Report 2013

Prudential regulation and supervision

National Bank of Belgium
Eurosystem

C. Prudential supervision

1. Development of closer, more comprehensive supervision

During 2012 and 2013, the IMF conducted a full, in-depth analysis of the Belgian financial sector under the FSAP. In addition, and taking account of the resulting recommendations, the NBB set out its priorities for microprudential and macroprudential analysis in its master plan 2012-2015 and in its 2013 and 2014 risk reviews. These priorities were determined with due regard for the potential risks which could arise in the financial sector, in the current national and international macroeconomic environment. The action plans of the various prudential services have to take account of those identified as priority risks.

During the year under review, the supervision structure for banks, insurance companies and financial market infrastructures was developed further in the context of the FSAP recommendations and the 2013 annual risk review. That structure is presented in sections 2, 3 and 4 respectively of this chapter.

1.1 Financial Sector Assessment Programme

The IMF's assessment of the financial sector aims to detect the main vulnerabilities which could trigger financial crises. That assessment comprises two main pillars. The first concerns analysis of the resilience of the financial system as a whole, notably on the basis of stress tests and the detection of the principal risks facing the system. The second pillar assesses the quality of the regulation and supervision of banks, insurance companies and financial markets.

The conclusions of the Belgian financial sector assessment, published in May of the year under review, draw attention to the main progress made in restoring a sound financial sector and improving the prudential supervision framework on the basis of the lessons learnt from the financial crisis. The IMF's assessment was positive overall; it emphasises that the regulation of the banks and insurance companies conforms to international good practice. Adherence to the IMF recommendations will be further checked under the new SSM supervision framework.

While the introduction of the "twin peaks" model on 1 April 2011 generated more synergy between microprudential and macroprudential policy, the supervision method adopted by the Bank and the implementation of a supervision cycle contributed to the improvement in the analyses and the promotion of financial supervision centred on the main risk factors. Nonetheless, the IMF pointed out the need to continue the reforms in order to ensure the optimum functioning of the new supervision architecture. The IMF recommendations concerned strengthening cooperation between the FSMA and the Bank and establishing a macroprudential authority. Apart from the improvements to be made to the regulatory framework for crisis management, the IMF also recommended establishing a resolution authority in Belgium.

In regard to the supervision process, the IMF stressed the importance of tailoring the supervision of individual institutions to the risk profiles and complexity of the organisational structures, especially in the case of smaller institutions. In addition, the IMF considered that the supervisory authority should have regular meetings with the management of financial institutions in order to examine in detail the main risks facing those institutions and the measures and actions required to limit those risks. In the insurance sector, too, the prudential supervision framework should take greater account of this aspect of risk analysis so that the sector is better prepared for the implementation of Solvency II.

The IMF's main findings and recommendations concerning the supervision of conglomerates in Belgium were that prudential practice has been based in recent years on prudence and the maximum use of the powers conferred on the supervisory authority, even if that means that there is no specific regime applied to conglomerates but instead consolidated supervision at sectoral level. The IMF noted that the corollary was the current lack of a clear framework applicable to any group classed as a financial conglomerate. The IMF's main recommendation therefore concerned the need to establish baseline supervision for financial conglomerates.

Although the financial position of banks and insurance companies has gradually improved over the past few years, the stress tests revealed certain vulnerabilities, namely the sector's low profitability and the close links between the financial sector and the government. According to the IMF, the supervision of financial institutions should include more systematic stress tests at both microprudential and macroprudential level.

As already explained in various sections of this Report, most of the IMF's recommendations under the FSAP have been or will be taken into account in the various legislative proposals currently being finalised, and in the supervision techniques and procedures applied by the Bank. By way of illustration, Box 3 details the Bank's preparatory work concerning the Financial Action Task Force (FATF) on money-laundering.

Box 3 – Combating money-laundering and the financing of terrorism and proliferation : preparation of the 4th mutual evaluation of Belgium by the FATF

In February 2012, the intergovernmental Financial Action Task Force (FATF) approved the new "International Standards on Combating Money Laundering (AML) and the Financing of Terrorism & Proliferation (CFT)", constituting its forty new "Recommendations". The FATF then continued its work of defining the new methodology for assessing technical compliance with the FATF recommendations and the effectiveness of the AML/CFT systems. As a member of the Belgian delegation, the Bank played an active part in this work. Adopted in February 2013, this new methodology will form the basis of the fourth round of mutual evaluations of the organisation's member countries. Following the assessment of the Belgian financial system conducted by the IMF in 2012 and 2013, Belgium will be one of the first four countries to undergo a mutual evaluation by the FATF using the new methodology.

New FATF methodology

The new methodology takes account of the experience gained during the third round of mutual evaluations. After that round, the member countries considered that, while it had been necessary to check initially that the countries evaluated had adapted their laws, regulations and measures to combat money-laundering and terrorist financing in order to take account of the 40 FATF Recommendations, the fourth round of evaluations should be used to ensure that the control mechanisms developed by member countries are effective, though without neglecting the need for those countries to watch over the compliance of their provisions with the new international standards which remain the essential basis for the effectiveness of these systems.

The new FATF methodology therefore implies that the fourth-round evaluations are organised by a dual procedure. That procedure first evaluates the technical compliance of the national systems with the standards but also, at the same time, their effectiveness in combating money-laundering, the financing of terrorism and proliferation. The countries evaluated will thus have to demonstrate that their laws and regulations and the other measures that they apply satisfy the almost 250 criteria for assessing technical compliance, which cover all components of the FATF recommendations. In addition, they will have to demonstrate the degree to which their systems for combating money-laundering and the financing of terrorism and proliferation are suitable for attaining the aims

of an effective system. Those aims are identified and specified in detail by the methodology in the form of eleven immediate outcomes.

As in the past, the new evaluations will be organised in three main phases. First, the country assessed has to provide the evaluation team with detailed information on both the technical compliance of its provisions with the FATF recommendations and the effectiveness of its systems. That basic information is supplemented by a two-week on-site visit by the evaluation team so that the evaluators can gain a clearer understanding of the mechanisms in place. Finally, the mutual evaluation report is discussed and adopted by the FATF. However, it should be noted that, during the on-site visit, the emphasis will be on evaluating the effectiveness of the mechanisms developed by the country in question. That evaluation will focus mainly on the vulnerabilities of the country evaluated, taking account of all its specific characteristics. The aim of the evaluation is in fact to help the evaluated country to tackle those vulnerabilities in order to increase the effectiveness of the measures to combat money laundering and the financing of terrorism and proliferation.

Preparations in Belgium

In the closing weeks of 2013 and the initial weeks of 2014, the various Belgian authorities concerned, including the Bank, thus contributed to the preparation of the detailed dossier of information on the mechanisms in place in Belgium, to demonstrate that they comply with the standards and are effective.

In this connection it should be noted that, pending the fourth Directive on the prevention of money-laundering and the financing of terrorism, on which negotiations are in progress, it has not yet been possible to adapt the Belgian laws and regulations to the new FATF standards.

However, since the new standards place more emphasis on the risk-based approach to supervision, the Bank can in particular make use of the "periodic questionnaire" on AML/CTF which financial institutions subject to its supervision have to complete each year. With that questionnaire, the Bank's risk-based approach to the exercise of supervision will be based on the collection of systematic, standardised data, facilitating comparisons between financial institutions and over time. In order to enable the financial institutions to prepare their answers for the beginning of 2014, the questionnaire was sent out to them by circular in September 2013 [1]. Shortly after that, the questionnaire was also presented to them at an information meeting organised by the Bank.

The information dossier produced by the Belgian authorities will form the main basis on which, in the spring of 2014, the FATF evaluation team will determine the priorities to be given particular attention during the rest of the mutual evaluation process, and notably during the on-site visit.

During that visit scheduled for 30 June to 11 July 2014, the evaluation team will conduct a detailed examination of the AML/CFT mechanisms implemented in Belgium, taking account of the previous decision on the priority of the various topics in this field.

The draft evaluation report will be debated and approved by the FATF in February 2015. This mutual evaluation report will also form the final section of the report drawn up by the IMF on Belgium under the FSAP.

(1) See Circular NBB_2013_10 of 25 September 2013 on the periodic Questionnaire relating to the prevention of money-laundering and the financing of terrorism, and the annexes to the circular.

1.2 Annual risk review 2013

Every year, in order to define its prudential analyses and guidelines, the Bank determines its priorities for the three main financial sectors, namely banks, insurance companies and market infrastructures, taking account of their respective characteristics. Those priorities are subjected to both a transverse analysis for all these sectors and a vertical analysis at the level of the individual dossiers dealt with by the operational services. These priorities concern both the major financial risks and the supervision procedures. All these aspects, listed and illustrated in chart 8 below, are discussed in more detail in the sections that follow. Box 4 looks in more depth at the New Organisation for Valorisation of Audit (NOVA) project, a reform which had already been launched before the establishment of the annual risk review 2013, but which also forms part of the improvements to the supervision process.

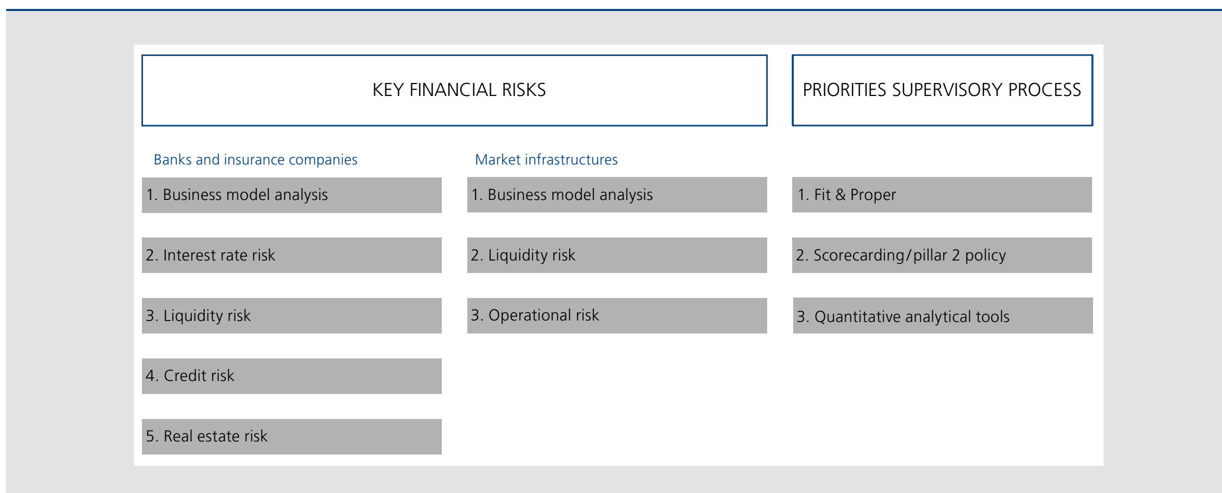
In regard to financial risks, during the year under review, particular attention focused on the business models of the individual institutions, since they are subject to stricter requirements as a result of the major changes to the law following the financial crisis. The business model risk concerns the three sectors, but the work had initially concentrated on the banking sector, where the determinants of the main sources of income and costs were identified. The interest rate risk is closely connected with the business models owing to the importance of intermediation activity, though the banks and insurance companies differ in their approach to that activity. Other risks were also accorded priority: liquidity risk which confronts the three sectors owing to financial market volatility, credit risk in a context of slackening economic growth in Belgium and in neighbouring euro area countries, and the real estate market risks in Belgium. Finally, the operational risks relating to cyber crime are of more specific concern to market infrastructures.

In regard to supervision procedures, the work concerned three priority topics. First, the publication of a new circular on expertise and professional reliability[1] was an important step forwards in the 'fit and proper' project launched in 2012. The uniform application of the assessment criteria set out in the circular and the extension of the experience with 'fit and proper' interviews will remain high on the agenda of all prudential departments in 2014.

On the second topic, "scorecarding" can be regarded as completed for credit institutions. The Bank reformed this risk analysis instrument in order to improve structural consistency in the supervision of the various credit institutions over which it has authority. In this connection it worked on two projects: cluster analysis and proportionality. The first project aimed to improve what is known as "peer group clustering" on a more refined and risk-oriented basis. The aim of the proportionality project was to permit adaptation of the profile of institutions in the scorecarding application on the basis of their impact/risk classification, and is therefore connected with the clustering project. The work on pillar 2 was postponed for credit institutions; future work will depend on the SSM developments concerning the SREP.

(1) See chapter B, section 5.2 of the "Prudential regulation and supervision" part of the Report.

CHART 8 RISK REVIEW 2013



Source: NBB.

Finally, the revision of the Quantitative Analytical Tools (QAT) is a project concerning the process of supervising both banks and insurance companies. In 2013 the work centred on the banking element (the B-QAT project). The existing Bank Performance Report (BPR) had to be revised following the changes to financial and prudential reporting made by CRD IV, applicable from 1 January 2014. In this project, work concerned both the content, namely the most relevant core data supporting supervision, and the form in which the data can be processed and presented in an optimal way, such as how to improve the integration of microprudential and macroprudential data. B-QAT is organised at three levels: (1) the Key Risk Indicators (KRI) are a standardised set of ratios and key figures which act as an early warning system for the teams responsible for prudential supervision, (2) the risk dashboard gives a broader and more detailed picture of the credit institution and forms a kind of financial identity card combining various topics in a clear format to give a coherent, structured picture of the credit institutions, and (3) the detailed thematic templates supply more specific information on each topic and facilitate in-depth analysis of a particular topic by combining relevant information from various sources or from various basic reports. For levels 2 and 3, the Bank had to do most of work, while the KRIs are essentially defined by the EBA or the SSM. Work on the thematic templates was completed in the autumn of 2013. The B-QAT project along with other changes to supervisory practices showed that there was a need for an updated IT environment, in the form of the Prudential Supervision Improvement and Extension Programme (PRIME). This programme aims to renovate the IT applications and tools supporting the Bank's prudential supervision activities. The programme is intended to provide institutions, the supervisory authorities, the management and the various parties involved with a modern and efficient environment for collecting, validating and managing data and for analysis and prudential reporting. That environment will also be flexible so that the expected requirements of the SSM can be respected. In PRIME, the data from the various sectors subject to supervision are collected on one and the same technological platform.

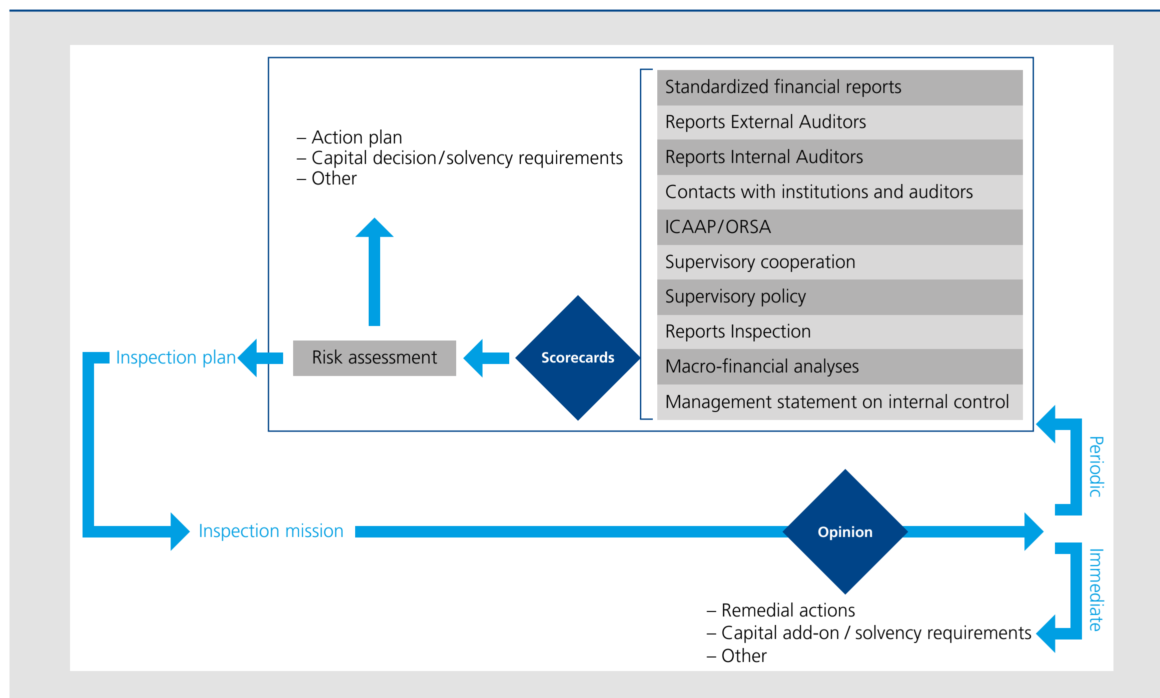
Box 4 – NOVA: the new inspection method

For the Bank, the inspections conducted by specialist inspectors on banks and insurance companies are a vital and irreplaceable supervision instrument for detecting failings in the way in which institutions organise their business and manage their risks, and for taking the necessary corrective measures. The Bank's inspections take place in the context of the risk assessment of the institutions, and lead to decisions on action plans. One of the actions that might be considered is the planning of an inspection. The Bank may also arrange an inspection at any time if specific circumstances so require. After the inspection, the Bank draws up an inspection report in which it expresses a general opinion and sets out its findings and recommendations. This inspection report enables the Bank to assess whether immediate action is needed, and to adjust the general risk profile of the institution at the time of the periodic risk assessment (see chart for more details).

During the year under review, the inspection methods were radically revised via the New Organisation for Valorisation of Audit (NOVA) project, in order to harmonise the inspections and make them more effective. Work on the NOVA project resulted in a general inspection manual, applicable since October 2013. That manual gives a clear definition of the inspection process and sets out a formal methodology. More particularly, it provides for an inspection universe, the introduction of the latest audit concepts and techniques, revision of the work programme objectives, a standardised implementation process, opinion rating, scoring of the recommendations and a modified inspection report. The NOVA project also involved work on automating the inspection process in order to maximise consistency in its execution.

The inspections conducted by the Bank are a) results-oriented: inspectors formulate opinions and recommendations for the spheres examined, giving them individual scores so that the shortcomings detected can be targeted, b) risk-oriented: the inspectors apply a methodology based on an analysis of the risk exposures and the way in which the risks are, or are not, monitored, c) intrusive: adequate information on supervision is actively sought, and d) forward-looking: the spheres analysed are related to the overall risk management system that supports future

INSPECTIONS IN CONNECTION WITH RISK ASSESSMENT



Source: Circular NBB_2013_15 of 11 December 2013 on inspections.

(financial) performance, for which purpose the Bank uses the Prudential Internal Control Standardised Model (or PRISM) as the internal reference model.

The review of the inspection methods coincides with the introduction of the SSM. The Bank decided to align the NOVA methodology as far as possible with that of the SSM, while maintaining the elements for which there is no provision as yet in the SSM, and/or those which, in the light of Belgian experience, should preferably be kept, such as the formulation and follow-up of recommendations by inspectors, and the notification of an overall rating. These additional elements will apply to all supervised institutions until the SSM comes into operation, and to all subjects for which the Bank has full and exclusive powers.

The inspection process and the expectations in relation to supervised institutions are explained in detail in the circular relating to inspections [1]. This transparent approach is designed primarily to ensure that the inspections run smoothly. The methodological revision is accompanied by adjustments to the organisational model, as the Bank decided to group the inspectors together in a single service from November 2014.

(1) Circular NBB_2013_15 of 11 December 2013 on inspections.

1.3 Annual risk review 2014

In regard to financial risks, the Bank set its supervision priorities for 2014 against the backdrop of a slight improvement in the macroeconomic and financial environment. In general, the work begun in 2013 will continue in 2014. There were no major changes to the list of priorities, though the sequence was amended and there was a shift of emphasis. In addition, a clearer distinction was made between priorities for credit institutions and those for insurance companies. While the banking sector analyses will be greatly influenced by the preparations for the SSM, especially the comprehensive assessment of credit institutions coming under direct ECB supervision from November 2014, the insurance company analyses will concentrate on examining the business models and their sustainability in the context of the very low level of interest rates in recent years and the changes to be made to the regulations under Solvency II.

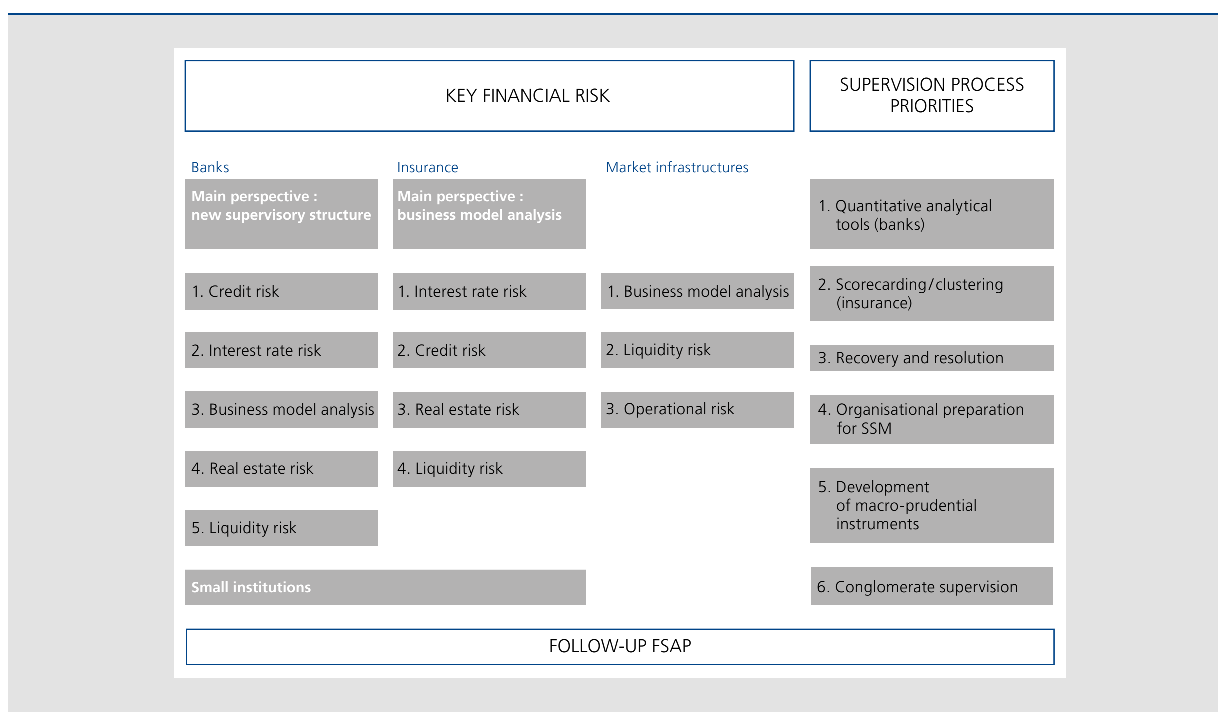
As recommended by the IMF following the FSAP, the concept of supervision tailored to the risk profile will also be extended to smaller institutions, particularly those with a high risk profile.

As regards priorities under the supervision process, the B-QAT project will first be supplemented in the near future with a second component : the risk dashboard. The first application of the new B-QAT concerning data for the first quarter of 2014 will obviously be subjected to close scrutiny, and will be followed by the final adjustments to the new analysis instrument. A similar analysis instrument is to be developed for the supervision of insurance companies as a result of Solvency II, which will introduce new reporting requirements. Now that the implementation of Solvency II has been scheduled for 1 January 2016, this will mean a tougher challenge in 2014. Other work relating to the supervision of insurance companies which needs to be done in the near future is the updating of scorecarding to permit more risk-oriented supervision. As in the case of banking supervision, this will form the basis of a cluster analysis in 2014[1].

Recovery and resolution will also be added to the list of priorities. Since the 2007-2008 crisis, the development of recovery and resolution plans has become one of the priorities of supervisory authorities throughout the world. The preparation of such plans for global systemically important banks (G-SIBs) is coordinated at G20 level by the FSB. This aspect will be developed in parallel with

(1) See chapter C, section 3.1, of the part of the Report on "Prudential regulation and supervision".

CHART 9 RISK REVIEW 2014



Source : NBB.

the European work programme on this subject, now that the Bank has gained experience from a number of pilot projects[1].

Creation of the SSM also presents a major organisational challenge for the Bank's supervision processes, as explained in detail in other sections of this Report[2]. In addition, the operational framework for the macroprudential instruments specified by CRD IV will be developed in line with what is being done at international level, as in the ESRB.

Finally, turning to the supervision of conglomerates, one of the FSAP recommendations concerned devising better baseline supervision for financial conglomerates and paying greater attention to the specific risks generated within such "bancassurance" groups. Since there are currently no clear international guidelines on this, the Bank considered it advisable to align the supervision of financial conglomerates with consolidated supervision at sectoral level. For credit institutions, that was done via the new banking law[3]. For insurance companies, it will be introduced via transposition of the Solvency II Directive.

(1) See chapter B, section 2.4, of the part on "Prudential regulation and supervision".
(2) See chapter A, section 2, of the part on "Prudential regulation and supervision".
(3) See chapter B, section 2.2, of the part on "Prudential regulation and supervision".

2. Banks

2.1 Components of the annual risk review 2013

During the year under review, the Bank's priorities for the supervision of the banking sector concerned business models, interest rate risk, liquidity risk, credit risk and real estate risk.

Business models and interest rate risk

In the second half of 2012, the Bank began setting up an analysis of the business models of banks. This analysis and the underlying methods were tested on a large bank. During 2013, the methodology developed was then further refined and extended to the four large banks (Belfius, BNPP Fortis, ING Belgium and KBC).

Business models are the means and methods that an institution uses to conduct its business, generate profits and continue developing. Each business model is unique, but certain characteristics are common to different banks. Business model analysis forms part of the supervision activities and, according to CRD IV, it is an essential part of the SREP, which means that the findings must be reflected in other components of the SREP and be used in the general SREP analysis. The purpose of the business model analysis is to enable the supervisory authority to form an opinion on (1) the current business model of the institution subject to its supervision and its viability, (2) the way in which the business model could change as a result of the institution's strategic decisions and/or changes in the economic and market environment, in other words the sustainability of the model. That determines the appropriate actions to be taken by the supervisory authority under the SREP.

The business model analysis offers the supervisory authority an instrument for determining at an early stage the situations and actions which could prejudice the institution's sustainability or general financial stability. The supervisory authority is thus able to adopt a more prospective and proactive approach. The development and implementation of business model analyses in Belgium is in line with a more general international trend among supervisory authorities to conduct in-depth analyses of the business models of banks in the course of their supervision.

The need for a business model analysis as part of supervision also fits into the context of the major developments and changes in the economic and market environment at national and international level, and the amendments to banking regulation, which are putting pressure on the institutions and forcing them to change. In addition, there is strong pressure of competition in the Belgian banking sector owing to a number of large banks retreating to their home market and reverting to traditional banking activities. The inclusion of the business model analysis in banking supervision and its extension to insurance companies forms part of the IMF's recommendations in connection with the FSAP[1].

In 2013, the main focus of attention was the development and implementation of the first phase of the business model analysis, which consisted in mapping the four main credit institutions in Belgium. That analysis was based on both quantitative and qualitative data. Since the aim at this stage is to determine in particular the bank's ability to generate income and profit, it was necessary to identify the profitability drivers at the most basic level – i.e. customer tariffs, the volume of business, fees, etc. Development of the analysis framework for these basic variables also permits some comparisons between institutions – e.g. in regard to volumes, tariffs

(1) See chapter C, section 1, of the part on "Prudential regulation and supervision".

and margins – and, in a second phase, projections and scenarios simulating in particular the interaction with macroeconomic variables such as the yield curve. The quantitative analysis is based partly on the internal data that the bank supplies on its activities, portfolios and sub-portfolios, and in that respect distinguishes between homogenous product groups; this produces characteristic data such as volumes, customer tariffs and maturities for all activities on and off the balance sheet. The various sources of income such as net interest income, fee income and income from market activities are included in the analysis, as is the operating cost structure and depreciation. This analysis makes it possible to produce an outline, economic representation of the activities and underlying profit generation for each institution.

The quantitative analysis is supplemented by various types of qualitative information on the institution, namely the quarterly and annual reporting, management accounting and budget reviews, market analyses, risk analyses for the various activities, etc. Interviews are also conducted with those responsible for the various operational activities within the institution. The data and the qualitative information enable a detailed bottom-up analysis, though it has to be supplemented by an analysis adopting a more top-down approach. Finally, on the basis of the quantitative and qualitative analyses, the performance of the current business model of each institution is assessed, together with its main sources of risk and vulnerability. That analysis is useful not only for the SREP but also for the analysis of the periodic financial results of the institution.

In 2014, the business model analysis will continue, with the ongoing operational implementation of the first phase and the launch of the second phase where possible. This second phase will focus more on prospective analyses and will examine the institution's strategic actions and multi-annual plans in order to arrive at an assessment of its sustainability.

In view of the low interest rate environment and the potential impact of an upturn in interest rates, particular attention has been paid to analysing interest rate risks in the banking sector. Since the impact of the low interest rate environment on bank revenues was a key aspect of the work relating to the business model analysis, the work on the interest rate risk for the banking sector was largely integrated into that on the business model analysis in 2013. In 2014, the work programme for interest rate risk will concentrate more specifically on the asset/liability management (ALM) aspect of those analyses. In addition, specific analyses were conducted in 2013 on certain ALM aspects of individual institutions and for specific activities, in connection with the modelling of the interest rate sensitivity of sight accounts and savings accounts and the impact of a sudden rise in interest rates on the market value of the Belgian government bonds in credit institutions' portfolios.

Liquidity risk

Credit institutions were able to raise funding on the financial markets under better conditions in 2013. Most large institutions also recorded steady growth of regulated savings deposits. As a result of the further expansion of this last source of funds and the limited growth of the assets, there was less need for Belgian banks to issue long-term paper. Issuance of long-term securities was relatively modest during the year under review, and mainly concerned covered bonds. These developments enabled credit institutions and financial holding companies to consolidate their already relatively comfortable short-term liquidity position, and to respect the regulatory stress test ratios for liquidity risk introduced by the supervisory authority in 2011.

Despite the steady improvement in financial market conditions from the second half of 2012, supervision of the liquidity position and liquidity management of credit institutions remains a priority, especially in the context of the preparations for the introduction of international liquidity standards. During the year under review, the Bank therefore continued to produce a quarterly report presenting an overview of financing conditions on the money and capital markets and a transverse analysis of the liquidity position of institutions on the basis of national liquidity ratios and new harmonised international standards. That report monitors the liquidity position of banks periodically, and duly informs the services concerned and the management of the NBB. Daily reporting of the liquidity of systemically important institutions continued as before.

Following a survey of the treatment of cash flows relating to derivative portfolios, the Bank also identified a number of inconsistencies in the liquidity reporting currently applicable in Belgium. The supervisory authority calculates its regulatory liquidity standards – the stress test ratios for liquidity risk – on the basis of that liquidity reporting. To ensure that the reporting tables are completed consistently, the Bank therefore decided to publish a list of frequently asked questions and the answers relating to the tables and the instructions. The Bank expects institutions to take account of these clarifications from now on in reporting their liquidity position.

The second pillar of bank supervision according to the Basel Principles is based on an analysis by the supervisory

authority of the specific characteristics of individual institutions and the need to impose individual supervision measures. In regard to this second pillar, CRD IV specifies that during the SREP the supervisory authorities should also pay explicit attention to an institution's liquidity position and liquidity management, and may impose additional, specific liquidity requirements on the basis of that analysis and other information. In addition to second-pillar decisions on capital, similar decisions on liquidity will be introduced in 2014 and will apply at least annually. During the year under review, the EBA worked on guidelines for an SREP on liquidity, and the SSM also developed a comparable methodology. The Bank is similarly devising a methodology on the basis of these international guidelines and activities.

Credit and real estate risk

During the year under review, the work relating to credit risk centred on two key topics : comparison of the various parameters that banks use to calculate their risk-weighted assets, and prospective assessment of the credit risk on the basis of adverse macroeconomic scenarios.

The credit risk parameters were compared for the business loan portfolio. This portfolio is better suited to direct comparison of the risk parameters applied by different lenders since a firm often has a relationship with more than one bank. For this purpose, use was made of new data from the central credit register supplemented by the results of an *ad-hoc* survey. The analysis attempted to distinguish between differences due to the nature of the loan (maturity, collateral obtained) and differences resulting from divergent calibration of the same risk by different banks. These data also made it possible to identify the branches of activity with a high ratio of risk-weighted assets to total assets. All these analyses which are in line with a general trend towards risk assessment benchmarking, will support the work required by the ECB in connection with the comprehensive assessment of credit institutions.

The prospective assessment of credit risk relates to the stress tests, of which it forms a key element. Thus, it was possible to model changes in the credit risk (losses and provisions) of banks according to various macroeconomic scenarios on the basis of the work done in connection with the IMF's FSAP mission. However, this approach proved to have a number of limitations. Work is currently in progress on improvements to the analysis framework with a view to the stress tests to be conducted as part of the comprehensive assessment which the ECB has launched in preparation for the SSM.

As far as credit risk on the Belgian mortgage market is concerned, in the past few years, the Bank has analysed recent developments on that market in detail, and ascertained the risk profile and quality of credit institutions' mortgage loan portfolios. This analysis was based in particular on data collected from 16 credit institutions via *ad-hoc* reporting of data on Belgian mortgage loans granted and held by each institution. During the year under review, the Bank decided to repeat this survey of credit institutions at regular intervals for the time being. The data on outstanding totals and new business will now be collected twice yearly, and the data on the corresponding minimum capital requirements will be collected annually (for the year-end position).

On the basis of the 2012 and 2013 surveys and in view of the relatively high ratio of mortgage loans in the balance sheet total of credit institutions, the Bank also considered that a potential increase in credit losses on these portfolios due to possible market shocks justified prudential measures. Similarly, the FSAP report had noted potential risks to financial stability from the Belgian property market.

These measures aim to strengthen the banks' resilience and mitigate the concentration risk. Box 5 offers a more detailed account of the reasons for these measures and their content. They are the first macroprudential measures taken by the Bank.

Box 5 – Real estate : measures adopted

Over the last few years, the Bank has analysed in depth recent developments on the mortgage market and identified the risk profile and quality of Belgian credit institutions' mortgage loan portfolios.

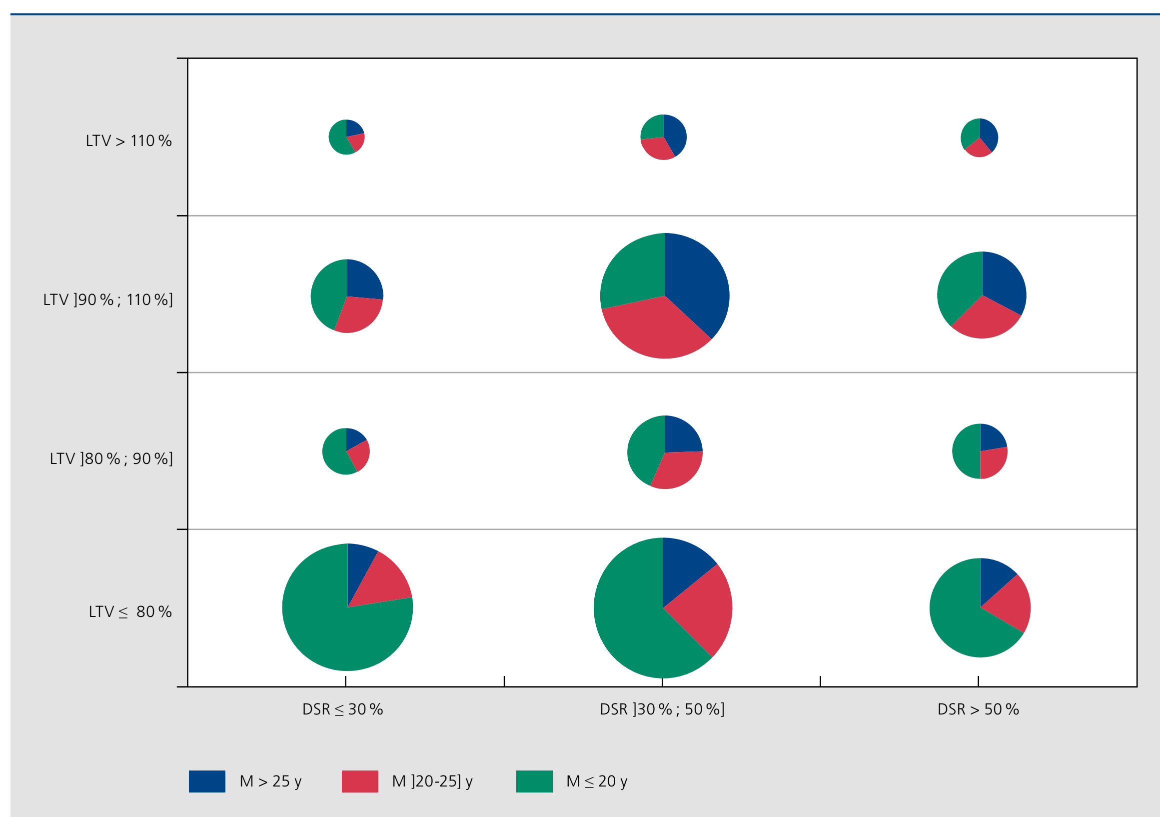
In this respect, the 2012 Financial Stability Review (FSR) stated that a substantial number of borrowers in recent vintages may have stretched their loan maturities, loan sizes and/or debt service ratios to levels that could entail

a higher risk of future credit losses for banks than in the past. To maintain the current very high asset quality of Belgian mortgage loans, the FSR therefore called for increased vigilance over current market developments, and a closer watch on the application of sufficiently conservative credit standards and the establishment of adequate risk pricing for all new mortgage loans.

The supplementary survey in 2013 focused in particular on the way in which the potential risks associated with mortgage loans are taken into account in calculating the minimum capital requirements for credit risk under the pillar 1 rules. In that regard, particular attention was paid to credit institutions which use the internal ratings-based approach (IRB) to calculate their minimum regulatory capital requirements for mortgage loans. The levels of the risk weights calculated with these internal risk models for Belgian mortgage loans (averaging around 10 %) are considerably lower than those determined by the standard approach for calculating the minimum capital requirements for credit risk (risk weighting of at least 35 %), though they vary widely between institutions. More detailed analysis confirmed that these differences between institutions are largely attributable to variations in the risk profile – and particularly the relative importance of the riskier sub-segments – of the portfolios of the different banks. However, the analysis also confirmed that the risk weights for Belgian mortgage loans were often very low in absolute terms, and lower on average than in many other European countries.

BREAKDOWN OF THE PORTFOLIO OF MORTGAGE LOANS OF IRB BANKS BY LTV, DSR AND MATURITY AT ISSUANCE [1] [2]

(non-consolidated data, end 2012)



Source : NBB.

(1) The three indicators are calculated at the time of granting the loans.

(2) The relative size of the circles reflects the relative size of the portfolios, while the level of the outstanding amount of loans in relation to the value of the property (loan-to-value, LTV) and the ratio between the debt repayments and the borrower's income at the time of granting the loan (debt service ratio, DSR) are broken down by specific intervals. In addition, each portfolio is broken down according to the initial maturity (maturity, M) of the loans expressed in years.

Although the credit quality indicators for households do not so far point to any deterioration in default rates on recent mortgage loan vintages, a number of factors could lead to a rise in credit losses in the future. In that respect, the said article in the FSR 2012 highlighted the particularly steep increase in house prices and mortgage lending over the preceding ten years, and the trend towards longer loan maturities and the relatively high (though stable) share of loan-to-value ratios of more than 80 % (including ratios higher than 100 %) in new contracts. In this connection, it is possible that a sizeable group of borrowers in recent vintages may have stretched their mortgage loan maturities, loan sizes and/or debt service ratios to levels that could entail a higher risk of future credit losses for banks than in the past. Consequently, some segments of the latest mortgage loan vintages could be more vulnerable to a deterioration in incomes and housing market conditions. Partly on the basis of criteria measuring the over- or under-valuation of property prices, the Bank and international institutions such as the ESRB, the OECD and the IMF therefore decided to draw attention recently to the potential risks associated with the Belgian housing and mortgage market.

In this context, and in view of the relatively large share of Belgian mortgage loans in the balance sheets of Belgian credit institutions, the NBB considered it justified to take some prudential measures aimed at strengthening the banks' resilience and reducing the concentration risk.

The first measure is macroprudential in nature and provides for a flat-rate 5 percentage point increase in the risk weightings calculated by the banks themselves, but only for banks calculating their minimum regulatory capital requirements for Belgian mortgage loans according to an IRB model. That measure took effect with the Royal Decree of 8 December 2013[1]. In practice, if a bank using the IRB approach calculates an internal risk weighting of 10 % for Belgian mortgage loans, this measure requires the minimum capital requirements to be calculated on the basis of a 15 % risk weighting. This add-on does not apply to banks using the standard approach mentioned earlier to calculate their capital requirements. This moderate add-on seems appropriate in view of the rather conservative policy on mortgage lending in the past, and the historically low level of losses on such loans. However, in view of the cyclical character of this measure, the Bank will keep a close eye on market developments for the purpose of continuous assessment of the appropriate level of that add-on. From 2014, the new capital requirements for Belgian mortgage loans can only be maintained pursuant to European rules permitting the EU Member States to impose specific requirements to address macroprudential risks. The Bank will do whatever is necessary to maintain the add-on with due regard for the new EU Directives applicable from 1 January 2014.

The other two measures adopted by the Bank are microprudential in nature : one concerned launching a horizontal assessment of the said IRB models on the basis of the results of the backtesting[2] to be conducted by the institutions, followed by any necessary adjustments to those approaches, and the other consisted in requesting credit institutions to carry out a self-assessment of the degree to which each bank conforms to the EBA Opinion on Good Practices for Responsible Mortgage Lending and the EBA Opinion on Good Practices for the Treatment of Borrowers in Mortgage Payment Difficulties. The results of these two exercises will be analysed in the first half of 2014.

(1) Royal Decree of 8 December 2013 approving the regulation of 22 October 2013 of the National Bank of Belgium amending the regulation of 15 November 2011 of the National Bank of Belgium on the solvency of credit institutions and investment firms.

(2) Backtesting is one of the components of the quantitative validation of a model based on comparison between predicted and actual values.

2.2 Organisation of supervision

Mapping of the banking sector

The population of banks was relatively stable in 2013. The decline in the number of credit institutions under Belgian law – which is partly technical (switch to payment institution status) – was largely offset by a rise in the number of branches under foreign law. The already significant presence of foreign banks in Belgium, in the form of Belgian branches or subsidiaries, is persisting. In the investment firm sector, consolidation has also been in progress for a number of years, and in 2013 that again led to a fall in the number of institutions.

Supervision practice – preparation for Basel III

At least once a year, the supervisory authority subjects each financial institution to a full risk assessment, and checks whether the financial institution's capital is sufficient, taking account of its financial structure and risk profile, including risks not covered by pillar 1. If the institution is part of a group, the consolidating supervisory authority and the authorities responsible for supervising subsidiaries and major branches have to agree on a common position and determine the capital needed for each entity and for the consolidated unit. The mutual decision on capital is the outcome of a long and intensive process, starting with the request by the consolidating supervisory authority to the local supervisory authorities for their assessment of the risks and their proposal regarding capital for the local entity, and culminating in a detailed risk assessment for the group as a whole and for its constituent entities followed by determination of the level of capital. That level is generally significantly higher – to a degree that depends on the specific risk profile of the group and its entities – than the minimum regulatory capital requirement.

During the period under review, the Bank paid special attention to the preparation of credit institutions for the more stringent Basel III rules, and conducted two types of analysis for that purpose. The first analysis comprised periodic simulations of the banks' capital levels according to the rules applicable from 1 January 2014. The banks not only had to respect the new minimum regulatory standards, but also had to show that their capital was sufficient to maintain the minimum set by the latest decision on capital. A second set of analyses examined the extent to which the banks were already able to comply with all the new Basel III rules from 1 January 2014 without using the transitional arrangements. Banks with an insufficient margin were asked to implement an action plan to expand their buffers in time by increasing their capital and/or reducing their risks. In a number of cases, this led to specific actions and measures to strengthen the solvency position of the institutions concerned.

TABLE 3 CHANGE IN THE NUMBER OF INSTITUTIONS SUBJECT TO THE BANK'S SUPERVISION

	31-12-2012	31-12-2013
Credit institutions	123	122
Under Belgian law	44	39
Branches governed by the law of another EEA country	53	55
Branches governed by the law of a non-EEA country	9	10
Financial holding companies	7	7
Financial services groups	4	4
Other financial institutions [1]	6	6
Investment firms	36	34
Under Belgian law	21	20
Branches governed by the law of another EEA country	13	12
Branches governed by the law of a non-EEA country	0	0
Financial holding companies	2	2
Payment institutions and electronic money institutions	18	26
Payment institutions	12	16
Electronic money institutions	6	10

Source: NBB.
(1) These are either specialist subsidiaries of credit institutions or credit institutions associated with a central institution with which they form a federation.

Supervision practice – inspections and model validation

On-site inspections are an important aspect of supervision. Prudential inspectors do not form part of permanent supervision teams but make up a separate group, carrying out their inspection missions in accordance with an agreed methodology (see the box on NOVA in chapter C, section 1 of the "Prudential regulation and supervision" part of the Report). Important topics covered by the inspections include the functioning and quality of risk management, the organisation and risk management of market activities, management of credit risk and liquidity risk, supervision of the retail network, and the application of the regulations on the prevention of money-laundering and the financing of terrorism.

As regards the validation of new models and the monitoring of the performance of previously validated models, the bulk of the work again concerned credit risk, which accounts for the major part of the capital requirements for institutions. Attention also focused on fair value models owing to the gradual disappearance of the prudential filter of the AFS (available for sale) portfolio under Basel III. Some new dossiers were also dealt with under market and operational risk and the ICAAP (International Capital Adequacy Assessment Process).

Supervision practice – cyber security and IT outsourcing

The internet has rapidly become a critical external network for the provision of services to the outside world (customers, branch networks, agents, etc.) and for the internal operation of institutions subject to supervision. At the same time, the use of the internet by institutions and their dependence on this tool generate high risks for the security and continuity of internal and outsourced IT systems and for the internet services offered.

In this connection, a particular focus of attention in 2013 concerned protection against cyber risks in general, and the plans for outsourcing the IT activities of financial institutions via "cloud computing" systems[1] in particular. Close cooperation was also established with Febelfin and the Federal Computer Crime Unit, among others, in order to combat e-banking fraud. It is noteworthy that almost all the e-banking fraud committed in Belgium in 2013 was due to specific fraudulent techniques (generally 'phishing' e-mails followed by telephone contact) whereby cyber criminals deceive users of e-banking services into disclosing their personal security codes.

(1) These are IT services offered on request and on line by providers of specialist IT services. In this connection, virtualisation and internet techniques are often used to render the IT services more extensible and more flexible.

3. Insurance undertakings

3.1 Components of the annual risk review 2013

The NBB has already been taking various initiatives since the end of 2011 to identify the points for attention in the insurance sector. In so doing, it has concentrated mainly on interest rate risk and liquidity risk. Since the end of 2011, the Bank has therefore launched special reporting geared to the vulnerabilities of large insurance companies. That reporting gives the supervisory authority a better idea of some of the risks specific to the insurance sector. In 2013, the Bank continued to use the results of this special quarterly reporting combined with the regular reporting data to conduct horizontal analyses in the insurance sector. The two main initiatives of 2013 are discussed below.

Persistence of a low interest rate environment

During the year under review, the NBB launched analyses designed to study in more detail the potential implications of persistently low interest rates for the insurance sector in Belgium. Historically, the Belgian insurance sector has always featured high guaranteed yields on certain life insurance products, and that is still the case, both for individual life insurance and for group policies. The guaranteed yields offered in Belgium are among the highest in the European insurance sector.

On the basis of an initial outlier analysis, the Bank singled out 13 companies and subjected them to more detailed examination in regard to the risks relating to this persistently low interest rate environment. The results of these analyses were then incorporated in a horizontal market analysis.

The initial findings resulting from these analyses indicate very wide variations in the management of the interest rate risk in the insurance sector. Companies use highly diverse strategies to manage this risk, and some of them warrant closer monitoring by the supervisory authority. The analyses also afforded a clearer view of the various facets and consequences of this persistently low interest rate environment.

Such an environment not only leads to a reinvestment risk – investments maturing have to be reinvested at a lower yield – but low interest rates also make it more difficult for insurers to market attractive life insurance products. With low guaranteed yields, it is harder to persuade customers and that may contribute to a decline in the volume of premium income.

In a low interest rate environment, there is also a danger that insurance companies may be over-zealous in their quest for higher returns on their investment portfolio. The first signs of a change in investment strategies are emerging on the Belgian insurance market. In a context of diversified portfolio management, that may not necessarily be a problem but firms must ensure that their expertise in managing their investments and risks is sufficient to maintain control over these alternative investments, which often have a credit and liquidity risk profile different from that of their traditional investment portfolio.

Another consequence of the low interest rate environment is that the transition from Solvency I to Solvency II, bringing a more market-consistent valuation, entails additional challenges, because the market value of the technical provisions increases significantly if the risk-free interest rate is low. In order to ease this transition, Omnibus II provided for transitional measures for discounting the risk-free interest rate. That is mainly advantageous for countries offering high guaranteed yields, so the likelihood is that Belgian insurance companies will also want to make use of that.

Furthermore, a low interest rate environment implies the risk of a sharp interest rate hike. If rates increase, insurance companies are not generally in a position to respond as flexibly as banks, owing to the longer maturity of their assets. The profit-sharing that insurance companies can offer on top of the minimum guaranteed yield therefore takes longer to adapt to rising interest rates than the interest that the banking sector can offer on alternative investments such as savings accounts or savings certificates. The risk of increasing surrenders and a further decline in premiums is then all the more real.

Analysis of a low interest rate environment shows the need for constant monitoring of this problem. Moreover, since the total assets of the insurance sector consist largely of investments in bonds issued by government entities, in-depth research was conducted into the composition and characteristics of the government bond portfolio of the insurance sector.

The results of this analysis for the sector as a whole were published in the FSR 2013. By mapping the maturity profile and coupon interest rates on government bonds, this study showed that, in the coming years, if the low interest rate climate persists, Belgian insurance companies will probably have to reinvest substantial amounts of AAA and AA bonds maturing at yields below the current coupon rate. In view of the outstanding amount of life insurance contracts with a high guaranteed yield, if the reinvestment risk materialises to such a considerable degree, albeit gradually, then in a low interest rate environment that could have a very significant impact on the results of insurance companies. Against that background, the substantial unrealised capital gains that insurance companies are currently recording on their bond portfolios will need to be treated prudently; those gains should not be allocated to the payment of dividends for policy-holders or shareholders, but should instead be regarded as a buffer for the years ahead, in case the current low interest rate environment persists in the medium term.

That environment and the resulting uncertainty over the feasibility of continuing to respect long-term commitments have already led to a downward adjustment of the guaranteed interest rate in the life insurance sector, both on new policies and for existing contracts where that is contractually possible. Moreover, this same low interest rate environment means that non-life insurers can no longer count on sufficient financial income generated by their assets to offset technical losses. That situation has encouraged the sector to pay greater attention to pricing, claims management and costs, and that has benefited the combined ratio. Apart from the individual analysis of the interest rate risk, the Bank therefore also considers the business model and general strategy of insurance companies as a key element in the overall risk assessment. Two pilot projects were launched in 2013 for that purpose. In 2014, the Bank will use the experience gained from those projects to initiate a more general review of the business models of large insurance groups.

Liquidity risk

In its analysis of the potential liquidity risk in the insurance sector, the Bank focused attention on monitoring the following aspects:

– "Surrenders" and total incoming and outgoing cash flows, namely premiums, (partial) surrenders, expiring contracts, deaths, etc. in class 21 insurance portfolios.
– The respective ratios between "liquid" and "less liquid" assets/liabilities.
– The exposure to certain specific assets and derivatives with a potential liquidity risk, e.g. repo's, securities lending activities, OTC derivatives, etc.
– Projections concerning liabilities and assets sensitive to the interest rate, in order to help identify significant future cash flow shortfalls.

The reported data once again confirm that, faced with a tendency towards rising surrenders and declining premiums, the Belgian insurance sector is finding it increasingly difficult to maintain the level of new class 21 business. That is due partly to the new tax treatment of life insurance products introduced in 2013, raising the tax on new premiums from 1.1 % to 2 %. It is also exacerbated by the low interest rate environment and by the fact that some life insurance products are no longer offered. Despite these declining volumes, the pure liquidity risk relating to this trend appears to be under control in most companies. The main point to watch is that these shrinking production volumes do not have too serious an impact on the profitability of the insurance business.

These developments also demonstrate the importance of monitoring the change in liquid assets and studying in more detail the relationship between liquid assets and liabilities that can be regarded as liquid or can be readily cancelled. In that respect, the conduct of an ALM policy centred on identifying and monitoring cash deficits will become increasingly important, both for the supervisory authority and for the insurance companies themselves. In some companies, the concentration of exposure to certain assets and derivatives with a potential liquidity risk is relatively high as a percentage of the total assets. Those exposures need to be monitored more closely.

3.2 Organisation of supervision

Mapping of the insurance sector and colleges of supervisors

At the end of the period under review, the Bank was supervising a total of 106 insurers, reinsurers, mutual guarantee associations and regional public transport companies (the latter being able to insure their fleet of vehicles themselves). That is therefore fewer than at the end of 2012, when the total came to 113. This downward trend is attributable to mergers, the conversion of Belgian companies into branches under the law of other EEA countries, closures following the transfer of portfolios to run-off, or the expiry of all the insurance liabilities. Furthermore, a European group continued to centralise its business lines in Belgium during 2013. As a result, the Belgian subsidiary will operate in future via branches in most other EEA countries.

Supervisory authorities of cross-border groups cooperate in colleges coordinated by the group's consolidating supervisor (the home country authority), with the participation of the supervisory authorities of the group's subsidiaries and branches (host country authority). Recurring items on the agenda for these colleges include the examination and assessment of the financial position, organisation, strategy, and the risks to which the group and its subsidiaries are exposed. Coordination arrangements are drawn up, namely arrangements on cooperation and the exchange of information, both in a going concern situation – e.g. for approval of an internal model – and in a stress situation. In that connection, EIOPA developed an internet application to continue streamlining the exchange of information between supervisory authorities.

TABLE 4 CHANGE IN THE NUMBER OF UNDERTAKINGS SUBJECT TO SUPERVISION (1)

	31-12-2012	31-12-2013
Active insurance undertakings	87	83
Insurance undertakings in run-off	9	8
Reinsurance undertakings	1	1
Other (2)	16	14
Total	**113**	**106**

Source: NBB.
(1) In addition, at the end of 2013, the Bank exercised prudential supervision over nine branches of companies governed by the law of another EEA country, though that was confined to checking compliance with the money-laundering legislation.
(2) Mutual guarantee associations and regional public transport companies.

During the period under review, a number of colleges were organised to prepare for the introduction of Solvency II. They took the form of joint inspections, workshops and reviews. In 2013, the emphasis was on drafting and discussing a risk assessment at the level of the group and at the level of its constituent entities.

In 2012, the colleges had also launched the initial preparations for the Own Risk and Solvency Assessment (ORSA) of institutions, a pillar-2 requirement of Solvency II. An initial assessment of the ORSA ratios by the supervisory authorities took place in 2013.

Supervision practice – preparations for Solvency II

In 2013, the insurance sector was asked about the best estimate of the technical provisions. The NBB's intention here was to examine the degree to which the industry was ready for entry into force of the new prudential regime. The survey results will be used in 2014 to encourage firms which are not yet up to the required level of supervision in methodological terms to catch up and take the necessary measures for that purpose.

Some companies are already anticipating Solvency II by adjusting their technical provisions towards the best estimate. That practice is problematic because it implies only partial implementation of the new prudential regime. In 2014 the Bank will therefore pay particular attention to estimating the required level of the technical provisions under the existing rules.

Under Solvency II, as an integral part of their business strategy, companies will have to conduct a regular assessment of their total solvency needs in the light of their specific risk profile, more particularly the ORSA. At the end of 2012, insurance companies were reminded about preparing an ORSA. Seven companies responded to the Bank's request and a number of the reports received were analysed and tested for compliance with the Solvency II requirements. A qualitative assessment model was developed for that purpose. The exercise will continue in 2014 with an initial analysis for a number of companies and a second analysis for those already examined. The qualitative assessment model will be refined and an initial approach to quantitative assessment is planned. The aim is to assess all companies by 2015.

Under the future Solvency II prudential framework, firms will be able to calculate their regulatory capital requirements on the basis of an internal model. The Solvency II Directive gives the prudential authority six months to

TABLE 5 COLLEGES IN WHICH THE BANK PARTICIPATES

	The Bank is the home-country authority	The Bank is the host-country authority
Complex groups	Ageas	AXA (AXA Belgium)
	KBC Insurance	
	Belfius Insurance	
	P&V	
Local undertakings	Intégrale Ducroire TCRe	
International undertakings		Allianz (Allianz Belgium and Euler Hermes)
		Generali (Generali Belgium and Europe Assistance)
		Munich Re (ERGO Life, DAS and DKV)
		HDI (HDI Gerling)
		BNP Paribas (Cardif)
		Delta Lloyd / Aviva (Delta Lloyd Life)
		Bâloise (Baloise Belgium and Euromex)
		MetLife (MetLife Insurance)
		Nationale Suisse (Nationale Suisse Belgium and L'Européenne)
		ING (ING Life and ING Non-Life)
		Assurances du Crédit Mutuel (Partners)
		CIGNA (CIGNA Life and CIGNA Europe)

Source: NBB.

assess the model and approve its use for regulatory purposes. Since the large workload entailed is concentrated on too brief a period, it was decided to allow firms to submit the model for assessment to the supervisory authority in advance, under a pre-application procedure. It is certainly not the intention for the supervisory authority to make any formal decision on the model at this stage. The firm must demonstrate that the modelled risks are sufficiently under control to produce reliable results.

At the Bank, work on pre-applications for internal models began in 2011 for undertakings which had submitted a dossier following the communication of 18 February 2011 concerning this procedure. In all, eleven dossiers were submitted to the Bank. This procedure permits examination of the extent to which companies wishing to use internal models to calculate their capital requirements are prepared for that.

In 2013, the same team dealt with both the quantitative and the qualitative aspects of the models. The inspections were conducted at the level of the Belgian parent company, the foreign parent company of Belgian firms, and the Belgian subsidiary of the foreign parent company. The developments and adjustments made to the internal models were monitored via regular meetings with the companies and by specific inspections. For some insurance groups, the college of supervisors discussed the practical arrangements and the organisation of the decision-making process in cases where the supervisory authorities disagreed on the appropriateness of the group model for the local market. Any shortcomings in the models were notified to the companies following discussion by the college.

The NBB notes that the companies have made progress but that some major challenges remain. The inspection missions already carried out enabled the Bank to draw conclusions both on the risks covered and on problems specific to each type of risk and the methodology applied. The 2012 findings were confirmed. Credit risk is often inadequately covered, the calculation of the market risk is approximate, the mortality tables used are not forward-looking, and non-transparent Vendor models are used in the case of catastrophe risk. The conclusions on the general modelling principles are also in line with those from 2012. The chosen methodology generates simplified models with inadequate granularity. Independent validation of the models needs upgrading and local knowledge of the group models is sometimes lacking, a finding that also applies to the management's

knowledge of the model. The methods of aggregating capital requirements are often insufficiently justified. That conclusion applies equally to the risk model: the choice of model, the assumptions and the use of expert judgment need stronger support. Finally, the outcome of the assessment of the technical provisions is uncertain. This all leads to excessive volatility in the capital and uncertainty over its exact level.

In regard to the flashing-light provision discussed in chapter B, section 3.2 of the "Prudential regulation and supervision" part, the Bank notified insurance companies that from 2013 the exemption dossiers will no longer be examined on the basis of the CPA-2006-2-CPA circular but according to a new methodology, owing to the persistently low interest rate environment and developments concerning Solvency II. As a result, no exemptions were granted in 2013.

Supervision practice – risk information and risk analysis

For the large insurance groups, periodic meetings took place with the members of the executive management of the undertaking. These meetings are intended to keep a close watch on the financial health of the companies concerned. That monitoring is necessary, notably in view of the FSAP conclusions. The weaknesses identified in some companies indicate the need for recovery measures. The periodic meetings with the companies ensure that the measures taken are closely monitored.

The large insurance groups inform the Bank of the outcome of the business-specific analyses which they conduct either periodically or on an *ad-hoc* basis (IMF stress tests, survey of vulnerabilities, assessment of the impact of Solvency II). During the course of 2013, the results of the various separate surveys were collated and examined against the standard reporting submitted to the Bank by the company. This exercise led to a risk analysis for each company. On the basis of these analyses, it was possible to detect any pitfalls, prompting more detailed analyses of those potential risks. The analysis results were discussed with the companies, which were urged to take steps to reduce their exposure to the increased risks.

Pursuant to the Bank's circular of 21 December 2012[1], in the case of the large insurance groups, an interview was conducted every three months with the approved auditor to discuss the undertaking's general situation. For other companies, these interviews were held less frequently.

Supervision practice – inspections

The inspection method underwent fundamental changes in 2013 to harmonise the inspections and improve their efficiency. For more details on this, see Box 5 on NOVA in chapter C, section 1 of the "Prudential regulation and supervision" part.

The 2013 inspection plan comprised a number of assignments concerning fifteen insurance companies. The main purpose of the missions was to assess:
– the rules and principles applied in regard to governance and management structure;
– the risk management systems and transverse control functions;
– reinsurance business;
– the organisation of class 23 activities and management of the associated risks;
– the rules for allocating costs among the various branches of activity;
– the adequacy of the technical provisions calculated under Solvency I;
– the progress of the preparations for the Solvency II requirements and in particular the adoption of the best estimate for calculating the technical provisions, and the preparations for the ORSA.

Some of the inspection missions also aimed to verify respect for the measures announced by the companies following previous missions, while others aimed to compare the management practices of the various companies for certain specific classes of activity.

(1) Circular NBB_2012_16 of 21 December 2012 on the approved auditors' duty of cooperation.

4. Oversight and prudential supervision of market infrastructures

4.1 Components of the annual risk review 2013

In the year under review, the Bank's supervision priorities for financial market infrastructures concerned business models, liquidity risk and operational risk.

Business models

The various market infrastructures are adapting their business models with a view to the introduction of TARGET2-Securities (T2S) and the specific new rules designed to make the activities more robust, such as CRD IV, EMIR and the draft Regulation on CSDs. This restructuring will give these entities access to new types of activity or functions, and that could tend to increase their risk profiles. The many companies operating in the post-trading sector are able to perform different roles: they may act as central depositories, provide custody services or act as authorised representative, depository or counterparty. However, their respective business models tend to converge for certain business segments, e.g. those where collateral is mobilised and rendered fluid. The extension of the market infrastructure activities to other links in the post-trading chain, the provision of new services and the increase in geographical scope therefore require close monitoring for the potential impact on risks.

Liquidity risk

If a financial market infrastructure has insufficient liquid resources at the scheduled moment for settlement, that may lead to systemic problems, especially in illiquid or volatile markets, and solvency problems. In particular, the NBB made sure that Euroclear Bank, as a financial market infrastructure, has the necessary procedures to measure and manage liquidity risk, even in the event of simultaneous default by two of its largest participants. Central depositories have an atypical risk profile. They do not collect deposits from the public and their lending activities are generally confined to granting intraday credit, solely for the purpose of facilitating the settlement of transactions. The excess deposits by their professional customers are also reinvested at maturities that ensure balance sheet liquidity. The supervision therefore needs to be based on principles specifically tailored to these business profiles, such as the CPSS-IOSCO principles for market infrastructures.

Operational risk

In the field of operational risk, cyber security is now receiving more specific attention. The supervisory authorities must, in particular, ascertain whether the market infrastructures are able to defend themselves and respond to cyber attacks, which are becoming more numerous and more serious. The main aim is to safeguard the integrity and confidentiality of the transactions handled by these infrastructures, and to guarantee continuity of service. As a member of the CPSS, the Bank took part in the international work on the cyber risks facing financial market infrastructures. That work charted the recent developments in cyber threats and the techniques available for dealing with them. The subject currently being examined is how the financial system as a whole could protect itself better against the growing level of threat, and whether the recovery mechanisms planned in response to a successful attack need to be strengthened. In view of the close links between infrastructures in the global financial system, it is vital to prevent the spread

of any consequences of an attack. The work of the G20 central banks concerning cyber risks is still at the analysis stage, and it is too soon to state what the new oversight expectations might be for financial market infrastructures in this sphere.

During the period under review, the Bank organised a round-table conference with the Belgian financial market infrastructures on the subject of cyber risks. There was an exchange of expertise on techniques for preventing, detecting, controlling and combating cyber threats. The participants also discussed the challenge of coping with the growing cyber threats, and considered the sectoral measures that might make a positive contribution here.

4.2 Organisation of supervision/oversight

The Bank is the prudential supervisory authority and overseer of market infrastructures. In exercising prudential supervision, it monitors the operator as an institution, whereas its oversight focuses on the system used by the operator. While the prudential supervision checks whether an institution complies with the rules on capital requirements, management, organisation and operational functioning, the oversight is more concerned with the stability of the financial system as a whole. The oversight examines whether systemic infrastructures are capable of ensuring the continuity of their services even in extreme circumstances. Table 6 indicates the Belgian infrastructures subject to the Bank's authority and cooperation between the Bank and the supervisory authorities of third-country infrastructures.

SWIFT

The Bank acts as lead overseer (principal supervisory authority) of SWIFT (Society for Worldwide Interbank Financial Telecommunication). Central banks make SWIFT subject to oversight because this entity is crucial to the security and efficiency of the financial messages exchanged between financial institutions and financial market infrastructures throughout the world.

During the period under review, the SWIFT Oversight Forum set up in May 2012 became more closely involved in determining the policy on oversight in relation to SWIFT. Apart from the G10 central banks, ten other central banks are informed of the SWIFT oversight conclusions. They

TABLE 6 THE BANK'S SUPERVISION AND OVERSIGHT OF FINANCIAL MARKET INFRASTRUCTURES

	International college of supervisors / cooperative oversight agreement		The Bank acts as the sole authority
	The Bank acts as the principal authority	The Bank participates under the direction of another principal authority	
Supervision			Belgian branch of Bank of New York Mellon Payment and electronic money institutions
Supervision and oversight	Euroclear Belgium (CIK) – ESES Euroclear SA/NV Bank of New York Mellon SA/NV (3)	CCP colleges (1)	Euroclear Bank (2) Atos Worldline BNYM CSD
Oversight	SWIFT (4)	TARGET2-Securities (5) TARGET2 CLS (7)	NBB-SSS Bancontact/Mister Cash (6) CEC (6) MasterCard Europe (6)

Source: NBB.
(1) These are the supervisory colleges for the central counterparties LCH Clearnet SA, LCH Clearnet Ltd, Euro CCP-NL, Eurex AG Clearing, KDPW-CCP, Keler CCP and CC&G.
(2) The Bank works on an *ad-hoc* basis with the other central banks concerned.
(3) Bank of New York Mellon SA/NV is the European headquarters of the BNYM group. The Bank is the principal authority in the college of European supervisors.
(4) Society for Worldwide Interbank Financial Telecommunication.
(5) TARGET2-Securities is the planned platform for the settlement of multiple securities settlement systems (SSS) in the euro area from mid-2015.
(6) Peer review in the Eurosystem / ESCB.
(7) Continuous Linked Settlement.

participate in determining the points for attention for future oversight activities.

The oversight activities concern all types of operating risk that may affect the SWIFT messaging services. During the period under review, special attention focused on the further development of integrated risk management and protection against cyber threats. Entry into service of a new data centre and the progress achieved with the technological renovation of the FIN application – the central application for the exchange of messages via SWIFT – were closely monitored.

Payment infrastructure

The Bank acts as lead overseer of MasterCard Europe. In 2013, it concluded a Memorandum of Understanding with the Central Bank of Russia, establishing cooperative oversight. The cooperation takes effect at the same time as the establishment of a legal supervision framework in the Russian Federation, and is justified by the growth potential of MasterCard Europe in that country. A similar agreement with the Nederlandsche Bank is being prepared, since the Dutch debit card scheme (PIN) was replaced by the MasterCard Europe debit card function (Maestro). The Bank also kept a close watch on the measures taken by Bancontact/MisterCash to conform to the standards introduced by SEPA (Single Euro Payments Area) for a payment card scheme.

The Centre for Exchange and Clearing (CEC), the Belgian clearing centre for the exchange and clearing of small interbank payments, migrated its technical platform at the end of March 2013 to the French retail payments system, *Système technologique d'échange et de traitement*. The CEC nevertheless remains a Belgian legal entity. The Bank concluded an agreement with the Banque de France on the exchange of information for the purpose of oversight.

Growing numbers of non-bank institutions have been operating under the payment institution status introduced last year (see the table in section 2.2 of chapter C). In 2013, the Bank embarked on a detailed survey of the duties of vigilance incumbent upon these payment institutions in order to prevent money-laundering and the financing of terrorism.

Central counterparties

In the final quarter of 2013, the national competent authorities launched the authorisation procedure defined in the EU's EMIR Regulation, whereby each CCP is granted a European passport. In that context, a supervisory college is set up for each CCP and has a right of consultation and escalation under the authorisation procedure. In early January 2013, the Bank took part in the supervisory college of 7 foreign CCPs, either as the supervisory authority of a CSD which the CCP uses for settlement, or as the supervisory authority of one of the three main clearing members of the central counterparty.

Securities deposit and settlement

The supervision concerning CSDs and securities settlement systems (SSS) focused on the establishment of a CSD by Bank of New York Mellon and on the activities of Euroclear Bank.

In December 2012, Bank of New York Mellon CSD and Bank of New York Mellon SA/NV were recognised respectively as a CSD and an institution equivalent to a settlement institution. That recognition entails the obligation to meet a series of basic requirements for a robust operational framework and risk management. In 2013, the Bank considered that those requirements were met and approved the operational launch of the Bank of New York Mellon CSD. The latter was also appointed as a securities settlement system. It will begin operating by early 2014 at the latest.

In November 2012, the FSB included the Bank of New York Mellon group in the list of Global Systemically Important Banks (G-SIBs). Consequently, as the supervisory authority of Bank of New York Mellon SA/NV the Bank concluded a cooperation agreement with the Federal Deposit Insurance Cooperation and the Board of the Federal Reserve, responsible for supervising the group's parent company in the United States. That agreement concerns participation in the preparation and regular monitoring of a general resolution plan under the aegis of a Crisis Management Group comprising the supervisory authorities of the main entities of Bank of New York Mellon. The work of the Crisis Management Group began in the second half of 2013.

From late 2012 to early 2013, the IMF conducted an EU-wide FSAP for the first time covering pan-European financial market infrastructures. In the process, the IMF – following in the footsteps of the Bank – also conducted an assessment of Euroclear Bank, on the basis of the CPSS-IOSCO principles applicable to financial market infrastructures. The IMF's recommendations concerned among other things the recovery plan requirements, advances on coupon payments and bond redemptions, daily reconciliation of positions in securities, and risk analysis concerning customers of participants in Euroclear Bank. As regards the organisation of the

supervision itself, the IMF recommended formalising and extending the current cooperation between the Bank and the Luxembourg authorities in respect of Euroclear Bank, in order to create a level playing field for Euroclear Bank and Clearstream Banking Luxembourg as international central securities depositories (ICSDs), and to include the ECB in that process. The Bank and the Luxembourg authorities are currently finalising an agreement. Lastly, the IMF considered it appropriate to deploy additional resources to strengthen the oversight of systemically important market infrastructures like Euroclear Bank.

In accordance with the new requirements included in the CPSS-IOSCO principles for market infrastructures, the Bank has to cooperate with the authorities of the countries for which the smooth operation of market infrastructures based in Belgium and active internationally is of major importance. At this stage, that requirement specifically concerns Euroclear Bank. The various cooperation agreements intended to give the authorities concerned access to all useful information for the exercise of their own responsibilities were finalised recently or are in progress. The structural implementation of that cooperation will take place in 2014.