



### THE EUROSISTEM – TARGET2-SECURITIES

Further central securities depositories joined TARGET2-Securities (T2S) in 2016, as the second and third T2S migration waves took place in accordance with the updated T2S Programme Plan. A total of seven CSDs joined T2S in 2016, including, in March, Interbolsa (Portugal) and the National Bank of Belgium Securities Settlement System – NBB-SSS, and later, in September, Euroclear France, Euroclear Nederland, Euroclear Belgium, VP Lux (Luxembourg) and VP Securities (Denmark). With the successful completion of the third migration wave in September 2016, T2S was processing about 45% of the total transaction volume expected after the end of full migration in 2017. The CSDs scheduled for the fourth and final migration waves continued to undergo migration testing in 2016. The fourth wave CSDs, including Slovakia's CDCP, started operations on T2S from 6 February 2017.

T2S functioned reliably in 2016 and the operating errors that did appear were successfully resolved. One way in which the Eurosystem conducts dialogue with T2s stakeholders is through "Focus Sessions", the purpose of which it is to ensure optimal use of the T2S platform.

The harmonisation of services provision and national procedures continued in 2016 and will continue to be a priority of T2S dialogue. The Eurosystem is also considering how to support the further development of market infrastructures and is looking at the following new areas of development: instant payments, T2 and T2S consolidation, and a Eurosystem collateral management system (ECMS).

The Eurosystem has adopted a near-term strategy called "Vision 2020" for the further development of market infrastructures, with a focus on preparing solutions for instant payments, T2 and T2S consolidation, and an ECMS. The purpose of the strategy is to harmonise and deepen the integration of the European market, to make cost savings by means of technical consolidation, and to introduce new services for European financial markets. Vision 2020 ties in with the European Commission's project to build a capital markets union.

The instant payments project is intended to ensure that at least one instant payment solution in euro is available 24/7/365 to all payment service providers in Europe. The Eurosystem is also examining the scope for providing real-time settlement of payments.

The T2/T2S Consolidation project is exploring potential synergies between T2 and T2S, with a view to consolidating the technical and functional components of both infrastructures, establishing a consolidated and harmonised connectivity solution, and providing new RTGS services.

The aim of the ECMS project is to establish a common Eurosystem collateral management system to support more efficient collateral mobilisation in Eurosystem credit operations. The ECMS is expected to provide only services that are harmonised at the Eurosystem level. Other services will have to continue to be provided by local collateral management systems.

## 5 STATISTICS

Národná banka Slovenska develops, collects, compiles and disseminates a wide range of statistics which support the monetary policy of the euro area and the stability of the financial system in Slovakia, as well as other tasks of the European System of Central Banks (ESCB), the European Systemic Risk Board (ESRB), the Bank

for International Settlements (BIS) and other international institutions. Based on data reported by financial and non-financial agents, the statistics serve internal users at Národná banka Slovenska and are also used by financial market participants, public sector entities, the media and the general public



## 5.1 STATISTICAL DEVELOPMENTS

Monetary and financial statistics continued to be compiled in conjunction with the European Central Bank (ECB) and European System of Central Banks (ESCB) through the reporting of individual balance-sheet data and interest-rate data of selected banks. In 2016 the ECB's preparations for the reporting of granular credit data had an impact on methodological questionnaires. ECB reporting requirements in regard to the conduct of longer-term refinancing operations continued to be met. The activities of ECB/ESCB working groups focused on improving the quality of securities data and of insurance statistics, as well as on the first stages in drafting new legislation on pension funds reporting. Preparations for an analytical register of granular data on credits provided by banks entailed the start of work on developing the Banks' Integrated Reporting Dictionary, on defining a Single Data Dictionary for the Eurosystem and on establishing the European Reporting Framework for banks.

A new NBS decree in this field was issued in 2016, namely Decree No 9/2016 amending Decree No 17/2014 on reporting for statistical purposes by banks, branches of foreign banks, investment firms and branches of foreign investment firms, as amended by Decree No 21/2015.

Regarding securities statistics, the quality of data in the ECB's securities databases was further improved in 2016. In response to user requirements, the Centralised Securities Database (CSDB) underwent two significant updates in 2016. For the purpose of data quality enhancement, the ECB took steps to supplement and correct data on investment fund shares/units through bilateral projects with individual euro area countries. The classification of certain borderline financial instruments referred to in national laws of some euro area countries was harmonised in methodological terms. In regard to the Securities Holdings Statistics Database (SHSDB), activities in 2016 included fine-tuning the data quality management framework for sectoral data reporting and introducing a system allowing the calculation of flow data for countries that do not directly transmit data on securities transactions.

As regards the quarterly financial accounts (QFAs) for Slovakia, data were partially revised in 2016

in order to bring them in line with the balance of payments and the international investment position data. Parallel to this process, back series data for the period 2004–2012 started to be compiled.

The signing in September 2016 of an *Agreement on the provision of data on firms incorporated in Slovakia and on their financial and non-financial data* marked further progress in compiling a dataset for the projected database of non-financial corporations. Work also continued on linking micro and macro statistics on the household sector, using data from the Household Finance and Consumption Survey (HFCS).

In the area of government finance statistics (GFS), an issue of discussion in 2016 was how to change data quality parameters in order to make the *Quality Report* clearer and more comprehensible for users (the parameters in question concerned revision analysis, overall stability, and changes in deficit-debt adjustment).

In regard to statistical methodology, NBS cooperates with the Statistical Office of the Slovak Republic (SO SR) and the Ministry of Finance of the Slovak Republic (MF SR). The main focus of their discussions in 2016 was the harmonisation of debt securities reporting for the government sector.

In May 2016, NBS and the SO SR signed an Addendum to their *Framework agreement on cooperation in the provision of statistical data and statistical information*. Consultations also took place concerning the sectoral classification of the national resolution fund (administered by the Resolution Council) and of the Deposit Protection Fund.

The field of insurance statistics experienced sweeping changes in 2016. The reporting templates used until 2015 were, for supervisory purposes, completely replaced with a new set of reporting templates in accordance with the Solvency II Directive<sup>14</sup> and with NBS decrees<sup>15</sup>. A piece of secondary legislation addressing statistical requirements – NBS Decree No 20/2015<sup>16</sup> – entered into force at the beginning of the year. Further reporting obligations on insurance market participants are laid down in MF SR Measure No MF/14725/2015-74<sup>17</sup>.

In 2016 much attention was focused on addressing technical issues, on improving data quality,

14 Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II).

15 Decree No 1/2016 of Národná banka Slovenska on reporting by insurance undertakings not subject to a special regime and by reinsurance undertakings, and Decree No 36/2015 of Národná banka Slovenska on reporting by insurance undertakings subject to a special regime.

16 Decree No 20/2015 of Národná banka Slovenska on reporting by insurance undertakings, reinsurance undertakings, branches of foreign insurance undertakings, branches of foreign reinsurance undertakings, insurance undertakings and reinsurance undertakings from other EU Member States, pension fund management companies and supplementary pension management companies.

17 Measure No MF/14725/2015-74 of the Ministry of Finance of the Slovak Republic amending Measure No MF/25918/2011-74 of the Ministry of Finance of the Slovak Republic stipulating the scope of financial statement data to be reported and how, where and by when these data are to be reported.



and on defining principles, responsibilities and time management in relation to the processing of reports, in cooperation with the other relevant NBS departments. The reporting requirements for branches of insurance undertakings established in other EU Member States were broadened substantially in 2016, in order to harmonise them with the requirements for insurance undertakings established in Slovakia. Hence, reporting agents were made subject to a uniform information obligation – based on the ‘host principle’ and more stringent than that imposed under Solvency II – in order to meet requirements for the balance of payments statistics and requirements under Regulation (EU) No 1374/2014 of the European Central Bank on statistical reporting requirements for insurance corporations.

An NBS decree<sup>18</sup> approved in December 2016 completes certain changes to balance of payment statements and introduces for insurance and reinsurance undertakings a new reporting template for the collection of data on securities.

In the area of capital market statistics, testing was carried out in 2016 on data collection, the functionality of validation checks and the automated transmission of data to the European Securities and Markets Authority (ESMA) in accordance with Directive 2011/61/EU of the European Parliament and of the Council on Alternative Investment Fund Managers.

In the field of pension fund statistics, the drafting of an ECB regulation on statistical reporting for pension funds began in 2016, with the intention to meet the requirements of the ESCB, European Systemic Risk Board (ESRB) and the European Commission. NBS and reporting agents in the pension fund market took part in procedures to ascertain the coverage of reporting requirements and the level of reporting costs.

In order to improve the quality of reported data and in particular the *errors and omissions* item, back series of statistics on the balance of payments, international investment position, and foreign debt, for the period 2013-2015, were revised and published in 2016. As part of an ECB project, the gradual process of harmonising balance of payments statistics with financial accounts statistics began in 2016 and included the adoption of a schedule for the next two-year period.

Significant changes took place in 2016 in regard to statistics on non-bank entities. All of the reporting agents began transmitting all their reports through a new information system that completely replaced the manual collection of statistics. There were also changes in the structure of the reporting templates and in the collection philosophy (from the cumulative collection of data to collection for a specific period). The template for the quarterly reporting of services received/provided vis-à-vis the rest of the world (used in the new system since 2015) was modified to allow the collection of monthly data on equity participations, monthly data on foreign assets and liabilities, data on initial stocks and quarterly data on transactions with the rest of the world. At the same time, a detailed methodology for the different reporting templates was produced.

The reporting obligation of non-bank entities for statistical purposes is governed by Article 8 of Act No 202/1995 Coll. – the Foreign Exchange Act (and amending Act No 372/1990 Coll. on non-indictable offences, as amended), as amended by Act No 602/2003 Coll. The structure, scope and content of statistical reports and the reporting method, procedure deadlines and place are laid down in NBS Decree No 264/2015 Coll. of 5 October 2015 on reporting in accordance with the Foreign Exchange Act.

## 5.2 INFORMATION SYSTEMS

In January 2016 NBS began using the Information System – Statistics Collection Portal (IS SCP) for the collection and processing of all statistical reports. During the year, the required outputs were finalised and the subsequent processing was optimised. The IS SCP brings greater functionality by enabling reporting in XBRL, the format used to transmit data for supervisory purposes to the ECB, the European Banking Authority (EBA) and the European Insurance and Occupational Pensions Authority (EIOPA). 2016 also saw the continuation of preparations for the transmission to ESMA, in the ISO 20022 format, of data on alternative investment fund managers.

By the end of 2016 around 3,100 reporting agents were registered in the IS SCP, including 29 from the banking sector, 34 engaged in other financial

*18 Decree No 8/2016 of Národná banka Slovenska on reporting by insurance undertakings, reinsurance undertakings, branches of foreign insurance undertakings, branches of foreign reinsurance undertakings, insurance undertakings and reinsurance undertakings from other EU Member States, pension fund management companies and supplementary pension management companies. (This decree replaced NBS Decree No 20/2015.)*



intermediation, 37 from the insurance sector, 131 from the capital market (investment firms, collective investment undertakings, asset management companies, the stock exchange, and central securities depositories), 46 from the pension fund sector and around 2,820 entities reporting to NBS under NBS Decree No 264/2015 on reporting in accordance with the Foreign Exchange Act.

In 2016 a total of 161 reporting templates were designed for data collection requirements under national law, 200 as required by the EBA, 103 as required by EIOPA, and two in accordance with

the EU's Alternative Investment Fund Managers Directive.

With the aim of providing access to historical data, the process of transforming and migrating historical data to the IS SCP was launched in 2016 and remains ongoing.

To ensure data quality and improve the processing of statistics on securities, interest rates and certain balance sheet items, individual modules were further developed in 2016 using business intelligence tools.

## 6 ECONOMIC RESEARCH

The economic research conducted at Národná banka Slovenska (NBS) focuses mainly on practical issues in the financial, economic and monetary spheres, while also supporting the central bank's core tasks with more sophisticated theoretical or model-based solutions. The research outputs represent the result of inter-departmental collaboration within the bank, as well as cooperation with experts from other institutions, both domestic and foreign.

The nature of the research tasks performed at NBS are determined by the central bank's needs and by the medium-term research agenda approved by the NBS Bank Board. The relevancy and quality of the research is supervised by an independent research committee, which approves research projects and makes recommendations to improve research activity.

The principal outputs of NBS research activity are published by the central bank as peer-reviewed working papers, discussion papers, or analytical documents. Altogether in 2016 NBS published a total of nine working papers, analyses and analytical commentaries<sup>19</sup>, addressing issues in the following areas in particular: the labour market and real economy; economic modelling; monetary policy and inflation; and fiscal policy.

Research on the convergence of the Slovak economy towards the average EU level showed that in an environment of falling relative prices,

not even higher economic growth – boosted by the absorption of the remaining EU funds available from the previous financing period – was sufficient to revive the catch-up process in economic performance and productivity. The structural reforms that could lay the ground for further catching-up have not been carried out. Slovakia remains marked by wide regional disparities in terms of key real economy indicators.

Research based on new detailed data on European firms confirmed that firms placing their products also in foreign markets are more productive. Firms' productivity increases in parallel with experience acquired. A small number of highly efficient firms account for the bulk of exports, and these firms continued to grow even during the crisis. The outcome of research on a narrow sample of firms in new EU Member States confirmed that export openness increases the volatility of firms' output. In contrast, however, with findings for firms in large advanced economies, new research provided evidence that firms in new Member States which export diverse products, or export to multiple markets, do not necessarily have greater stability of sales.

Research findings in the area of economic modelling were largely focused on new approaches to testing the validity of the assumptions applied in time series models. One research paper provided empirical evidence for non-linearity and non-normality of distribution in a large majority of macro-

<sup>19</sup> The full texts of working papers and analyses can be found on the NBS website, at <http://www.nbs.sk/en/publications-issued-by-the-nbs/research-publications>