E. Insurance undertakings

During the year under review, the Bank continued to exercise closer supervision over insurance undertakings with the highest risk profile. In some cases, the Bank imposed measures which occasionally led to cessation of all or part of an undertaking's business. The Bank's operational supervision over insurance undertakings also focused in particular on the adequacy of the "best estimates" of future flows of technical provisions in the life insurance portfolios, in view of the importance and the difficulty of modelling customer behaviour in a changing interest rate environment. The quarterly reports which undertakings submitted to the Bank under the new Solvency II prudential regime also formed the subject of a transversal analysis.

Furthermore, the legal framework for insurance and reinsurance undertakings was completed. Supervision regimes tailored to small institutions were set up, and Communications on licensing and cross-border activities were published. In addition, Circulars clarified the Bank's expectations concerning the internal risk management of insurance undertakings, the identification of preferential claims in the event of liquidation, the loss-absorbing capacity of deferred taxes, and the definition of infrastructure investment and the associated prudential eligibility criteria.

Brexit and its implications for the Belgian and European insurance market constituted a key point for attention. The year under review also brought EIOPA's generally positive assessment of the way in which the Bank exercises prudential supervision over insurers and insurance groups. In addition, various field tests were conducted in connection with the preparation of a common prudential framework for internationally active insurance groups.

Finally, the Bank also conducted various horizontal analyses on such subjects as liquidity risks and spread risks, and carried out stress tests on the interest rate risk.

1. Mapping of the sector and supervision priorities

1.1 Insurance undertakings

At the end of 2017, the Bank exercised supervision over 82 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, owing to mergers and the cessation of business following the transfer of portfolios. These operations 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.

There was a notable rise in the number of reinsurers subject to supervision, but that was due simply to a technical adjustment to the regulations. With the entry into force of the new prudential supervision regime, direct insurers that also operated as reinsurers before 2016 were additionally registered as reinsurers.

1.2 Insurance groups

At the end of 2017, 11 Belgian insurance groups were subject to the Bank's supervision, three fewer than in 2016. Further rationalisation of the groups' structure is dictated by the Solvency II framework. Seven of these groups only have holdings in Belgian insurance undertakings (national groups), while four groups have holdings in at least one foreign insurance undertaking (international groups).

TABLE 25 NUMBER OF INSTITUTIONS SUBJECT TO SUPERVISION [1]

(end-of-period data)

	2013	2014	2015	2016	2017
Active insurance undertakings	83	80	75	72	67
Insurance undertakings in run-off	8	4	3	2	2
Reinsurance undertakings	1	1	1	1	29
of which: undertakings also operating as insurers	–	–	–	–	28
Other [2]	14	12	12	12	12
Total [3]	**106**	**97**	**91**	**87**	**82**

Source: NBB.

(1) At the end of 2017, the Bank also exercised prudential supervision over twelve branches of undertakings governed by the law of another EEA member country, but that prudential supervision was confined to verifying compliance with the money-laundering legislation.

(2) Surety companies and regional public transport companies.

(3) For 2017, the total only takes account once of undertakings active as both insurers and reinsurers..

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 decision-making and the convergence of supervisory activities. The establishment and operation of the colleges are based on coordination arrangements between the supervisory authorities concerned, for which the principles are laid down in the regulations.

TABLE 26 BELGIAN INSURANCE GROUPS SUBJECT TO THE BANK'S SUPERVISION

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

Source: NBB.

1.3 Points for attention concerning operational supervision

During 2017, the problems identified in the past relating to the financial situation of certain undertakings were not all resolved. Undertakings with a high risk profile remained subject to closer supervision by the Bank. In parallel with initiatives taken by the institutions themselves, the Bank imposed measures which, in certain cases, led to cessation of some or all of the institution's activities.

In addition, the supervision of insurers again featured the entry into force of new prudential rules. The problems concerning the correct application of the new rules have not been totally resolved at this stage, but some progress was apparent. Owing to the scale and complexity of the reporting, its quality gave rise to questions, but a notable improvement was achieved during the period under review.

In 2016, work and surveys had been conducted on large insurance undertakings. In 2017, the resulting information was subjected to a transversal analysis on three specific subjects.

Best estimate

A first sphere concerned the work on the adequacy of the "best estimate" [1] of the technical provisions for the portfolio of life insurance products. Workshops arranged

(1) The best estimate corresponds to the average future cash flows weighted according to their probability, taking account of the current expected value of those flows, estimated on the basis of the relevant risk-free yield curves.

TABLE 27 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
ASCO		Euler Hermes
KBC Assurances		
PSH	AXA	AXA Belgium
		Touring Assurances
	Assurances du Crédit Mutuel	Partners Assurances
	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	Baloise Belgium
		Euromex

Source : NBB.

with large undertakings examined the calculation of the best estimates at granular level. There were discussions on the functioning of profit-sharing at segment and product level. In the current low interest rate environment, the undertaking's profit-sharing policy has only a limited impact on the calculation of the best estimate for life insurance products. However, that profit-sharing will be more significant if interest rates rise, especially for more recent products with a low guaranteed yield, as the average maturity and cash flows of the undertakings' assets are largely aligned with those of the liabilities, and that currently reduces the portfolio's interest rate risk. If interest rates rise, that alignment could limit the undertaking's scope to keep profit-sharing in line with market interest rate levels (capacity to pay). If the undertaking cannot meet its customers' expectations, those customers will be inclined to drop the product (redemption risk or lapse risk) and invest in other products which do keep to market interest rates. It is no easy task to model customers' behaviour in a changing interest rate environment for the purpose of calculating the best estimate, as there are few time series available on the subject. These analyses lead to further interactions with the undertakings to gain a better understanding of the modelling of best estimates at product and portfolio level.

Cost projections in the best estimate

A second sphere of the transversal analysis concerned the cost projection in the best estimates. This analysis was based on a questionnaire sent to seven large insurers in 2016. The comparative analysis of the responses resulted in general findings and clarifications regarding the current regulations, and they were presented to the sector for consultation.

The Bank wants to see more consistent cost allocation and cost projections in the best estimates, as it found that there were differences in the way in which undertakings allocate and project costs, and that situation was not always entirely in accordance with all the regulations. The Bank also drew up instructions and issued clarifications concerning reporting models. However, the information provided by that reporting does not enable the Bank to conduct a full analysis. The Bank therefore attaches great importance to the production of adequate documentation by the undertakings. This work resulted in a Communication to the undertakings [1].

Analysis of the periodic reporting

The quarterly reports that undertakings submit to the Bank under the new prudential regime were analysed in depth. The data thus supplied were subjected to plausibility checks in regard to the key elements of the undertakings' financial situation. In 2017, the Bank received for the first time reports on a complete financial year, in this case the year 2016. The information in these annual reports is particularly extensive, and new supervision instruments are being developed for conducting the necessary analyses on these data. The action of the Bank in systematically asking the undertakings to remedy the defects found is leading to a notable improvement in reporting quality.

Priority was accorded to analysis of insurers with a low solvency ratio. The solvency calculations are based on a multitude of technical specifications and require a good interpretation of the regulations to ensure correct application. In addition, correct calculation of the parameters used is equally essential to ensure the quality of the solvency figures reported. The analysis includes a detailed examination of the valuations in the balance sheet, and of the calculation of the required and available capital. This exercise is conducted according to the principle of proportionality.

In 2017, undertakings submitted a Regular Supervisory Reporting (RSR) to the Bank for the first time. This document forms part of the information which must be submitted for supervision purposes. The RSR information is used to establish the undertaking's overall risk profile. It is examined together with the information obtained from the ORSA (Own Risk and Solvency Assessment) [2], the Solvency and Financial Condition Report and the governance memorandum. The RSR of the large undertakings was analysed, then shared and discussed in the colleges of supervisors. Meetings were arranged with the large undertakings to examine the consistency of the various documents mentioned above. The RSR is a particularly useful instrument for the supervisory authority as it permits the correct interpretation of the large volume of figures submitted in the periodic reports.

(1) Communication NBB_2017_32 of 29 December 2017 on the results of the horizontal analysis of the costs used in valuing the technical provisions.
(2) The ORSA enables the insurer to assess its risks and solvency internally. In that connection, it pays particular attention to the overall solvency need, continuous conformity with the set capital requirements and technical provision requirements, and evaluation of the degree to which the insurer's risk profile deviates from the assumptions underlying the calculation of the solvency capital requirement ("adequacy of the standard formula").

1.4 Points for attention concerning thematic inspections

Investment management

The persistent low interest rate environment makes it difficult for insurers to find suitable investments with a yield sufficient to cover the contractually guaranteed interest rates without taking excessive risks. A number of insurers are refocusing their investments, notably in favour of (mortgage) loans (see section 3.4 under "Economic and financial developments" in this Report). In 2017, being concerned about appropriate management of the risks of these investments, the Bank carried out inspections on the investment strategies and the associated risk management. Those inspections yielded some findings. The executive board often receives insufficient information on the implementation of the investment strategy and the risk management. The ALM policy and the investment policy (including as regards outsourcing) are not always sufficiently developed and/or do not conform to the Solvency II regulations, and the ALM risk is not always monitored continuously. The functions associated with these tasks need to be more clearly defined, and the risk management needs to be independent of the operational tasks. Finally, it is evident that the internal audit does not always pay the necessary attention to the investment policy, usually owing to a lack of resources.

Prevention of money-laundering and terrorist financing

The inspections carried out in this sphere highlighted some shortcomings in the analysis of the risks confronting the undertakings, which may lead to organisational inadequacies in terms of both the resources allocated to the prevention function and the procedures established for detecting and reporting suspicious transactions. The on-site checks also revealed a lack of knowledge and proper organisation in relation to financial sanctions and embargoes.

Other themes

The calculation of the best estimate of the technical provisions (see section E.1.3) also formed the subject of specific inspections which concerned in particular the account taken of profit-sharing and the difficulties that small undertakings experience in calibrating their assumptions.

Inspections on the valuation of mortgage loans also generated some points for attention, notably as regards the discounting assumptions, the failure to take account of interest on arrears in the cash flows, and the absence of back-testing.

2. Legal framework and horizontal analyses

2.1 Undertakings subject to a special regime on account of their size

Article 4 of the Solvency II Directive states that the provisions of the Directive do not apply to undertakings whose business does not exceed certain thresholds concerning premium income or technical provisions, or does not involve certain complex risks such as liability, credit and suretyship insurance risks, or cross-border activities. Belgium made use of this option by making provision, in Articles 272 to 302 of the Solvency II Law, for three regimes geared to small undertakings.

The first of these regimes concerns undertakings which fall below the thresholds defined by the Directive, which are reiterated in the Solvency II Law, though the latter specifies that reinsurance activities are not eligible for this particular regime. The undertakings in question are subject to a supervisory regime similar to the one that existed under the Law of 9 July 1975 on the supervision of insurance undertakings, particularly as regards the requirements concerning own funds and technical provisions.

The second regime concerns undertakings whose business does not exceed the thresholds in the Directive and which have also concluded an agreement whereby they systematically reinsure or transfer all their insurance liabilities. In view of this transfer of risks, these undertakings are exempt from all supervision, except for the obligation to register with the Bank and prove that they still meet the conditions to qualify for that exemption.

Finally, the third regime concerns local insurance undertakings, i.e. those which confine their business to covering certain fire risks in the municipality where their head office is located or in neighbouring municipalities. The thresholds applicable to these undertakings are lower than for the preceding categories, the permitted activities are more limited, and a high reinsurance transfer percentage is required. If these conditions are met, the supervision regime is confined to registration, verification of compliance with the said conditions, and the requirement concerning an effective management team comprising at least two persons. It should also be noted that this regime is available only to undertakings pursuing activities which met the aforesaid conditions on 1 January 2016.

The supervision regimes described above are described in more detail in two specific Circulars [1], [2].

2.2 Preferential rights and running inventories

The Solvency II Law set up a system of protection for policy-holders, insured persons and beneficiaries of insurance contracts or commitments in the event of liquidation of the insurance undertaking. This system comprises a preferential right to the assets corresponding to the technical provisions of the various separately managed activities, and a preferential right to the whole of the assets of the insurance undertaking. It should be noted that these preferential rights do not concern reinsurance claims.

These provisions formed the subject of a Circular [3] specifying which claims are preferential and the rules on their valuation, and the conditions governing whether an asset can be included in those subject to the preferential rights corresponding to the various separately managed activities.

The Circular also points out that insurance undertakings must maintain a special register, called the running inventory, which identifies the assets forming the basis of each of the preferential rights corresponding to the separately managed activities. These registers must be constantly updated, but since the preferential rights will only be asserted in the context of a liquidation in which the insurance contracts are terminated, it is only necessary to submit an annual summary to the Bank. It is therefore only necessary to submit the complete registers to the Bank if the risk of liquidation is imminent or if a check is being carried out.

2.3 Communications on authorisation and cross-border activities

Communication on the authorisation of undertakings governed by Belgian law

The Solvency II Law maintained the principle of prior authorisation for the pursuit of insurance or reinsurance activities. Authorisation is granted per branch in the case of insurance and per activity in the case of reinsurance. An undertaking authorised in an insurance branch or a reinsurance activity cannot extend its operations to another branch or activity for which it does not have authorisation until after obtaining an extension of its authorisation.

(1) Circular NBB_2017_11 of 27 March 2017 on insurance undertakings subject to a special regime on account of their size.
(2) Circular NBB_2017_12 of 27 March 2017 on local insurance undertakings.
(3) Circular NBB_2017_10 of 22 March 2017 on preferential rights of insurance creditors, running inventories and the summary statement of the running inventories.

The Bank published a Communication [1] which sets out the conditions and describes the procedure for applying for authorisation as an insurance or reinsurance undertaking governed by Belgian law, or for requesting an extension of an existing authorisation. It is accompanied by the memorandum on the obtaining of authorisation by an insurance or reinsurance undertaking governed by Belgian law, detailing the procedure to be followed. These documents essentially constitute an update of Communication D.146 of 19 April 1996 and the previous authorisation memorandum, which are cancelled.

Communications on cross-border activities

The Solvency II Directive upheld the principle whereby authorisation obtained in one Member State is valid throughout the European Union. However, that does not mean that there are no formalities governing the commencement of activities in another Member State, be it via a branch or via freedom to provide services. In reality, both the Directive and the Solvency II Law provide for a notification procedure between the authorities of the Member States concerned by the start of cross-border activities. Belgian law also makes provision for a prior notification regime for the acquisition of a subsidiary abroad and the commencement of an activity in a non-EEA country. Those procedures are set out in two Communications [2],[3] which update the Bank's guidelines on the subject.

2.4 Circular on the Own Risk and Solvency Assessment (ORSA)

The Own Risk and Solvency Assessment (ORSA) forms the foundation of the risk management of insurance undertakings under Solvency II.

It is essential for an undertaking's executive committee and board of directors to be aware of all the significant risks to which the undertaking is exposed, whether or not they are included in the calculation of the regulatory solvency capital requirements and whether or not they are quantifiable. It is vital for the undertaking to assess for itself, in its risk management, the amount of own funds that it should hold in view of the risk exposure and commercial objectives specific to the undertaking. It is essential for the solvency and risk assessment to be incorporated in the undertaking's management policy, and more particularly in its strategic decisions.

An initial Circular on the subject had been adopted pursuant to the EIOPA guidelines. A new Circular [4] was drawn up during the period under review to strengthen the risk management.

A chapter was added concerning good practices for stress tests. In the ORSA, undertakings have to make a prospective assessment of the risks which they expect to face. Stress tests are one of the tools that they must use to facilitate that prospective approach to risk management. The aim of the good practices is to give undertakings better information on how to devise a sound framework for stress tests, sensitivity analyses and scenario-based analyses. These good practices describe both the quantitative and the qualitative aspects of the stress tests while drawing attention to the principle of proportionality: small undertakings can focus more on qualitative aspects while larger undertakings have to use more sophisticated stress-testing techniques.

Undertakings are also required to attach a table to their ORSA report, presenting an overview of the five principal current or future risks confronting the undertaking, taking account of the business plan and its risk tolerance limits. The summary table gives the Bank an accurate idea of the risk analysis conducted by undertakings and an overview of the stress tests and scenarios devised.

2.5 Loss-absorbing capacity of deferred taxes

Article 153 of the Solvency II Law, which transposes Article 103 of the Directive, provides for an adjustment to the calculation of the solvency capital requirement (SCR) corresponding to the loss-absorbing capacity of deferred taxes.

Under Solvency II, the assets and liabilities are recorded at the value at which they could be transferred or exchanged in a transaction concluded under normal market conditions. That results in a figure which differs from their book value or their tax value. Deferred tax assets (DTAs) and deferred tax liabilities (DTLs) represent the tax impact of these valuation differences known as "temporary differences". However, it should be noted that, as in the case of the IFRS, part of the DTAs may also result from unused tax credits and unused tax losses.

Thus, in the Solvency II balance sheet, an insurer or reinsurer will record a DTL or a DTA according to whether an asset will produce a gain or a loss not currently

(1) Communication NBB_2017_17 of 2 June 2017 on the procedures for obtaining authorisation as an insurance or reinsurance undertaking governed by Belgian law, and for obtaining an authorisation extension.
(2) Communication NBB_2017_18 of 2 June 2017 on the procedures to be followed by insurance or reinsurance undertakings governed by Belgian law for pursuing an insurance or reinsurance activity abroad.
(3) Communication NBB_2017_19 of 2 June 2017 on the procedures to be followed by insurance or reinsurance undertakings governed by foreign law for pursuing an insurance or reinsurance activity in Belgium.
(4) Circular NBB_2017_13 of 19 April 2017 on the Own Risk and Solvency Assessment (ORSA).

expressed in its balance sheet. In other words, the undertaking will immediately record either the tax on the profit resulting from the capital gain, or the tax credit resulting from the capital loss. However, the recording of a (net) deferred tax asset is subject to a recoverability test in which the undertaking has to demonstrate that it will make a future taxable profit to which this DTA can be imputed.

Deferred tax assets may result either from a negative valuation difference between the value according to Solvency II and the tax value of the assets, which is the case if there is an unrealised net loss on the securities portfolio, or from a positive valuation difference in the liabilities if the Solvency II technical provisions exceed the statutory technical provisions.

The adjustment concerning the loss-absorbing capacity of deferred taxes (LAC DT) consists in taking account of changes in the deferred tax assets and liabilities when calculating the SCR, as the SCR is an own funds requirement intended to cater for either a reduction in the value of the assets or an increase in the liabilities. Such fluctuations also imply a change in the amount of the deferred tax assets and liabilities. The adjustment in question consists in taking that change into account in calculating the SCR.

In an initial Circular [1] on the subject, only the amount of the net deferred tax liabilities could be taken into account in the adjustment concerning the loss-absorbing capacity of deferred taxes. The Circular [2] discussed here abolished that restriction in order to bring the Bank's practices more into line with those developed on this subject in the other Member States.

It is evident from an EIOPA study that the restriction applied by the Bank could be considered a strict rule compared to the methods developed in the other Member States, which aim primarily to impose restrictive assumptions, should the occasion arise, in connection with the demonstration of the existence of future profits which can justify the part of the LAC DT exceeding the net DTL.

With effect from 2016, Belgian undertakings were therefore authorised to reduce their SCR by an amount in excess of the net DTL, known as the notional DTLs. However, the Circular specifies that these notional DTLs must not exceed whichever is the smaller of either, on the one hand, the amount resulting from the recoverability test or, on the other hand, the estimated taxable profits according to the undertaking's business plan, which are cumulated over a maximum of five years and multiplied by the tax rate, then by the SCR coverage rate before application of the adjustment, the latter rate being reduced by 100 %.

The new Circular was to apply for the first time to the calculation of the SCR relating to the situation as at 31 December 2016. However, an analysis revealed that few undertakings used the option offered by the new Circular.

EIOPA also carried out work to reduce the differences between Member States in application of the LAC DT.

2.6 Infrastructure Circular

Economic research has shown that the investment rate in the European Union is still below the long-term average prevailing before the 2008-2009 financial crisis. It is government investment that is particularly low, mainly on account of the need to restore sound budgets in the Member States following the European debt crisis.

As investment is a highly cyclical component of demand, it largely explains the seriousness of the recession and the struggle to restore growth in the euro area. In addition, the low investment rate also erodes an economy's long-term growth potential.

The European Commission, under the presidency of Jean-Claude Juncker, therefore put forward an "Investment Plan for Europe" when he took office. One aim of the plan was to eliminate unjustified barriers in the legislation concerning the funding of infrastructure projects by insurers. In fact, insurers – and particularly life insurers – are essentially long-term investors often seeking to acquire assets with a maturity that matches their liabilities.

That is why Delegated Regulation 2015/35, which – among other things – sets out the capital requirements for insurance undertakings, creates a separate infrastructure asset class that takes account of the specific characteristics of this investment. The new asset class has to meet criteria concerning resistance to stress and the predictability of cash flows, and must form the subject of an appropriate contractual framework. Fulfilment of these criteria should ensure that the prudential policy is tailored to the risk profile of infrastructure investment.

(1) Circular NBB_2016_21 of 25 April 2016 on the loss-absorbing capacity of technical provisions and deferred taxes.
(2) Circular NBB_2017_14 of 19 April 2017 on the loss-absorbing capacity of deferred taxes.

In February 2017, the Bank published a Circular [1] providing additional clarification on the definition of infrastructure investment and the associated eligibility criteria, to enable insurers to assess the corresponding risks. In some cases, that risk assessment will require adjustment of the risk management systems of insurance undertakings in view of the potentially new character of the investments concerned.

2.7 Brexit

The United Kingdom's withdrawal from the European Union – commonly known as "Brexit" – planned for the first quarter of 2019 raises a series of questions concerning the activity of British undertakings in the European Union, particularly if it is assumed that, after Brexit, the United Kingdom will have to be considered as a third country under EU legislation on insurance and reinsurance. In that scenario, British undertakings will no longer be able to pursue their activities either via freedom to provide services or via a European branch which would not be supervised by the Member State in which it is established.

In view of this uncertainty, some British insurers and reinsurers are already examining the possibility of establishing a subsidiary in the European Union and transferring to that subsidiary the activities that they have hitherto carried out via freedom to provide services or via a branch. Such a subsidiary would offer parent companies in the United Kingdom the advantages of the single licence throughout the European Union. Some insurance and reinsurance undertakings (Lloyd's, MS Amlin and QBE) have publicly announced their intention to establish such a subsidiary in Belgium. Another institution (The Navigators Group) has announced its intention to acquire shares in a Belgian insurer (ASCO). Contact is currently ongoing with the Bank's services in connection with the preparation of an authorisation application for these undertakings.

At this stage, several points remain unclear, such as the post-Brexit fate of insurance or reinsurance contracts concluded prior to that date with a company based in the United Kingdom and the arrangements for transferring European activities currently managed from the United Kingdom to a subsidiary located in the European Union.

The same applies to the activities that companies governed by the law of a European Union Member State pursue via freedom to provide services or via a branch in the United Kingdom. In their case, the uncertainty lies in whether "post-Brexit" British law will still authorise such activities, and under what conditions. At EIOPA level, discussions are in progress, in which the Bank is participating, for the purpose of examining the prudential issues associated with the United Kingdom's departure from the European Union.

2.8 EIOPA visit

Among its various tasks, EIOPA is responsible for promoting a common culture of consistent, high-quality supervision of insurance and reinsurance companies. In that connection, EIOPA assesses supervisory authorities' implementation of national projects such as balance sheet inspections, stress tests, or the application of the rules on internal models for calculating solvency requirements, and the efficient operation of the colleges of supervisors.

In April 2017, EIOPA thus assessed how the Bank exercised prudential supervision over insurers and insurance groups. For that purpose, it gathered information on all the applicable legislation, and the Circulars, internal policies and various transversal analyses developed by the Bank. That information was supplemented by presentations on the Bank's own tools and procedures, and their deployment for the purposes of operational supervision, and by question and answer sessions. EIOPA's conclusions were generally reassuring as regards the quality of supervision exercised by the Bank, which has already prepared a plan in response to EIOPA's comments.

2.9 ICS field test

In connection with the global convergence of capital standards and the promotion of financial stability, the International Association of Insurance Supervisors (IAIS) is currently developing a common prudential framework for internationally active insurance groups (IAIGs). That framework includes the development of an International Capital Standard (ICS) comprising a number of elements: the provision concerning the consolidation scope, the valuation of assets and liabilities, the own funds components and the own funds requirements.

In the past three years, there have been various field tests on the subject to obtain input from experts, both from the sector concerned and from the supervisory authorities. The field testing serves to refine the capital standards mentioned above and to continue developing the qualitative aspects of the framework. During the period under review, field testing was carried out specifically to develop an initial, concrete version of the capital standards according

(1) Circular NBB_2017_04 of 16 February 2017 on infrastructure investment under the Solvency II regime.

to a standard method. A new field test will permit further refinement of these standards, including as regards undertaking-specific parameters and the internal models used to determine the capital requirements. The expectation is that the international capital standard can be introduced by the end of 2019, and will be applied on a consolidated basis to all internationally active insurance groups.

2.10 Horizontal analyses and stress tests

During the year under review, the Bank also conducted various horizontal analyses of the Belgian insurance sector (see box 15), and carried out stress tests to ensure that the interest rate risk is still low for insurance undertakings (see box 16).

Box 15 – Horizontal analyses of the Belgian insurance sector

This year, as part of its risk analysis, the Bank again carried out a series of horizontal analyses on the main risks for the insurance sector. This work included a more detailed examination of the interest rate, liquidity and spread risks faced by Belgian insurers.

Interest rate risk

The potential consequences of persistently low interest rates have been the most significant financial risk for insurers for several years now, and remain an attention point for the Bank.

In 2014, in order to obtain a more complete and detailed view of the insurance sector's exposure to interest rate risk, the Bank had decided to develop standard annual reporting specifically for monitoring that risk. This 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 contracts, the duration of the technical provisions and their covering assets, detailed projections of cash flows concerning the technical provisions and assets, and projections relating to yields on the assets and liabilities.

With the aid of these data, an assessment framework was devised on the basis of a set of risk indicators. The Bank has been applying this assessment framework for three years, and has refined it each year. In particular, it uses the framework to examine 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 between the projection of the expected yields on the assets, on the one hand, and the guaranteed yields on the liabilities on the other hand. These parameters make it easier for the Bank to identify the undertakings which are (more) vulnerable to a low interest rate environment.

Undertakings for which the risk was deemed significant were subjected to a more detailed examination. In a limited number of cases, this led the Bank to request an action plan from the undertaking, or to analyse possible measures to limit its interest rate risk. That approach will continue to be followed in the longer term.

In this connection, the Bank proposed an amendment to the prudential regulations on life insurance intended to avert the risks of large-scale policy redemptions, particularly in the event of an increase in interest rates. The measure aims to discourage early redemptions, or at least to ensure that the costs associated with speculative redemptions are shared between the insurer and the policy-holder. In practice, this measure would consist in making the redemption value depend on both the residual term of the policy and the difference between the guaranteed contractual yield and an interest rate representing financial market yields at the time of redemption.

Liquidity risk

Back in 2014, taking account of the downward trend in the volume of traditional life insurance premiums and the increased share of illiquid assets on the Belgian insurance market, the Bank had already decided to keep a close watch on liquidity risk in the insurance sector.

The Bank provides for separate quarterly liquidity reporting by all life insurance undertakings. An insurer generally faces a less significant liquidity risk than a bank, and that risk is more difficult to measure.

To permit integrated monitoring of the liquidity risk, the Bank developed an assessment framework based on a set of risk indicators. Those indicators focus on the trend in incoming and outgoing cash flows, the trend in the liquid assets and liabilities, and finally, 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 risks of individual insurers and of the sector as a whole.

For a small number of undertakings, the liquidity reporting results led the Bank to adopt follow-up measures or to carry out inspections. More specifically, the findings which emerged from these analyses regarding the reduction in premium volumes and the growing number of individual life insurance contract surrenders also gave rise to a strategic review on the future of the individual life insurance sector in Belgium, and recommendations by the Bank on the subject.

Spread risk

Fixed-interest-rate assets – which make up the bulk of the insurers' investment portfolio – are subject to spread risk. The spread corresponds to the risk premium, i.e. the difference between the asset's yield and the risk-free interest rate. If an asset's risk premium increases, its yield increases and its market value falls. The spread risk is therefore the risk that the asset's market value may vary according to fluctuations in the risk premium, due to a change in the (perceived) risk of the asset.

Quantitative studies and stress tests previously conducted for the insurance sector revealed that variations in 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, and partly to the principle of marking to market enshrined in the Solvency II regime. Since all variations in spreads are reflected in the market value of these bonds, they have a direct (positive or negative) impact on the own funds 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 long-term guarantee (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 the offsetting depends on the type of LTG measure which can be applied.

In order to obtain a more integrated and complete view of the spread risk for insurers, beyond the possible effect on capital requirements and valuation, an assessment framework was developed in the year under review for monitoring the spread risk of Belgian insurers. That assessment framework mainly concerns the indicators relating to credit quality, duration and interest rate sensitivity of fixed-interest-rate assets. During the year under review, the extent to which that risk is covered by the capital buffer stipulated by the Solvency II framework was also examined. That risk will be monitored with the aid of the insurers' annual reporting on the subject to the Bank.

Undertakings identified as outliers will be monitored in future quantitative analyses, e.g. via stress tests. The Bank also analyses how insurers themselves assess the risk in their ORSA report. In that connection, particular attention will focus on the spread risk of government bonds, as the Solvency II framework does not impose any capital buffer in that respect.

Box 16 – "Flashing-light" policy and national stress test framework

"Flashing-light" reserve

Under the Solvency I regime, insurers had to form additional statutory provisions (commonly known as the flashing-light reserve) to cover the interest rate risk that they incurred on certain types of contract. Following the entry into force of the new Solvency II prudential regime, the prudential rules on additional reserves were retained in the accounting framework. That reserve must therefore be maintained for as long as the interest rate risk persists. However, as the Solvency II regime also makes provision for specific regulatory requirements to cover the interest rate risk, new rules were introduced in the accounting framework, thus simplifying the mechanism for waiving the obligation to form additional reserves.

As a general rule, that waiver is conditional upon fulfilment of all the regulatory capital requirements under Solvency II without making use of the transitional measures concerning technical provisions. Apart from checking fulfilment of this condition, the Bank analyses the situation of the undertakings concerned and the market conditions in order to ensure that the interest rate risk is still low. In that assessment, it uses the most relevant tools at its disposal, including the stress test results relating to the interest rate risk exposure.

Stress tests

The Bank considered it useful to issue a Communication to the sector explaining its policy and expectations concerning stress tests for insurance. In that regard, a distinction is made between firms' own stress tests, e.g. those developed for the ORSA, and stress tests imposed by the Bank. The latter tests may be both microprudential (focusing attention on specific exposures in a small number of undertakings) and macroprudential. The Bank's stress test policy is flexible and provides substantial scope for achieving objectives specific to each exercise. The insurance sector undergoes a stress test at least once a year, and if there is a European stress test the Bank adjusts its own stress test accordingly.

This new framework was first applied in practice in 2017. To reduce the workload for firms, the stress test methodology was adapted as far as possible to that for the 2016 EIOPA stress test. That test puts the emphasis on the most relevant risks for insurers, namely market risks, including the interest rate risk, and excluding technical underwriting risks, and consists of two quantitative scenarios supplemented by a brief qualitative questionnaire.

The main aim of the first – low for long – scenario is to detect and assess the Belgian insurance sector's potential vulnerabilities relating to the interest rate risk. That scenario tries to simulate a structural stagnation situation in which a shortage of profitable long-term investment and persistently weak growth (and low growth expectations) lead to a continuing decline in the risk-free yield curve, particularly for the longest maturities. This exercise forms part of a macroprudential risk assessment and by that token supplements the risk assessments conducted for individual undertakings (see box 15). The main aim of the stress test is to detect the sector's vulnerabilities. However, weaknesses found at individual level must not be ignored. This implies that the results of the low for long scenario are taken into account in the assessment of the waiver application mentioned above.

The second scenario was developed by the IMF in collaboration with the Bank, in the context of the FSAP conducted in Belgium (see chapter A under "Prudential regulation and supervision"). To test the insurance sector's resilience, an adverse macrofinancial scenario was developed, simulating a recession caused by a sudden increase in risk aversion worldwide, a reappraisal of the sovereign risk in the euro area, a credit cycle crash in emerging market economies, and a significant correction on Belgian property markets. That scenario combines an increase in the risk-free yield curve with substantial shocks affecting key asset classes in the investment portfolio (government and corporate bonds, mortgages and other loans, equities, real estate, etc.). The results of these stress tests were not yet final when this Report went to press.