D. Insurance

The prolonged low yield environment is putting severe pressure on the business model of the insurance sector, especially in the "life" branch. The challenges that this creates are seen in the results of the stress tests conducted in 2016 by EIOPA jointly with the Bank, and in the Bank's priority risk analyses. In this macroeconomic context of persistently low interest rates with only a gradual increase in economic growth, further consolidation took place in the sector during the year under review.

Finalisation of the new regulatory framework for insurance and reinsurance undertakings (Solvency II) is likewise a major challenge for the sector and for the supervisory authority. The Law of 13 March 2016 on the status and supervision of insurance and reinsurance undertakings ("the Solvency II Law") transposed the Solvency II Directive [1] into Belgian law. That Law is only the first, albeit important, stage in the implementation of the new prudential supervision framework for insurance and reinsurance undertakings. Apart from the establishment of the actual legal framework, a series of Royal Decrees had to be amended or entirely rewritten. At the same time, the Bank issued Circulars on most aspects of this new supervision framework. Those texts are based largely on the EIOPA recommendations, but may contain provisions specific to Belgium, especially in the sphere of governance.

In 2016, apart from finalisation of the Solvency II legal framework, close attention focused on the implementation of the legislation. In particular, the Bank adapted its internal procedures for supervising insurance undertakings in line with the new legal framework. It also developed an internal dashboard to provide an overall view of the key figures in the Solvency II reports. In addition, consultation was arranged with the IRAIF/IREFI [2] on the duties of approved auditors regarding Solvency II reporting. Finally, the Bank also took a number of initiatives aimed at improving the quality of the reporting data.

1. Mapping of the sector

1.1 Insurance undertakings

At the end of 2016, the Bank exercised supervision over 87 insurers, reinsurers, surety companies and regional public transport companies which insure their fleet of vehicles themselves. The steady decline in the number of undertakings evident in previous years continued, and was once again due mainly to mergers and the cessation of business following the transfer of portfolios. These trends are dictated partly by the need to continue streamlining the structure of the insurance groups operating on the Belgian market, and partly by new, tougher capital requirements in a low interest rate environment.

1.2 Insurance groups

At the end of 2016, 14 Belgian insurance groups were subject to the Bank's supervision, three fewer than in 2015. Further rationalisation of the groups is dictated here, too, by the need to streamline their structure and by the new regulatory requirements. Eight of these groups only have holdings in Belgian insurance undertakings (national groups), while the

(1) Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II).
(2) Institute of approved auditors for financial institutions.

TABLE 27 NUMBER OF INSTITUTIONS SUBJECT TO SUPERVISION [1]

	2012	2013	2014	2015	2016
Active insurance undertakings	87	83	80	75	72
Insurance undertakings in run-off	9	8	4	3	2
Reinsurance undertakings	1	1	1	1	1
Other [2]	16	14	12	12	12
Total	**113**	**106**	**97**	**91**	**87**

Source: NBB.

(1) Apart from that, at the end of 2016, the Bank exercised prudential supervision over ten branches of undertakings governed by the law of another EEA member country, but that supervision was confined to verifying compliance with the money-laundering legislation.

(2) Surety companies and regional public transport companies.

other six have holdings in at least one foreign insurance undertaking (international groups). Under Solvency II, the Bank is the group supervisory authority for each of those groups, and in that capacity it receives specific reports which form the basis of prudential supervision at group level.

The supervisory authorities of cross-border groups facilitate group supervision by working together in colleges of supervisors. These colleges ensure that the collaboration, exchange of information and mutual consultation between the supervisory authorities of the EEA member countries actually takes place in order to promote the convergence of supervisory activities. The establishment and operation of the colleges are based on coordination arrangements between the supervisory authorities concerned, on the basis of the European regulations.

TABLE 28 BELGIAN INSURANCE GROUPS SUBJECT TO THE BANK'S SUPERVISION

Belgian national groups	Belgian international groups
AMMA Assurances	Ageas SA/NV
Belfius Assurances	Argenta Assurances
Cigna Elmwood Holdings	Aviabel
Credimo Holding	Credimundi
Fédérale Assurance	KBC Assurances
Fork Capital	PSH
Securex	
Vitrufin	

Source: NBB.

2. Finalisation of the legal framework

2.1 Royal Decree on annual accounts and flashing-light reserve

The regulatory provisions on the annual accounts[1] were amended by a Decree dated 1 June 2016[2] in order to adapt the accounting regulations to the new supervisory framework resulting from transposition of the Solvency II Directive.

The old accounting regulations did not contain any specific rule on the measurement of the technical provisions but referred to the prudential provisions. However, those prudential provisions were replaced by very different ones under the Solvency II Law.

In regard to the annual accounts, it was decided to keep the technical provision measurement rules as they stood before the entry into force of the Solvency II Law. That approach permits a controlled transition from one regulatory framework to the other, and ensures consistency and continuity in other areas for which the annual accounts serve as a reference (tax, company law, profit-sharing, etc.).

For life insurance, the Decree maintains the provisions on the formation of an additional reserve to cover the difference between the interest rates that the company is contractually committed to guaranteeing and the yield achievable on its investments (commonly known as the "flashing-light reserve"). From that point of view, the principle of the obligation to form the additional reserve is maintained. Conversely, the waiver option was revised to take account of the new

(1) Royal Decree of 17 November 1994 on the annual accounts of insurance and reinsurance undertakings.

(2) Royal Decree of 1 June 2016 amending the Royal Decree of 17 November 1994 on the annual accounts of insurance and reinsurance undertakings.

TABLE 29 COLLEGES FOR INSURANCE UNDERTAKINGS SUBJECT TO THE BANK'S SUPERVISION

The Bank is the group supervisory authority	The Bank is one of the supervisory authorities involved	
Ageas SA/NV	Allianz	Allianz Benelux
Argenta Assurances		Euler Hermes
Aviabel		
Credimundi	AXA	AXA Belgium
KBC Assurances		Inter Partner Assistance
PSH		Touring Assurances
		L'Ardenne Prévoyante
	Groupement des Assurances du Crédit Mutuel	Partners Assurances
	Nord Europe Assurances	North Europe Life Belgium
	Delta Lloyd	Delta Lloyd Life
	Generali	Generali Belgium
		Europ Assistance Belgium
	Munich Re	D.A.S.
		Ergo Insurance
		DKV Belgium
	NN	NN Insurance Belgium
		NN Insurance Services Belgium
	Baloise Group (1)	Baloise Belgium
		Euromex
	Enstar Group (2)	Alpha Insurance

Source: NBB.
(1) The coordination arrangements were signed in 2016.
(2) The coordination arrangements will be signed during 2017.

prudential framework. The main criterion allowing the Bank to grant that waiver is the degree to which the solvency capital requirement is covered by eligible own funds without recourse to the transitional measures laid down by Articles 668 and 669 of the Solvency II Law. Apart from checking fulfilment of that condition, the Bank analyses the situation of the undertakings concerned and the market conditions in order to make sure that the interest rate risk is adequately under control. In that assessment, it uses the most relevant tools at its disposal, including – for 2016 – the results of the stress tests concerning exposure to the interest rate risk[1]. The results of those stress tests organised by EIOPA are described in box 13 below.

(1) Circular of 5 October 2016 on exemption from the obligation to create additional reserves.

2.2 Royal Decree on bonuses

Bonuses and rebates constitute distribution of the profit made during the financial year, either in the form of higher insurance benefits (bonuses) or in the form of reimbursement of part of the premium (rebates). Bonuses are granted mainly in life insurance, and rebates in non-life insurance.

Technically, bonuses and rebates are granted in two stages. The first stage is the distribution, consisting in the assignment of all or part of the profit made to a particular set of contracts. At that stage, the undertaking determines the overall amount which is added to the provision for bonuses and rebates. That operation does not create any individual rights for the policy-holders. The second stage is the allocation, which determines the amounts to be added to the insurance benefits or reimbursed to policy-holders in the form of rebates.

The first stage is the one that has the biggest impact on the insurer's overall solvency, because it involves deducting from the profit a global amount that, under Belgian law, can then only be used by the insurer for bonuses and rebates. Conversely, the allocation comes under consumer protection, because it is a matter of determining when the amounts in question are to be allocated to the policy-holders and the rules to be respected in order to maintain fairness between the various policy-holder categories.

The Royal Decree of 14 September 2016 [1] is a prudential text which, by that token, only regulates the distribution of bonuses. Its general philosophy consists in determining the maximum amount which can be shared out and the conditions governing that operation.

The amount which can be distributed is the profit on the insurance activity plus the income from the net return on the covering assets. The conditions governing the distribution take a prospective view. The SCR coverage ratio attained by the eligible assets without the use of the 16-year transitional measures under Articles 668 and 669 of the Solvency II Law must be 100 % or higher. If that level is achieved only by means of the aforesaid transitional measures, the insurance undertaking must first request the Bank's authorisation.

2.3 Circular on the governance system

Article 42 of the Solvency II Law provides that insurance or reinsurance undertakings must at all times have an appropriate governance system to ensure the efficient and prudent management of the undertaking.

A set of new governance requirements was thus stipulated in the Solvency II Law and in the Delegated Regulation 2015/35 of the European Commission of 10 October 2014. Those requirements were specified in Circular NBB-2016-31 issued by the Bank on 5 July 2016.

In regard to the management structure of insurers and reinsurers, the Solvency II Law reinforced the role and responsibility of the board of directors concerning risk management (determination of the risk appetite and the risk tolerance limits, validation of a range of risk policies, etc.) and, in so far as certain thresholds are exceeded, made it mandatory to form two new sub-committees of the board: the risk committee and the remuneration committee. The Law also stipulates that, unless exemption is granted, the Chief Risk Officer must have a seat on the board of directors of insurance and reinsurance undertakings.

On the subject of the independent control functions, the duties of the actuarial function and the risk management function were redefined, and the importance of the latter function was highlighted, notably by stipulating that it must be headed by a member of the executive committee. The "three lines of defence" model which coordinates the interactions between the various independent control functions was also formalised.

As regards risk management, the concept of a "risk management system" was translated into specific requirements concerning strategies, decision processes, risk policies and reporting. The Law also provides that insurers and reinsurers must conduct an annual internal assessment of risks and solvency (Own Risk and Solvency Assessment or ORSA).

Finally, the Solvency II Law also strengthened a number of other spheres within the concept of the "governance system", such as:

- the requirements concerning the expertise and professional integrity of the managers of insurance or reinsurance undertakings: validation of a "fit and proper" policy, description of the collective capabilities to be available on the board of directors, etc.;
- outsourcing: identification of critical or important functions, activities or operational tasks and application of stricter rules in cases of critical outsourcing;
- financial management: "prudent person" principle, rules on investment management, capital management, asset and liability valuation, etc.;
- rules on remuneration: legal obligation to formalise a remuneration policy and draw up a list of Identified Staff, embedding of sound remuneration practices;
- continuity: formalisation of a continuity policy and emergency plans covering the undertaking's vulnerabilities; and
- reporting: governance memorandum as the "cornerstone" incorporating the relevant sections of the "Solvency and Financial Condition Report" and the "Regular Supervisory Report", replacing the report by the effective management on internal control via a report from the executive committee on the effectiveness of the governance system, etc.

(1) Royal Decree of 14 September 2016 on the distribution of bonuses and the grant of rebates in insurance.

2.4 Circular on firm-specific parameters

Subject to the Bank's approval, insurers and reinsurers, when calculating their regulatory capital may, for certain underwriting risk modules, replace a sub-set of the parameters in the standard formula with parameters specific to the undertaking concerned.

On 25 April 2016, the Bank published a Circular on the data quality criteria to be taken into account in the process of calculating firm-specific and group-specific parameters. That Circular adopts the EIOPA guidelines on the subject. In that Circular, the Bank also stipulated the information that undertakings must submit annually in order to ensure continued respect for the requirements on the use of firm-specific parameters.

2.5 Communications on internal models

On 19 July 2016, the Bank published two Communications on internal models, one concerning the "pre-application" procedure and the other concerning the "application" for the use of the internal models. These two Communications are intended to inform insurers and reinsurers of the procedure for the pre-application stage, and the content of the application for use of an internal model. These Communications are meant for undertakings wishing to use an internal model for the first time to calculate their regulatory capital, or undertakings using an internal model to calculate their regulatory capital and wishing to apply for major changes in their internal model, or undertakings using an internal model to calculate their regulatory capital and wishing to introduce new factors in that model, such as additional risks or operational units not yet included in the scope of the internal model.

3. Implementation

3.1 Dashboard

The implementation of the new Solvency II prudential regime includes the new harmonised reporting at European level comprising full information on the various aspects of supervision. For 2016, that reporting is limited to an abridged version of the future annual reporting (day one reporting) and quarterly reporting.

To secure a structured analysis approach, the Bank developed a dashboard for this initial reporting. The aim is to set up an extended dashboard which will provide a summary of the reporting, including key indicators which can offer an overall view of the undertaking's financial situation, and clear charts showing the main trends.

3.2 Framework for collaboration with approved auditors

In line with the Solvency I framework, the Solvency II Law provides that the approved auditor's mission consists primarily in examination of the periodic financial information, assessment of the internal control, and the signalling function.

The Bank consulted the sector and the IRAIF/IREFI to determine which reports form part of the periodic information under Solvency II. The general aim is to achieve a more consistent approach than that prevailing under Solvency I. As the Solvency II legal framework is no longer based solely on the accounting framework (BEGAAP/FRS), the auditor's mission has become more complex. In view of the scope of the Solvency II reporting it was decided that the auditor's mission would be confined to the reporting elements which give a deeper understanding of a company's financial situation. The supplementary reporting components which are used more for statistical purposes, such as the breakdown of the information by country, will not form part of the annual inspection by the approved auditors.

3.3 Data quality

In May 2016, insurers and reinsurers submitted their first Solvency II reports. The study of the data obtained from the Quantitative Reporting Templates (QRTs) was hampered by a lack of rigour on the part of a number of undertakings. The Bank found that the quality of the data submitted during the first year of entry into force of the Solvency II Directive was inadequate, confirming the results of the analysis conducted during the preparatory phase. The Bank thus continues to monitor this aspect jointly with the undertakings concerned and their approved auditors. The reporting quality needs to improve considerably in order to satisfy the requirements of the Solvency II Law and to be used for prudential purposes.

In order to improve the quality of the data received from insurers and reinsurers, the Bank contacted the undertakings where shortcomings had been found. In January 2016 the Bank also sent out a Communication (1), emphasising the importance of reliability in the data submitted. The communication explicitly refers to the list

(1) Communication NBB-2016-01 of 7 January 2016 concerning the quality of the data relating to reporting item S.06.02 (" list of assets").

of assets: that report in which the undertakings detail the characteristics of the assets which they own is a very valuable source of information for conducting numerous macroeconomic, statistical and prudential analyses for supervision purposes, so long as the reporting is carried out correctly. All undertakings are therefore expected to continue improving the data quality.

4. Supervision

4.1 Points for attention concerning supervision in general

The supervision of insurance undertakings in 2016 was dominated by the entry into force of the new prudential framework. The actions taken in 2015 revealed a range of problems concerning the implementation of Solvency II. Those problems arise because insurers vary in their ability to adapt their strategies, processes and procedures, and because of the complexity of the new accounting standards.

The problems identified in 2016 prompted some insurers to embark on an internal review of their financial situation. For other companies, the Bank conducted the analysis. Following that exercise, some insurers strengthened their financial position, in particular by raising additional capital. In other cases, the problems led to the proactive imposition of measures by the Bank.

Transitional measure concerning technical provisions

The transitional measure under Solvency II concerning technical provisions allows insurers to spread over a 16-year period, in a linear fashion, the changeover from the calculation of the technical provisions under the Solvency I rules to the Solvency II rules. This transitional measure can only be used with the Bank's prior approval and furthermore, it only applies to insurance and reinsurance liabilities existing as at 1 January 2016. So far, the Bank has only authorised one undertaking to use the transitional arrangement for technical provisions.

Assessment of the best estimate

During the preparatory year 2015, the Bank had called in external actuarial experts to assess the quality and suitability of the "best estimates" of the seven largest Belgian insurers. The best estimate corresponds to the probability-weighted average of future cash flows, taking account of the time value of money (expected current value of future cash flows), estimated on the basis of the relevant risk-free interest rate curve. Analysis of the external actuarial experts' reports resulted in a number of findings for each insurer. The Bank stated that the undertakings were expected to produce an action plan addressing those findings. During the year under review, the Bank kept a close watch on the global action plan for improving the best estimate, arranging periodic meetings with the management of the insurance undertakings concerned. In some cases, specific measures led to an increase in the technical provisions. In 2017, the Bank will continue monitoring progress and promoting the improvement in the quality of the best estimate in order to boost confidence in that assessment.

In addition to the individual analyses of best estimate quality, two horizontal analyses were conducted during the year under review, again based on a selection of undertakings determined on the basis of the external actuarial experts' reports. The first horizontal analysis concerned asset modelling and the link with technical provision modelling. That analysis was based on a questionnaire sent to seven large insurers. The responses were used for a horizontal comparison of modelling quality. The second horizontal analysis concerned the cost projection in the best estimate. That analysis was also based on a questionnaire sent to seven large insurers. The comparative analysis of the responses will start in 2017.

Analysis of the reporting specific to life insurance

In connection with the transition from the old set of standards to the new, the Bank set up specific reporting for the assessment of the technical provisions in the "life" business. That assessment tool can be used to break down the best estimate into various components, and to check the level of the best estimate (life insurance technical provisions under the new standard) compared to the inventory reserve (life insurance technical provisions under the old standard). The assessment instrument also included consistency tests to check the quality of the data supplied. During the year under review, the assessment instrument was used both for individual analysis of the best estimate for each undertaking and for the horizontal analysis. The horizontal comparison did not reveal any serious defects in the calculation of the best estimate, and concluded that, for the seven large insurers, there was a degree of consistency in the components of the best estimate and in the variations in the life insurance technical provisions between the old standard (based on the inventory reserve) and the new (based on the best estimate).

Analysis of the solvency figures

The first reports that the undertakings submitted to the Bank in accordance with the new prudential regime were subjected to a horizontal analysis. While these first reports present only a small volume of data, they nevertheless permitted a range of basic checks. For instance, plausibility checks were made in the case of key elements of the undertakings' financial situation (such as the composition of the own funds, the capital requirements, loss attenuation by technical provisions and deferred taxes, the risk ratio, the combined ratio (1) and reinsurance).

For insurers with a low solvency ratio, the Bank devised a specific approach for examining the quality of the solvency reporting. The solvency calculations are in fact based on a multitude of technical specifications requiring proper interpretation of the regulations in order to ensure correct application. The approach adopted includes a detailed examination of the valuations in the Solvency II balance sheet, and of the calculation of the required and available capital. That exercise respects the principle of proportionality.

4.2 Points for attention concerning thematic inspections

Activities relating to derivatives

In 2016, in view of the importance of derivatives, the Bank's "insurance" inspection team devoted a substantial part of its resources to examining their use by insurers and reinsurers. The missions concerning derivatives at various insurance undertakings revealed a number of points for attention. The first point noted was a lack of monitoring and supervision of outsourcing in connection with derivatives, and the absence of any review cycle for derivatives strategies, similarly the absence of ad hoc revision of the strategies in the case of changing market conditions, for example, or unexpected events. A second point for attention is the incomplete development of the Assets & Liabilities Management (ALM) model at the level of derivatives strategies (simplifications, absence of a dynamic and/or prospective view, etc.). Furthermore, the inadequacy of the undertakings' liquidity risk management and cash flow management (mainly owing to the lack of a prospective view of margin calls and the absence of any link between cash flow projections and actual cash flows) appear to be points requiring the attention of the undertakings.

Missions concerning the best estimate

Following the entry into force of the Solvency II Law, the calculation of the best estimate of the technical provisions still remains a subject of concern for the Bank. There is a great disparity between life and non-life activities: the latter generally present fewer problems owing to the relatively short duration of the liabilities and the good, general control of the claims management process. In 2016, the emphasis was also on the best estimate of the health branch (guaranteed income, industrial accidents, hospitalisation, etc.). The inspection teams raised a number of points for attention. They found that insufficient account was taken of the costs relating to insurance liabilities in the projections (notably at the level of the breakdown between acquisition costs and maintenance costs, allowance for one-off costs, etc.), and that the estimate of future bonuses was not geared to the expected trend in the return on the assets representing the technical provisions. Another point for attention is the incorrect modelling of reinsurance (contract boundaries (2), counterparty risk, etc.) plus the absence or inadequacy of sensitivity analyses and back-testing (3) of the assumptions made. Insurers also face the difficulty of correctly modelling future inflation for health insurance products, whereas the best estimate for those products is very sensitive to that parameter. Finally, insurers must make further improvements to the documentation of the best estimate calculation, deepen the analyses underlying the methodological choices and the assumptions made, and provide better justification for expert opinions.

4.3 Points for attention concerning models

In 2016, four insurers whose internal model was approved in 2015 began using it to determine their capital requirements. At the same time, the Bank began monitoring those internal models. There are several dimensions involved here (such as the monitoring of the undertaking's action plan, the monitoring of the Terms & Conditions imposed by the supervisors, and general monitoring of the models' performance). A number of significant changes to the approved models were also dealt with in 2016.

The year 2016 also saw the acceptance of two new applications from insurers wishing to use an internal model to determine their regulatory capital under Solvency II. Two other insurers initiated a pre-application procedure: the work done by the Bank led to a one-year postponement of the formal introduction of one of these applications.

Apart from this work relating to the required solvency capital, the Bank also launched a benchmarking exercise relating to the economic scenario generators and the ALM aspects of the cash-flow models used to value the life insurance liabilities (including bonuses).

(1) The combined ratio is the ratio of the sum of losses incurred plus the costs divided by the premiums collected
(2) Contract boundaries determine the insurance or reinsurance liabilities relating to future premiums arising under the contract.
(3) Back-testing means comparing the results of a simulation with empirical observations.

Box 13 – 2016 EIOPA stress test for insurance undertakings

Taking account of the efforts required owing to the entry into force of the Solvency II regulations in 2016, EIOPA opted for a targeted stress test, focusing on the most relevant risks for insurers, namely market risks, excluding technical underwriting risks. The stress test consisted of two quantitative scenarios both supplemented by a short qualitative questionnaire :

- The "double hit" scenario is a hypothetical scenario developed by EIOPA jointly with the ESRB. It reflects the ESRB's assessment of the main risks for the European financial system, namely persistently low interest rates and an increase in risk premiums. The scenario affects both the assets and the liabilities of the undertakings by an environment that combines a fall in the risk-free yield curves with significant shocks to key asset categories in the investment portfolio (government and corporate bonds, (mortgage) loans, equities, property, etc.).
- The "low for long" scenario simulates a structural stagnation situation in which a scarcity of profitable long-term investment and persistently weak growth (and low growth expectations) cause a further decline in the risk-free yield curve, particularly over longer maturities. The stress curve is based on swap rates as at 20 April 2015, the date when – for the first time – they recorded a low level for most long-term interest rates. This swap rate was then subjected to the EIOPA extrapolation methodology in which the "ultimate forward rate" [1] is an interest rate of just 2 %, instead of the normal 4.2 %. This last assumption is meant to characterise the prolonged period of weak growth.

The starting position for the exercise is the situation on 1 January 2016. That means that the participants can only use long-term guarantee (LTG) measures, transitional measures, company-specific parameters and (partial) internal models approved by the Bank as at 1 January 2016. Most undertakings (19) use the volatility adjustment (VA), and just one uses the transitional measure for technical provisions. In analysing the results, the main focus was on the impact of the two scenarios on the balance sheet and own funds available to cover the solvency capital requirement. The impact on the actual capital requirements was not calculated. The results for the Belgian market are set out and discussed below.

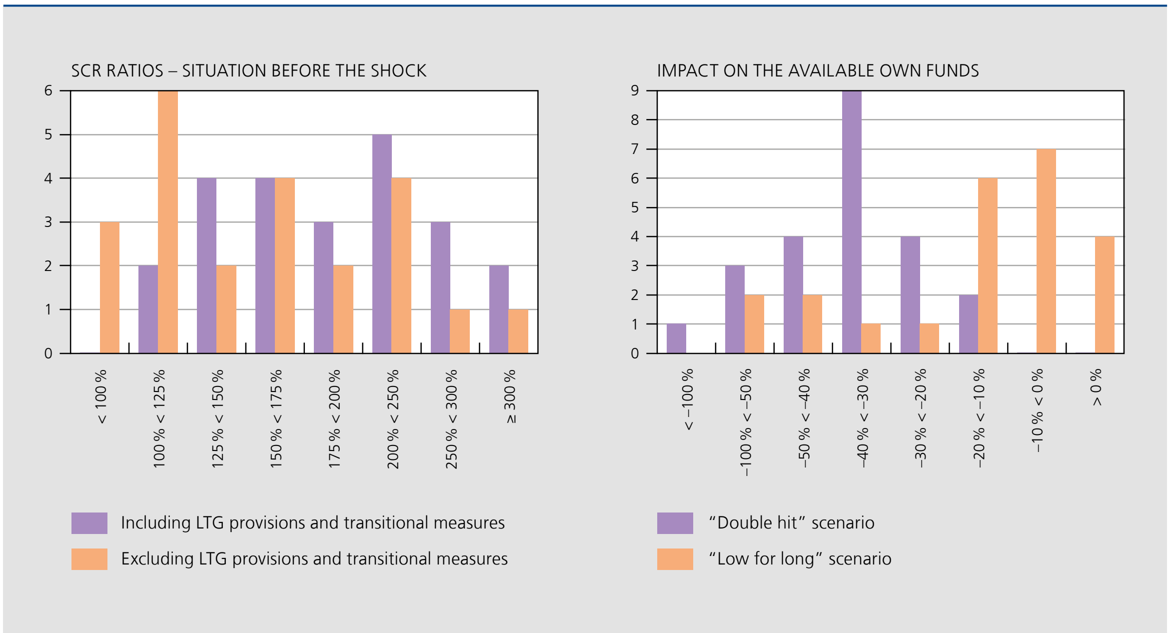
We begin by examining the distribution of the solvency capital ratios (SCR) of the 23 participants before application of the shocks. The average SCR ratio is 196 % before the shocks, suggesting a comfortable starting position. All the undertakings respect the regulatory SCR ratio (100 %) and three-quarters of them have an SCR ratio of more than 150 %. The impact of the use of the LTG provisions and transitional measures, especially the VA, is clearly apparent on examination of the distribution of the SCR ratios which take no account of these measures. The average SCR ratio then falls by between 55 % and 141 %. In addition, three undertakings would no longer meet the regulatory requirements : fewer than half of the participants would achieve an SCR ratio of more than 150 %. After taking account of the shock, there is a further substantial increase in the impact of the LTG provisions and transitional measures. In view of the significant impact of these measures on the undertakings' solvency, the Bank will continue to pay attention to the supplementary conditions and the regulatory requirements that they have to respect.

The "double hit" scenario is the one which has the biggest impact on undertakings' own funds, causing a 35 % fall, on average. In view of the severity of this scenario, the examination focused less on the impact on the own funds and more on the underlying factors explaining the impact, and on variations between undertakings. The results indicated vulnerabilities in some undertakings which will be examined more closely case by case, and will be included on the agenda of future stress test exercises.

The "low for long" scenario results in a weighted average reduction in the own funds of 14 % (with a median of 11.6 %). Two undertakings suffer a very severe impact (between –100 % and –50 %) on their own resources, and in the case of two undertakings that loss totals between 40 % and 50 %. The ultimate impact on the undertaking's

(1) The ultimate forward rate is the interest rate on which the EIOPA risk-free interest rate curve converges at a term of 60 years.

STRESS TEST RESULTS FOR BELGIAN INSURERS
(number of undertakings)



Source: NBB.

solvency depends on its initial situation: excess solvency, if any, can absorb part of the shock. The results of this scenario confirm an earlier finding – made in the context of the interest rate risk analysis – namely that some undertakings are vulnerable in a persistently low interest rate environment. The Bank will continue to examine how the most vulnerable undertakings can further reduce their interest rate exposure and/or build up additional own funds or provisions ("flashing-light" reserve).

5. Priority risks

This year, in its risk analysis, the Bank once again conducted a series of horizontal analyses for the Belgian insurance sector. In particular, this work took stock of the interest rate and liquidity risks which had already formed the subject of a transverse analysis in previous years, and scrutinised in more detail the spread risk in the insurance sector.

5.1 Interest rate risk

The potential consequences of persistently low interest rates are currently the most significant financial risk for insurers, and therefore remain a point for the Bank's attention.

In order to obtain a more complete and detailed idea of the interest rate situation in the Belgian insurance sector, the Bank had decided in 2014 (on the basis of the year-end 2013 figures) to develop a new standard report for monitoring the interest rate risk. That report comprises four sections, each designed to shed light on a specific aspect of the interest rate risk: the current composition of the guaranteed yields on insurance portfolio contracts, the duration of the technical provisions and their covering assets, detailed projections for cash flows concerning the technical provisions and the assets, and projections relating to yields on the assets and liabilities.

Using these data, an assessment framework was devised on the basis of a set of risk indicators. It is used to examine such aspects as the average level of the guaranteed yields and their residual term, the proportion of the technical provisions accompanied by guaranteed yields on future premiums, the level of the duration gaps, the matching of the underlying asset and liability cash flows, and the difference in the projection of the expected yields on the assets, on the one hand, and the guaranteed yields on the liabilities. The Bank uses these parameters to facilitate identification of the undertakings with increased vulnerability in certain situations, such as a low interest rate environment.

When implementing a new form of reporting, it is necessary to look out for any problems. With that in mind, during the initial years, the Bank has endeavoured to improve the quality of the reported data on the interest rate risk. For many undertakings, that entailed the adoption of more specific measures promoting an improvement in the quality of those reports. The undertakings for which the risk was ultimately considered significant on the basis of the assessment framework were subjected to more detailed examination. In a small number of cases, that prompted the Bank to require the undertaking to adopt an action plan or mitigating measures to keep its interest rate risk within bounds.

5.2 Liquidity risk

By the end of 2014, the Bank had decided, on the basis of earlier analysis results concerning a small group of undertakings, to require all life insurers to submit separate quarterly liquidity reports. In fact, neither the previous regulatory framework (Solvency I) nor the new one (Solvency II) made provision for adequate quantitative monitoring of this risk, which is often poorly understood in the insurance sector. An insurer's liquidity risk is less significant than that of a bank, and it is also less easy to measure. In view of the downward trend in traditional life insurance premium volumes and the increasing proportion of illiquid assets on the Belgian insurance market, the Bank decided to keep a close eye on liquidity in the insurance sector.

To permit integrated monitoring of the liquidity risk, the Bank developed an assessment framework based on a series of relevant risk indicators. The first group of indicators focuses on the trend in incoming and outgoing cash flows and their interconnections. The second group examines the trend in liquid assets and liabilities and the ratio between them. The last group of indicators monitors the trend in exposures to instruments and derivatives presenting a potential liquidity risk. These three groups of indicators permit more systematic monitoring of the liquidity risk of individual insurers and of the sector as a whole.

In view of the results of the liquidity reporting, the Bank decided to adopt follow-up measures or arrange inspections for a small number of undertakings, in order to monitor their liquidity more closely. More specifically, the findings that emerged from these analyses regarding the reduction in premium volumes and the growing number of individual life insurance contract cancellations also gave rise to a strategic review of the future of the individual life insurance sector in Belgium, and to recommendations by the Bank on the subject.

5.3 Spread risk

Fixed-interest-rate assets – which make up the bulk of the insurers' investment portfolio – are subject to the spread risk, i.e. the risk that the market value of the asset may vary according to fluctuations in the risk premium, owing to a change in the (perceived) risk of the asset.

Quantitative studies and stress tests previously conducted for the insurance sector revealed on a number of occasions that variations in the spreads often had a very significant impact on the insurer's balance sheet. That may be due partly to the large proportion of government and corporate bonds in the investment portfolios of Belgian insurers. The principle of marking to market, enshrined in the new Solvency II regime, is also a factor: since all variations in spreads are reflected in the market value of these bonds, there is a resulting direct (positive or negative) impact on the own resources of insurance undertakings.

To take account of the often long-term character of an insurer's investment portfolio, the Solvency II regulatory framework provides for LTG measures which moderate the said impact by offsetting part of the increase in the spread with an increase in the discount rate for the technical provisions. In that regard, the level of offsetting depends on the type of LTG measure which can be applied.

In order to obtain a more integrated and complete idea of the spread risk for insurers, beyond the possible effect on capital requirements and valuation, an assessment framework was developed last year for monitoring the spread risk of Belgian insurers. In the case of interest rate risk and liquidity risk monitoring, additional data were deemed necessary, but it is possible to obtain an accurate and adequate idea of an insurer's spread risk by adhering to the new regulatory framework, Solvency II, which provides for extensive reporting of elements such as the list of assets. It is therefore unnecessary to devise new reports for monitoring this specific risk. As in the case of interest rate risk and liquidity risk monitoring, the assessment framework thus developed should permit systematic monitoring of that risk on the basis of a set of indicators, both for individual undertakings and for the insurance sector as a whole.

On the basis of the 2016 analysis, the Bank will begin by urging a whole range of undertakings to make significant improvements in the quality of the data on their list of assets, because at this stage those data have not always permitted adequate conclusions to be drawn regarding their spread risk. In the future, the analyses conducted here should also enable the Bank to perfect the spread risk assessment framework, and – for example – devise its own top-down stress test model for the spread risk. Undertakings identified as outliers are likely to be subject to closer monitoring in future quantitative analyses, e.g. in the form of stress tests.