This newsletter is a twice-yearly publication intended to inform readers regularly about international technical cooperation at the Bank of Italy, especially seminars and workshops.

The Bank of Italy is engaged in technical cooperation activities (i.e. seminars and workshops, bilateral staff training and institution building) to strengthen the institutional capabilities of the beneficiaries. The beneficiary institutions are generally in new EU member states that have not yet adopted the euro, EU candidate and potential candidate countries, Mediterranean countries, Eastern European and Caucasian countries within the European Neighbourhood Policy area, BRICS and other emerging countries.

The areas of cooperation relate to the Bank’s institutional functions (central banking including market operations, payment systems and treasury services, economic research and statistics, banking and financial supervision, and currency circulation) and some support activities (IT, internal auditing, controls).

Further details on https://www.bancaditalia.it/compiti/ricerca-economica/cooperazione-tecnica-internazionale/index.html

2015 (1st Semester) Highlights

Two international seminars, 17 bilateral activities (study visits or meetings in Rome and missions abroad), 2 requests for written information; initiatives held in Rome gathered 112 participants: these are some figures concerning the activities of the first half of 2015.

Details inside.
Seminars & Workshops

Seminar on “Information Systems Auditing in a Central Bank: Practical Experience and New Challenges”
(Rome, 15-17 April 2015)

The rapid evolution of Information and Communication Technology increases the challenges for IT auditors who are continuously being requested to identify new risks and evaluate the relevant controls. This is particularly true for central banks, which include information among their most valuable assets. The seminar analysed the evolution of IT audit practices in this context. The first day mainly covered organizational and methodological issues, describing the position and role of IT auditors in a modern Audit department: in a large central bank a specific IT audit unit can be set up, although its staff will nevertheless work in close contact with the general auditors. [Read more on page 7]

Seminar on “Balance of Payments Data Production According to BPM6: the Bank of Italy’s Experience”
(Rome, 9-11 June 2015)

The first edition of the Balance of Payments Manual was published in 1948, just after the Bretton Woods agreements and the establishment of the International Monetary Fund. In more than half a century, external statistics have been a fundamental tool in all countries for economic policy making. Things are no different today: the Balance of Payments and the International Investment Position are crucial statistics for the ECB in the definition of Eurosystem monetary policy and the European Commission relies on them to evaluate member states’ economies in the Macroeconomic Imbalances Procedure. [Read more on page 8]

Bilateral Activities
(study visits to Italy & missions)

Study visits and missions are organised at the direct request of the beneficiary central bank/supervisory authority or other supranational entities, such as the European Commission and the IMF, which sometimes finance the initiatives.

As usual in the first half of the year, the number of bilateral activities was rather subdued. Activities were focused on supervision and financial stability, payment system oversight, monetary policy operations and statistics. An increasing share of participants have come from the central banks of China, India, Indonesia and Vietnam. About half of the bilateral activities have been carried out within larger programmes financed by the European Commission (TAIEX initiatives, the EU-China Trade Project, and the Eurosystem needs-analysis programmes with the central banks in the Western Balkans coordinated by the ECB, which formally ended in March).

Bilateral Activities (in figures)
(1st January - 30th June 2015)

Study visits: 11
On-site missions: 6
Number of participants in study visits: 62
2015 Forthcoming Seminars & Workshops

Seminar on “The Quality of Banknote Circulation and the Bank of Italy’s Monitoring Activity on Professional Cash Handlers”  
(Rome, 21-23 October 2015)

The seminar will take a broad view, including a description of the Italian cash cycle (actors involved and some data on the cash handling industry). An overview of the role of a central bank in preserving the quality of banknote circulation will be offered, as well as a description of the Eurosystem regulations and their implementation in Italy. Participants will be introduced to the Bank of Italy’s monitoring of professional cash handlers (off-site and on-site) with a special focus on on-site inspections.

Seminar on “Innovation, Retail Payment Instruments and Systems: Market Developments, Regulatory Initiatives and Effects on Oversight”  
(Rome, 18-20 November 2015)

In the Single Euro Payments Area (SEPA) framework, the seminar will describe market tendencies and regulatory initiatives to steer the development of payment systems. The main driver for change is standardization and harmonization of the chief traditional payment instruments (credit transfers and direct debits), as well as the adaptation of infrastructures. A second topic will be the increasing number of stakeholders, including non-banks, that can provide payment services, which should heighten competition and foster efficiency. A third theme will be the acceleration of technological innovation, which implies a growing influence of technological players and contributes to the diversification of means of payment (mobile, internet, etc.) based on protocols that are not yet fully standardized. Another implication of technological progress is the impact on public payments, for both local and central administrations.

Public oversight at European and national level must closely monitor market developments, conduct detailed analysis, and manage the tools for intervention.

Workshop(*) on “Macroeconomic Modeling and Forecasting”  
(Rome, 10-11 December 2015)

The workshop will provide an overview of the techniques and models used at the Bank of Italy for short- and medium-term forecasting, for the analysis of economic policy issues, and for counterfactual simulations. First, the quantitative tools in use at the Bank of Italy will be described; then the workshop will focus on the main applications of the econometric models that support some of our institutional activities, such as short- and medium-term forecasting, constructing risk scenarios, assessing the possible use of macroprudential policy tools, evaluating structural reform programs, and estimating the effects of alternative fiscal policies.

(*)Workshops are organized as short seminars with a narrow thematic focus, addressed to small groups of specialists.
### Seminar on “Internal Audit in a Central Bank”
(Rome, first half 2016 - date to be decided)

The objective of the seminar is to enhance common understanding of the role and the functioning of an internal audit department in a central bank. The Bank of Italy’s Internal Audit Department will describe its organization, methods and techniques to foster benchmarking within central banks. Interactive sessions will be held to share experience of off-site activities, quality programme, risk assessment, and audit approaches.

### Seminar on “Risk Management for Central Banks: Implementing a Comprehensive Framework to Deal with Institutional and Investment Challenges”
(Rome, first half 2016 - date to be decided)

In recent years, the Bank of Italy has put considerable effort into developing a comprehensive framework, both methodological and organizational, that encompasses the different risks for a central bank posed by its institutional and investment functions. Further effort has been devoted to creating an In-house Credit Assessment System consistent with Basel II principles and Eurosystem standards. The system, which has been operational since 2013, was developed with the contribution of experts from several sectors of the Bank with experience in credit risk assessment (Supervision, Research, Risk Management and Monetary Policy). The seminar will illustrate how risk analysis is carried out at the Bank of Italy, providing ample illustration of modelling techniques for market, credit, liquidity, and operational risk; the scope for strategic asset allocation by central banks within an asset and liability management framework; and the use of the credit risk framework in monetary policy operations.

### Seminar on “Payment Systems and Market Infrastructures in the EU; Policy, Operation, Oversight: the Bank of Italy’s Experience”
(Rome, second half 2016 - date to be decided)

The seminar aims to improve participants’ knowledge of EU payment systems and market infrastructures from a policy, operational, technical and oversight point of view. Considering the role played by the European System of Central Banks (ESCB) in this field, the seminar will look at the services offered in large-value payment systems, TARGET2, and in the securities clearing and settlement systems, TARGET2-Securities (T2S), as well as the oversight functions performed by the Bank of Italy and its involvement in retail payment services and instruments within the Single Euro Payments Area (SEPA). Presentations will be supplemented with a visit to the Service Desk of the TARGET2-T2S Single Shared Platform (SSP), the Eurosystem’s Financial Market Infrastructure jointly operated by the Bank of Italy and the Deutsche Bundesbank.
Workshop(*) on “Building the Backbone of the Organisation: Internal Rules, Processes and Procedures”  
(Rome, first half 2016 - date to be decided)

The workshop discusses how to shape the central bank as a lean organization by adopting a process-oriented approach, keeping the impact of internal rules to a minimum, and making the most of information technology and of managerial skills. Specific case studies and examples from the Bank of Italy’s experience will be provided: simplification of internal rules, adoption of an Enterprise Resources Planning (ERP) system, dematerialization of all internal papers, and introduction of more flexible work times. Finally, the importance of a synergic interaction between the variables at stake and of a comprehensive vision of the organization as a system is highlighted and discussed.

Workshop(*) on “Euro Banknote Production with a Focus on Design and Origination: The Experience of the Bank of Italy”  
(Rome, first half 2016 - date to be decided)

The workshop will provide a general overview of the framework for euro banknote production (reference context and principles; ECB and NCB roles; Eurosystem requirements for banknote production); an outline of the Bank of Italy’s Banknote Directorate (resources and activities; organization; machinery and equipment); a description of the main manufacturing steps (printing stages and cutting and finishing process) and a visit on site. Special focus will be placed on design and origination (D&O) facilities and expertise, including a description of the process and of the key achievements in the field; the production of offset and intaglio plates using the most advanced ‘computer-to-plate’ techniques; and the contribution to the ES2 project and innovative pre-press activities.

Workshop(*) on “Financial Statistics in Central Banks”  
(Rome, second half 2016 - date to be decided)

The post-financial turmoil poses new and demanding challenges not only to policy-makers, but also to statisticians and national accounts experts, who are called upon to provide suitable and timely statistical data to support policy decisions and help identify macroeconomic imbalances. The workshop describes the latest developments in methods and in the scope of the financial statistics produced by central banks. Topics will include an overview of the current Italian financial accounts framework as a part of the Eurosystem, focusing on sources, methods and uses of financial accounts produced by the Bank of Italy. The Bank’s IT platform for financial statistics will also be illustrated.

(*)Workshops are organized as short seminars with a narrow thematic focus, addressed to small groups of specialists.
Participation in seminars and workshops is by invitation. Requests from institutions other than the regular beneficiaries are considered on a case-by-case basis. The working language is English. Participation is free of charge. In some cases hotel accommodation is provided by the Bank of Italy. Travel expenses to and from Rome are not reimbursed. Seminar duration is usually 3 days; workshops last 2 days at the most.

Lunches are covered for the duration of the seminar/workshop. A courtesy dinner is also offered. We usually accept up to 25 participants in the seminars and only one representative from each institutions. As far as workshops are concerned, groups are not larger than 15 participants. Our seminars and workshops are as interactive as possible. Short presentations by selected participants are usually invited in order to stimulate discussion and debate.

General Information

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The Bank of Italy’s new conference center
(Seminar on “Information Systems Auditing in a Central Bank: Practical Experience and New Challenges”, continued from page 2) IT risks have to be identified and evaluated along with business and operational risks to develop an integrated audit universe. IT auditors should be able to understand the IT infrastructures, applications and services supporting business processes, the level of risk. Consequently, the decision to schedule an audit on one of these aspects, will be based on the criticality of the business processes being supported. Following this method, the most pervasive technologies (databases, networks, server farms) are likely to be identified as the most risky, but their complexity will suggest restricting the scope of the audit to just some of the IT processes related to them (i.e. security management, continuity, etc.). In any case, most of the audits are usually ‘integrated’, meaning that a business process is analysed in terms of effectiveness, efficiency and security, considering both administrative procedures and the supporting IT systems. At the Bank of Italy a manual for a business process audit has been produced, which includes a specific appendix on the analysis and evaluation of the supporting application system. Several high-level and detailed control objectives are included, which provide the starting point for developing the audit programme. The representative of the Central Bank of Armenia described the recent evolution of Internal Auditing in his organization, mainly based on clear procedures and knowledge sharing. The Bulgarian Central Bank reported on its audit of IT Strategic Planning and IT Portfolio Management in which it made extensive use of IT audit and control best practices.

On the second day the participants were asked to work in groups to foster interaction between them and compare the different approaches. A case study was proposed consisting in an application system supporting the decision-making process for monetary policy. The groups were asked to describe the scope of the audit and then to draft possible findings starting with evidence collected during the fieldwork, using the template adopted at ESCB level. The Bank of Italy showed some of the preliminary results of the adoption of data analysis tools to support audit work or to identify risk situations. This requires greater integration between general audit and IT audit, since an in-depth knowledge of the business processes and of the structure of the data are both necessary to evaluate the potential lack of controls. The participants had also the opportunity of visiting the Bank of Italy’s Data Processing Centre and the Operations Room of the TARGET2 Single Shared Platform, where European payments are also monitored. The day ended with a presentation of an audit seen from two different perspectives. After an introduction by one of the IT auditors, who described the audit objectives and the methodologies employed, the person in charge of the audited project expressed his point of view, detailing the per-
received positive and negative aspects of the audit activity.

The third day focused on Cybersecurity. Participants were first shown notable examples of recent security breaches, then given a survey of the threat landscape as published by ENISA (the EU Agency for Computer Security) in 2014. Subsequently, a presentation by a representative of the Bank of Italy’s Internal Audit Directorate outlined the problems and issues that are faced by IT auditors in giving assurance as to the capability of the Bank to respond and react to cyber threats. Specifically, an orientation towards reaction rather than prevention was deemed as the most effective approach, stemming from a precise identification of the so-called ‘threat-model’. Some hints as to emerging standards, certifications and good practices were also given, while recognizing a general immaturity of the approaches found in the literature. Information-sharing was also identified as a key control in helping IT auditors face these new risk scenarios.

The seminar brought together 25 participants.

(Seminar on “Balance of Payments Data Production According to BPM6: the Bank of Italy’s Experience” continued from page 2) However, the evolution of the economic and financial markets, accelerated by globalization, which induced the recourse to innovative instruments and channels for international payments, have required more than a revision of the statistical guidelines addressed to BOP compilers. In 2009 the IMF published the Sixth Edition of the Balance of Payments and International Investment Position Manual (BPM6), the last update of the international standards. At the same time, important technological changes were made to standards for the transmission of statistical data between countries and international organizations for their dissemination to the public. In particular, the SDMX (Statistical Data and Metadata eXchange) standard was introduced, sponsored by the main international organizations (IMF, ECB, OECD, Eurostat, BIS, World Bank, UN). Consequently, in the summer of 2014, when BPM6 implementation was scheduled for EU countries, BOP compilers had to face a double revolution, both statistical and technological. Against this background, the Bank of Italy decided to take advantage of the new standard to re-engineer its data production system for external statistics. During the Seminar the Bank of Italy speakers illustrated the main features of its new system for data collection, data compilation and data dissemination of external statistics production, with a specific focus on the main issues related to BPM6 introduction.

In the first parts of the event, the experts from the Bank of Italy and a speaker from the Banco do Brazil presented the main data sources and the principal features of the implementation of the new international standards. A fairly intense debate concerned the pros and cons of the use of the ITRS (Indirect Transactions Reporting System), versus direct reporting surveys, for BOP purposes.

The views expressed during the seminars do not necessarily reflect the position of the Bank of Italy.
Then the Bank of Italy illustrated the infrastructures needed to support the direct reporting sample surveys of non-financial firms, which were introduced in 2011 to replace the former ITRS system, including the internet-based IT tools that reporters use to transmit the information to the Bank, the data checking procedures, and the Business Register, all necessary to support sample selection and the sampling techniques. Subsequently, the focus moved to the BOP Current Account, exploring in particular the items ‘Goods’, ‘Travel’ and ‘Compensation of Employees’. The expert from the Central Bank of Moldova presented its ITRS system for measuring remittances. The seminar then dealt with the Financial Account and the Bank of Italy described the models developed to compile the ‘Portfolio investment’, ‘FDI’, and ‘Other investment’ components. In this context, the new criteria for compiling the FDI were of particular interest for the participants. In the last part of the seminar the Bank of Italy presented the methodology adopted for the backcasting of time series produced according to the new standard and the measures adopted to ensure high quality standards in the whole statistical production chain. Finally, practical solutions to improve the efficiency of the systems were presented, in addition to the Bank of Italy, by the representatives of Central Banks of Kazakhstan and Turkey.

The seminar was attended by 25 participants.

*Seminar on BoP Statistics—Some speakers*

The views expressed during the seminars and the workshops do not necessarily reflect the position of the Bank of Italy.
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