

Overview of the NBB's oversight and supervision of financial market infrastructures in 2012

The Bank is responsible not only for the oversight but also for the prudential supervision of post-trade financial market infrastructures. The central bank's oversight promotes the safety and efficiency of the payment and settlement infrastructures, and ultimately of the financial system as a whole. The prudential supervision ensures the robustness of the market infrastructures' operator at micro-level, thus helping to maintain the confidence of the institution's counterparties. Within the Bank, the two functions are performed by the same entity.

The standards applicable to financial market infrastructures were amended during the year under review. In April, the Committee on Payment and Settlement Systems (CPSS) and the International Organisation of Securities Commissions (IOSCO) published their Principles for Financial Market Infrastructures, which group together and reinforce the standards applicable worldwide to post-trade market infrastructures. As the Bank stated in its circular dated 20 July 2012, the CPSS-IOSCO Principles for financial market infrastructures form the reference framework for its prudential supervision and oversight of settlement institutions. These include Euroclear Belgium, Euroclear SA/NV, Euroclear Bank, and BNY Mellon CSD SA/NV. At European level, Regulation no. 648/2012 of 4 July 2012 on OTC derivatives, central counterparties and trade repositories entered into force in August, and the related implementing technical standards in March 2013. The European Union is also continuing its work on the development of European legislation on central securities depositories (CSDs).

Furthermore, the Bank and the FSMA, the Belgian securities commission, signed a memorandum on

18 October 2012 clarifying the exchange of information and cooperation between the two institutions in connection with the supervision of securities settlement systems and central counterparties. That cooperation aims to prevent gaps and duplication, and to avoid any unnecessary burden on market infrastructures. In its assessment of the market infrastructures based on international standards, the Bank will consult the FSMA on aspects for which the latter is responsible. In the event of a crisis affecting a market infrastructure, there will be consultation.

Table 1 contains an overview of the entities in whose oversight and/or supervision the NBB is involved. Many of these infrastructures have an international dimension with euro area or worldwide operations. The NBB performs the role of lead overseer/supervisor for international infrastructures established in Belgium, such as SWIFT and Euroclear. As a corollary, it participates in cooperative oversight and supervision for international infrastructures established outside Belgium, but providing services to Belgium.

In the current environment, market infrastructures are faced with changing regulations that demand enhanced risk management. At the same time, the market environment leads to a restructuring and a repositioning of the various actors, including market infrastructure users. These changes ultimately influence the business models of market infrastructures. Below is an overview of the points requiring the attention of overseers and supervisors as regards the post-trade market infrastructures established in Belgium.

TABLE 1 FINANCIAL MARKET INFRASTRUCTURES SUBJECT TO THE BANK'S SUPERVISION AND OVERSIGHT

	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	
Prudential supervision			Belgian branch of BNYM Payment and electronic money institutions (18)
Prudential supervision and oversight	Euroclear Belgium (CIK) (ESES) Euroclear SA/NV BNYM SA/NV ⁽¹⁾	LCH.Clearnet SA/NV	Euroclear Bank ⁽²⁾ Atos Worldline ⁽³⁾ BNY Mellon CSD SA/NV
Oversight	SWIFT ⁽⁴⁾	TARGET2 Securities (T2S) ⁽³⁾ TARGET2 (T2) ⁽³⁾ CLS	NBB-SSS Bancontact/Mister Cash ⁽³⁾ CEC ⁽³⁾ MasterCard Europe ⁽³⁾

Source: NBB.

(1) BNYM SA/NV is the European headquarters of the BNYM group. The Bank is the principal authority in the college of European supervisors.

(2) The Bank works on an *ad-hoc* basis with other central banks concerned.

(3) Peer review in the Eurosystem/ESCB.

(4) Society for Worldwide Interbank Financial Telecommunication.

1. Oversight of SWIFT

The Society for Worldwide Interbank Financial Telecommunication (SWIFT) is not a payment system but a key messaging provider for payment and securities settlement infrastructures throughout the world. Central bank oversight of SWIFT is justified in view of its crucial importance for the safety and efficiency of payment and securities settlement systems.

Box 1 provides an overview of the set-up of the international co-operative oversight of SWIFT. The NBB acts as lead overseer of SWIFT. The oversight is performed in cooperation with the G10 central banks. Since 2012, information has been shared with a wider group of central banks, as the country representation in the SWIFT oversight arrangements was expanded with the establishment of the SWIFT Oversight Forum. In the Forum, senior representatives of the G10 and ten other central banks conduct joint discussions on the SWIFT oversight policy and results. The SWIFT Oversight Forum held its inaugural meeting in 2012 and held a second meeting for the initial discussions on specific subjects in the second half of the year.

In 2012, SWIFT provided its overseers with an updated self-assessment report regarding its compliance with the High Level Expectations (HLEs). SWIFT's demonstration of

compliance with the HLEs does not reflect the overseers' opinion, but SWIFT's own assessment of how it lives up to the HLEs.

Box 2 lists the five HLEs for the Oversight of SWIFT. These constitute the framework for reviewing SWIFT activities that fall within the scope of the oversight. The overseeing central banks address their common security and resilience expectations *directly* to SWIFT, because the company had been identified as a major messaging services provider for correspondent banking activities and for critical payment and securities settlement infrastructures. The expectations centre around security (confidentiality, integrity, availability) and system resilience. As there are other service providers playing a similar role to SWIFT, there is a risk that different overseers may use different oversight/assessment frameworks, thereby creating an unlevel playing field. These concerns have been addressed by the CPSS and IOSCO in their Principles for Financial Market Infrastructures. Annex F of these Principles lists the oversight expectations applicable to critical service providers. It suggests an oversight approach for other critical service providers that is similar to what the overseers of SWIFT aim to achieve with the HLEs.

Two major SWIFT projects that the overseers reviewed in 2012 are "Distributed Architecture" and "FIN Renewal". Both projects are multi-year platform investments that

help to increase the security, resilience and reliability of the services provided. The Distributed Architecture project was already announced at the end of 2007, and will near completion in 2013. With this project, SWIFT set up a multi-zonal messaging architecture, allocating countries to either the European or the Trans-Atlantic zone. It added a SWIFT operating centre for the European zone as well as an additional command and control capability in Asia, enabling operations to be controlled from either Asia, Europe or the US. Operational improvements are made at every SWIFT operational site, and include the renovation of computer rooms and the power and cooling infrastructures. The latest major initiative is the construction of a new state-of-the-art operating centre that replaces one of those currently in use. Monitoring progress in this building project was a major focus of overseers in 2012. In 2013, overseers will monitor the installation of equipment and the activation of the site. The second major SWIFT project reviewed by overseers is the FIN renewal project. The underlying technology platform of FIN, SWIFT's core application for messaging, is being renewed to address long term technology needs while aiming to significantly reduce ongoing operating costs. Only the central FIN application is adapted, not the FIN interfaces and SWIFT network connections at the customers' end. The first components of the renewed application will go live in 2013 and the project extends to 2015. Aspects reviewed include risk management, project management including the monitoring of project milestones, test strategies, and transparency of communication in relation to vendors and customers. Overseers in 2012 also focused on the logical security features or the cyber defence of the SWIFT operations. Standing topics for review include IT audit reports,

technology and information, security risk management, and the development of an enterprise-wide risk management framework.

Furthermore, overseers continue to monitor closely SWIFT's financial position, as well as trends in its messaging volumes. SWIFT's FIN messaging traffic, the major contributor to the company's revenue, increased by 3.5 pct. in 2012, compared to 8.9 pct. budgeted. In a difficult general economic environment, SWIFT did achieve a profit before tax of 20 million euro, in line with the budget. SWIFT decided not to grant a messaging rebate on 2012 messaging invoices, but reserved the available profit to fund a technology renewal program on behalf of its customers: SWIFT will contribute to the renewal of Hardware Security Modules at the customer premises in 2013 and 2014. The review of SWIFT's financial position provided assurance that the price reductions are sustainable over the longer term, and compatible with intended investments that are part of the stated SWIFT strategy. SWIFT continues to enjoy a strong financial position, with all investment, including the major multi-zonal architecture project, being funded out of operating cash flow. New projects initiated by SWIFT under its SWIFT2015 strategy are analysed by overseers to the extent that they might impact the stable provisioning of services to the global financial infrastructure. In 2012, SWIFT decided to refocus efforts on a reduced set of initiatives, thereby making sure that sufficient resources can be available for the key projects without diverting attention to less important projects.

Finally, SWIFT's Chief Risk Officer (CRO) in 2012 continued the development of an integrated Enterprise Risk Management framework throughout SWIFT.

Box 1 – The international co-operative oversight of SWIFT

As lead overseer, the NBB conducts the oversight of SWIFT in cooperation with the other G10 central banks, i.e. Bank of Canada, Deutsche Bundesbank, European Central Bank, Banque de France, Banca d'Italia, Bank of Japan, De Nederlandsche Bank, Sveriges Riksbank, Swiss National Bank, Bank of England and the Federal Reserve System (USA), represented by the Federal Reserve Bank of New York and the Board of Governors of the Federal Reserve System.

The NBB monitors SWIFT developments on an on-going basis. It identifies relevant issues through the analysis of documents provided by SWIFT and through discussions with the management. It maintains a continuous relationship with SWIFT, with regular or ad hoc meetings, and serves as the G10 central banks' entry point for the cooperative oversight of SWIFT. In that capacity, the NBB chairs the senior policy and technical groups that facilitate the cooperative oversight, provides the secretariat and monitors the follow-up of the decisions taken.



The various SWIFT oversight groups are structured as follows:

- the **SWIFT Cooperative Oversight Group (OG)** is composed of all G10 central banks, the ECB and the chairman of the CPSS. It meets twice a year. It is the forum through which central banks conduct cooperative oversight of SWIFT, and in particular discuss oversight strategy and policies related to SWIFT;
- within the OG, the **Executive Group (EG)** includes the Bank of Japan, the Federal Reserve Board, the Bank of England, the ECB and the NBB. It meets about four times a year. It holds discussions with SWIFT's board and management on the central banks' oversight policy, issues of concern, SWIFT's strategy regarding oversight objectives, and the conclusions. The EG supports the NBB in preparing for discussions within the broader OG, and represents the OG in discussions with SWIFT. The EG can communicate recommendations to SWIFT on behalf of the OG. At one of the EG meetings, the annual reporting by SWIFT's external security auditor is discussed;
- at the technical level, the **SWIFT Technical Oversight Group (TG)** has four full-day meetings a year with SWIFT management, internal audit and staff to carry out the groundwork of the oversight. Specialised knowledge is needed to monitor SWIFT's use of computer technology and the associated risks. The TG draws its expertise from the pool of staff available at the cooperating central banks. It reports its findings and recommendations to the OG.

In 2012 the **SWIFT Oversight Forum** was set up. The SWIFT Oversight Forum is composed of senior overseers from the G10 central banks (OG) and of ten additional central banks, namely Australia, China, Hong Kong, India, Korea, Russia, Saudi Arabia, Singapore, South Africa and Turkey. It is chaired by the NBB. The SWIFT Oversight Forum's objectives are:

- to facilitate a coordinated flow of information about SWIFT oversight conclusions to the Forum participants;
- to foster discussions on the oversight policy concerning SWIFT;
- to provide input to the OG on priorities in the oversight of SWIFT; and
- to serve as a communications platform on system interdependencies related to the common use of SWIFT or for communication in the case of major contingency situations related to SWIFT.

Box 2 – The High Level Expectations (HLEs) for the Oversight of SWIFT

HLE 1. Risk identification and management – SWIFT is expected to identify and manage relevant operational and financial risks to its critical services and ensure that its risk management processes are effective.

HLE 2. Information Security – SWIFT is expected to implement appropriate policies and procedures, and devote sufficient resources, to ensure the confidentiality and integrity of information and the availability of its critical services.

HLE 3. Reliability and resilience – Commensurate with its role in the global financial system, SWIFT is expected to implement appropriate policies and procedures, and devote sufficient resources, to ensure that its critical services are available, reliable and resilient and that business continuity management and disaster recovery plans support the timely resumption of its critical services in the event of an outage.

HLE 4. Technology planning – SWIFT is expected to have in place robust methods to plan for the entire lifecycle of the use of technologies and the selection of technological standards.

HLE 5. Communication with users – SWIFT is expected to be transparent to its users and provide them information that is sufficient to enable users to understand well their role and responsibilities in managing risks related to their use of SWIFT.

2. Oversight and supervision of retail payment services

European Forum on the Security of Retail Payments

The Bank participates in the work of the European Forum on the Security of Retail Payments. The Forum operates under the aegis of the Eurosystem and the ESCB and brings together representatives of the EU authorities in charge of oversight and prudential supervision. The Forum aims to facilitate common knowledge and understanding by the authorities of the security issues related to electronic retail payment instruments and services that are offered within the EU.

A first report on the security of internet payments was published on 31 January 2013, issuing a set of recommendations to the providers of services covered by the Payments Services Directive, as well as to the governance authorities of payment schemes (including card payment schemes). The implementation of those recommendations is expected to take place by 1 February 2015. Furthermore, a second set of recommendations aiming to increase the security of the payment account access services (account information services and payment initiation services) is currently subject to a public consultation that ends in mid-April 2013. The Forum also initiated work on the security of mobile payments that should materialise in a report by the end of 2013.

Oversight of retail payment systems

The Centre for Exchange and Clearing (CEC) is the Belgian automated clearing house which processes and settles retail payments between banks active in Belgium. It stopped using the NBB infrastructure and migrated to the French technical platform, STET. This was fully completed by the end of March 2013. Although it now uses the platform together with its French equivalent, the CEC remains a separate, independent Belgian system. As an overseer, the NBB paid specific attention to the planning and implementation of the migration. On the occasion of the change of platform, improvements in risk management were introduced: the CEC increased the frequency of the settlement cycles, and it now only credits the receiving participant after final settlement takes place in Target2. These changes were made in accordance with the

recommendations of the overseer concerning financial risk management.

Oversight of card payment schemes

The Bancontact-MisterCash debit card scheme is preparing to comply with the Single Euro Payments Area (SEPA) standards, for which the target implementation date is the beginning of 2014. As the overseer of the scheme, the Bank has monitored these developments, with a focus on the financial risk management, as well as on the scheme's new projects.

At the end of 2012, as the lead overseer of MasterCard Europe (MCE), the Bank ended the cooperative assessment of MCE's compliance with the Eurosystem 2008 standards

Prudential supervision of payment institutions and electronic money institutions

At the end of November 2012, the provisions of the European Electronic Money Directive were transposed into Belgian law.⁽¹⁾ In the course of 2012, several service providers considered whether they should start operating under a payment institution licence or an electronic money institution licence, or change from one to the other. Several companies presented their project to the Bank so as to determine, after a preliminary analysis, whether the envisaged services would indeed fall within the scope of the Payment Services Directive and/or Electronic Money Directive. A number of companies formally submitted their request for authorisation after such preliminary analysis. The NBB has granted authorisation to nine payment institutions so far. Most started operating in 2012.

Furthermore, the development of European standards and guidelines relating to areas that are relevant for payment institutions continued to receive particular attention. Topics include the actions to combat money laundering and the use of agents under a European passport.

3. Oversight and supervision of securities settlement systems and operators

The Bank acts as the overseer of securities settlement systems, and as a prudential supervisor of their operator, with respect to three Euroclear group entities. In addition, it acts as the overseer of NBB-SSS (Securities Settlement System), operated by the NBB itself. Finally, the Bank has

(1) The European Directive of 16 September 2009 on electronic money services in the internal market (EMD) was transposed by the Belgian law of 21 December 2009 regulating the activities of payment institutions, within the timeframe required by the European Directive of 13 November 2007 on payment services in the internal market (PSD).

oversight and prudential supervision competencies in relation to the Bank of New York Mellon (BNYM) Group entities established in Belgium.

3.1 Oversight and supervision of Euroclear group

The Bank acts as the overseer and as a prudential supervisor of three Euroclear group entities: Euroclear SA/NV (ESA),⁽¹⁾ Euroclear Bank (EB) and Euroclear Belgium.

ESA

ESA is the Euroclear group's parent company. It owns the securities processing platforms and offers common services for the group's (international) central securities depositories – (I) CSDs. A memorandum of understanding governs the multilateral cooperation concerning the oversight and supervision of the common services which ESA provides to the group's CSDs. The Bank acts as the coordinator of ESA supervision and oversight. The monitoring of the operational reliability and stability of the settlement platforms operated by ESA was still one of the main topics of attention for the regulators. Specific consideration focused on the ESA policy for IT infrastructure management and protection against cyber crime. Furthermore, the review of the compliance of the ESA "common services" with the CPSS-IOSCO Principles for Financial Market Infrastructures was conducted and was shared with the Euroclear group CSDs' authorities. Finally, an analysis was initiated on the recovery and resolution procedures to be developed in the event of default by a group entity.

EUROCLEAR BANK

As an international central securities depository (ICSD), Euroclear Bank (EB) provides settlement and custody services for international securities, bonds, equities and fund instruments. It has nearly 1,400 participants that have access to its network of more than 40 links with domestic market CSDs worldwide.

As the lead overseer of EB, the Bank monitored EB's efforts to further reduce intraday credit and liquidity risks in the Euroclear system. To neutralise credit risk drivers, EB has implemented system changes to optimise the settlement of short-term triparty repo roll-overs. Thanks to the synchronisation of triparty initiations and closings, intraday credit risks will decline significantly. These changes were implemented at the end of March 2013.

After a risk-mapping assessment of EB's asset servicing activities, the Bank initiated a specific work stream on

the applicable credit risk management framework regarding the advancing of income and redemption proceeds. In securities markets, it is common business practice for income and redemption proceeds to be advanced before the actual receipt of the final payment from the issuer. Potential credit risks on system participants as a result of these advances need, within Financial Market Infrastructures in particular, to be managed in accordance with the new CPSS-IOSCO Principles stipulating the full collateralisation of all lending. This will require EB to adapt its current procedures in order to fully comply with the new standards.

In the course of 2012, the Bank assessed EB against the full set of Principles for Financial Market Infrastructures issued in April 2012. Of the twenty applicable CPSS-IOSCO Principles, seventeen have been assessed by the NBB as "Fully observed" and three as "Broadly Observed", namely Principle 4 (Credit risk), Principle 11 (Central securities depositories) and Principle 19 (Tiered participation arrangements).⁽²⁾

Since EB is a critical Financial Market Infrastructure, the IMF included EB in its FSAP for pan-European payment and securities settlement systems, with an assessment based on the same set of international standards.

In 2012, as part of the group's strategy to contain costs and diversify EB's recruitment pool, EB created a remote dual office arrangement for EB operations in Poland. The Bank, as a prudential supervisor, monitored the developments related to this project particularly with regard to operational risks, asset protection, governance and internal controls, and will continue to closely follow the roll-out of the project.

The Bank continued to pay particular attention to the ICAAP process (*Internal Capital Adequacy Assessment Process*) of EB in 2012. In accordance with the Capital Requirements Directive, a *Supervisory Review and Evaluation Process* (SREP) of Pillar II was carried out.

Finally, EB was also requested to put in place a fully-fledged recovery plan, for review by the Bank. As the recovery plan is an evolving document, repeated and continuous interaction between the institution and the Bank is taking place. Also, further revisions are expected following the publication of the related international guidelines and other applicable EU regulations. In parallel, Euroclear SA (ESA) is also setting up a recovery plan, with particular

(1) ESA, the holding company of the Euroclear (I)CSDs, operates under the prudential status of "equivalent settlement institution" due to the core services it performs for Euroclear Bank SA.

(2) See article in this FSR on the "Assessment of Euroclear Bank against the CPSS-IOSCO Principles for Financial Market Infrastructures", p. 129.

attention to group-wide compatibility and coherence of the recovery plans among the various group entities.

EUROCLEAR BELGIUM

Euroclear Belgium mainly holds Belgian securities, in particular Belgian equities. It settles participant transactions jointly with Euroclear Nederland and Euroclear France on the unified ESES settlement platform used by these three CSDs. The Bank monitored the ESES CSDs' decision to join the T2S project and the development by Euroclear Belgium of new services for issuers. It also paid attention to the situation regarding settlement efficiency. The IMF included ESES in its pan-European FSAP, but only so far as assessing the responsibilities of the supervisor or overseer, based on the CPSS-IOSCO Principles for FMIs. The Bank and the coordinated supervision and oversight of ESES were assessed as being compliant with the standards for supervision and oversight.

3.2 Oversight of NBB-SSS

Concerning NBB-SSS, the Bank monitored the implementation by its operator of the recommendations made following the last assessment of the system against the ESCB-CESR standards for securities settlement systems. It further monitored the decision of the NBB-SSS to join the T2S-project and the ongoing implementation of the project in two phases, whereby the first phase implies the use of a new IT-platform and functionalities by the end of 2014 and the second phase the actual joining of T2S in 2016.

3.3 Oversight and supervision of The Bank of New York Mellon group

An important initiative for systemic market infrastructures operating in Belgium is the creation of a CSD by the Bank of New York Mellon Group.

BNY MELLON CSD SA/NV

On 15 December 2012, the Brussels-based BNY Mellon CSD SA/NV (BNYM CSD) was licensed as a CSD by Royal Decree. BNYM CSD is a non-bank subsidiary of the BNYM Corporation, the US (non-banking) holding company of the group. BNYM CSD is overseen by the Bank. BNYM CSD – as a settlement institution – also falls within the scope of prudential supervision.

BNYM CSD will outsource its operations and most of its administrative functions to the Bank of New York Mellon

SA (BNYM SA/NV), the Belgium-based bank subsidiary of the New York state chartered Bank of New York Mellon. BNYM SA/NV was licensed for that purpose as an "equivalent settlement institution", which is a Belgian regulatory status for institutions providing services of significant importance to CSDs. As a consequence, BNYM SA/NV has to comply with the prudential requirements linked to this status and it allows the NBB to impose the compliance of the settlement services provided by BNYM SA/NV with the CPSS-IOSCO Principles for Financial Market Infrastructures.

BNYM CSD is to start operations in the course of 2013, after its official notification as a system under the Settlement Finality Directive. It plans to gradually roll out its services, starting with issuer services before providing settlement services and triparty collateral management services. The implementation of each phase will be reviewed by the Bank as prudential supervisor and overseer.

PRUDENTIAL SUPERVISION OF THE BANK OF NEW YORK MELLON SA/NV (BNYM SA/NV)

In 2012, the Bank of New York Mellon Group continued to consolidate its legal entities in Europe. As part of the strategic move towards a single European banking structure, the Irish credit institution of the group, the Bank of New York Mellon Ireland Limited (BNYMIL) was merged with the Brussels based BNYM SA/NV. The business activity which was conducted by BNYMIL prior to the merger is carried on through the Dublin branch established by BNYM SA/NV.

In 2012, the Bank closely monitored the developments relating to the consolidation of the European entities. Focusing specifically on the new activities that are being transferred to BNYM SA/NV further to the consolidation projects, the Bank supervises the potential impact on the risk profile of the bank, particularly via the ICAAP-SREP (Internal Capital Adequacy Assessment Process – Supervisory Review and Evaluation Process). This process is performed in collaboration with the members of the BNYM EEA College via the Joint Risk Assessment process as per the EBA guidelines.

In view of the role of BNYM SA/NV in strengthening the European presence of the group, the Bank decided to organise High Level Supervisory College meetings to complement the existing Technical Level meetings of the Supervisory College, formally set up by the Bank at the end of 2011 in accordance with the CRD III directive.

In the context of a growing need for cross-border supervisory collaboration between Europe and the US, and in

accordance with the Financial Stability Board's key attributes for G-SIFIs, the Federal Reserve Bank initiated both a Supervisory College and a Crisis Management Group (CMG) for Bank of New York Mellon, in which the Bank

actively participates. The Bank, for consistency reasons, tries to align its own work in the field of the recovery and resolution plans as far as possible with the work of the CMG.

Box 3 – Securities settlement systems in Belgium: key figures on securities deposits and turnover

Securities settlement systems established in Belgium include the ICSD Euroclear Bank (EB) and the CSDs NBB-SSS and Euroclear Belgium (EBE). NBB-SSS and EBE primarily function as depositories for securities issued in Belgium. EB is an international CSD that holds securities deposits in eurobonds and domestic securities from more than 40 markets. A fourth CSD, BNY Mellon CSD SA/NV was set up in December 2012 but is not expected to start its operations until some time in 2013.

Most securities held in EB are fixed-income securities (e.g. eurobonds, government bonds). At the end of 2012, securities deposits held in EB by participants amounted to EUR 10.8 trillion, which is slightly above the previous year's figure of EUR 10.7 trillion. Whereas in 2011 settlement turnover rose 24 % to EUR 328.5 trillion compared to the previous year, the value of transactions processed by EB in 2012 fell 7 % to EUR 307.1 trillion. The decline in turnover is linked to lower trading volumes in European fixed income securities and lower ticket sizes. EB is a multi-currency system. The bulk of EB settlement turnover is in EUR. Other large settlement currencies include USD, GBP and JPY. EB is rated AA+ by Fitch Ratings and AA by Standard and Poor's.

CHART 1 EUROCLEAR BANK SECURITIES DEPOSITS & TURNOVER
(in € billion)

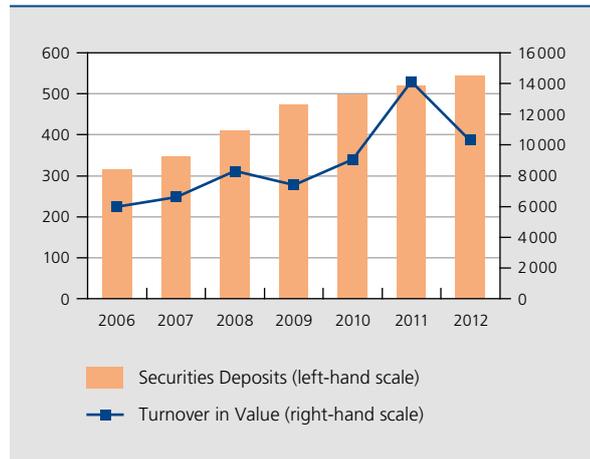


The value of securities deposits in NBB-SSS, the central securities depository for fixed-income Belgian government and corporate debt, has been rising steadily since 2006, reaching EUR 544 billion in 2012, more than 4 % up against 2011. While settlement turnover increased significantly in 2011 (+56 %) – due to a sharp rise in activity on the secondary market for Belgian government linear bonds – turnover declined in 2012 by 27 % from



EUR 14.1 trillion to EUR 10.3 trillion. This is in line with the decrease in 2012 in the secondary market for Belgian government linear bonds, which represents more than 70 % of turnover in NBB-SSS.

CHART 2 NBB SSS SECURITIES DEPOSITS & TURNOVER
(in € billion)



Unlike EB and NBB-SSS, securities held in EBE are mainly Belgian equities. The value of these securities deposits in EBE is reported in market value and is therefore more affected by market volatility. Securities deposits held in EBE on behalf of participants rose more than 20 % from EUR 130 billion in 2011 to EUR 157 billion in 2012 at year-end. The movement in the value of securities deposits held on behalf of participants in EBE is directly linked to the recovering equity market in Belgium in the course of 2012. Securities deposits are still 40 % lower than in 2006, before the start of the market turmoil. The value of turnover, on the other hand, decreased by 4 % in 2012 to EUR 564 billion from EUR 588 billion in 2011, still above pre-crisis levels.

CHART 3 EUROCLEAR BELGIUM SECURITIES DEPOSITS & TURNOVER
(in € billion)

