

# Risk Report

In compliance with the IFRS 7 requirements, introduced by the Regulation (EC) no. 108 of 11 January 2006 and following amendments, this section describes the nature and extent of risks arising from financial instruments and insurance contracts, which the Group had been exposed to during the accounting period, along with a description of the related risk management processes at the reporting date.

The period of validity of the Solvency I regulatory regime was concluded at the end of 2015 financial year and the new Solvency II regulatory regime came into force as from 1 January 2016. In line with the approach developed by Ania<sup>4</sup> (Communication Prot. no. 0067), this Risk Report therefore provides qualitative disclosure regard-

ing the objectives, policies and processes for capital management with reference to the Solvency II framework, giving evidence of the evolutions towards the new supervisory regime. Conversely, quantitative information, in continuity with the previous year, is still based on official data related to the Solvency I regulatory regime. This approach, consistent with the applicable accounting principles, is motivated, on the one hand, by the need to provide the stakeholders up-to-date information useful to evaluate the objectives, policies and processes for the capital management, and on the other hand, by the need to report quantitative data related to regulatory capital in line with the regulations in force at the reporting date.

## I. Internal Control and Risk Management System

Generali Group has developed an Internal Control and Risk Management System, defined by the Board of Directors of the Parent Company, whose principles apply to all Group Companies. It defines the purpose, principles, structure, roles, responsibilities and key provisions of the system, in compliance with the laws and regulations applicable to Group internal control and risk management.

By means of the Internal Control and Risk Management System, Generali Group aims at maintaining the identified risks within an acceptable range in order to optimise the available financial resources required to manage the identified risks and thereby improve the profitability of the business exposed to these risks (risk-adjusted performance). The activities of Generali Integrated Risk Management System at Group level are carried out under the coordination and steering of the Head Office, and rely on a set of Group Policies and Guidelines, monitoring tools as well as common methodological frameworks. The coordination and steering of these activities is ensured through the reporting of the local Risk Management, Compliance and Internal Audit functions to the related function at Head Office level. Such coordination is fundamental to ensure a consistent and efficient im-

plementation of the Risk Management System and to allocate capital to the Group Companies taking into consideration their specific risk profile.

A project of particular importance to ensure full adherence with the Solvency II prudential regime, is the application process for the approval, by the Supervisory Authority, of the Internal Risk Model used for the calculation of the Solvency Capital Requirement. In developing the Internal Risk Model, Generali ensured compliance with all Solvency II requirements, including tests and standards envisaged by regulations, including Validation. The Internal Model approval process has been defined on the basis of a multi-year working plan, coordinated with the College of Supervisors (coordinated by the Group Supervisor and composed by the National Supervisors of the Countries included in the scope of application of the Internal Model). Within the pre-application process several meetings with the College were held, and subsequently the so-called "Application package" was submitted with the objective of receiving the approval for the use of the Internal Model for the calculation of the Solvency Capital Requirement.

In March, following the Application submitted by Assicurazioni Generali S.p.A., IVASS (Istituto per la vigilanza sulle assicurazioni), approved the use, starting from 1 January 2016, of a Partial Internal Model to calculate the consolidated Solvency Capital Requirement at Group level, as well as the Solvency Capital Requirement for the main insurance undertakings in Italy and Germany, for the French non-life Companies and for the Czech Company Ceska Pojistovna A.s..

The process of defining and updating the written policies based on Solvency II Framework has been com-

<sup>4</sup> Ania stands for Associazione Nazionale fra le Imprese Assicuratrici, being the Association of the Insurance companies at Italian level.

pleted. The policies rule the system of internal controls by defining roles and responsibilities of the control functions, and define the processes related to the management of individual risks (investment, underwriting and operational risk) and the main business processes (including capital management, asset-liability management process and product approval process). The completion of the written policies required by Solvency II is part of a broader commitment of spreading the internal control culture and awareness on the Internal Control and Risk Management System adopted both at Company and at Group level. To this end, the Generali Internal Regulations System (GIRS), which is the Group internal regulatory system, approved by the Board of Directors of Assicurazioni Generali, defines the hierarchy of the Group internal regulations and identifies their main characteristics. It also introduces the process that governs the life cycle of the Internal Regulations in terms of preparation, validation, approval, dissemination and adoption at Group level.

As part of the implementation of the Solvency II Pillar II requirements in terms of governance, the Group ORSA Report (Own Risk and Solvency Assessment) has been prepared, in accordance with the principles and with the

## II. Risk Management System

In order to ensure an effective management of risks arising from the business with focus on the most significant ones, which could undermine the solvency position of the Group and of the Business Units or constitute a serious obstacle to the achievement of the Group's objectives, the Board of Directors adopted the "Internal Control and Risk Management System" and the "Risk Management Policy". In order to guarantee a consistent approach and to monitor the management of the risks throughout the Group, the adoption of these policies is required to all Group subsidiaries.

### Roles and responsibilities

The risk management is implemented through a specific ongoing process, which involves, with different roles and

content requirements provided by IVASS within Letters to the Market issued according to the EIOPA Guidelines.

Finally, given the prior designation of the Group as a Global Systemically Important Insurer (GSIs), the Parent Company conducted an assessment of its systemic risk importance by updating its Systemic Risk Management Plan. In parallel the Group also updated the Liquidity Risk Management Plan and the Recovery Plan based on the guidelines and standards issued by the Financial Stability Board (FSB) and by the International Association of Insurance Supervisors (IAIS). In November 2015, the Group was removed from the list of GSIs published by FSB.

The following paragraphs detail general aspects related to the implementation of the Risk Management Policy at Group level, with reference to governance and risk management processes. In particular a definition is provided of the main risks to which the Group is exposed, according to the Group Risk Map, which has been approved within the Risk Management Policy. For each risk category a brief description of the main methodologies applied for the risk assessment is given.

responsibilities, the Board of Directors, the Top Management and the operating and control structures both at Group and Company level. This is defined within the "Internal Control and Risk Management System", annually approved by the Board of Directors of the Parent Company and, subsequently, by the Local Entities' Boards<sup>5</sup>, taking into consideration local specificities and regulations.

The Board of Directors approves the risk management policies and strategies, as well as the risk tolerance levels. The risk adjusted performance targets are defined in line with the capital adequacy level.

The Board of Directors is regularly informed by the Top Management of the Parent Company and by the Group Risk Management function on the Group risk exposures, through regular reporting or, in exceptional circumstances, in case of material changes in the risk profile, or when prompt intervention through corrective measures is required. The Board of Directors is also periodically informed by the 'Dirigente Preposto', Manager in charge of preparing the Company's financial reports, also through the Risk and Control Committee, on the risk management and internal control related to the process of financial reporting. The Risk and Control Committee,

<sup>5</sup> Board is to be considered as the administrative, supervisory or management body according to the local governance.

holder of inquiry, consultative and advisory functions, assists the Board of Directors in carrying out the tasks related to the Internal Control and Risk Management System. The committee is composed of non-executive directors, the majority of whom being independent.

At Group level, the Board of each Group Company maintains the ultimate responsibility to approve the risk management policy, strategy and risk tolerance levels as well as to periodically define its risk adjusted targets, in alignment with the Parent Company's directives and its own required capital adequacy level.

The Parent Company Top Management is in charge, at different levels, of implementing, maintaining and monitoring the risk management policies in accordance with the Board of Directors' directives. It also steers the definition of operative limits and their timely review through guidelines that each single Group Company is required to implement. Moreover, the Top Management monitors the risk exposures, and the compliance with the assigned tolerance level on an ongoing basis.

The Group CEO is also the member of the Board in charge of the Internal Control and Risk Management System who, among other tasks, implements the risk management Policies and proposes initiatives to the Board of Directors aiming at adjusting and reinforcing the Internal Control and Risk Management System.

The Top Management shares its main strategic decisions with the Group Management Committee (GMC), which plays a coordination role. The purpose of the GMC is to ensure better alignment of the strategic priorities within the Group and to improve the effectiveness of the decision-making process, through a team approach promoting the sharing of opinions and the adoption of an international perspective.

The GMC supports the Group CEO for the strategic decisions, such as the endorsement of recommendations submitted to the Board of Directors, the main decisions in terms of risk and investment, the assessment of the Group financial and operating results, as well as the definition of the strategic projects having an impact at Group and main Business Units' level.

The Committee, chaired by the Group CEO, comprises, to date, the heads of the four Group Head Office Functions (Group CFO, Group CRO, Group COO, Group CIO), the three Country managers of the main Countries (Italy, Germany and France) and the Head of the Global Business Lines Division.

The Parent Company Top Management is supported also by the cross functional Balance Sheet Committee, Finance Committee and Product & Underwriting Committee. The Balance Sheet Committee identifies and investigates the issues, which may have a material impact on the balance sheet, both at a Group and Head Office level. The Finance Committee investigates and assesses extraordinary investments and transactions, while the Product & Underwriting Committee oversees the profitability and the riskiness of new insurance products through a centralized process calling for prior approval of new products.

The functions involved in the risk management process operate according to the Three Line of Defence approach, as outlined in the Internal Control and Risk Management System:

- the operational department heads (Risk Owners), as primary risk takers through their activities, have the direct responsibility to manage risks and implement appropriate control measures. To this end, they provide Top Management with the information needed to define the policies, methodologies and tools for the management and controls of the risks for which they are responsible, both at Group and Company level. To this extent, they oversee their implementation and ensure their adequacy over time. They also ensure that the operational departments that are under their responsibility comply with their objectives and policies, they implement corrective actions within their delegated authorities, and submit specific recommendations or proposals of improvements to the Top Management;
- the Group Risk Management, the Group Compliance and the Group Actuarial Function are the second Line of Defence. The Group Risk Management, whose responsible is the Group Chief Risk Officer, guarantees the accurate implementation and the overall adequacy of the Risk Management System, as prescribed by the regulation and as defined by the Board of Directors. The Group Risk Management Function supports the Board of Directors and the Top Management in the definition of the risk strategy and in the development of the methodologies to identify, evaluate, control and report risks. Through an adequate reporting system, the Group Risk Management Function defines the framework for assessing the strength of the overall Risk management system. With the purpose of fully complying with independence requirements from the business functions, the Group CRO also reports functionally to the Board of Directors. Further, the Chief Risk Officers of the local Companies report also to the Group CRO. The Group Compliance Function, whose

responsible is the Group Compliance Officer, has the responsibility to evaluate whether the organization and the internal procedures are adequate to prevent the risk of incurring legal or administrative sanctions, financial losses and damage to reputation as a result of infringements of laws, regulations or measures of Supervisory Authorities or self-regulatory standards. Also the Group Compliance Officer reports functionally to the Board of Directors. The Group Actuarial Function, of which the responsible is the Group Head of Actuarial Function, has to coordinate the computation and the validation of the Technical Reserves of the Group and to develop a common frame of reference rules for the Local Actuarial Functions. Moreover, it sets a common structure for providing opinions on re-insurance and underwriting activities to be adopted by Local Actuarial Functions. Its main task is to provide the Group Board of Directors with an independent opinion regarding the Group Technical Provisions within Solvency II requirements and about the Group underwriting and reinsurance policy. Also the Head of the Actuarial Function reports functionally to the Board of Directors;

- the Internal Audit Function, named Group Audit, is the Third Line of Defence and is an objective function carrying out

### III. Risk Management Policy

The “Risk Management Policy” is the cornerstone of all risk-related policies and guidelines. The Policy is approved by the Board of Directors, assisted by the Risk and Control Committee, upon proposal of the Group Chief Risk Officer.

The Policy establishes the driving principles and minimum process requirements to identify, evaluate, manage and monitor current and forward looking risks that could arise from the activities performed by Generali Group.

The Policy ensures a sound and effective management of risks throughout Generali Group consistently with the

assurance activities for the benefit of the Board of Directors, the Top Management and other departments, with the aim of improving the effectiveness and efficiency of the System of Internal Controls, the organization and the governance processes. The Head of Group Audit Function reports directly to the Board of Directors, by means of the Chairman.

Within the first organizational level of the Internal Control and Risk Management System, the Dirigente Preposto in charge of the preparation of the Company’s financial reports, in accordance with the provisions of Art. 154 bis of the Consolidated Law on Finance Intermediation (T.U.F. – *Testo Unico della Finanza*), is responsible for providing adequate administrative and accounting procedures to prepare the Parent Company financial statements, and the consolidated financial statements as well as any other financial communication.

Companies belonging to the Insurance Group are required to comply with the directives for the Internal Control and Risk Management System described above. Local amendments are allowed only in case of conflict with local laws.

stated risk appetite defined by the Board of Directors of Assicurazioni Generali.

The main processes and procedures prescribed in this Policy are aimed at establishing a sound management of risks to preserve the stability and solvency of Generali Group, and at leveraging synergies, best practices, and specialized competences developed within the Group.

Group Companies are requested to adopt this Policy, according to the local specificities and the regulatory requirements.

## IV. Risk Management process

The Risk Management process, regulated by the Policy includes the following main phases:

- Risk identification;
- Risk measurement;
- Risk management and control;
- Risk reporting (for the Board of Directors, the Supervisory Authority and external stakeholders). The Policy includes also the principles aimed at drawing up ORSA Reports, at Group and local level.

## Risk identification and measurement

Given the categories provided for in Reg. 20/2008 IVASS, Art. 19 and the Solvency II framework, the main risks to which the Group is exposed to, on a current and forward looking basis, are explained below.

The Group Risk Map, approved by the Assicurazioni Generali Board of Directors, identifies the main risk categories listed hereafter. For each category, a specific measurement methodology is defined:

Risks covered by Partial Internal Model				
Internal Model				Standard Formula
Financial risks	Credit risks	Insurance risks	Insurance risks Life & Health	Operational risks
Interest rate yields	Spread widening	Pricing	Mortality CAT	
Interest rate volatility	Credit Default	Reserving	Mortality no CAT	
Equity Price	Counterparty Default	CAT	Longevity	
Equity volatility		Non-Life Lapse	Morbidity/ Disability	
Property			Life Lapse	
Currency			Expense	
Concentration			Health CAT	
			Health Claim	

Risk measurement methodologies (both for qualitative and quantitative risks) are applied in order to provide an integrated measurement of risks at Group level.

The risks identified in the Group Risk Map, within the financial, insurance and credit risks categories, are measured through a quantitative model aimed at determining the Solvency Capital Requirement, based on the Partial Internal Model (also called Economic Balance Sheet). The Solvency II Directive provides for specific tests and standards, aimed at ensuring the reliability of the results obtained and their actual use in business decision-making processes.

The capital requirement for operational risks is defined on the basis of the EIOPA Standard Formula<sup>6</sup>.

## Management and monitoring of risks

Hereafter the main principles for the management and monitoring of the above risk categories are described.

<sup>6</sup>  
The determination of capital requirements does not provide further sub-categories.

## V. Financial Risks

Financial risks include risks deriving from unexpected movements in interest rates and exchange rates and the values of equities and properties, as well as increases in the volatility of interest rates and equity values that may have an adverse impact on the economic or financial results.

Also concentration risk is considered, consisting in the possibility that a single exposure or group of exposures to a single final issuer results in a loss of such magnitude so as to endanger the financial and solvency position of the Group.

Assets subject to market movements are invested both to profitably employ the capital subscribed by shareholders and to meet contractual obligations to policyholders. Unexpected movements in interest rates, in values of equities and properties, as well as exchange rates could have a negative impact on the shareholders' equity and on Group solvency position. Therefore, a proper analysis of the impact of adverse market movements implies the consideration of volatility and correlations among these risks as well as the effects of these risks on the economic value of the related insurance liabilities.

For more details on exposures to investments subject to market risk, please refer to section "Investment" of the Notes.

As mentioned above, the economic impact of market changes for the shareholders does not only depend on the sensitivity of the assets with regards to these movements, but also on the effect of these movements on the present value of insurance liabilities, which can absorb part of the risk.

In life business, this absorption is generally based on the level and structure of minimum return guarantees and profit sharing arrangements. The sustainability of minimum guaranteed rates of return is assessed through deterministic and stochastic analysis, on the medium or long terms, performed at Company and, if necessary, at single portfolio level. These analyses take into account the dynamic interaction between assets and liabilities in

order to support the product definition and asset allocation strategies aiming at optimising the risk/return profile.

In managing the investments, the Companies follow the Group guidelines relating to assumption of risks and the defined operating limits.

In order to manage the Group exposure towards financial markets, while maintaining a perspective of risk/return, the management adopts procedures and actions at portfolio level including:

- strategic and tactical asset allocation guidelines updated to changing market conditions and to the ability of the Group to assume financial risks;
- matching strategies related to net cash flows and the duration of assets and liabilities, in order to manage interest rate risk;
- dynamic hedging strategies through the use of derivatives instruments such as options, swaps, forwards and futures;
- policies for managing policy portfolio and pricing consistent with sustainable guarantee levels.

The currency risk arising from borrowings in currencies other than the euro is neutralized using derivative hedging instruments.

For the purpose of concentration risk mitigation, the Group pursues the effective diversification of both investment and counterparties. Such diversification objectives are achieved mainly through the diffusion and application of the Group guidelines.

The Group has a data warehouse for the collection and aggregation of data related to financial investments, which ensures homogeneity, time effectiveness and high quality analysis of financial risks.

### Life segment

Taking into consideration the specific characteristics of the life business, the impact of negative changes in the financial market conditions has to be assessed both on assets and liabilities. As envisaged by IFRS 4, this impact is represented herein as percentage change of Group's Embedded Value<sup>7</sup>.

Embedded Value (EV) is an actuarially determined estimate of the Group value, net of any value attributable to future new business. With reference to the covered business at the date of valuation, and to the relevant consolidation perimeter (i.e. the operating life and health

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The Group publishes annually an Embedded Value Report on the activities of the Life segment.

Companies of the Group), the EV is equal to the sum of the Adjusted Net Asset Value (ANAV), and the Value In-Force (VIF). Namely:

- the Adjusted Net Asset Value corresponds to the market value of the consolidated shareholders' funds, net of goodwill and DAC (Deferred Acquisition Costs), and before the payment of dividends from profits in the year;
- the Value In-Force corresponds to the present value of the projected stream of after-tax industrial profits generated by the business in force at the valuation date. This value takes into account the cost of financial guarantees related to the options, embedded in insurance contracts, and less the frictional costs of holding the capital and the cost of non-financial risks.

Regarding the market risk the Group performs the following sensitivities on its Embedded Value:

- Yield curve +0.5%: sensitivity to an upward parallel shift of 50 basis points in the underlying market risk free rates, accompanied by an upward shift in all economic assumptions;
- Yield curve -0.5%: sensitivity to a downward parallel shift of 50 basis points in the underlying market risk free rates, (-100 basis points analysis has not been performed at 31/12/2015 because of a lack of significance in a scenario with very low interest rates), accompanied by a downward shift in all economic assumptions;
- Equity value -20%: sensitivity to a 20% market value reduction of all equity investments in the portfolio at valuation date;
- Property value -10%: sensitivity to a 10% market value reduction of all property investments in the portfolio at valuation date.

#### Life Embedded Value sensitivities: Market Risks

(%)	31/12/2015
Interest rate +0.5%	1.8
Interest rate -0.5%	-4.4
Equity price -20%	-5.5
Property price -10%	-1.8

When analyzing the data from a general point of view, if it is evident that the decrease in equity and real estate prices has a negative impact on the shareholders' value, it must be also noted that a shift in risk free rates might have both positive and negative effects, driven by the insurance portfolio structure and by the assets and liabilities mismatch in terms of cash flow.

As it can be seen, at 31 December 2015, the Company is subject to the effects of the decreasing interest rates. The reduction in embedded value is greater than the variation observed in the opposite case, that is in case of a rise in interest rates. The asymmetry above, albeit reduced from the previous year thanks to an increase in interest rates and a reduction in the volatility of the reference curve (the implied volatility of equity instruments remains about the same levels), recorded at the end of 2015, is mainly due to the presence of specific financial guarantees implied in contracts, in particular minimum return guarantees, the cost of which increases considerably because of the decrease, in the current level of rates.

#### Non-life segment, Holding and other businesses segment

According to the requirements of IFRS 7, the impact of possible changes in interest rates and values of the equity instruments on the non-life and financial segments is represented by the impact on the result for the period and on the shareholder's equity of the Group, net of the corresponding tax effects.

Market risk evaluation has been performed, for non-life, Holding and other businesses segments, following a bottom up approach and using a full evaluation model, which calculates the change in value of each financial instrument caused by applied stress tests (+/- 50bp yield curve change, +/- 20% change for equity).

The market risk evaluation was made on all the financial instruments in the portfolios at the end of the year, both from direct and indirect investments held by funds, and derivatives instruments.

Valuation of impact on Group's financial statements deriving from possible changes in interest rate was assessed both considering instrument with fixed interest rate (exposing Group to "fair value" risk with impact on equity or result depending on their accounting classification) and with floating interest rate (exposing Group to "cash flow" risk with impact on profit or loss). This impact was assessed considering the 12-month period ending at the reporting date.

The stress test of +/- 50bp on the yield curve and of +/- 20% of equity value changes shows:

- a potential impact on the Group shareholders' equity attributable to the consequent change in the fair value

- of bonds and equities classified as available for sale<sup>8</sup>;
- a potential impact on the Group's result of the period attributable to the consequent change in the fair value of debt securities and equities classified as financial assets at fair value through profit or loss;
- a potential impact on the Group's result for the period related to the re-computation on coupons and accrued interest of floating rate securities.

Changes in interest rates and equity prices, net of the related deferred taxes, may have a potential impact on shareholders' equity. The impact is detailed in the table here below. With regard to the sensitivity on the result for the period, it is not material and therefore considered within the impact on shareholders' equity:

#### Sensitivity on non-life and Holding and other businesses segments' Shareholders' equity

(%)	31/12/2015
Interest rate +0,5%	-461
Interest rate -0,5%	461
Equity price +20%	617
Equity price -20%	-617

## VI.Credit Risk

### Credit risk from financial investments

Credit risk refers to possible losses arising from the default or failure of counterparties to meet their financial obligations (default risk) or from changes in value of debt instruments resulting from the widening of their credit spreads (spread widening risk). Spread fluctuations can be caused by changes in the creditworthiness of debt instruments issuers or by widespread events of credit crunches or liquidity crisis.

As envisaged in the Group Risk Guidelines, investments in securities with a high credit rating (investment grade) are preferred, and the diversification of risk is encouraged. The Group has a data warehouse for the collection and aggregation of data related to financial invest-

ments, which ensures homogeneity, time effectiveness and high quality analysis of financial and credit risks.

Ratings provided by the main rating agencies are used for the assessment of the creditworthiness of the individual issues and issuers. In cases where there are multiple and divergent agencies' ratings, the second best rating among those available is chosen. An internal rating based on a detailed economic and financial analysis is assigned to certain investments for which no rating is available. An internal rating can also be attributed to externally rated securities, in order to limit automatic reliance only to external ratings assigned by agencies. Investment activities in instruments subject to credit risk are conducted following prudent criteria. This is evidenced by the fact that the distribution by rating class shows that the absolute majority of the investments is of a high rating standing.

<sup>8</sup>

Sensitivity analysis does not assume the achievement of defined triggers for impairment.

In order to mitigate the counterparty risk, related to market risk hedging strategies, the following risk mitigation measures are pursued. These include the selection of counterparties, the use of listed instruments and the integration of ISDA Master Agreements with the Credit Support Annex (CSA). CSA provides for the delivery of a collateral when the value of the contract exceeds a certain threshold.

It should also be noted that, for financial assets, which hedge liabilities related to life insurance policies, the same considerations made for market risk are applicable. As a result, in some cases, defaults, downgrades or spread fluctuations also have an impact on the value of insurance liabilities, which consequently mitigate risk.

## Reinsurance credit risk

In addition to debt and derivative financial instruments, the Group is exposed to credit risk through the exposure to reinsurance counterparties to which part of the business is ceded. In particular, the ability by reinsurers to fulfil contractual obligations towards the Group is monitored.

## VII. Insurance risk

Insurance risk is analysed separately for life and non-life businesses. It should be noted that health risks are classified as life or non-life depending on their technical features.

### Life insurance risk

Insurance Risk Life & Health includes biometric risks embedded in life and health policies deriving from the uncertainty in the expected future claims pay-out related to assumptions regarding mortality, longevity, morbidity and disability rates. It includes also risks coming from uncertainty on expenses and those arising from the possible exercise of contract options mainly related to the expected value of lapses and future premiums.

The Group Companies' life portfolios have a prevailing component of saving contracts, but there are also pure risk covers (death plus riders, such as accident, disability, dread disease, etc.) and some annuity portfolios, with the presence of the longevity risk.

The Group centrally sets the main reliability and solvency criteria, which take into account the risk exposure and the probability of default of each reinsurance counterparty.

The main criterion consists in the definition of a maximum exposure transferable to each reinsurer. In principle, the maximum risk transferable to an individual reinsurer for each reinsurance program should not exceed a given percentage of its net equity. Generally, such exposure is further reduced according to the rating provided by the rating agencies and to the line of business being considered. Based on the features of risk being transferred, a maximum amount threshold is established. For long-tail business more restrictive criteria are adopted.

In some circumstances, local regulations, market practice or specific types of business allow the Group to benefit from mitigation of the related reinsurance credit risk through deposits from reinsurers and/or letters of credit as a guarantee on ceded reserves.

For details on the rating of the technical provisions attributable to reinsurers please refer to section "Insurance and investment contracts" in the Notes.

The risks related to policies with a prevailing saving component and with minimum interest rate guarantee are adequately measured in a prudent way in the pricing process in accordance with the particular situation of the local financial markets, and taking also into account any relevant regulatory constraint. In order to better manage risks and costs associated with embedded options included in the above products, the Group is continuing to pursue the policy, already undertaken in previous years, of reducing and redefining the structure of related financial guarantees. In this perspective, the design of the products has been redefined, by better linking the level of the guarantees to the persistency of the policies.

The insurance provisions above are grouped in three macro classes:

- contracts with a minimum guarantee level: this group considers both yearly cliquet or at event (death and maturity) guarantees;
- contracts without interest guarantee: in this category, together with standard unit linked policies, there are also contracts whose benefits and premiums can be adjusted by Companies in order to mitigate interest rate risk;

■ contracts matched by specific assets: this category includes contracts where the liabilities are totally matched by specific assets.

From a quantitative point of view regarding the life underwriting risk and according to the parameters indicated by the CFO Forum, the Group performs the following Embedded Value sensitivities:

■ maintenance expenses -10%: sensitivity to a 10% decrease of maintenance expenses;

■ lapse rate -10%: sensitivity to a 10% decrease of lapse rates;

■ mortality/morbidity for risk business -5%: sensitivity to a 5% decrease of mortality/morbidity for all product lines except annuities (e.g. term assurance, whole life, annuity during the accumulation period);

■ mortality for annuity business -5%: sensitivity to a 5% decrease of mortality for annuity business only (e.g. annuities in payment).

#### Life Embedded Value Analysis: Underwriting Risks

(%)	31/12/2015
Expenses -10%	2.3
Lapse rate -10%	1.5
Mortality / Morbidity (excl. Annuities) -5%	2.0
Annuity Mortality -5%	-0.8

The table above shows that the reduction of expenses and mortality rates (except for annuities) has a positive effect in the value; on the contrary, as expected, for the annuities, a reduction in mortality rates leads to a corresponding decrease in value.

Regarding lapse, a decrease in surrender assumptions could produce both positive and negative effect in the Embedded Value, depending on the portfolio structure and on the economic contingencies. In particular, the magnitude of variances depends on the alignment of some variables such as return of the fund, level of guarantee and structure of surrender penalties. The offsetting effects of these factors result, at Group level, in an increase in the Embedded Value when the lapse rates decrease.

In addition to the quantitative analyses above presented, the qualitative aspects relating to underwriting, monitoring and risk management process are carefully assessed.

As far as the demographic risk related to pure risk port-

folios is concerned, the mortality tables used in the pricing include prudential margins. The standard approach is to use population or experience tables with adequate safety loadings. For the most important risk portfolios ad hoc reviews of mortality experience are performed by the Parent Company, based on information provided by each Company, at centralized level, every year in comparison with the expected mortality of the portfolio, determined according to the most up-to-date mortality tables available in each market. This analysis takes into consideration the mortality by sex, age, policy year, sum assured and other underwriting criteria.

There is a particular emphasis, both at local and central level, on the underwriting of new contracts, that considers both the medical and financial and moral aspects. A standard, defined at Group level, in manuals, forms and medical and financial underwriting requirements has been established, both for death covers and for riders. Underwriting autonomy levels for Companies are determined depending on their structure and their portfolio. Above the autonomy granted to Companies, risks are also examined by either the Underwriting Department

and Insurance Department of Parent Company (which is the main reinsurer for many Group Companies) or by local reinsurers.

As far as riders are concerned, which are most exposed to moral risks, maximum insurability levels by Country and Company are set, lower than those applied for death covers; at the same time, in order to mitigate these risks, consistent policy conditions are established, especially for what refers to policy exclusions.

The Parent Company issues underwriting guidelines, determines with the Group Companies operating limits to be followed and defines the standard process to request exemptions in order to maintain the risk exposure between the preset limits and ensure a coherent use of the capital.

Reinsurance is also used to mitigate mortality and morbidity risk. As far as the surplus (proportional) reinsurance is concerned, the Parent Company acts very often as the main reinsurer for its subsidiaries, then ceding to the reinsurance market the portions of individual risks exceeding its own retention. Sometimes reinsurance is made directly by the Company to the local reinsurance market, with the Parent Company's support and agreement. As far as the catastrophe risk is concerned, it is related to geographical concentrations, which are typical of Group insurance, and it is covered by acquiring ad hoc, non-proportional covers, and by adopting adequate underwriting policies, diversifying the risk at geographical level..

The longevity risk, in the Group Life business portfolio, remains not very significant. For the most important portfolios of annuities under payment, there is an annual evaluation for the adequacy of the technical basis, that considers the demographic component but also the financial component related to the minimum interest rate guarantee and any mismatch between the liabilities and the corresponding assets.

Especially when a guarantee is provided, the most appropriate demographic assumptions are defined to reflect the trend of future mortality. For policies which foresee an accumulation phase and, at maturity, an annuity conversion option for the lump sum, no guarantee is normally granted on the technical basis for the determination of the annuity to be paid in the future; if, however, this is guaranteed, particularly in cases of collec-

tive agreements, contractual mechanisms for adjusting the basis of mortality compared with some variations in mortality effective population are often introduced.

Risks related to voluntary withdrawal from the contract or changes in flows from expected premiums (lapse risk) and risks related to inadequacy of charges and loadings in the premiums in order to cover future expenses (expense risk), are evaluated in a prudential manner in the pricing of new products, while considering, in the construction and the profit testing of a new tariff, assumptions derived from the experience of the Company. Should this not be sufficiently reliable or suitable, the experience of the other Group entities of the same Country or the general experiences of the local market are applied. In order to mitigate lapse risk, surrender penalties are generally considered in the tariff and are determined in such a way to compensate, at least partially, the loss of future profits.

For all risk categories, in the annual Embedded Value analysis, there are two levels of local and central control, both ex-ante in underwriting and pricing phases and ex-post.

Within this framework, aggregate analysis has been made on the best estimate of the risk factors in order to assess the consistency of the assumptions and update them. At the same time, the consistency of assumptions made with the actual experience of the year was assessed, by valuating, risk by risk, the changes in the portfolio values.

For additional information on direct written premiums of life segment please refer to the paragraph "Life segment" of the Management Report.

## Non-life insurance risk

Non-Life Insurance Risk refers to uncertainty as to the occurrence, amount and timing of insurance liabilities. This includes the following sub-risk:

- the pricing (or underwriting) risk and the catastrophe risk cover the risk that the premium earned in the following year is insufficient to cover actual future claims, expense and extreme events;
- the reserving risk relates to the uncertainty of the claims reserves run-off around its expected value, in a one-year time horizon.

In other words, this covers the risk that actuarial reserves are not sufficient to cover all the liabilities related to the incurred claims.

### Pricing risk

The pricing risk derives from the possibility that premiums are not sufficient to cover future claims, contracts expenses and extremely volatile events.

In order to quantify this risk, the Group assesses its exposure to attritional claims, large claims and catastrophes, gross and net of reinsurance, for the most relevant part of its portfolio.

Regarding this risk, the Group:

- has developed stochastic or deterministic bottom-up simulation models, which are validated by sensitivity analyses and stress tests;
- for frequency risks, determines large risks and catastrophe risks (such as earthquake, flood, windstorm, etc.) possible loss scenarios and risk capital requirements, also in consideration of reinsurance structures (proportional, excess of loss, etc.), net retention and cover;
- adopts, also for evaluating reinsurance cessions, models that are consistent with Value Based Management principles, which consider that value creation estimated from risk capital is the metric to be used to evaluate the efficiency and adequacy of the solutions to be chosen.

Reinsurance structures are based on a detailed risk analysis that allows identifying, for each class of business, the structure type, the retention level and the total amount of cover needed to mitigate exposures from single risks and, for some classes, events that derive from the accumulation of risks existing within a portfolio.

Treaty reinsurance provides a risk transfer mechanism for the greatest portion of each portfolio, while facultative reinsurance is used to cover individual additional exposure peaks.

Regarding treaty reinsurance, the most important lines of business are best covered by excess of loss contracts, which allow setting precise retentions for each class. This makes it possible to retain those risks that are marked by a lower volatility and higher expected returns.

In this respect, the Group has progressively changed its strategy and its business model for the purchase of the contractual reinsurance: coordination and governance of the Parent Company has been further strengthened, entrusting to it the role of the single reinsurer of other Italian and foreign Companies.

As a result, the model provides for the Parent Company to subscribe – at market conditions – all the major treaties of the subsidiaries with few minor exceptions justified by regulatory reasons or market conditions. This approach allows to manage the reinsurance cycle more efficiently than in the past because it gives the chance to adjust easily the level of risk retention through the retrocession treaties, retaining more risk in the hard market phases and less risk in the soft market phases.

The placement of facultative reinsurance is instead managed by the individual Companies, as it is a type of protection strongly related to individual risk assessment carried out by the underwriting unit complying with the principle defined in the Group Reinsurance Guidelines.

Reinsurance counterparties are chosen in accordance to the criteria defined by the Group Head Office (as described in paragraph “Reinsurance credit risk”).

With specific reference to the Parent Company, these principles have been confirmed by the Board of Directors on 17 February 2016 and the structures in place during the current year reflect the new business model for the purchase of the contractual reinsurance described above both in the structures and levels of retention.

### Reserving risk

The assessment is closely related to the valuation of technical provisions, in particular to the uncertainty of the claims provisions in respect to their expected value. Consequently, the risk assessment properly considers the reserving processes, by using claim triangles and all other relevant information collected and analysed according to specific guidelines.

For quantitative information on cumulative claim payments and the ultimate cost of claims by accident year and their development please refer to section “Insurance and investment contracts” in the Notes.

## The underwriting policy

In the non-life branches, the Group underwriting embraces all lines of business. The Group is active in Retail, Small-Medium Enterprises and Corporate & Commercial lines.

The focus is mainly on products with a low or medium volatility, with a minor and selective presence in market segments such as, for example, energy.

The underwriting guidelines are particularly prudent with reference to emerging risks (electromagnetic fields, ge-

netically modified organisms, nanotechnologies, etc.), while asbestos-related covers are generally excluded.

The underwriting activity is geographically diversified, although mainly concentrated in continental Europe, which accounts for around 93% of direct gross written premiums.

For additional information on direct written premiums of property&casualty segment please refer to the paragraph "Property&Casualty segment" of the Management Report.

## VIII. Operational risk

Operational risk refers to risks of losses arising from inadequate or failed internal processes, personnel and systems or from external events.

The management of operational risks is essentially responsibility of each Business Unit. These units are asked to draw up operational plans aligned with the targets set by the Parent Company and to identify and implement all actions to mitigate any risk which could potentially jeopardize it. The overall assessment of these risks and the consistency of the various mitigating actions are guaranteed by the Group Risk Management department.

The Parent Company has defined some common principles for this kind of risks:

- policies and basic requirements to handle specific risk-sources;
- a detailed operational risk classification and standard criteria to be applied to the whole Group in order to identify and evaluate operational risks within business processes;
- criteria to evaluate operational risks and to collect major loss events;
- common methodologies and principles guiding the internal audit activities, set by the Group Internal Audit department, in order to identify the most relevant processes to audit.

Operational risk also includes:

- Financial reporting risk is the risk of a transaction error, which could entail an untrue and incorrect representation of the situation of the assets,

liabilities, profit and loss in the Company's financial statements, in the yearly and half-yearly consolidated financial statements and in any other financial release. The definition of a specific framework, based on internationally recognized standards (Coso, Cobit) provides assurance that the financial reporting risks, to which the Company may be exposed, are identified and addressed according to an approach of analysis that investigates the Company processes and focuses on the relevant transactions that contribute to the generation of the Company's financial statements and any disclosure of financial nature. The definition of the methodology and organization of the financial reporting risk framework at Head Office and Group level, and the monitoring of its effective implementation are delegated to Dirigente Preposto in charge of preparing the financial reports of Assicurazioni Generali S.p.A. in accordance with the provisions of Law no. 262 of 28 December 2005, as amended;

- Compliance risk, defined as the risk of legal and regulatory sanctions, material financial loss or reputational damage the Company may suffer as a result of not complying with laws, regulations and administrative provisions applicable to the Company's business. The Group has introduced a "Group Compliance Policy", which sets out principles and guidelines to carry out the compliance activities and, as part of the management and coordination activities of the Parent Company, envisages that the compliance functions of the Group Companies establish an information flow between them and the Parent Company.

For further information please see the Corporate Governance Report.

## IX. Other risks

This risk category encompasses risks that are not included in the previous categories and for which a specific capital requirement under Solvency II is not required.

### Liquidity Risk

The Group manages the liquidity risk with the aim of efficiently dealing with expected and unexpected cash outflows, taking as well into account potential difficulties arising from the illiquidity of assets upon their sale.

Through a constant cash flow monitoring activity the Group aims at maintaining a sound financial structure.

Liquidity Risk is defined as the uncertainty, arising from business operations, investment or financing activities, over whether the insurer will have the ability to meet payment obligations in a full and timely manner, in a current or stressed environment, for example being able to meet commitments only through a credit market access at unfavourable conditions or through the sale of financial assets incurring in additional costs due to illiquidity of (or difficulties in liquidating) the assets.

The liquidity risk is monitored and managed at local level by the single Business Units, within a common Group framework defined by the Head Office.

Such framework has the aim of providing a common approach to managing liquidity risks in order to ensure the Group Companies' financial sustainability in terms of expected and unexpected cash outflows over a short/medium time frame.

The Liquidity Risk framework includes an ad hoc liquidity risk policy that outlines the strategies, principles and processes to identify, assess and manage present and forward-looking liquidity risks to which Assicurazioni Generali S.p.A. is exposed to as a consolidated entity, both at Company level and at Group level. Generali has defined a specific Contingency Funding Plan with the aim of: identifying the key risk factors and scenarios which can lead to a situation of tension or crisis in the Group liquidity position; defining roles, responsibilities, and processes to be activated in such situations; and identifying the management actions to be undertaken in

case of increasingly critical crisis situation. In addition, within the Recovery Plan Generali formalised the actions to be undertaken in order to restore a sound liquidity and solvency position should extreme external events hit the Group.

The Liquidity Risk Management Policy has been formally approved by the Boards of the Group Business Units involved in the scope.

In addition, with regard to entities operating in the P&C segment, reinsurance treaties with the Group Parent Company help each Business Unit to reduce the exposure to the main risks assumed at local level, thus mitigating the possible negative consequences of catastrophes events or large claims, which could impact the individual Companies' financial stability.

### Liquidity Risk Model

With the aim of implementing a consistent liquidity risk monitoring approach at Group level, the main Business Units provide periodically the HO with a specific tool, the Liquidity Risk Model, which has the ability to highlight possible future liquidity issues both in a business-as-usual scenario and in stressed scenarios.

The model focuses on the Company's cash flows projections over multiple time horizons and on the portfolio investments liquidity, with a particular focus on the eligible assets covering technical reserves. The model final output is summarized through three main ratios indicating possible liquidity stress situations in each scenario. The key ratios are:

- Technical Reserves Coverage;
- Investments' Liquidability Ratio;
- Liquidity Gap Ratio.

Starting from the Business Units' individual ratios, two additional Group metrics are calculated with the aim of measuring the amount of available liquid resources at Group level: the Group Liquidity Risk Coverage Ratio and the Group Excess Liquidity. The calculation methodology takes into consideration the need to preserve a sound financial stability in each Business Unit of the Group. The two indicators also take the available credit lines into consideration.

## Parent Company

The liquidity level of the Parent Company, Assicurazioni Generali S.p.A., is periodically monitored in order to satisfy all the commitments that could arise in the short and medium term. The monitoring activities include: a strict control over the ongoing operating business, detailed forecasts on dividends that will be paid by Group companies or to be paid to Shareholders, evaluations on possible capital needs for Subsidiaries, monitoring of holding expenses, management of coupons to be paid over the financial debt and a regular analysis of the Group refinancing strategy.

These evaluations are supported by the outcomes of the Liquidity Risk Model previously described, including under unfavourable scenarios, in order to be able to assess every possible liquidity need that might arise in the various market contexts.

The main funding sources at Group Parent Company level comprise cash flows arising from insurance and reinsurance activities, dividends from subsidiaries, intragroup loans, available credit lines with banking institutions, an integrated cash pooling system, a portfolio of liquid assets, and a quick and efficient access to the debt capital markets, continuously monitored by dedicated structures.

Thanks to the regular cash flow monitoring, the Group has the aim of maintaining a sound financial structure over a short and medium term time horizon.

## Financial Liabilities

In order to achieve such results the Group set up a careful analysis of its cash flows. Financial liabilities are mainly fixed rate exposures denominated in Euro. With reference to the exposure denominated in currencies other than Euro, hedging transactions have been put in place with the task of ensuring cash flows predictability and stability, as well as mitigation of currency risks.

The Group target of debt reduction for the 2012-2015 period was achieved in advance during 2014-2015, with an overall decrease of the financial debt of 1 billion euro. For the next years we do not foresee any material change in current stock of debt.

Liquidity risk is also managed through the placement on the market of financial instruments of different maturity, currency and seniority. This strategy allows the Group to diversify its sources of funds, drawing from different classes of investors.

For quantitative information related to financial liabilities please refer to the section “Financial Liabilities” of the Notes.

## Insuranceliabilities

The Group's Companies take into account the impact on their expected profits of all the exit and entry sources and in particular those related to any rational/irrational surrenders, as reported also in the previous paragraph “Life underwriting risk”. In addition, in all the valuations, including sensitivities reported in the paragraph related to the market risk, a dynamic surrender approach is implemented, taking into account the interaction between the return of policyholder funds and the financial market developments.

The liquidity risk arises from a mismatch between liabilities and assets cash flows. The Group manages this risk by means of various mitigation strategies, either embedded in the products or in the funds structure.

In particular, in the phase of product design, penalties for surrenders are allowed, calculated in order to partially compensate the eventual decrease of expected future profits. At the same time, for a relevant part of the portfolio, financial guarantees are not provided in case of surrender; this has a disincentive effect for policyholders and reduces the cost of this embedded option for the Company. The surrender assumptions used both for pricing and valuation, in terms of value and risk, are periodically reviewed and updated.

## Strategic, reputational, contagion and emerging risk

Strategic risk refers to the risk arising from external changes and/or internal decisions that may impact on the future risk profile of the Company and the Group.

Reputational risk refers to the risk of potential losses due to a reputational deterioration or to a negative perception of Company's or Group's image among its customers, counterparties, shareholders and Supervisory Authority.

Contagion risk refers to the risk coming from Group's belonging, i.e. the risk that problems arising from one of the Group's Local Entities could negatively affect the

solvency, economic or financial situation of other Group Companies or the Group as a whole.

Finally, emerging risks refer to the new risks due to internal or external environment changes, that may bring to an increase in the exposure to risks already included in the Risk Map or that may require to define a new risk category.

## X. Risk monitoring by third parties

The Generali Group risk profile, considered as a set of assessments regarding the level of overall exposure to various risks, is monitored by the Supervisory Authorities of the Countries where the Group operates.

The main rating agencies perform periodic assessments of the Group's financial stability by expressing their opinion on its ability to fulfil its obligations towards policyholders and bondholders.

The evaluation is performed on the basis of several factors including financial and economic data, the Group's competitive position in markets where it operates and the strategies developed and implemented by the management.

At Generali's request, Standard & Poor's (S&P's) with-

drew its rating on the Group on 13 February 2015. Generali will therefore no longer have a S&P's rating. The decision is based on a thorough review including consultation with investors and other stakeholders, which highlighted the inflexibility of S&P's criteria and its failure to take account of the significant improvement in the Group's financial solidity achieved in the last two years. Furthermore, the automatic link to the sovereign rating applied by S&P's did not recognize the high level of diversification in the Group, nor the benefits of its broad geographical presence. That is why Generali decided to ask for the S&P's rating to be withdrawn. In accordance with industry norms, Generali will keep its rating with three major rating agencies: Moody's, Fitch and AM Best.

The current rating and outlook assigned to Assicurazioni Generali S.p.A. by the major agencies are the following:

	Rating	Outlook
A.M.Best	Baa1	stable
Fitch	A-	stable
Moody's	A	stable

Thanks to the improvement in the Group's capital position and operating performance, the rating agency Fitch upgraded the rating on the Generali bonds on 26 August 2015. A key factor leading to the rating upgrade was the strong focus of the management on the capital strengthening and on reducing the financial leverage. The outlook was confirmed as stable.

On 23 October 2015, the rating agency AM Best confirmed Generali's FSR (Financial Strength Rating) rating as A (Excellent). For the first time, AM Best assigned the

same FSR rating also to the Generali Italia and Česká Pojišť'ovna. AM Best also confirmed the ratings of the debt instruments issued or guaranteed by Generali. The outlook was confirmed as stable.

AM Best stated that the rating reflects the Group's very strong business position in continental Europe, solid operating performance and improving capitalization.

On 26 January 2016 the rating agency Fitch confirmed Generali's and its subsidiaries IFS (Insurer Financial

Strength) rating at A-; the outlook was confirmed as stable. The rating reflects the improvement in Group's capital position, the expectations that operating performance will remain strong and that management's ongoing focus will be to preserve capital and reduce financial

leverage. On the basis of Fitch's internal model (FBM), Generali's capital position remained strong at the end of 2014 and it is now very close to the "Very strong" level, thanks to the improvement in the Group's capitalization.

## XI Capital management

Generali Group aims at maintaining an adequate level of capital according to the current regulatory requirements and to the Solvency II framework.

The Solvency II directive, entered into force at European level on 1/1/2016, implies a market consistent valuation of all balance sheet items and by the consideration of all risks the Group is exposed to. Risk calibration is performed according to the Value at Risk approach with a confidence level of 99.5% over a one-year period. The risk appetite defined at Group level gives due consideration to that calibration level, even increasing it for internal purposes.

The use of the Group Internal Model supports the capital management processes, within the strategic planning activities, and other business decision making processes.

The main Group's objectives in capital management are, in summary:

- ensure compliance with the solvency regulatory requirements of each operating segment where the Parent Company and other Group Companies operate (non-life segment, life segment and financial segment);
- safeguard business continuity and the ability to develop its own business;
- continue guaranteeing an adequate return on capital to shareholders;

- achieve the best balance between equity and debt, ensuring adequate remuneration to all sources of capital and debt;
- determine adequate pricing policies which are consistent with the level of risk arising from the activities within the various segments.

In this context, the main evidences related to current capital requirements are described hereafter.

In each Country where the Group operates, local laws and/or local Supervisor Authorities require a minimum capital. This minimum capital should be maintained by each subsidiary to face its own insurance obligations and/or operational risks.

The Group is a financial conglomerate and it is subject to supplementary supervision regarding capital adequacy requirements, risk concentration, intra-group transactions and internal control. In particular, in 2015 the Group available margin amounted to € 30.1 billion (€ 29.0 billion at 31 December 2014) and the Groups required margin amounted to €18.3 billion (€18.6 billion at 31 December 2014). Therefore, the Group's Solvency I cover ratio (i.e. the ratio of available margin to required margin) was 164% (156% at 31 December 2014).

As described above, Annual Report 2015 is the last reporting that contains information about Solvency I as, from 2016, it will be replaced by the Solvency II regime.