IBNER"). Provisions for outstanding claims are based on estimates of future payments, including claims settlement expenses, for these claims. These estimates are made on a case-by-case basis in accordance with facts and circumstances ascertainable at the time the provision is formed.

The estimates reflect the well-founded judgement of Group adjusters based on general practices for forming insurance provisions and a knowledge of the nature and value of each type of claim. These provisions are adjusted regularly during normal processing and represent the expected eventual costs necessary to finally settle all pending reported claims, taking into account inflation, interest rates and other social and economic factors that could affect the amount of provisions that are required.

Historical developments in distribution patterns and claims payments, the level of reported and still outstanding claims and the nature of the extent of cover are also taken into account. In addition, court decisions and economic conditions can also affect the estimate of provisions and the eventual size of claims.

IBNR and IBNER provisions are formed to offset the expected costs of losses that have been incurred but not yet reported to the individual Group companies. These provisions, just like the provisions for reported claims, are formed to pay the expected costs, including claims settlement expenses, necessary to finally settle these claims. Because, by definition, the extent of these losses is still unknown when the provisions are formed, the Group calculates its IBNR and IBNER liabilities based on historical claims experience, adjusted for current developments in claims-related factors. These provisions are based on estimates made using actuarial and statistical forecasts of the expected costs to finally settle these claims. The analyses are based on the facts and circumstances known at the time and on expectations regarding changes in legal and/or economic factors that determine the level of loss, such as case law, the inflation rate and labour costs. These provisions are regularly reviewed and revised once additional information is known and claims are actually reported. The time needed to learn of these claims and settle them is an important factor that must be taken into account when forming provisions.

Claims which are easy to settle, such as property damage under motor insurance, are reported within a few days or weeks and are normally settled within a year.

More complicated claims, such as personal injury under motor or general liability insurance, typically require longer settlement times (on average four to six years, in some cases considerably longer). Difficult claims, where settlement regularly depends on the results of often protracted litigation, also lead to substantially longer settlement times, especially in the liability, casualty, building and professional liability lines of business.

The final costs of the claims and claims settlement expenses depend on a number of variable circumstances. Between the time a claim is reported and final settlement, changing circumstances may require that the provisions that were formed be revised upwards or downwards. For example, changes in the law, the outcome of litigation and changes in medical costs, costs for materials for auto and house repair and hourly wage rates, loss frequency and loss amount can have a substantial effect on the costs of claims. These factors may result in actual developments differing from expectations — sometimes substantially. Loss reserve estimates are regularly reviewed and updated, using the most recent information available to the Managing Board. Any changes to provision estimates are reflected in the operating result. VIG's conservative policy toward provisions is shown, for example, by the fact that liquidation of loss reserves has generally led to a profit. Based on the Group's internal procedures and the information currently available to it, management believes that the Group's provisions in the property and casualty insurance area are adequate. However, forming loss reserves is by nature an uncertain process and therefore no guarantee can be given that in the end losses will not differ from the Group's initial estimates.

# CHANGE IN GROSS LOSS RESERVE

The following table shows the changes in VIG's direct loss reserve as of the end of each year indicated. The provisions reflect the amount of expected losses, based on claims that occurred in the current and all previous loss years and had not yet been paid as of the balance sheet date, including IBNR and IBNER.

Interpreting the information contained in this table requires caution, because each amount contains the effects of all changes from the previous periods. The circumstances and trends that affected liability in the past could possibly recur in the future and therefore no conclusions can be drawn from the information given in this table as to future results.

Claim payments for each year of occurrence on the applicable balance sheet date (gross)

Year of	Calender year										
occurrence	≤2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
in EUR '000											
2008 and before	2,545,366	950,902	303,922	170,272	112,173	94,986	70,399	69,753	57,289	35,959	
2009		1,687,960	713,178	180,476	69,027	38,112	25,020	16,847	15,673	9,919	
2010			1,714,403	705,902	161,705	73,596	44,006	26,997	25,863	17,143	
2011				1,616,214	651,472	101,100	107,425	52,275	43,849	33,054	
2012					1,711,639	775,993	194,023	93,221	84,701	44,606	
2013						1,811,908	705,274	179,122	130,960	70,628	
2014							1,545,509	773,664	192,081	101,832	
2015								1,565,072	734,971	212,354	
2016									1,619,590	806,055	
2017										1,827,020	
Total	2,545,366	2,638,862	2,731,503	2,672,864	2,706,016	2,895,695	2,691,656	2,776,951	2,904,977	3,158,570	

<sup>\*</sup>Currency translation effects and changes in the scope of consolidation can lead to differences in the figures for previous years.

Loss reserve for each year of occurrence on the applicable balance sheet date (gross)

Year of	Calender year										
occurrence <sup>-</sup>	≤2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
in EUR '000											
2008 and before	3,244,374	1,873,058	1,346,843	1,041,376	800,527	667,485	601,923	512,045	468,769	445,454	
2009		1,414,103	653,175	387,931	234,502	162,405	134,355	111,606	100,578	84,719	
2010			1,519,003	649,507	392,546	229,759	170,849	136,974	105,317	94,608	
2011				1,596,365	765,298	410,771	269,853	194,351	157,623	121,972	
2012					1,592,559	764,380	437,836	285,304	211,434	168,909	
2013						1,686,441	788,263	479,577	279,969	197,272	
2014							1,739,007	809,712	467,509	312,895	
2015								1,680,149	786,209	466,268	
2016									1,747,035	799,591	
2017										1,892,313	
Total	3,244,374	3,287,161	3,519,021	3,675,179	3,785,432	3,921,241	4,142,086	4,209,718	4,324,443	4,584,001	

<sup>\*</sup>Currency translation effects and changes in the scope of consolidation can lead to differences in the figures for previous years.

### Reinsurance

VIG limits its potential liability arising from the insurance business by passing on, to the extent necessary, a portion of the assumed risks to the international reinsurance market. Some of the risks of Group companies are reinsured within VIG and these risks are in turn ceded to reinsurers at the Group level.

# REINSURANCE GUIDELINES

The reinsurance guidelines are jointly determined each year by the corporate Reinsurance department and the member of the Managing Board responsible for reinsurance during the development of the reinsurance strategy for the next financial year. They require each Group company to provide, in consultation with the corporate Reinsurance department, reinsurance coverage that is appropriate for its local company. These guidelines govern the following points.

## REINSURANCE IS A PREREQUISITE FOR THE ACCEPTANCE OF INSURANCE COVERAGE

Underwriting departments may only make a binding commitment to insure a risk if sufficient reinsurance coverage has already been assured.

### RETENTION

It is Group-wide policy that no more than EUR 50 million for the first two natural catastrophes and EUR 20 million for each additional event can be placed at risk on a PML (probable maximum loss) basis. The maximum Group-wide retention per individual loss is less than EUR 10 million.

## SELECTION OF REINSURERS - DIVERSIFICATION

VIG and its Group companies divide their reinsurance coverage among many different international reinsurance companies that VIG feels have appropriate credit quality, so as to minimise the risk arising from one reinsurer's inability to pay (credit risk). The monetary limit per reinsurer is set individually for each subsidiary. No significant reinsurer default has occurred in the history of VIG.

### SELECTION OF REINSURERS - RATINGS

For lines of business where claims settlement takes a long time, in particular for motor third party liability, general liability and aviation, VIG uses reinsurers with outstanding ratings (at least a Standard & Poor's rating of A, preferably a rating of AA or higher), which in all likelihood will also continue to exist over the long term. Even for lines of business with claims that are settled quickly (for example, natural catastrophes, fire, technology, transportation, storm, burglary, household, water pipes, auto collision), where the number of reinsurers is greater, the preferred rating is Standard & Poor's "A" or higher. Only in a few cases – and for limited periods of time – are reinsurers with lower ratings accepted.

### DESIGN OF REINSURANCE PROGRAMMES

If it can be justified economically, any Group company can purchase reinsurance coverage individually from external reinsurers. If individual reinsurance policies can only be purchased by a Group company at uneconomical terms, VIG strives, as far as possible, to jointly place reinsurance contracts covering risks from natural catastrophes, property lines of business, casualty, transport, aviation and motor liability. If necessary, intra-Group assumptions of reinsurance are also passed on as retrocession in the reinsurance market for safety reasons. The guidelines for Wiener Städtische reinsurance coverage are presented below. Retentions for all other companies in the Group are below those of Wiener Städtische.

#### REINSURANCE COVERAGE USING THE EXAMPLE OF WIENER STÄDTISCHE

#### Natural catastrophes

Wiener Städtische provides insurance for damage caused by natural catastrophes such as storms, hail, flooding or earthquakes. Wiener Städtische AG uses reinsurance coverage to limit its retention for natural catastrophes to EUR 16.5 million for the first loss event and EUR 5.0 million for each additional event.

## Private customer business

The private customer business consists of essentially stable insurance portfolios having calculable results that are characterised above all by a stable claims frequency. Thus, such recurrent claims are only reinsured in exposed lines of business, for example storm insurance, with a targeted use of proportional reinsurance to reduce the effects on the retention. The effects on the retention of the small number of expected major losses are covered by non-proportional reinsurance. Even in this operating segment, Wiener Städtische's maximum net loss is between EUR 1 million and EUR 2 million, depending on the line of business.

# Management and control

### LIQUIDITY MANAGEMENT

VIG manages its liquidity using guidelines approved by the Managing Board of VIG Holding. As a rule, VIG Holding and each subsidiary are responsible for their own liquidity planning. As the Group parent company, VIG Holding is responsible for allocating capital for the Group as a whole. This allows capital to be efficiently distributed within the Group. It also allows VIG Holding to ensure that the target levels of liquidity and capital resources are available both at the Group level and in the individual operating units.

Most of the liquidity for day-to-day operations comes from premiums received from primary insurance, regular income from investments and proceeds from the sale of investments. These inflows are offset by payments for property and casualty insurance claims, and benefit payments for life and health insurance. The remaining net liquidity is used to cover acquisition and operating costs.

The maturity pattern of the insurance business provides a natural liquidity buffer. Unlike the premiums received, VIG guarantees insurance coverage for a certain period of time, and no cash outflow occurs during this period until an insured event occurs. The liquidity buffer is invested during this period and generates investment income. A portion is held in the form of liquid investments to ensure that it can be quickly converted into cash to pay claims. In addition, the bond portfolio, in particular, is structured so that the proceeds from maturing bonds are received on the dates it is anticipated they will be needed. External influence factors, such as capital market developments and the interest rate level, affect the liquidity situation by improving or restricting the ability to sell the investment portfolio at market value.

The time, frequency and size of insured claims are also important for the liquidity situation of property and casualty insurance. The number of policy extensions also plays a role.

The liquidity needs for life insurance are generally affected by the difference between actual mortality experience and the assumptions used to calculate underwriting provisions. Market returns or minimum interest rates and the behaviour of life insurance customers, such as the number of policies surrendered or terminated, also have an effect on VIG liquidity needs.

#### CAPITAL MANAGEMENT

In the interests of our shareholders and insurance customers, our goal is to ensure that VIG has adequate capital resources at all times and that all operating insurance companies fulfil their respective minimum regulatory capital requirements. Due to its successful business strategy, VIG has traditionally had very good capital resources. Maintaining this good capital base in the future is also important to us, both to allow us to take advantage of profitable growth opportunities and to cushion the effects of large loss events.

#### Standard & Poor's rating

VIG also places great importance on permanently maintaining a strong credit rating with Standard & Poor's (S&P). VIG is regularly rated by S&P. S&P has its own capital model for assessing the relationship between the risk capital required by a company and the capital resources available to it. In August 2017, S&P confirmed VIG's A+ rating with a "stable" outlook.

The subordinated bonds issued in 2013 (EUR 500 million, tier 2, first call date 9 October 2023), in 2015 (EUR 400 million, tier 2, first call date 2 March 2026) and in 2017 (EUR 200 million, tier 2, first call date 13 April 2027) and the hybrid bond issued in 2008 (outstanding volume EUR 198 million, restricted tier 1, first call date 12 September 2018) have been rated A- by S&P.

According to the S&P rating report of 17 August 2017, VIG's capital resources exceed the requirements for the AAA level. This means that VIG has a very good credit rating when compared to similar insurance companies and outstanding capital resources. When performing regular capital planning, VIG takes account of the effects on its rating, with the goal of strengthening it over the long term.

## Active capital management

VIG uses the criteria above to monitor its capital positions and takes appropriate measures to further improve its capital structure and strengthen its capital and solvency situation over the long term. VIG has set itself a goal of holding the solvency ratio at the current level in all of the insurance companies in the Group in spite of planned growth.

Capital management focuses on subordinated long-term liabilities with equity-like characteristics. VIG Treasury continuously monitors capital market developments, with particular attention to developments concerning bonds with equity-like characteristics from the European insurance sector. New capital instruments developing in the capital market for insurance companies are examined for applicability to VIG.

## Capital resources

As of 31 December 2017, share capital of EUR 132,887,468.20 was registered in the commercial register, divided into 128,000,000 no-par value bearer ordinary shares with voting rights. VIG Holding held no own shares on 31 December 2017 (2016: none). In addition, VIG Holding can, according to the authorisation by the shareholders, increase its shareholders' equity by issuing common or preferred shares. The individual authorisations are listed in Note 8. Consolidated shareholders' equity on page 171.

A calculation at the level of the listed Group leads to a solvency requirement under Solvency II of EUR 3.48 billion as of the 3<sup>rd</sup> quarter of 2017, compared to Group's existing capital of EUR 7.82 billion (unaudited figures). The calculations for 31 December 2017 had not yet been finished when the consolidated financial statements were finalised.

	30.09.2017*	31.12.2016
in EUR billions		
Capital	7.82	6.64
Capital requirement	3.48	3.41
Solvency ratio	approx. 225%	approx. 195%

\*Values not audited

Regulatory Group solvency reporting is performed at the level of VIG's principal shareholder, Wiener Städtische Versicherungsverein.

In April 2017, VIG Holding issued a EUR 200 million bond with a term of 30 years. VIG Holding can call the bond for the first time after 10 years. The bond satisfies the requirements for tier 2 capital under Solvency II and is eligible as capital based on the requirements of the S&P rating agency.

# Long-term debt financing

As of 31 December 2017, VIG Holding had outstanding subordinated bonds and outstanding hybrid capital with a variety of maturities. Detailed information on the VIG Holding bond programme is available in Note 9. Subordinated liabilities on page 174. As shown by the maturities, VIG's focus is on subordinated liabilities that are eligible capital. General capital market conditions and other circumstances that affect the financial services sector as a whole or the Group in particular could have an adverse effect on the cost and availability of debt financing. The goal, therefore, is to actively manage the Group's capital structure to keep refinancing risks as low as possible.