B. Prudential regulation

Introduction

There were two main factors guiding the choice of priorities for prudential supervision in 2014 and 2015. First, the continued development of the new framework for that supervision, detailed in part A, had profound implications for the implementation of prudential supervision in practice, especially with the changes to the way in which it is organised following the switch to the SSM. Also, the introduction of the various new regulatory provisions influenced the method of monitoring financial risks and organising supervision processes.

The second decisive factor in the definition of the priorities relating to financial risks and supervision processes was the adverse macroeconomic environment, which is discussed in detail in the part of the Report on "Economic and financial developments". The weak economic growth and the persistence of a low interest rate environment are particularly relevant because of their impact on the financial sector. These two factors exerted pressure on the sector's interest income, with all the ensuing implications for profitability. They could also prompt an excessive quest for high-yield assets, accompanied by riskier behaviour (search for yield).

Against that backdrop, the Bank paid particular attention to analysing the business models and profitability drivers of banks, insurers and financial market infrastructures in order to assess whether they are equipped to cope with the challenges resulting from factors relating to the macroeconomic environment and to meet the more stringent regulatory requirements, both new and future. This chapter examines the priority risks for each sector before reviewing the main aspects of operational supervision, in each instance on the basis of the mapping of the financial sector and against the background of cost-cutting in the sector. Finally, cyber risk, which is cross-sectoral, is addressed in the context of the increasing digitalisation and importance of the stored data and the amounts concerned.

1. Overview of the priorities of the annual risk reviews in 2014 and 2015

As explained in its 2012 and 2013 Reports, the Bank uses a management cycle for prudential supervision to enable the Board of Directors to give clearer guidance on prudential priorities and actions. The management cycle is based on a medium-term risk analysis (a three- to five-year master plan) and a short-term analysis (annual risk review). These priorities concern the three financial sectors, namely banks, insurers and market infrastructures. They also encompass both financial risks and more qualitative priorities, such as supervision methods and organisation.

Under the master plan for 2012-2015, the work during the year under review centred on the priorities set in the 2014 risk review and on drawing up the 2015 risk review which lists the prudential priorities up to the end of 2015. Having regard to the various reforms carried out in recent years in the financial supervision regulation and architecture, those priorities are increasingly influenced by developments at European and international level. The priorities mentioned in the risk review are the guide for drawing up the action plans of each supervisory service. However, the entire process leaves sufficient scope for any adjustments that may be needed on account of new developments or risks which emerge in the various sectors and are detected at national and European level with the aid of suitable instruments.

In the medium term, the emphasis will be on continuing implementation of the two major prudential projects, CRD IV/CRR and Solvency II, in preparation for full and thorough application of the new regulations.

1.1 Risk review 2014

The priorities for the year under review, detailed in various sections of this part B, are essentially based on work which began in 2013, though the order of priority and the intensity have been changed to take account of not only the macroeconomic context, but above all the reforms to the supervision architecture in the banking sector and the new regulatory reforms concerning insurance and market infrastructures.

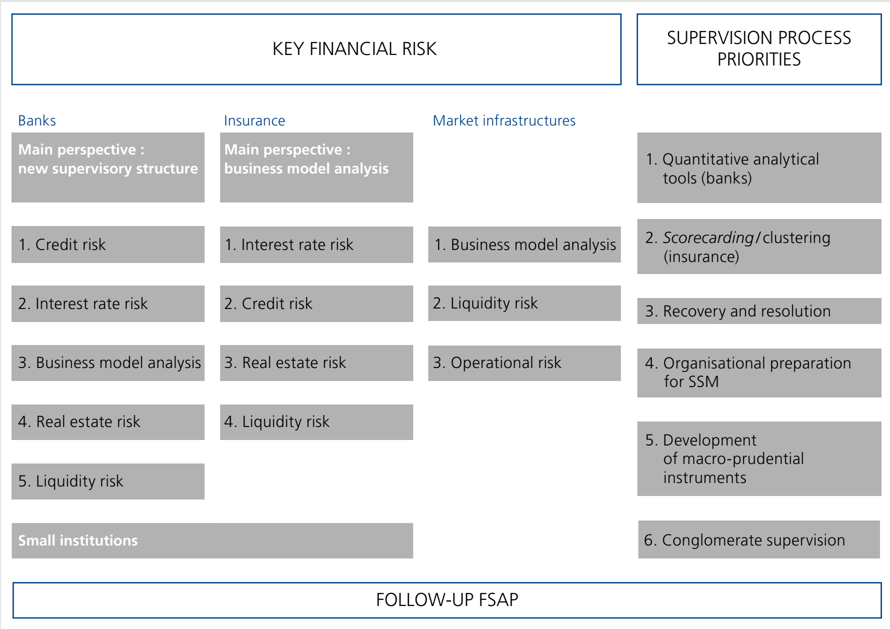
With regard to the financial risks, the preparations for the SSM and particularly the comprehensive assessment (CA) had a major impact on the work relating to Belgian banks subject to the direct supervision of the ECB since 4 November 2014 (see part A, section 1.2). In that context, at the end of 2013, the credit risk analyses had already been singled out as a priority for 2014. In regard to insurance, the interest rate risk was the main point for attention, in view of the persistently low interest rates.

Apart from these priority subjects, the Bank also expanded the examination of business models and their sustainability for the three main financial sectors in the adverse macroeconomic climate and in view of the restructuring process initiated by many Belgian financial institutions in the wake of the financial crisis. Despite the varying degrees of progress, these analyses give the Bank a clearer picture of certain vulnerabilities of individual institutions, plus a better understanding of the challenges facing the various sectors.

The liquidity position of financial institutions was one last point for attention in regard to financial risks, and the supervision concentrated on constant monitoring of the liquidity position via transversal analyses and the introduction of the harmonised liquidity standards under Basel III.

As regards the supervision process, the updated analysis instrument based on the new CRD IV/CRR reporting came into use for the banks. For insurers, the scorecarding instrument was developed to allow a more risk-based supervision. A start was made on drawing up recovery

CHART 7 RISK REVIEW 2014



Source : NBB.

plans for credit institutions of national systemic relevance, and in regard to insurance, a pilot project was launched in that respect. The Bank had to devote much attention to the organisational preparations for the SSM, as explained in detail in section 2.2 of part B and the Corporate Report 2014.

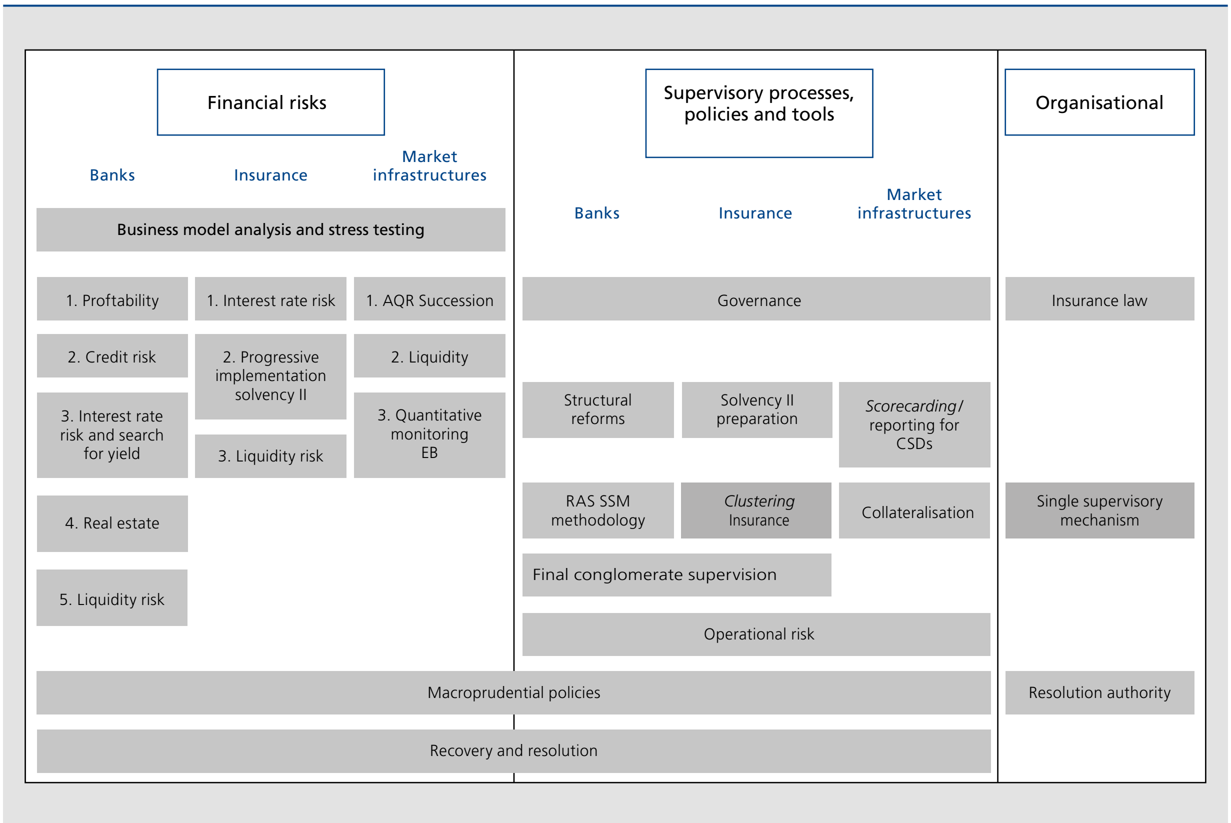
The publication of the Banking Law marked the official start of the work of the Board of Directors of the Bank as the macroprudential supervision authority. The Banking Law modified the supervision framework for conglomerates and, during the year under review, preparatory work was carried out for the further practical implementation of the Law, in the knowledge that since 4 November 2014 the ECB has exercised supervision over conglomerates for credit institutions directly subject to its supervision. The exemption from conglomerate supervision in the case of KBC was ended. The AXA insurance group restructured its activities in Belgium: both the banking and the insurance pillars now come under the direct supervision of the French parent company. The Belgian sub-group can therefore no longer be classed as a financial conglomerate. In view of these changes, the Belgian financial sector now has only three financial conglomerates in which the banking sector is dominant (KBC, Argenta and Belfius).

1.2 Risk review 2015

Generally speaking, the work which began in 2014 will continue in 2015. The list of priorities was not fundamentally changed but was refined to permit better monitoring and streamlining of the various activities. The risk review 2014 also underwent a number of adjustments that an intermediate assessment had identified as necessary. A distinction was made between priorities relating mainly to financial risks, priorities which can be chiefly defined as “supervision processes, policies or instruments”, and finally, priorities which really come under the organisation of prudential supervision. There are many links between the various priorities, and the degree of supervision on banking topics will largely depend on the SSM. That is why the SSM’s risk analyses were incorporated in this exercise, together with other similar analyses such as those from the ECB’s Directorate General Macroprudential Policy and Financial Stability, the ESRB Secretariat and the EBA.

A key point for attention also concerns the need to link the analyses with the measures and sanctions to be applied, and to develop proportional, risk-based supervision for both small and large institutions.

CHART 8 RISK REVIEW 2015



Source: NBB.

Financial risks

In regard to financial risks, the gradual deterioration in the macroeconomic environment largely determined the priorities and their importance for 2015.

That is the context in which, during the course of 2015, the Bank will actively continue the analyses of the profitability of Belgian financial institutions, notably by means of detailed examinations of business models. These will be supplemented by specific transversal analyses on subjects such as credit risk, interest rates, and the search for yield, although it is too soon to say that the latter has become widespread. The Bank will also continue its research on the Belgian property market and will extend it to include the commercial property market in view of the increasing exposure of financial institutions to this type of asset.

For credit institutions subject to ECB supervision, monitoring of both the quantitative and the qualitative results of the CA will likewise be a priority in 2015.

For the banking sector, the priorities defined by the Bank correspond very largely to those determined by the ECB in its strategic plan 2015 for SSM banks. The differences are confined mainly to risks relating to emerging countries and the inability of banks to cover capital shortfalls. There are two factors accounting for those differences. First, Belgian banks are less exposed to those countries, notably because they have refocused on the domestic economy. Also, the risk concerning the inability to cope with a shortage of capital seems to be smaller in Belgium, as most of the banks passed the comprehensive assessment, while those that failed were either given special treatment – in view of their characteristics – or succeeded in covering the shortfall by increasing their capital.

Supervision processes, policies and instruments

For the banking and insurance sectors respectively, the implementation of the Banking Law and the preparations for Solvency II are central concerns.

A governance manual will be prepared for the banking sector on the basis of the Banking Law. The aim is to provide institutions with an overview of all the provisions by linking the current regulations on the subject and, if necessary, to update the circulars or recast them as regulations. International reference documents, such as those of the Basel Committee on Banking Supervision or the EBA guidelines, and the technical standards applicable will also be incorporated in this overview via references. In addition, there will be transversal analyses of the new governance provisions under the Banking Law, notably the restrictions on cumulating directorships and the formation of specialist committees within the board of directors. Governance also covers the need to take account in the ICAAP of the risks relating to failure to respect the honest, fair and professional treatment of customers by an undertaking or by some of its staff (conduct risk).

In order to implement the structural reforms included in the Banking Law, a series of reports will be developed. In regard to pillar 2 capital decisions taken in 2014, a transitional policy taking account of the phased introduction of Basel II and the CA was established for a one-year period, with due regard for the SSM approach on the subject. For 2015, apart from familiarisation with the SSM methodology, the main effort will concern the application of that methodology to smaller credit institutions, in order to maintain consistency within the Belgian banking sector.

For insurance companies, the cluster analysis will be put into practice. In preparation for Solvency II, the Bank will develop a policy on the options and discretionary powers under that Directive. It will also devise a policy on the implementation of this framework for smaller insurance companies. The Bank will examine the impact of Solvency II on the accounting rules for Belgian insurers and will develop a new policy on profit-sharing which will comprise harmonisation with Solvency II plus development of a backstop based on Belgian accounting law. Finally, it will scrutinise the process for the validation of internal models.

The term "operational risk" covers cyber risks and continuity risks, the risk of excessive outsourcing and the concentration risk of external internet service providers. The Bank will be proactive in analysing these subjects and will examine how existing supervision instruments can be supplemented or used in different ways to take account of the fast-changing risk environment.

As far as the supervision of conglomerates is concerned, the accent will be on the harmonisation of the reporting required of the three Belgian financial conglomerates. That should allow the conglomerate dimension to be reflected better in the SSM supervision methodology, notably in the SREP analysis, where that dimension will mainly influence the risk parameters relating to governance and the business model.

For market infrastructures, the bank scorecarding will be adapted to take account of their specific risk profile.

On the subject of recovery plans, there are various implementing measures still to be taken following the Banking Law, e.g. in order to specify the content of those plans, to define the framework of exemptions and simplified obligations, and to establish asset encumbrance indicators. Recovery plans will also be analysed for market infrastructures on the basis of the international standards on the subject.

2. Banks, investment firms and payment institutions

2.1 Analysis of some priority risks from the annual risk review

Interest rate risk

In 2013, the analysis of interest income and the interest rate risk in the banking sector was regarded as a key priority in the supervision of Belgian credit institutions. The reason for that was the exceptionally low level of interest rates, which could present specific challenges for the banking sector as explained in chapter 3, section 4 of the part of the Report on "Economic and financial developments". During the year under review, that aspect remained an important point for attention, as risk-free interest rates continued to fall in the euro area, reaching a historically low level as a result of weak economic growth and very low inflation. The priority accorded to interest rate risk in the context of supervision was reflected in a deeper analysis of recent developments in banks' interest income and the factors driving those developments.

During the year under review, in the light of the current low interest rates and the potential impact of an upturn in rates, special attention also centred on improvements to prudential reporting covering the interest rate risks in the banking book. Prudential reporting and the prudential treatment of that interest rate risk are described in circular PPB-2006-17-CPB, which is in line with the Basel Principles (2004)[1] and the CEBS/EBA guidelines (2006)[2] concerning that risk. However, on the basis of an initial, limited questionnaire, it emerged that there are substantial differences between the various institutions in regard to the underlying assumptions and methodologies used in that prudential reporting. In the second quarter, to improve the comparability of the prudential reporting data and the quality of interest rate risk reporting, the Bank sent 15 credit institutions a detailed questionnaire which included a range of options – to be evaluated by the banks – for the harmonisation of the underlying assumptions and methodologies. Following an initial consultation between the Bank and a Febelfin working group, the sector developed a set of common positions which were analysed and assessed in parallel with the banks' individual responses. Since the prudential treatment of interest rate risk in the banking book currently forms the subject of international work by the Basel Committee on Banking Supervision, the EBA and the SSM, no major changes will be made to Belgian prudential reporting for the time being. That said, it will be some time yet before that work is completed at international level, so that there is still a need for increased harmonisation of prudential reporting in the short term. However, any clarification of circular PPB-2006-17-CPB will be without prejudice to the principle of the circular whereby the interest rate risk in the banking book is a second-pillar risk that needs to be properly managed, assessed and capitalised internally, whereas prudential reporting aims to compare the interest risk in the banking book between different institutions, so as to detect any quantitative outliers. The banks are therefore expected to manage their interest rate risk positions on the basis of various possible interest rate scenarios, including persistently low rates, and in so doing to measure the impact both on the bank's income and on the economic value of the banking book. Prudential reporting is therefore still only one element that the supervisory authority uses to assess the interest rate risk in its SREP and to determine any capital surcharge under the second pillar.

(1) Basel Committee on Banking Supervision (2004), *Banking Principles for the Management and Supervision of Interest Rate Risk*, July 2004.
(2) Committee of European Banking Supervisors (2006), *Technical aspects of the management of interest rate risk arising from non-trading activities under the supervisory review process*, 3 October 2006.

Business model analysis

Since 2013, the business model analysis (BMA) has formed an integral part of the supervision of the main Belgian banks (Belfius, BNP Paribas Fortis, ING Belgium and KBC). The BMA is meant to enable the supervisory authority to identify at an early stage any risk positions and management actions that might be detrimental to the institution's financial situation and viability, and to financial stability in general. The BMA comprises two main stages, namely (i) analysis of the institution's current business model and its current viability, and (ii) analysis of the institution's sustainability for the coming three to five years.

In 2013, the BMA activities centred on the development, testing and implementation of the first stage, namely the analysis of the viability of the large Belgian banks. In 2014, this first stage was essentially standardised and put into operation. Thus, quantitative and qualitative reporting was arranged for each institution to provide data for the analyses; that reporting is to take place at least once a quarter. In addition, specific improvements to the quantitative and qualitative data reported were made for each institution. On the basis of these data, the actual underlying economic developments and the factors driving the profitability of the individual banks were assessed according to the financial results submitted for each institution. Changes to the activities and the stated commercial aims are frequently discussed with the people responsible for the various business activities.

Some of the conclusions of these BMAs led to prudential measures and were included in the 2014 SREP analyses. The findings concerning the trend in net interest income and the associated risks were incorporated in the interest rate risk analysis and were studied in depth.

During the fourth quarter of 2014, a start was also made on rolling out the BMA approach for other Belgian banks, and the second stage of the BMA was launched for large banks, namely the analysis of sustainability or how the business model might change as a result of strategic decisions by the institution or the impact of changes in the economic and market environment. This second stage focused primarily on a critical analysis of the institutions' strategic, financial and commercial action plans for the next three to five years.

In the SSM, the priority in 2015 will also be the analysis of business models and profitability (see chapter B, section 1), as an essential element of the SSM's prudential supervision and the SREP analysis. In that context, the Bank explained its BMA approach and the resulting prudential measures to an SSM working group. There is in fact considerable pressure on business models in the current environment featuring low interest rates, weak economic growth, strong competition, continuing impact of risky portfolios or management practices from the past within institutions and regulatory changes.

Property market risk

On the subject of credit risk, in recent years, the Bank has analysed in detail the latest developments on the Belgian mortgage market, and has ascertained the risk profile and the quality of credit institutions' mortgage loan portfolios. That analysis was based in particular on data collected from 16 credit institutions via an *ad-hoc* template for reporting data on Belgian mortgage loans granted and held by the institution.

The analyses by the Bank and by international institutions such as the ECB, the ESRB, the OECD and the IMF, drew attention to the potential risks relating to the Belgian property and mortgage markets. Although at this stage the household credit quality indicators do not show any deterioration in default rates on recently granted mortgage loans, there are some factors that could lead to increased loan losses in the future. In that regard, the FSR 2012 (1) drew attention to the particularly steep rise in house prices and mortgage loans in the preceding ten years, the trend towards longer loan maturities, and the relatively high (and stable) proportion of loan-to-value ratios in excess of 80 % (including ratios of more than 100 %) in new contracts. During this period, a significant number of borrowers extended the term of their loan, increased the amount borrowed and/or raised the percentage of their income spent on repaying the loan to levels which could imply a higher risk of future losses for the banks, compared to loans granted previously. In the event of more adverse developments on the Belgian housing market, the riskier segments of the stock of mortgage loans could cause the banks to incur larger-than-expected loan losses. That is why, as explained in detail in the Report 2013 (2), the NBB considered that it was justified in taking certain prudential measures to improve the banks' resilience and reduce the concentration risk.

The first measure, dating from the final quarter of 2013, was macroprudential and stipulated a 5 percentage point rise in the risk weightings calculated by the banks themselves, but only for those that use an internal

(1) Review of the Belgian residential mortgage loan market (2012), *Financial Stability Review*, National Bank of Belgium, 95-107.
(2) See chapter C, Box 5 of the part of the Report 2013 on "Prudential regulation and supervision".

ratings-based (IRB) model to calculate their minimum regulatory capital requirements for Belgian mortgage loans. This measure came into force via a Bank regulation approved by Royal Decree on 8 December 2013 [1], and was then implemented in 2014 under Article 458 of the CRD IV. This additional capital requirement does not apply to banks that use the standard approach to calculate their capital requirements for Belgian mortgage loans. This measure increased the average risk weighting of banks adopting the IRB approach from around 10% at the end of 2012 to almost 15 % at the end of 2013. The relatively modest size of this supplement seemed appropriate in view of the generally fairly prudent credit standards that Belgian banks have applied in the past in regard to mortgage loans, and the historically low percentage of losses on such loans. However, considering the cyclical character of this measure, the Bank kept a close eye on market developments during the year under review so that it could constantly assess the appropriate level of this supplement. It concluded that the 5 % supplement (corresponding to an extra capital requirement of around € 600 million) still provided an adequate but necessary extra capital buffer for the risks identified.

The other two measures adopted by the Bank at the end of 2013 were microprudential. One concerned the launch of a horizontal assessment of the IRB models on the basis of the results of the back-testing to be carried out by the institutions, followed by any necessary adjustments to these risk models. This measure aimed to remedy potential weaknesses in the risk parameters used in the IRB approach. In this connection, the Bank assessed the suitability of the calibration of the models for the probability of default and the loss given default used in calculating the regulatory capital according to the IRB approach (see part B, chapter 2.2 for more details). Banks using unsatisfactory calibration were required to adapt their pillar 1 models.

The other microprudential measure consisted in asking 16 credit institutions to conduct a self-assessment on the degree to which they conform 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 Bank analysed these self-assessments by the banks on the degree of prudence in their lending conditions for home loans ; it found that the Belgian banks very largely satisfied the standards, notably via the fairly strict rules on the subject and other codes of conduct in the sector concerning Belgian mortgage loans.

During the year under review, as well as monitoring the three prudential measures adopted at the end of 2013, the Bank regularly reviewed the latest developments on the Belgian housing and mortgage markets. The main conclusions of that monitoring were published in the FSR 2014 [2], on the basis of a quantitative analysis of the domestic mortgage portfolios of 16 Belgian banks, similar to the analysis used for the said article in the FSR 2012. The latest data confirm that, since 2012, the banks have tightened some of their lending criteria for mortgage loans. As stated in the 2012 article, that will help to maintain the high quality of Belgian mortgage loan portfolios.

With this monitoring and these three prudential measures, the Bank aimed to strengthen the resilience of the market and of the credit institutions with the largest exposures to Belgian mortgage loans against the risk of potentially higher-than-expected loan losses on Belgian mortgage credit. In this connection, the recent slowing of house price rises and lending growth has reduced the likelihood of further imbalances developing in the future. Since subsequent changes in the tax treatment of mortgage loans could also have a moderating effect on market developments, the Bank considered that there was no need for additional measures in the year under review.

2.2 Operational supervision

Mapping of the banking sector

At the end of 2014, the population of credit institutions, investment firms, and payment and electronic money institutions came to 119, 34, 18 and 11 institutions respectively. The population of financial institutions remained more or less stable in 2014. The pause in the consolidation process that was a feature of the banking sector in recent years may be due to a wait-and-see attitude on the part of the banks throughout the year under review, in the context of the thorough health check imposed by the SSM on large banks in 2014, mapping both the asset quality and the resilience of the institutions (see part A, 1.2). Now that the results are known, there could be renewed consolidation and acquisitions in 2015. In the payment institutions sector, there has been a slight rise in new authorisations, mainly in respect of start-ups in specific niches of the sector using exempt institution status [3].

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

(2) The Belgian mortgage market: recent developments and prudential measures (2014), Financial Stability Review, National Bank of Belgium, 113-122.

(3) Pursuant to Article 48 of the Law of 21 December 2009, "exempt institutions" are subject to a simplified regime that only comprises the obligations under Articles 21 and 22 of that Law.

TABLE 4 NUMBER OF INSTITUTIONS SUBJECT TO THE BANK'S SUPERVISION

	31-12-2013	31-12-2014
Credit institutions	121	119
Under Belgian law	39	37
Branches governed by the law of an EEA member country	55	56
Branches governed by the law of a non-EEA member country	10	10
Financial holding companies	7	6
Financial services groups	4	4
Other financial institutions (1)	6	6
Investment firms	34	34
Under Belgian law	20	20
Branches governed by the law of an EEA member country	12	12
Branches governed by the law of a non-EEA member country	0	0
Financial holding companies	2	2
Payment institutions	16	18
Under Belgian law	12	11
Exempt institutions	2	4
Branches governed by the law of an EEA member country	2	3
Branches governed by the law of a non-EEA member country	0	0
Electronic money institutions	10	11
Under Belgian law	5	5
Exempt institutions	5	5
Branches governed by the law of an EEA member country	0	1
Branches governed by the law of a non-EEA member country	0	0

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

Transition to the single supervisory mechanism

The introduction of the SSM has significant implications for the organisation of supervision. As described in part A, section 1.1, most banks have come under SSM supervision with the ECB carrying ultimate responsibility, while other institutions do not fall within the scope of the SSM.

Each of these supervision regimes has its own specific reference framework with its own articulation of supervision, so that it was necessary from an organisational perspective to divide the population of financial institutions into three groups. The first group comprises the banks or banking groups considered significant according to the SSM definition. That group comes under the direct supervision of the SSM. The second group contains banks considered less significant, which are also subject to the ultimate responsibility of the SSM, whereas the front-line supervision is exercised by the national supervisory authorities – in this case the Bank. The third group of institutions is outside the scope of the SSM. The available means of supervision were divided among these three groups with due regard for the expected scale and intensity of the supervision activities.

The group of banks considered significant includes the large banking groups[(1)(2)] whose parent company is established in Belgium and the Belgian subsidiaries and large Belgian branches of significant foreign banking groups established in another country participating in the SSM.

That group is composed as follows:
– Belgian banking groups considered significant: 7 banks or banking groups, namely the Belgian parent company (in some cases a financial holding company or a mixed financial holding company) and its Belgian subsidiaries;
– Belgian subsidiaries of significant foreign banking groups subject to the SSM: 6 banks, namely the Belgian subsidiaries and their own Belgian banking subsidiaries;
– Belgian branches of significant foreign banking groups subject to the SSM.

The banks or banking groups considered significant are supervised by a JST, as described in part A, section 1.1.

The second group comprises banks established in Belgium which are considered less significant according to the SSM, and includes Belgian local banks and specialist institutions, plus the Belgian branches of banks of EU Member States not participating in the SSM. When the SSM was launched, there were 30 banks on the list of less significant banks.

The Bank remains responsible for the day-to-day supervision of these institutions, though it collaborates closely with the SSM and applies the harmonised procedures specified in the SSM manual. In addition, the SSM has the power to take charge or to take decisions at any time. For this population, the SSM focuses mainly on the largest local credit institutions, i.e. the ones incurring the highest risks.

(1) The criteria for determining whether or not an institution can be classed as significant appear in the SSM Regulation and concern the institution's size (balance sheet total of more than € 30 billion; relative size in the country of origin) or cross-border activities, or whether the institution receives state aid.
(2) The term "significant" according to the SSM definition should not be confused with the term "credit institution of significant size" as defined in Article 3, 30 of the Belgian Banking Law of 25 April 2014.

This second group also includes the Belgian branches of less significant foreign banks subject to the SSM. Here it should be noted that the Bank's powers of supervision over branches established in the EU, particularly within the SSM, have become very limited.

A third group of financial institutions falls outside the scope of the SSM. This includes Belgian representation offices of foreign banks, Belgian stockbroking firms and Belgian branches of foreign investment firms. This group of financial institutions, whose only common feature is that they do not come under the SSM, comprises a very mixed population in terms of the nature, scale and complexity of their business and the regulations applicable (credit institutions and investment firms), and as regards the supervisory powers and the degree of supervision.

The grouping of institutions according to whether or not they are subject to the SSM is broadly reflected in the organisation of bank supervision, though without total segmentation. The supervision of these various groups still has many features in common, so it is important to avoid any silo effect that would impede the convergence of supervision methods and best practice as well as a smooth rotation of supervisory authorities from one group to another.

The introduction of the SSM also requires radical adjustments to internal processes and procedures, since supervision activities in the SSM are now carried out jointly by the Bank and the ECB, and ultimate responsibility for many decisions, particularly in the case of significant institutions, now rests with the SSM. The Bank has therefore introduced new governance procedures whereby the aim of contributing as efficiently as possible to SSM decision-making – and influencing it where necessary – in accordance with the SSM regulations and the Belgian rules applicable is reconciled with the desire to ensure that the Bank has an accurate and well-informed view of prudential banking developments in general, and particularly of Belgian institutions subject to the SSM.

Comprehensive assessment

The year under review was dominated by the comprehensive assessment that took up most of the prudential resources from January to November. Although the Bank decided from the start to outsource a major part of the assessment to firms of auditors selected for the purpose, and also called in a consultancy to take charge of the project, it deployed as many NBB prudential supervisors as possible to ensure the success of this major exercise and to familiarise them with the methodology of the exercise and its practical application. The NBB inspectors who normally conduct their audits independently of the permanent banking teams were temporarily assigned to the bank supervisory teams to monitor the progress of the activities on site. The joint efforts ensured that the work required was completed on time, in accordance with the methodology specified by the ECB. The assessment which, compared to routine prudential supervision, comprised a very extensive and particularly detailed analysis of the quality and valuation of an institution's assets, undoubtedly helped to give the supervisory authorities a clearer understanding of the conformity of the institutions' accounting practices with the IFRS rules and the degree to which those practices employ prudential concepts constituting a prudent approach to the assessment of the solvency of customers and counterparties (definition of borrower default, valuation of collateral, valuation of securities). The conclusions of the asset valuation and the results of the stress tests will be taken into account in setting the pillar 2 capital objectives.

Every year, the supervisory authorities conduct an overall assessment of the risks facing an institution, and of the resources and measures that a credit institution can use to control those risks. That risk assessment ultimately leads to a decision which determines the amount of capital that a bank must hold to cope with these known and calculated risks. In 2014, at the request of the SSM, the Bank conducted this assessment in October, to take due account of the clarification that would be available by then from the comprehensive assessment of the banks concerned. Prior to the entry into force of the SSM, the Bank submitted proposals for decisions on capital and liquidity to the SSM, which took the final decisions before the end of the year under review.

Combating money-laundering

The Bank's supervision of financial institutions' compliance with the regulations designed to combat money-laundering and terrorist financing remains a key action point (see part A, section 5.1, for more details on the regulations on this subject). Institutions which display a lack of vigilance or which have insufficient knowledge of the customers and their profile to identify suspicious transactions are subjected to prudential recovery measures intended to improve their organisation within the specified period, without prejudice to the possibility of imposing an administrative fine.

Validation of internal models

In 2014, work relating to quantitative methods focused mainly on the contribution to the AQR. This first involved assessing the methods of collective provisioning for credit risk. The banks' provisions were compared with the result of a simplified model (challenger model), devised on the basis of a methodology stipulated by the ECB. That comparison made it possible to check whether the level of provisions was sufficient and, where necessary, to formulate proposals for improving the banks' models. The next step was to examine the valuation of certain assets for which market values did not exist, and the underlying valuation processes.

In addition, there were other activities relating to the internal models used for the regulatory capital. This concerned inspection of these internal models, essentially for credit risk (internal ratings-based (IRB) approach) and for operational risk (advanced measurement approach – AMA). Thus, the results of the back-testing of the models for the probability of default and loss given default in the residential property portfolio were assessed in the context of the Bank's monitoring of the property market. This back-testing did not uncover any real outliers (banks with observed defaults or losses well in excess of the estimates).

The participation in the benchmarking activities inaugurated by the EBA, the Basel Committee on Banking Supervision and, more recently, the SSM was confirmed. The same applies to the contribution to research by the Basel Committee on consistency between the capital requirements for credit risk in the IRB models.

Box 4 – Harmonisation of reporting requirements for banks

The year 2014 marked a turning point in the development of European reporting, as the long process of European harmonisation in this field led to the publication of an Implementing Technical Standard (1) by the EC. This standard had been initiated by the European Committee of Banking Supervisors, which has now been renamed the EBA. In 2006, the EBA had already published recommendations on standardising financial reporting (FINREP) and reporting on capital requirements (COREP). However, as these recommendations were not binding, they allowed far too many differences to persist between the reporting requirements of national authorities. That situation entailed substantial costs for cross-border groups and prevented the efficient creation of a European database for comparing the risk profile of credit institutions. Following the 2008 financial crisis, there was evidently a need for the actual introduction of harmonised European reporting. That took place via Article 99 of the CRR which gives the EBA power to define harmonised reporting directly applicable to all institutions in the EU.

This new reporting was of course based on the previous FINREP and COREP versions. Thus, COREP was adapted to the new CRR capital requirements. It was also extended to cover new risks such as liquidity risk or the leverage effect. Moreover, FINREP now includes new information on non-performing assets and on exposures for which banks have granted restructuring or concessions owing to the deterioration in the quality of the counterparty (forbearance). In future, that information can be used for regular assessment of asset quality on a comparable basis for the whole EU. A similar change was made to address the question of encumbered assets. Finally, it was decided to reduce reporting times to 30 days in order to obtain this information more quickly. The Bank took an active part in drawing up these new regulations and kept the Belgian financial sector regularly informed of on-going developments via quarterly meetings with Febelfin.

This new reporting was successfully implemented by credit institutions from 31 March 2014. The Bank also forwarded the first data collected under these new rules to the European authorities. Since then, the ECB and the EBA thus have had the necessary information to refine their knowledge of the risk profile of financial institutions, and that will contribute to the speedier detection of fragilities in the financial sector.

(1) Commission Implementing Regulation (EU) No. 680/2014 of 16 April 2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No. 575/2013 of the European Parliament and of the Council.

In addition, the entry into force of the SSM creates new challenges, as it will represent an unprecedented opportunity to organise the collection of both monetary statistics and prudential data more efficiently. To that end, discussions are in progress at the ECB on creating a single European reporting system covering all the ECB's statistical needs, in its role as both a monetary authority and a prudential authority.

In parallel with the implementation of these new reporting schemes, the Bank revised its internal Quantitative Analytical Tools (QAT) for data reported by financial institutions. The new tool is intended to facilitate the examination of large quantities of figures reported periodically by the institutions to permit rapid identification of risk situations relating to solvency, performance and liquidity. The internal tool also provides a quick summary of the financial situation of supervised institutions on a harmonised basis for the entire sector. Finally, the tool is based on functions that ensure a more flexible and detailed analysis according to the supervision needs. These tools will also be regularly updated in line with the procedures and means developed by and within the SSM.

3. Insurance companies

3.1 Analysis of some priority risks from the annual risk review

Interest rate risk

In 2013, the Bank launched analyses for the purpose of studying in more detail the potential consequences of persistently low interest rates for the Belgian insurance sector. Historically, the insurance sector in Belgium has always featured high guaranteed yields on certain life insurance products – and it still does so – in respect of both individual and group insurance (see chapter 3, section 4, of the part of the Report on "Economic and financial developments"). The guaranteed rates offered in Belgium are among the highest in the European insurance sector.

In 2013, on the basis of an initial outlier analysis, the Bank picked out 13 companies for more detailed examination. The results of this study were then incorporated in a horizontal market analysis which gave rise to a number of conclusions and prudential measures, the most relevant of which are examined below.

The low interest rate environment currently prevailing in the euro area presents a real risk for any insurance companies tempted by an excessive search for yield. In this context, it is crucial for the supervisory authority to keep a close eye on developments in investment management and any corresponding (new) risks that companies face, such as the increasing illiquidity of the assets, heightened credit risks, etc. Since not all insurance companies are equally candid in announcing their future investment intentions, frequent, detailed monitoring is advisable. Apart from better mapping of the spreads on insurance companies' bond portfolios, the Bank also recently decided to set up more detailed monitoring of investment in derivatives, repo transactions and securities lending (see the section below on liquidity risk). Previously, this subject was only monitored more closely for large insurance companies.

On the basis of the analyses conducted, the Bank also considered that it was necessary to gain a more systematic idea of the interest rate risk facing all insurance companies on the Belgian market. For that purpose, the Bank drafted a proposal for a new standard reporting scheme comprising four parts, each one being important to obtain a proper picture of the interest rate risk situation in all insurance companies.

The first reporting component concerns a review of current guaranteed yields on the life insurance portfolio. That component is based on an *ad-hoc* questionnaire which was sent to life insurers in 2012 and 2013 in order to obtain an overview of the guaranteed interest rates on current contracts in accordance with the following dimensions: (i) weighted residual term of the guarantees, (ii) weighted average guaranteed yield, (iii) guarantees concerning future premiums (yes/no), and (iv) type of life insurance (individual or group).

The second aspect of the reporting is intended to provide an overview of the duration of the current assets and liabilities portfolio. The definition of duration corresponds to the one which will also be used for the purposes of Solvency II, namely the "Macaulay duration". Similarly, Solvency II is the reference used for the valuation basis, and more particularly the market value for assets and the best estimate for the technical provisions on the basis of the relevant risk-free interest rate curve used by Solvency II (see part A, section 2.1 for a definition of the best estimate). The durations have to be declared per segment (according to the company's own management system) and for all segments taken together, in each case for the liabilities and the assets covering them, for which a distinction is also made between fixed-income and other assets. Finally, the institutions are requested to provide a brief description of the products and covering assets in the respective segments.

Another key component of the reporting is an overview of the cash flows relating to the assets (covering assets) and the liabilities (technical provisions). This exercise is based on the projections which will also be required under Solvency II, with the important difference that the projections must in this case be supplied per segment, and projections will also be required for the covering assets as well as for the liabilities.

The last aspect of the reporting concerns projections relating to yields on assets and liabilities, per segment and for all segments taken together. The yield projections should in principle reflect the trend in average accounting returns on both the technical provisions and the associated covering assets. Companies are also asked to detail all the assumptions used, e.g. in regard to the return on categories of underlying assets, the return on reinvestments, etc., to enable the Bank to obtain an idea of the parameters on which these projections are based.

The reporting described above should therefore become the new standard. Obviously, the existence of this standard reporting does not rule out additional initiatives, e.g. for the purpose of requesting further details from certain companies, where appropriate. When Solvency II is launched, the reporting format will also be assessed and adjusted if necessary to make it fully compliant with the Solvency II requirements on the subject.

Liquidity risk

The specific reporting of the vulnerabilities of large insurance companies, launched at the end of 2011, pays particular attention to the potential liquidity risk. In that connection, the Bank asks for the following information:

– All incoming and outgoing cash flows, particularly premiums, (partial) redemptions, expiries, deaths, etc. in the class 21 insurance portfolios.
– An overview of the liquid and less liquid assets and liabilities.
– The exposure to certain assets and derivatives presenting a potential liquidity risk, such as repos, securities lending, OTC derivatives, etc.

In 2014, the Bank developed a set of indicators to permit full, integrated monitoring of liquidity risk. These indicators are based on the said reporting and can be divided into three groups. The first group of indicators focuses on the trend in incoming and outgoing cash flows and the way in which they are linked with one another. The second examines the trend in liquid assets and liabilities and their relationship with the total assets and liabilities. The relationship between liquid assets and liabilities is also monitored. The third group of indicators looks at the trend in exposures to instruments and derivatives presenting a potential liquidity risk. The Bank is also working on a methodology whereby the exceeding of certain limits may trigger an increase in reporting frequency and/or other prudential measures.

The figures and indicators submitted as part of the reporting have long confirmed the upward trend in redemptions and the downward trend in premiums confronting a number of Belgian insurance companies. Premiums collected from the market in class 21 products were down by 17.2 % in 2013, at € 13.2 billion. That fall is due partly to the change in the tax treatment of life insurance products, as the tax on premiums was raised from 1.1 to 2 % at the beginning of 2013, and is partly exacerbated by the current low level of interest rates and the fact that an increasing proportion of the class 21 portfolio is now eight years old, so that (partial) redemptions are exempt from withholding tax. In addition, some companies are deliberately paying less attention to the marketing of class 21 products.

These developments confirm the need to monitor the quantity of liquid assets and to examine in more detail the relationship between those liquid assets and liabilities which are liquid or can be readily terminated. The data submitted show that for most companies the stock of liquid assets far exceeds the stock of liabilities that can be readily terminated. As regards the exposure to certain assets and derivatives presenting a potential liquidity risk, there is nonetheless a relatively high concentration (compared to the total assets) in some companies.

The Bank considers that in 2015 it would be desirable to extend the range of companies required to report on their liquidity; this would cover the whole of the life insurance market (excluding class 23 products) instead of just the large insurance companies. The reporting permits a quicker response to a liquidity crisis, and a proactive approach to a deteriorating liquidity situation.

3.2 Operational supervision

Mapping of the insurance sector and colleges of supervisors

At the end of the period under review, the Bank exercised supervision over a total of 97 insurance companies,

TABLE 5 NUMBER OF UNDERTAKINGS SUBJECT TO SUPERVISION (1)

	31-12-2013	31-12-2014
Active insurance undertakings	83	80
Insurance undertakings in run-off	8	4
Reinsurance undertakings	1	1
Other (2)	14	12
Total	**106**	**97**

Source: NBB.

(1) In addition, at the end of 2014, the Bank also exercised prudential supervision over ten branches of companies governed by the law of another EEA member country, although that was confined to checking compliance with the money-laundering regulations.
(2) Surety companies and regional public transport companies.

reinsurance companies, surety companies and regional public transport companies which insure their fleet of vehicles themselves. That is fewer than at the end of 2013 when the number of companies stood at 106. This decline is due to mergers, the cessation of business following the transfer of portfolios or the expiry of all the insurance commitments, and the conversion of Belgian companies into branches that come under other EEA member countries.

Supervisory authorities of cross-border groups work together in colleges. The group's consolidating supervisory authority (the home country authority) arranges the co-ordination, and the supervisory authorities of the group's subsidiaries and branches (host country authority) take part in these meetings. Recurring items on the agenda for these colleges include the discussion and appraisal of the financial situation, the organisation, the strategy and the risks to which the group and its subsidiaries are exposed. Coordination arrangements – namely arrangements concerning cooperation and the exchange of information – are made both for a going concern situation, such as the approval of an internal model, and for stress situations.

TABLE 6 COLLEGES FOR INSURANCE UNDERTAKINGS SUBJECT TO THE BANK'S SUPERVISION

	The Bank is the home country authority	The Bank is the host country authority
Complex groups	Ageas KBC Assurances Belfius Insurance P&V	AXA (AXA Belgium)
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 et 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) CDA bvba

Source: NBB.

As part of the preparations for Solvency II, the colleges examined the implementation of preparatory guidelines and their impact on the functioning of the colleges. During the year under review, they continued to develop the assessment of risks at both group level and constituent entity level. Colleges for groups wishing to use an internal model from the entry into force of Solvency II started discussions during the year under review to arrive at a joint timetable for the approval process which is to take place in 2015.

Scorecarding

The revision of the scorecarding tool started at the beginning of September 2013. That revision was conducted in response to the evaluation of the tool when it was first used in 2012, and aimed to align the risk typology with that of Solvency II. The changes made should help to improve the tool's reliability by taking account of the specific characteristics of the insurance sector. Both life and non-life risks were therefore treated – and the risks defined – in a manner tailored to the insurance sector in accordance with terminology based largely on Solvency II.

The modified scorecarding tool also differs from the previous tool in taking account of qualitative criteria per risk category. It was decided to reduce the importance accorded to the qualitative criteria in order to rebalance the impact of the quantitative and qualitative aspects. At the end of 2014, the first complete analysis using the new version of the tool was finalised and led to an initial classification of insurance companies according to the risks.

Clustering

Clustering is a risk-based approach to operational supervision which aims to define the degree of supervision for companies according to the assessment of the companies' risks. This approach is based on the evaluation of each company's vulnerability to the various types of risk. That evaluation is conducted with the aid of the scorecarding tool and on the basis of remote analyses and on-site inspections. In addition, it assesses the likely impact on global and sectoral financial stability of the failure of each company in regard to the various types of risk mentioned.

On that basis, the next step is to classify the companies to determine the extent and frequency of the checks on each one. Systemic undertakings and other companies with both a high failure risk and a significant impact on sectoral stability are subject to full supervision involving application of the supervision procedures in their strictest form and according to their broadest definition. Other companies are subject to supervision in varying degrees according to their vulnerability to the specific risks associated with the nature and scale of their activities. Those which are not too vulnerable and are of only limited importance from a sectoral perspective are subject to limited, periodic supervision according to a de minimis approach.

In this connection, the service responsible for the prudential supervision of insurance and reinsurance companies is divided into two units: one unit for first-line supervision (monitoring of reporting, checking on conformity, and early warnings) and one unit for the detailed analysis of the undertakings.

Preparations for Solvency II

In 2013, the insurance sector was asked about its practices regarding the best estimate of the technical provisions (see A, section 2.1). The Bank's aim was to examine the extent to which the sector was ready for the entry into force of the new prudential regime. The survey results were analysed in 2013 and 2014, and the conclusions were forwarded to the companies which were asked to comment and, if appropriate, to produce an action plan for further improvements to the methodology used. The Bank is conducting another analysis of the companies' responses on this subject in order to make any necessary adjustments in time. The ultimate aim is still to ensure that the companies achieve an acceptable methodological level when the new prudential regime takes effect.

Under Solvency II, companies will have to include in their business strategy the regular assessment of all their solvency needs, notably in the form of the ORSA (own risk and solvency assessment). At the end of 2012, insurance companies were made aware of the need to set up an ORSA. In 2014, the Bank examined the extent to which a number of companies were prepared for the Solvency II requirements, on the basis of a qualitative assessment model designed for the purpose.

Business model analysis

The work which had begun in 2013 on the analysis of the business model of insurance companies forming part of a bancassurance group continued in 2014 and was extended to other large companies. In view of the low interest rates, attention focused mainly on analysing the profitability of the life portfolio. In the case of large (life) insurance companies, profit sources were analysed. That analysis was supplemented by specific analyses of their activities in order to explain certain developments concerning the financial margin, the underwriting results and costs for the various (groups of) products and companies.

Prevention of money-laundering

In February 2014, the Bank received for the first time the insurance companies' responses to the questionnaire on measures to combat money-laundering (see A, section 5.1). The Bank used the information obtained to proceed with formalising the risk-based classification of insurance companies in regard to the prevention of money-laundering, and to refine its internal procedures on the subject. The framework which it devised for this purpose was already in use in 2014. Thus, two insurance companies were subjected to a full inspection of their compliance with the provisions of the Law of 11 January 1993 on prevention of the use of the financial system for the purpose of money-laundering and terrorist financing.

In the light of the resulting findings, the Bank decided to remind life insurance companies of the need to keep a constant watch on compliance with the said legal and regulatory requirements and to ensure that the resources allocated to that problem are adequate. The Bank intends to continue conducting targeted supervisory measures in this field.

Pre-application for internal models

Under the future Solvency II prudential framework, companies 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 assess the model and approve its use for regulatory purposes. It was decided to allow companies to submit a model in advance to the supervisory authority for assessment in accordance with a "pre-application" procedure. It is certainly not the intention that the supervisory authority should make a formal pronouncement on the model at this stage.

Since the start of the pre-application process in 2010, the Bank has conducted 75 assessments on site for all types of risk – financial risks, technical insurance risks and operational risks. In that context, the Bank also took part as the host institution in 12 colleges which considered the internal models (though without giving any written feedback to the insurance companies). During this process, there was also growing interaction between the group supervisory authorities and the supervisory authorities from the host Member States.

Some of the companies taking part in the pre-application postponed the date for applying the model owing to cumulative delays. As a result, those companies have more time to complete and finalise the design, documentation and validation of their model. In addition, during the use test they can conduct more detailed practical testing.

Despite the progress made as a result of the pre-application assessments, the companies were notified of many points for attention. The main points identified for the various companies are presented below.

In general, it emerged that the assumptions used are simplified without being adequately checked. Moreover, in many cases the presentation of the risk factors or exposures is insufficiently granular.

The assessment of the risk model is often still a major concern. For the purpose of that assessment, appropriate tests should be conducted to check various aspects of the model. The risk model assessment does not only encourage improvements to the model, it also offers the company support in estimating the model's residual uncertainty. Consequently, it is necessary to take account of essential uncertainties, e.g. by including prudence margins in the model or adjusting the SCR obtained.

A practical example is the aggregation of risks in an internal model, where there is much room for improvement despite the checks on the model. In general, insurance companies should pay greater attention to analysis of their aggregation model in order to demonstrate that the model incorporates common adverse events causing serious stress which could generate increased losses.

Consequently, there is often insufficient evidence that the model result corresponds to a "once in 200 years" event, which means that the calculated SCR may not be enough to absorb the losses coinciding with the 99.5 quantile imposed by the Directive. For specific types of risk, the following points for attention were also frequently found:

- In market risk simulation models, companies generally use approximate revaluation techniques which had originally been inadequately supported. In recent years, those techniques have evolved as a result of the supervisory authorities' findings. However, there is a need to continue examining whether adjustments should be made to the model results to replace the approximate values.
- Under Solvency II, the philosophy applied to non-life insurance models differs from that under Solvency I (namely a "1-year overview" instead of a "complete overview"). Companies therefore generally have less experience with the new types of non-life insurance models.

– Some companies use external commercial models. In some cases, they do so without adequate knowledge of those external modules or without conducting appropriate relevance tests on the results.
– In the case of (foreign) insurance group entities, local knowledge of the models developed at group level is sometimes inadequate. Within a group, testing at local level via a use test could be formalised via procedures for the local assessment of applicability, which would also provide an official channel for communication between the entities and the group.
– In many cases, the quality of the independent internal validation is unsatisfactory; the internal validation lacks depth and therefore cannot be used as an effective test of the modellers' work. More specifically, the validators should be sufficiently critical and question the fundamental choices made in developing the model. In addition, validators are at the very least expected to carry out some independent tests.

Inspections

On-site inspections are an essential supervision tool for establishing the prudential risk profile of insurance companies. Using commonly accepted audit principles and techniques, the inspection methodology is based on analysis of the risk exposure. This approach takes the form of an objective assessment of the way in which companies organise their business and control their risks; that assessment is used for drawing up action plans.

The inspections follow a standard procedure specified in circular NBB_2013_15 of 11 December 2013 on inspections. This work leads to preparation of an inspection report detailing the purpose of the inspection, the type of checks carried out, the shortcomings detected, and the recommendations on remedying those shortcomings. The inspection leads to a general assessment set out in the report. That assessment takes account of the number of recommendations mentioned and the associated criticality scores. The said circular gives more details on the scale of the general assessment and these criticality scores.

The inspection plan for 2014 comprised a number of inspection missions concerning 15 insurance companies. The main purpose of these inspections was to assess:
– the risk management systems and cross-control functions;
– the preparations for the Solvency II requirements, particularly the adoption of the best estimate for calculating the technical provisions;
– the adequacy of the technical provisions calculated according to Solvency I;
– the suitability and implementation of the investment strategy;
– the organisation of class 23 business and management of the associated risks;
– compliance with the legal and regulatory requirements on prevention of the use of the financial system for the purpose of money-laundering and terrorist financing, and prevention of the financing of the proliferation of weapons of mass destruction.

Some of the inspection missions also aimed to compare the management practices of different companies in certain specific fields.

Box 5 – External actuarial experts

In connection with the preparations for the introduction of Solvency II, the Bank calls on external actuarial experts to assess the quality and suitability of the best estimate (see part A, section 2.1 for a definition of this term) of the seven largest insurance companies in Belgium. The insurance supervision law provides the legal basis enabling the Bank to bring in external experts.

The best estimate forms the major part of the technical provisions under Solvency II. These technical provisions in turn constitute the bulk of the insurance companies' liabilities. As the insurance companies' own funds are determined under the new Solvency regime by the difference between the assets and liabilities, the best estimate plays a crucial role in determining the available own funds of those companies. It is therefore vital to obtain a correct figure for this balance sheet item.

The external experts are asked to give an opinion on the amount of the best estimate. That procedure is not confined to simply certifying the results. The data used, the assumptions and models must also be examined in detail during this exercise. Shortcomings detected are classified by type (error or difference in expert judgement) and according to the degree of reliability of their impact. Any shortcomings found are notified to the Bank and if necessary quantified. This gives the Bank an overview of deviations found and an estimate of their impact.

The external experts carry out their assignment in accordance with a specific work programme designed for the purpose. These in-depth assignments are the result of close cooperation between the Bank and the Institute of Actuaries in Belgium. The amount spent on this programme highlights the importance and scale of the exercise. It involved no fewer than 13 insurance companies, three reinsurers, eight actuarial consultancies, four firms of auditors and five of the Bank's Services.

During the summer of 2014, a negotiated procedure with publication was launched: 14 candidates applied to take part in the multilateral framework agreement. Seven of those candidates were selected on the basis of the price submitted and the quality of the proposed team. The assignment began in November 2014. The Bank is monitoring the project very closely and making sure that the seven assignments are properly completed. For that purpose, monthly meetings are held between the external experts and those from the Bank. The meetings provide an opportunity not only for the participants to discuss their experiences but also to fine-tune the work programme month by month according to the specific characteristics of each situation.

The Bank is aware that this exercise is an additional challenge for the seven largest Belgian insurers, and makes sure that everything necessary is done to minimise the resulting burden on those companies. The Bank will also give regular feedback to the insurance companies concerned so that they also gain significant benefits from this exercise.

During the project, the external experts produce a detailed report containing their findings and recommendations. The project is to be completed in June 2015, after which the report will be submitted to the Bank. The NBB will conduct a full appraisal of the exercise on the basis of that report and the monthly meetings. The insurance companies concerned can then expect to receive detailed feedback on that appraisal.

4. Oversight and financial market infrastructures

4.1 Analysis of some priority risks from the annual risk review

Business models, liquidity risk and operational risk were given priority by the Bank for its supervision and oversight of financial market infrastructures during the year under review. The business model analysis and the liquidity risk analysis are discussed below. In the case of operational risk, particular attention once again focused on cyber security in 2014, as explained in detail in part B section 5.

Business model analysis

With a view to the launch of TARGET2-Securities (T2S), a project which is intended to facilitate cross-border securities settlement, a number of financial market infrastructures reviewed their business model. Since the settlement of securities transactions by most European central securities depositories (CSDs) will take place on the common T2S platform, CSDs will have to offer value added services to offset the loss of revenue relating to the settlement services transferred to T2S. Collateral management is becoming increasingly important, with an ever-growing international dimension. The EMIR Regulation (European Market Infrastructure Regulation)[1] is further reinforcing that trend. The joint venture between Euroclear and its American counterpart, Depository Trust & Clearing Corporation (DTCC), is an illustration of this trend. The authorities are keeping a close watch on the increasing interdependencies, both between market infrastructures in the same category (e.g. between two (international) CSDs Euroclear and DTCC) and between different market infrastructures (e.g. between central counterparties and CSDs).

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. Although market infrastructures exposed to liquidity risk have enough sources of liquidity to meet their day-to-day obligations, they also need sufficient sources of liquidity in all the relevant currencies in extreme circumstances (such as the failure of their two biggest debtor customers). Liquidity management must also be based on regular simulations of extreme scenarios and ex-ante checks.

4.2 Organisation of supervision and oversight

The Bank is the prudential supervisory authority and overseer of market infrastructures. In exercising prudential supervision, it monitors the individual institution, whereas its oversight focuses on the actual system used by the operator. While the prudential supervision checks whether an institution complies with the rules on capital and liquidity requirements, governance as well as organisation and operational functioning, the oversight is more concerned with the stability of the financial system as a whole. In particular, the oversight examines whether systemic infrastructures are capable of ensuring the continuity of their services even in extreme circumstances. The table below indicates the Belgian infrastructures subject to the Bank's

(1) Regulation (EU) No. 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories.

TABLE 7 THE BANK'S SUPERVISION AND OVERSIGHT OF FINANCIAL MARKET INFRASTRUCTURES

	Institutions / systems subject to supervision and oversight		
	The Bank acts as the sole authority	International cooperation	
		The Bank acts as the lead authority	The Bank participates, another authority is lead authority
Prudential supervision	Belgian branch of The Bank of New York Mellon Payment and electronic money institutions		BNY Mellon SA/NV (1)
Supervision and oversight	BNY Mellon CSD Atos Worldline	Euroclear Bank Euroclear Belgium Euroclear SA/NV	CCP Colleges (3)
Oversight	NBB-SSS Bancontact / MisterCash (2) Centre for Exchange and Clearing (2) MasterCard Europe (2)	SWIFT (4)	TARGET2 TARGET2-Securities CLS (5)

Source: NBB.
(1) From the entry into force of the single supervisory mechanism.
(2) Peer review in the Eurosystem / ESCB.
(3) These are the supervisory colleges for the central counterparties LCH.Clearnet SA, LCH.Clearnet Ltd, EuroCCP, Eurex AG Clearing, CC&G, ICE Clear Europe, KDPW-CCP and Keler CCP.
(4) Society for Worldwide Interbank Financial Telecommunication.
(5) Continuous Linked Settlement.

authority and the cooperation between the Bank and the supervisory authorities for third-country infrastructures.

SWIFT

The Bank acts as lead overseer of SWIFT (Society for Worldwide Interbank Financial Telecommunication). SWIFT is subject to oversight because it is crucial to the security and efficiency of the financial messages exchanged between financial institutions and financial market infrastructures throughout the world. The oversight of SWIFT is conducted by the G10 central banks, while the oversight plan and conclusions are presented to the larger group of the SWIFT Oversight Forum, in which ten other central banks also participate.

The oversight activities concern all types of operational risks associated with the SWIFT messaging services. One type of operational risk, namely cyber risk, was the focus of much closer attention during the period under review. The development of mechanisms protecting against cyber threats is continuing. During the year, SWIFT successfully completed the modernisation of its data processing architecture, with the entry into service of a new data centre. FIN, the core application used in SWIFT messaging services, is undergoing a complete technological overhaul. The monitoring of this multi-annual project was also one of the main focal points during the year under review.

Retail payments and non-bank payment service providers

Payment institutions (as well as certain electronic money institutions) provide payment services such as money remittance or credit transfers using payment accounts, the issue and acquiring of payment and debit/credit cards. At European level, the negotiations on the second payment services Directive continued in 2014. This Directive will complete the existing regulatory framework for payment institutions and adapt it to the new market developments (the conferring of a licence as a payment institution to "third party payment service providers" and the modification of the conditions for exemption from that status).

The Bank also collaborated on the report entitled "Non-banks in retail payments" which was published by the Committee on Payments and Market Infrastructures (CPMI) in September 2014. The main conclusions of that report concern the potential impact, in terms of operational risk, of the involvement of non-bank institutions, as well as problems relating to the level playing field, consumer protection aspects, and risks that may arise if payment services are subcontracted to a single non-bank institution or too small a group of non-bank institutions.

The Bank also takes part in a working group set up by the EBA on the security of internet payments. In October 2014, the EBA launched a consultation concerning its 'Guidelines on the security of internet payments' which payment service providers and payment schemes will have to apply from 1 August 2015. The aim is to reduce the relatively high incidence of fraud and create a level playing field for the various payment service providers.

The International Standards on Combating Money-Laundering and the Financing of Terrorism and Proliferation (FATF recommendations) led the Bank to publish new circulars for financial institutions in October 2014. These circulars (1) give institutions detailed information on the periodic questionnaire concerning the combating of money-laundering and terrorist financing which they will have to complete each year. Payment and electronic money institutions will also be subject to that obligation. The answers to this questionnaire will enable more dedicated supervision plans to be drawn up in future.

Payment infrastructures and instruments

The process of bringing the Bancontact/MisterCash debit card scheme into line with the Single Euro Payments Area (SEPA) standards is continuing. In 2014, that included opening the way to competition for payment transaction acquirers, i.e. firms that process those transactions in favour of merchants. In connection with its responsibility for the oversight of Bancontact/Mistercash, the Bank monitored these developments. This year, Bancontact/Mistercash also set up a guarantee mechanism aiming at protecting the payment transaction acquirers against the possible financial consequences of an issuer's failure, in accordance with a recommendation made by the Bank.

For the Centre for Exchange and Clearing (CEC), the Belgian automated clearing house that handles retail payments, 2014 was the first full year of operation on the technical platform of the French operator STET (Système Technologique d'Echange et de Traitement). However, the CEC is still a Belgian legal entity subject to the Bank's oversight. This year, the main development for the system is the processing of SEPA direct debits, which previously had to be processed through other infrastructures.

The Bank keeps a close eye on the implementation by MasterCard of its risk management strategy for digital payments. The digital wallets offered by MasterCard formed the focus of particular attention by the Bank in the light of the Recommendations for the security of internet payments published on the ECB website in January 2013 (2).

Central counterparties

In 2014, the Bank took part in the supervisory colleges of eight foreign central counterparties (CCPs), either as the supervisory authority of a CSD in which the central counterparty settles, or as the supervisory authority of one of the three countries with the biggest CCP clearing members. The participating supervisory authorities first examined whether the CCPs met all the EMIR requirements for obtaining authorisation. Seven of the eight CCPs for which the Bank takes part in the supervisory college obtained the authorisation of the national competent authority following a comprehensive assessment and after the college's opinion. In the event of significant changes to the models or extension of the CCP's services, the supervisory college will conduct a new assessment and issue an opinion to the national competent authority.

Securities custody and settlement

During the year under review, the Bank continued to monitor Euroclear Bank's action plan aiming at full compliance with the CPSS-IOSCO principles. One of the main measures implemented is the elimination of the 'advanced income' practice whereby bond redemptions, bond interest and share dividends were recorded before the issuer had actually paid. If the issuer failed to pay, the transactions were reversed, with the risk that the money could no longer be collected from the customer. By not releasing the money until the issuer has actually paid, this risk for Euroclear Bank is now avoided.

The Bank also worked on a CPSS-IOSCO assessment of the NBB-SSS, which brought a new settlement platform into service on 2 February 2015 with a view to the migration to T2S. As part of the preparations for the switch to

(1) NBB_2014_11 of 22 October 2014 and NBB_2014_22 of 22 October 2014.
(2) Recommendations for the security of internet payments. These recommendations are the result of work by the European Forum on the Security of Retail Payments (SecuRe Pay). That forum is a voluntary initiative concerning cooperation between overseers and supervisory authorities of payment service providers, intended to improve their knowledge and understanding of the problems relating to the security of electronic retail payment services and instruments.

T2S, settlement in Europe will from now on take place two days after the trade date (instead of three).

Finally, the Bank also devoted attention to the fine-tuning of the market infrastructures' recovery plans following the publication of the CPMI-IOSCO guidelines.

The supervision of CSDs, custodians and securities settlement systems (SSS) focused partly on the implementation of the asset quality reviews and stress tests carried out in preparation for the SSM, and partly on monitoring the proper, controlled implementation of the new strategies of various operators subject to supervision, intended to position them correctly in an environment whose structure and legal and regulatory framework have undergone major changes. In addition, certain dimensions of financial risks applicable more particularly to those operators in view of their specific activities (intra-day liquidity, large exposures) received special attention. Finally, the new standards being phased in with the implementation of the new regulations (Basel III, CRD IV, large exposures, liquidity risk and leverage ratio) are monitored both in advance and as they enter into force. For operators with credit institution status, that monitoring is based on the ICAAP-SREP and ILAAP exercises applicable to them.

As well as participating in the Crisis Management Group (CMG) of BNY Mellon with the Federal Deposit Insurance Corporation, the Federal Reserve Bank of New York (FRBNY), the Board of the Federal Reserve and the UK Prudential Regulation Authority, the Bank has also taken part since 2012 in the BNY Mellon FSB (Financial Stability Board) College, which – apart from the Bank – includes the FRBNY, the Prudential Regulation Authority and the UK Financial Conduct Authority.

5. Cyber-risks

The internal IT systems of all financial institutions and infrastructures are linked in one way or another to the internet, through which they increasingly operate their services and applications. The internet used to be an add-on for most financial institutions and infrastructures, but in recent years many internet applications and services have become vital components supporting the core business of these undertakings.

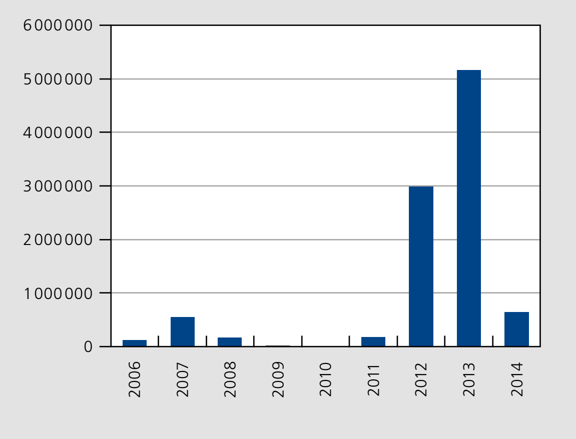
Apart from the success of the internet, due in particular to the many opportunities for innovation, its cost efficiency and convenience of use, the cyber threats confronting financial institutions and infrastructures have also increased, and attacks on internet services and internal IT systems are becoming ever more frequent, persistent and professional. This last factor is a constant, major challenge for financial institutions and infrastructures, which have to ensure that their systems and services are adequately protected at all times. Often, a temporary local defect is all it takes for the attackers to break through the defences (or at least some of them) and strike (or attempt to do so).

In this connection, both the prudential supervision and oversight of financial infrastructures maintained particular vigilance in 2014 regarding the protection of financial institutions and infrastructures against cyber risks. In view of the great importance and international character of the cyber threats, not only were checks and risk assessments carried out but ever-increasing attention also focused on international cooperation with other financial authorities and working groups, such as the European SecurePay Forum and the Committee on Payments and Market Infrastructures (CPMI).

In the second half of 2014, the EBA decided on close, structural cooperation with the ECB, inter alia for the purpose of combating internet payment fraud and internet banking fraud in Europe, by becoming co-chair with the ECB of the SecurePay forum. This forum was set up to prepare the European guidelines on payment security, which the EBA will then convert into European prudential regulations and the Eurosystem overseers will integrate into their oversight standards.

A CPMI working group studied the cyber risks and in November 2014 it published a report on the subject. Owing to the interdependency and interconnectedness between financial market infrastructures, cyber risks affecting a single infrastructure could spread to a whole number of infrastructures. Cyber threats are often transnational, and that presents additional challenges for an approach at company level or at national level. These findings reinforce the need to continue developing the cooperation between

CHART 9 ANNUAL FINANCIAL LOSS DUE TO E-BANKING FRAUD IN BELGIUM
(in €)



Source: NBB.

infrastructures, central banks and other regulators on the subject of cyber security in the coming years.

The close cooperation with entities such as Febelfin and the Federal Computer Crime Unit with a view to combating internet banking fraud continued in 2014. In this respect, it should be noted that instances of e-banking fraud declined considerably in Belgium in 2014, for the first time in several years, notably as a result of the efforts made by financial institutions and following some successful investigations by the Belgian police and judiciary.

As in 2013, the fraud cases recorded were due almost exclusively to fraud techniques whereby cyber criminals deceive users of e-banking services into disclosing their personal security codes, usually following a telephone call.

Another positive point is that the further expansion of mobile banking services in Belgium is not at this stage accompanied by any noteworthy degree of mobile payment fraud. Here, too, the Bank acting jointly with the sector is monitoring the existing threats and the security solutions adopted by financial institutions.