

**Payment, clearing and
settlement systems in
Italy**

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List of abbreviations

ABI	Associazione Bancaria Italiana Italian Banking Association
BI-COMP	Banca d'Italia Compensazione Bank of Italy Clearing System
BI-REL	Banca d'Italia Regolamento Lordo Bank of Italy real-time gross settlement system
CABI	Centro Applicativo Banca d'Italia
CAI	Interbank database on cheques and payment cards Centrale d'Allarme Interbancaria
CC&G	Cassa di Compensazione e Garanzia
CIPA	Convenzione interbancaria per i problemi dell'automazione Interbank Convention on Automation
CLFI	Consolidated Law on Financial Intermediation
CNIPA	Centro Nazionale per l'Informatica nella Pubblica Amministrazione National Centre for Information and Communication Technology in the Public Administration
CONSOB	Companies and Stock Exchange Commission Commissione Nazionale per le Società e la Borsa
CSM	Clearing and Settlement Mechanism
Digitpa	Ente nazionale per la digitalizzazione della pubblica amministrazione National Centre for Information and Communication Technology in the Public Administration
ICCREA	Istituto Centrale del Credito Cooperativo
IDEM	Italian Derivatives Market
IDEX	Italian Derivatives Energy Exchange
EBA	European Banking Association
LDT	Liquidazione dei Titoli Securities net settlement process
MTS	Mercato Telematico dei Titoli di Stato Screen-based market for government securities
RIBA	Electronic bank receipts – Ricevuta Bancaria
RNI	Rete Nazionale Interbancaria RNI National interbank network
SEPA	Single Euro Payments Area
TARGET2	Trans-European Automated Real-Time Gross Settlement Express Transfer System
TSP	Technical Service Provider

Introduction

The Italian payment system continues to evolve in response to European integration, developments in financial markets, technological innovation and initiatives launched by both public authorities and private sector bodies.

Changes to the institutional framework have ensued from legislative and regulatory measures aimed at (i) strengthening the reliability of the Italian payment system; (ii) encouraging the use of new payment instruments; and (iii) aligning Italian legislation with European regulations. Legislative measures have strengthened the oversight role of the Bank of Italy originally spelled out in Article 146 of the 1993 Banking Law, which entrusted the Bank of Italy with explicit responsibilities aimed at promoting the reliability of the payment system and fostering its efficiency. The law also provided for the Bank of Italy to issue specific regulations on payment systems. Such regulations were, in fact, issued in February 2004 to set the scope of the Bank of Italy's oversight activities for payment systems, relevant infrastructures and payment instruments.

The aims of this oversight function were extended by the Legislative Decree 11/2010, which transposes the EU's Payment Services Directive, into Italian law and reformulates Article 146 of the Banking Law for consistency with the Eurosystem's Oversight Policy. The new rules extend the objectives of the oversight function to user protection, redefining its scope and providing the Bank of Italy with the instruments for administrative control.

The process of European financial integration has reshaped the interbank payment system. Large-value payments are now settled through TARGET2, launched in 2007. Following the inauguration of the Single Euro Payments Area (SEPA), Italy's retail settlement system, BI-COMP, was adapted to handle pan-European credit transfers and direct debits and made interoperable with other clearing and settlement mechanisms across borders.

The advent of SEPA has also led to changes in the institutional framework governing the provision of payment services.

Legislative Decree 11/2010 transposing the Payment Services Directive into Italian law has broadened the range of entities (payment institutions) that are authorised to provide payment services in addition to the traditional intermediaries (banks and electronic money institutions) and it has also harmonised the rules for all payment services.

With a view to strengthening confidence in advanced, non-cash instruments, the decree offers incentives for the use of secure electronic instruments (eg by allowing merchants to offer discounts to customers who use such instruments). Other measures were also issued at the European Community level, notably EC Regulation 924 of 16 September 2009 on cross-border payments within the Union, which aims to modernise retail payment services and make the euro area more competitive.

The Consolidated Law on Financial Intermediation (CLFI) (Legislative Decree No 58 of 24 February 1998) provides that settlement and custody services for securities may be carried out by private companies. Against this legal background, the central depository service is provided by Monte Titoli, which is also the operator of the securities settlement process, Express II.

The CLFI also establishes the principle that the management and organisation of regulated markets are entrepreneurial activities and entrusts the Bank of Italy with surveillance functions for regulated markets relevant to the conduct of monetary policy.

With a view to strengthening financial systems against catastrophic events and to mitigating systemic risk, the Bank of Italy has worked with the main payment system stakeholders, technical service providers, market infrastructures and banking groups to assess the Italian financial system's state of preparedness for operational crises. In this connection, the Bank of Italy has promoted an ad hoc national coordination body to develop guidelines for reducing

systemic risk factors. With a mandate to assure business continuity in the Italian financial markets, this working group, known as CODISE, is co-chaired by the Bank of Italy and the Commissione Nazionale per le Società e la Borsa (CONSOB), the Italian stock exchange commission, and involves representatives from leading banking groups and infrastructures essential to the orderly working of the financial system.

1. Institutional aspects

1.1 The general institutional framework

The Bank of Italy is mandated by law to promote the smooth operation of the payment system and it is empowered to issue regulations for that purpose. The Bank issues provisions to clarify the objectives, scope and instruments of its oversight of payment systems. Within the Eurosystem, it also contributes to analyses and proposals concerning oversight, and participates in the committees where payment system issues are discussed.

The Bank's oversight activity covers public and private payment systems, infrastructures and payment instruments especially as regards (i) completion of monetary integration; (ii) maintenance of financial stability; and (iii) promotion of technological innovation.

Supervisory responsibilities for trading and post-trading infrastructures are assigned to CONSOB, but are shared to some degree with the Bank of Italy, which has sole supervisory powers over the organised trading of interbank funds, owing to their relevance to monetary policy. CONSOB acts in a regulatory and supervisory role in regulated markets other than wholesale markets for government bonds, with the aim of ensuring market transparency, orderly trading and the protection of investors. It has also regulatory powers with regard to post-trading that are exercised in agreement with the Bank of Italy.

With the support of the Bank of Italy, the Autorità Garante della Concorrenza e del Mercato, the antitrust authority, is responsible for antitrust issues relating to payment instruments.

The regulatory framework of the Italian payment system is based on the Italian Civil Code, the 1993 Banking Law (Legislative Decree 385 of 1 September 1993) and other specific laws, including the Codified Law concerning note-issuing banks (see Codified Law 204/1910 and the Bank of Italy's Statute with reference to bank transactions negotiated or executed by the Bank of Italy).

The Bank of Italy's interest in the proper functioning of the payment system and, in particular, of interbank systems stems from its role in the implementation of monetary policy and as supervisor of the banking system. The Royal Decree of 6 May 1926 gives the Bank of Italy exclusive responsibility for managing the clearing system for interbank payments.

The 1993 Banking Law, as amended by the Legislative Decree 11/2010, entrusts the Bank of Italy with explicit responsibilities and powers aimed at promoting the efficiency and reliability of the payment system. With regard to the transparency of banking services, the 1993 Banking Law gives the Bank of Italy the power to control the way in which commercial banks deliver the information they are required to provide to customers.

In order to prevent money laundering, Law 197/1991 authorises the Bank of Italy to supervise the activities of non-banks that operate in the payment system, including intermediaries that carry out funds transfers via payment cards.

The circulation of individual paper-based payment instruments (eg cheques) and the discharge of financial obligations (eg novation and bilateral netting) are governed by the provisions of the Civil Code and other specific laws (see Royal Decree 1345 of 21 September 1933, Legislative Decree 1736 of 21 December 1933 and Legislative Decree 507 of 30 December 1999).

The regulations governing cheques and electronic money were substantially revised by Legislative Decree 231 of 21 November 2007 on the circulation of payment instruments, which transposes the EC's Third Money Laundering Directive (2005/60/EC).

To enhance the security of cheques and confidence in their use, an interbank database on irregular cheques and payment cards was established by Law No 205 of 25 June 1999 and Legislative Decree No 507 of 30 December 1999, which amended the penalties imposed for writing bad or unauthorised bank or postal cheques. The database records the names of offenders who have drawn bad cheques or written cheques without authorisation as well as details of lost and stolen cheques. It also blacklists persons whose authorisation to use payment cards has been revoked.

Legislative Decree 48 of 24 March 2011 transposed into Italian law the provisions of Directive 2009/44/EC on settlement finality, amending Directive 1998/26/EC which in turn was transposed by Decree 210 of 12 April 2001.

More specifically, this Decree abolishes the zero hour rule¹ with regard to designated payment and securities settlement systems, introduces a special regime for guarantees given to the system and includes provisions to protect participants that settle securities trades on behalf of other intermediaries. It also assigns to the Bank of Italy the responsibility for collecting necessary information and distributing it to the competent authorities when an insolvency process is initiated.

The legal framework of the retail payment system BI-COMP is governed by a Bank of Italy regulation issued in November 2005 ("Regulation concerning the oversight of low-value payment systems" dated 11 November 2005) which lays down the general principles governing the system's operation and sets out the exchange of payment instructions for transmission to the "Dettaglio" sub-system as well as the process for determining multilateral clearing balances.

As regards the "Dettaglio" sub-system, the operational role of the Bank of Italy is limited to the phase where multilateral clearing balances are determined and transmitted for settlement. The market is responsible for the preceding phases (ie exchange of instruments and activities preparatory to determining the balances).

European Regulation 924/2009/EC provides that charges for cross-border payments within the Community are the same as those for payments in the same currency within a member state. It further stipulates that all banks in the EU have to be accessible for direct debits as from 1 November 2010.

Work is under way to transpose the European E-Money Directive (2009/110/EC) into Italian legislation. The E-Money Directive amends Directive 2000/46/EC on the prudential supervision of electronic money institutions, which was transposed by the Italian Law 39 of 1 March 2002. This law empowers the Bank of Italy to define prudential supervision requirements regarding the financial stability of such institutions and also to set oversight requirements for e-money instruments and systems. The 2009 Directive introduces a clear definition of electronic money and establishes that e-money institutions may carry, in addition to issuing electronic money, other activities, such as the granting of consumer credit, or operation of payment systems and that these additional business activities are subject to new requirements in terms of capital guarantees.

The legal framework for trading and post-trading infrastructures is governed by the CLFI, which sets out regulations on (i) issuers of securities on regulated markets; (ii) financial intermediaries; and (iii) financial markets and the CSDs.

¹ The zero hour rule provided that any transactions conducted by an insolvent institution after midnight on the date that the institution is declared insolvent are void.

The CLFI assigns the management functions of financial markets to private companies and the supervisory role to public authorities. The privatisation of financial markets and CSDs is specified in the CLFI (see Articles 61, 80 and 204), while the privatisation of settlement systems, particularly SSS and clearing houses, follows from general regulations issued on the basis of the CLFI (see Articles 69 and 70).

The legal framework of CSDs is completed by means of a number of rules on financial instrument dematerialisation established at the start of economic and monetary union. Dematerialisation is compulsory for all government bonds and private listed securities, and also for such financial instruments as may be specified by CONSOB and the Bank of Italy.

1.2 The role of the central bank

The Bank of Italy is entrusted with oversight powers aimed at ensuring the efficient and reliable functioning of the payment system.

In Italy the central bank has traditionally played an important role in the direct provision of payment and settlement services with a view to enhancing the payment system's reliability and stability. The operational role of the Bank of Italy in the payment and securities settlement systems currently entails banknote issuance, the management of TARGET2 and BI-COMP, and the execution of government payments as a fiscal agent.

The Bank of Italy also supervises post-trading infrastructures and those financial and money markets that are relevant for monetary policy, ie the wholesale screen-based market for government securities, Mercato Telematico dei Titoli di Stato (MTS) and the screen-based interbank deposit market (e-MID).

1.2.1 Oversight

As mentioned above, the oversight function is assigned to the Bank of Italy by Article 146 of the 1993 Banking Law (which concerns the oversight of payment systems and implemented by means of framework guidelines issued by the Bank. These guidelines specified the aims of that oversight, setting objectives for reliability (essentially, the prevention of operational and settlement risk) and efficiency (gauged on the basis of the speed and cost of the entire money transfer cycle), covering payment systems, infrastructure services and payment instruments (both traditional and innovative).

Article 146 was reformed by Legislative Decree 11/2010, which transposed the EU Payment Services Directive (Directive 2007/64/EC), into Italian law, for consistency with the Eurosystem's Oversight Policy Framework. The decree extended the objectives of the oversight function to user protection and redefined its scope, attributing to the Bank of Italy the instruments for administrative control and recognising that the Bank of Italy shares the oversight responsibilities on payment system assigned to the Eurosystem.

In line with the framework agreed at Eurosystem level, the Bank of Italy is assigned the lead role in supervising systems and payment instrument schemes legally incorporated in Italy. The Bank reports on its oversight policies, assessments and results to the ECB's Governing Council via the ECB's committee structure.

The Bank of Italy is also responsible for the local features of the TARGET2 system; it monitors the operations and risk exposures of participants that have settlement accounts with Bank of Italy by analysing system data.

The Bank of Italy monitors the compliance of the domestic card payment scheme, Consorzio Bancomat, with the standards of the Eurosystem Oversight framework.² It also participates in the Eurosystem's assessment of the Mastercard and Visa schemes, and in the assessment of TARGET2 and EURO1 compliance with the Core Principles on Systemically Important Payment Systems.

As part of its oversight activities, the Bank of Italy has undertaken various initiatives to promote the use of more innovative payment methods. These include the evaluation of a system for electronic money transfers and the implementation of a payment card anti-fraud scheme. The latter initiative was coordinated by the Ministry of the Economy's means-of-payment Central Anti-Fraud Office.

The Bank of Italy's Market and Payment System Oversight Department has pushed for improvements in the transparency of payment service pricing and in the handling time for cheques and credit transfers. In this context, the Associazione Bancaria Italiana (ABI, the Italian Banking Association) has established the so-called PattiChiari project, through which Italian banks are encouraged to make public their business terms and conditions. Furthermore, a protocol between the ABI and the Italian Manufacturers' Association (Confindustria) has set standards for credit transfers in terms of price transparency and maximum handling time.

The oversight function of the Bank of Italy is involved in the authorisation process for Italian electronic money institutions (for which the Bank's Specialised Intermediaries Supervision Department is primarily responsible). Particular attention is paid to the security aspects of e-money, both at the national and at the Eurosystem level, where the Bank of Italy has contributed to the Electronic Money System Security Objectives (EMSSO) report on the security requirements for e-money schemes.

In 2003, the Bank of Italy issued its "Guidelines for the business continuity of systemically important payment infrastructures" following a consultation with major banking groups, financial market operators and infrastructures. Subsequently, the Committee for Business Continuity (CODISE) co-chaired by the Bank of Italy and CONSOB was set up, with a mandate to guarantee business continuity in the Italian financial markets. The working group involves representatives from leading banking groups and companies that manage infrastructure essential to the orderly working of the financial system.

To enhance its understanding of operational risks in the retail payments sector, in 2009 the Bank of Italy surveyed a significant sample of the Italian banking community on the role played by the technical service providers (TSPs) of financial intermediaries in retail payment systems. The aim was to gain insights into the role of TSPs in the retail payments sector and the perceived risks of outsourcing to them the handling of retail transactions.

The oversight function monitors the operations and risk management capabilities of the two "quasi-clearing and settlement systems" that manage the retail payments of cooperative banks (Istituto Centrale del Credito Cooperativo-ICCREA and Cassa Centrale Raiffeisen). The oversight function participates in the Eurosystem's oversight activity on correspondent banking, which is carried out through a biannual survey that also includes major Italian banks.

² According to the Eurosystem Oversight framework for card payment schemes, each card payment scheme should: have a sound legal basis under all relevant jurisdictions (Standard 1); ensure that comprehensive information, including appropriate information on financial risks, is available to all actors (Standard 2); ensure an adequate degree of security, operational reliability and business continuity (Standard 3); implement effective, accountable and transparent governance arrangements (Standard 4); and manage and contain financial risks in relation to the clearing and settlement process (Standard 5).

In response to the July 2009 initiative of the G8 to lower the cost of remittances sent by immigrants to their home countries, the Bank of Italy, together with the World Bank, supported the launch of a website that allows the prices charged by money transfer companies and other operators to be compared.

According to the CLFI, the Bank of Italy has both regulatory and supervisory responsibilities for infrastructure (ie CSDs, SSS and clearing houses), as well as the authority to carry out on-site inspections and impose penalties. The Bank of Italy also supervises companies that own or manage settlement systems. Finally, with reference to trading infrastructures, the CLFI assigns the Bank of Italy a supervisory role in markets that are relevant to monetary policy (ie MTS, the wholesale screen-based market for government securities, and the screen-based interbank deposit market e-MID).

The Bank of Italy communicates its policy stance for the oversight function by disclosing its intervention plans and methods to market participants (ie financial intermediaries, service providers and market infrastructures). It keeps the public informed of its activities through its Report to Parliament and the Government – which is submitted annually pursuant to Law 262/2005 (as amended by Legislative Decree 303/2006) – as well as through its annual report, economic bulletins and website.

1.2.2 Provision of payment and settlement services

The Bank of Italy's role in payment and securities settlement systems comprises the issuance of banknotes, the management of the pan-European system TARGET2 – jointly with the Deutsche Bundesbank and the Bank of France on behalf of the Eurosystem – the management of the BI-COMP net retail system and the management of government payments as a fiscal agent. The Bank's role as fiscal agent involves the execution of all payment orders issued by central government bodies, and the collection of all amounts due to the central government.

Following the ECB's March 2007 decision to implement a single European facility for securities settlement in central bank money, the Bank of Italy together with the Deutsche Bundesbank, the Bank of Spain, the Bank of France initiated the TARGET2 Securities (T2S) project.

Under the standard terms and conditions of the Eurosystem Reserve Management Services (ERMS), the Bank of Italy provides a gateway for correspondents to access TARGET2; it is also set to develop a number of services for cash and reserves management, securities custody and portfolio management.

1.2.3 Cooperation with other institutions

The oversight activities of the Bank of Italy are often performed in cooperation with other authorities.

As regards relations with other national authorities, the oversight function analyses the payment system market and provides any necessary support to the Antitrust Authority on antitrust issues relating to payment instruments.

At the international level, the Bank of Italy contributes to cooperative oversight of the multi-currency Continuous Linked Settlement (CLS) system for foreign exchange, within the CLS Oversight Committee (OC) which is chaired by the Federal Reserve.

The Bank of Italy also participates in the SWIFT Cooperative Oversight Group (OG), which is the forum through which the G10 central banks and the ECB conduct their oversight of the global provider of financial messaging services.

The Bank of Italy shares its responsibilities for market supervision with CONSOB as regards clearing, guarantee, settlement and central depository systems for financial instruments (the

so-called post-trading infrastructures) and markets relevant to monetary policy. The Bank of Italy has regulatory powers with regard to post-trading that are exercised in agreement with CONSOB.

Following the merger of the Borsa Italiana with the London Stock Exchange Group, the Bank of Italy, jointly with CONSOB, signed a memorandum of understanding with the UK's Financial Services Authority (FSA) that governs the cooperation and the exchange of information between the three authorities.

The Bank of Italy also cooperates with the French supervisory authorities with reference to the link in the Italian secondary government bond market, MTS, between the Cassa Compensazione and Garanzia and the French central counterparty, LCH.Clearnet SA.

1.3 The role of other private and public sector bodies

The main providers of payment services are the banking system, the Italian Post Office and the Bank of Italy. In accordance with the 1993 Banking Law, banking activity consists in deposit collection on a public basis and the granting of credit. It is restricted to credit institutions, which are also authorised to carry out other activities subject to mutual recognition throughout the European Union (under Directive 2000/12/EC of 20 March 2000), notably the issue and management of payment instruments. As a result of merger activities, the number of banks has fallen significantly (from 1,064 in 1990 to 760 in 2010). At the end of 2010, there were 33,640 branches. The number of foreign banks stood at 75, with 296 branches.

Since February 1998, the Post Office has been a private company owned by the Ministry of the Treasury. It plays an important role in the field of retail payments. After growing rapidly in recent years, postal bank payment services now compete with those of the banking system. The bank and postal systems are deeply integrated: postal and bank cheques have been mutually accepted since July 2002, and the Post Office has been involved in low-value credit transfer processing since April 2000. Its banking and financial activities are regulated by Presidential Decree 144 enacted in May 2001, which places the Post Office under the same supervisory regime as banking and financial intermediaries.

According to Article 114–6 of the Banking Law (as amended by the Legislative Decree 11/2010), payment services may also be provided by e-money institutions and the newly defined payment institutions, as well as by traditional banking intermediaries.

1.3.1 The Italian Banking Association

As the banking system's representative body, the ABI is responsible for coordinating interbank agreements and establishing uniform interbank operational and accounting methods. It promotes, in conjunction with the Bank of Italy, the broadest possible participation in interbank initiatives and the dissemination of information. The ABI participates in the SEPA, the migration programme for which is monitored by the Bank of Italy.

1.3.2 The Interbank Convention on Automation

The Interbank Convention on Automation (CIPA) is tasked with planning initiatives for interbank communications systems and applications. It also coordinates the implementation of joint projects, particularly within the payment system. The CIPA comprises the Bank of Italy, which acts as chair and provides the secretariat, the ABI, 69 banks, and 11 other organisations and companies active in the interbank automation field.

1.3.3 National Centre for Information and Communication Technology in the Public Administration

The National Centre for Information and Communication Technology in the Public Administration (Ente nazionale per la digitalizzazione della pubblica amministrazione – Digitpa), works to implement the policy guidelines set out by the Ministry of Innovation and Technology. The Bank of Italy works together with this authority, in accordance with the role assigned to the Bank of Italy by Presidential Decree No 137 of 7 April 2003, in laying down the rules for electronic funds transfers between private parties, between government bodies, and between the latter and the former.

1.3.4 The main interbank service providers

SIA is one of the most important Italian service providers. It provides network services and interbank applications and technological platforms for banking and financial intermediaries and markets. It also provides clearing services for retail payments settled in BI-COMP and handles debit and credit cards. At the beginning of 2000 the Bank of Italy ended its participation in SIA, which in 1999 had merged with CEDBorsa (a software company which managed stock exchange trading systems), thereby consolidating the management of IT systems for market and settlement systems. SIA is also the service provider for the infrastructure of the STEP2 system, which is owned and managed by the European Banking Association (EBA). In 2007 it merged with another infrastructure service provider (SSB), which is active in card processing.

1.3.5 Monte Titoli

Monte Titoli is a company that offers the central custody and administration of transferable securities (shares and bonds), as well as securities settlement services. Since December 2002, Monte Titoli has been part of the Borsa Italiana Group, which merged into the London Stock Exchange Group in 2007.

In 1986, Law no 289/86, governing Monte Titoli's activity in private securities, established that this CSD was the only company authorised to administer private securities. But, from 1998, following the implementation of the CLFI, Monte Titoli was no longer considered to have a monopoly, as the new law invoked the principles of privatisation and liberalisation with a view to increasing competition (see Article 80 of the CLFI).

In August 2000, Monte Titoli was authorised to manage government bonds, which until then had been managed by the Bank of Italy; the actual transfer of government securities from the Bank of Italy to Monte Titoli took place at the end of 2000. Thus, both private and government securities are now managed by a single Italian CSD.

Dematerialisation has increased the importance of the CSD, as title to securities is now authenticated by means of book entry. In October 2000 Monte Titoli was authorised to operate the Express RTGS system, which started operating in parallel with the Liquidazione dei Titoli (LDT) process. However, LDT has since been replaced by the new Express II clearing and settlement system (see Section 4.3.1) introduced by Monte Titoli in January 2004. Monte Titoli also operates the daily matching correction system X-TRM, which manages the matching of transactions and the routing of matched transactions to the settlement services. The X-TRM system also establishes the bilateral balances between the CCPs participating in the SSS (Cassa di Compensazione e Garanzia (CC&G) and LCH.Clearnet; see Section 4.2.2) and their counterparts, and sends these balances to the settlement services.

In August 1998 the ECB included Monte Titoli in the list of securities settlement systems meeting the standards set by the European Monetary Institute (EMI) for the credit operations of the European System of Central Banks (ESCB).

1.3.6 The Cassa di Compensazione e Garanzia

The CC&G acts as a central counterparty. The company is controlled by London Stock Exchange Group. The activity of CC&G, originally restricted to derivative financial instruments, also extends to the stock market, for which a central counterparty is mandatory, and to the markets for Italian government securities, where it is optional.

1.3.7 The Companies and Stock Exchange Commission

CONSOB plays a regulatory and supervisory role in regulated markets other than the wholesale markets for government bonds. It seeks to ensure the transparency of markets, orderly trading and the protection of investors. It is also vested with regulatory and supervisory powers on guarantee, settlement and central depository systems.

In accordance with the CLFI, CONSOB may give authorisation to market management companies that fulfil certain requirements (see Article 63). It also plays a supervisory role in regulated markets and market management companies (see Articles 73 and 74). In the event of serious irregularities in the management of markets or in the administration of management companies, and wherever it is necessary for the protection of investors, CONSOB can adopt extraordinary measures to protect markets and management companies (see Article 75).

1.3.8 The market management companies

Market management companies have a number of regulatory and supervisory responsibilities. In accordance with the CLFI (see Article 64), market management companies must (i) provide the structures and services necessary for the proper functioning of the market; (ii) manage the market from an operational point of view; (iii) be responsible for permitting, precluding or suspending trading for given intermediaries and financial instruments; and (iv) ensure compliance with any rules contained in insider trading laws (eg as regards the registration of operations and the distribution of relevant information subject to public disclosure requirements).

2. Payment media used by non-banks

2.1 Cash payments

Since the introduction of the euro, legal tender in circulation in Italy comprises euro banknotes and coins. At the end of 2010, the amount of cash in circulation as a percentage of GDP was 9.3% (7.2% in 2006). The use of cash is still predominant: it has been estimated that in 2010 cash accounted for about 90% of all micropayments.

At the end of 2010, the ratio of the stock of currency in circulation to M1 was 15% (14% at the end of 2006).

However, the use of cash is on the decline for retail purchases, which is consistent with the spread of payment cards and other electronic means of payment. This trend is confirmed by the Bank of Italy's latest sample survey on Household Income and Wealth (referring to

2010),³ which found that households' average monthly cash outlays had fallen to 44% of their total expenditure, from about 48% in 2006.⁴

2.2 Non-cash payments

In 2010, 66 transactions per capita were made using instruments other than cash (62 in 2006). They were made mainly by means of payment cards and credit transfers (respectively 27 and 20 transactions per capita in 2010; 22 and 18 in 2006), with an average value of around EUR 79 and EUR 6,000, respectively. Payment cards account for 40% of the total payments executed using instruments other than cash, showing an increase in recent years (from 35% in 2006).

The diffusion of payment instruments is quite diverse at a regional level: in southern Italy cards are much less used than in the north (16 versus 37 transactions per capita in 2010).

According to the above-mentioned sample survey on Household Income and Wealth, about 85% of Italian households have a current account. Again, this average figure conceals a considerable gap between northern (96%) and southern Italy (67%).

2.2.1 Non-cash payment instruments

2.2.1.1 Credit transfers

In Italy, credit transfers are one of the most popular payment methods. They are widely used for retail transactions (eg the direct crediting of wages, salaries and pensions). In 2010, credit transfers amounted to EUR 7,938 billion (6,222 billion in 2006) in total value, with the number of transactions reaching 1,227 million (1,070 million in 2006).

Credit transfers are settled via two channels, BI-COMP and STEP2.

BI-COMP settles credit transfers with a value of less than EUR 500,000 through its retail subsystem; transactions with a value of more than that threshold are settled through TARGET2. Through BI-COMP, clearing system participants clear their credit and debit positions and transmit any outstanding multilateral balance to the TARGET2 system for settlement (see Section 3).

The BI-COMP clearing system manages domestic and SEPA credit transfers (SCTs). In 2010, some 6.3 million SEPA credit transfers were settled through BI-COMP, representing 1.7% of the total handled by the clearing and settlement system. This figure includes credit transfers transmitted by BI-COMP to the two mechanisms with which it has interoperability arrangements (Equens in the Netherlands and STEP.AT in Austria).

In 2010, STEP2, the pan-European automated clearing house (PE-ACH) for bulk payments in euros, settled 72% of the SCTs ordered by Italian banks. STEP2 processes credit transfers that comply with the convention on credit transfers in euros, ie retail payments of up to EUR 50,000 per transaction.

Convergence on the new SEPA pan-European standards, which began in January 2008 for credit transfers, is proceeding slowly, but there have been some encouraging signs: in Italy, in 2010 the pace of migration to the SEPA-standard credit transfer (SCT) accelerated from 1% in 2009 to 6%.

³ See Bank of Italy, *Household Income and Wealth in 2010, Supplement to the Statistical Bulletin*, Rome, 25 January 2012.

⁴ The cash portion of household consumer spending is highest in the south, among the less-educated and in poorer households.

2.2.1.2 Collection orders (direct debits and bank receipts)

Collection orders are executed by banks. They are originated by creditors and may be executed by debtors via various payment methods: direct debits are carried out by means of pre-authorised debits of payers' current accounts; collections of bank receipts are executed through other payment methods.

Direct debits are used mainly by firms and families to collect recurrent low-value payments (eg utility bills). In 2010, 593 million direct debits were made (480 million in 2006) for a total value of EUR 365 billion (EUR 299 billion in 2006).

Bank receipts used by firms to collect trade and other credits are processed via an electronic bank process (*Ricevuta Bancaria* or RIBA).⁵ RIBA's share of total collection order transactions fell from 39% in 2006 to 28% in 2010.

The new SEPA direct debit schemes (SEPA Direct Debit) became operational in November 2009. From November 2010, they have been effectively mandatory for all institutions already offering similar domestic debit services.

2.2.1.3 Bank cheques and banker's drafts

The number of cheque transactions has fallen significantly in recent years. In 2010, 315 million cheque transactions were cleared (453 million in 2006), with a total value of EUR 842 billion (EUR 1,191 billion in 2006). From 2009 to 2010, the number of cheque transactions and their corresponding value decreased by a respective 6% and 7%. In 2010, cheques accounted for 8% of the total value of cashless transactions (14% in 2006). The marked decline is explained by the restrictions on cheque usage that were introduced by decree in 2008 to counter money-laundering. Since 2008, cheques must now be non-negotiable, except in a few cases such as the option, if formally requested, of using a bank draft for amounts of less than EUR 5,000.

Low-value cheques (of up to EUR 5,000) and bank drafts are cleared through a truncation process based on electronic interbank messages in place of physical delivery. The BI-COMP local clearing subsystem clears paper-based cheques.

In addition, the Bank of Italy also issues cashier's cheques for amounts of between EUR 500 and EUR 500,000, against cash payments for the corresponding amount. This instrument is also used for certain non-recurring payments carried out by the central bank on behalf of public entities (eg tax refunds and severance pay to central government employees).

The use of such methods has declined with the increasing use of electronic payment orders to make government payments. The electronic order process was launched in 1999 with the aim of promoting the use of credit transfers to make government payments while cutting down on paper-based documentation. In 2010, about 98% of all government payments were made electronically. In the same year, the Bank of Italy issued around 315,000 cashier's cheques (compared with about 514,000 in 2006) for a total value of EUR 3,106 million (EUR 6,511 million in 2006).

2.2.1.4 Payment cards

Efforts to promote the use of secure chip technology in payment cards accelerated in 2009 and in 2010. More than half the cards in circulation in Italy and about 85% of the country's ATM and POS terminals now comply with the standard. The replacement of magnetic stripe

⁵ From a statistical point of view the RIBA is classified under "other payments" in the ECB statistics since it does not represent a typical credit transfer or direct debit; the RIBA is a payment initiated by the payee without a preauthorisation under a payer's mandate.

with chip technology has helped significantly in combating fraud, as have effective preventive measures by intermediaries and special incentives for operators. Intelligent pricing by intermediaries can also encourage the wider take-up of electronic payment methods. In Italy, as elsewhere, payment card fees have come down in recent years.

Debit cards

In 2010, about 37 million debit cards were in circulation, showing a slight increase over 2006 (1.5%). Almost all these cards can be used to execute both payments and cash withdrawals through the nationwide network of POS terminals and ATMs.

From 2006 to 2010, the number of debit card transactions increased by 14% (from 1,501 million to 1,704 million), thanks to the growing use of debit cards at POS terminals (up by 19%). The number of transactions at POS terminals per card rose from 22 in 2006 to 25 in 2010, while the number of withdrawals from ATMs increased by 8%. At the same time, the average value of each POS terminal transaction fell by 25% (EUR 93 in 2006; EUR 69 in 2010), while the average value of each ATM withdrawal rose slightly (from EUR 168 in 2006 to EUR 180 in 2010).

PagoBANCOMAT and BANCOMAT are the major nationwide debit card networks respectively for POS terminals and for ATMs. These systems provide a common infrastructure and a common set of rules and standards under a single trademark. The BANCOMAT consortium is responsible for organising and operating network facilities.⁶ At the end of 2010, some 568 banks participated in the consortium.

Payments and withdrawals with debit cards are debited to the holder's account almost in real time. This means that holders must have the value of the purchase or the amount of the withdrawal on their account when the debit card is used. ATM transactions are processed through the retail subsystem and settled via BI-COMP.

Credit cards

In 2010, some 34 million credit cards were in use in Italy (31 million in 2006), but only 43% were used at least once over the year (48% in 2006). In 2010, the number of transactions totalled 588 million (475 million in 2006), representing an average of 17 transactions per credit card (15 transactions in 2006).

Despite this recent increase in credit card circulation, credit cards are still less widely used in Italy than in other European countries. More widespread usage is limited by a continuing preference for cash and the use of debit cards at POS terminals.

In 2010, credit card expenditure accounted for 2.2% of per capita GDP, less than half the share held by ATM cash withdrawals (5.5%) and roughly equal to the share held by debit card POS expenditure (2.5%). In addition, even though cards are now accepted at an increasing number of outlets (especially in the retail sector), gaps in coverage persist in various Italian regions. Some retailers continue to be deterred by card commission charges and the work involved in authorising and processing payments.

The major nationwide credit card network (in both the issuer's and the acquirer's markets) is Carta Si SPA with around 800 participating banks. The network is linked to both Visa and Mastercard. A growing number of individual banks have launched proprietary cards directly linked to the international labels.

⁶ In 2008, the former Convention for the Management of the Bancomat Trademark (COGEBAN) became the BANCOMAT consortium. ABI founded COGEBAN in 1985 to foster the use of debit cards in Italy. BANCOMAT manages both the BANCOMAT and PagoBANCOMAT systems and owns the related trademarks.

E-money and card payments over the internet

Online transactions have expanded at very rapid rates in recent years, although they still account for only about 6% of all cashless payments. During 2010 they increased by 24%, which included growth of 24% in online credit transfers, 15% in online transactions using credit cards and 33% in those using pre-paid cards.

The number of prepaid cards in circulation has grown considerably in the last five years (from 4.5 million in 2006 to 12.4 million in 2010). Online transactions via prepaid cards accounted for about half of total prepaid card transactions in 2010.

A survey in 2009 found that a variety of economic agents are interested in the development of mobile payments for small amounts (micropayments). Remote services (via text messaging, for instance, or mobile internet applications) are expected to grow rapidly, as are contactless payment services at a later stage. An additional impetus for the development of such services will come from the eventual transposition of the new EU electronic money directive into national legislation.

2.2.2 Non-cash payment terminals

At the end of 2010, there were 51,360 ATMs (43,820 at the end of 2006) and 1.5 million POS terminals (1.1 million in 2006). In recent years, the annual number of transactions per POS terminal has increased significantly (from 690 in 2006 to 1,083 in 2010), but usage is still limited in comparison with that of other industrialised countries and with the transaction volume of domestic ATMs.

Over 90% of ATMs are interconnected within the nationwide BANCORMAT network. Most POS terminals are linked to the PagoBANCORMAT network. Membership is open to any bank located in Italy that complies with the rules of the BANCORMAT consortium.

2.2.3 Recent developments

The new European regulatory framework on retail payments calls for a strategy to promote the use of cashless instruments and displace the use of cash, which continues to be a favoured medium of payment.

The Bank of Italy, together with the banking and financial community, is making special efforts in this direction. To this end, the Bank of Italy launched a survey on the costs of retail payments in 2009 with the aim of enhancing the general understanding of the cost efficiency of different payment instruments.

The transposition of the Payment Services Directive (PSD) into Italian law broadened, among other things, the range of entities (payment institutions) authorised to provide payment services in addition to the traditional intermediaries (banks and electronic money institutions). It also harmonised the rules for all payment services, speeding up the adoption of SEPA payment instruments (ie SEPA credit transfers and SEPA direct debits).

The SEPA project, launched in 2002 at the initiative of European banks, will increase the efficiency of payments within the EU and foster innovation. The migration to SEPA involves a wide range of participants: central banks, commercial banks, public administration, firms and consumers.⁷

⁷ The National SEPA Migration Committee is an ad-hoc organisation established in 2007 to guide and monitor the implementation of SEPA. Co-chaired by the Italian Bankers' Association (ABI) and the Bank of Italy, it includes representatives from the main categories of final users of payment instruments (corporates, public administration, merchants and consumers).

The Bank of Italy, in cooperation with ABI, is already disseminating information on the implications of SEPA for the domestic payments system. As the provider of treasury services to the Italian government, the Bank of Italy is working with the Ministry of the Economy to adapt public payments to European standards. The first initiatives were taken in January 2008.

An additional boost to the automation of payment cycles has come from measures by the Italian government to bar public entities from accepting paper-based invoices. This move will also encourage government departments to use IT more intensively, as well as promote accounting transparency and up-to-date business practices.

2.2.4 Interchange fee regulation

The European regulatory framework established by the PSD brings important changes to the regulation of national interchange fees. The transposition into national law of the PSD provisions on surcharging has resulted in a ban on surcharges. As stated by the Directive, the ban was introduced in order to take “into account the need to encourage competition and promote the use of efficient payment instruments”.⁸

3. Payment systems (funds transfer systems)

3.1 General overview

Following two far-reaching reforms implemented in the 1980s and 1990s with a view to promoting settlement in central bank money by reducing recourse to correspondent accounts, boosting the efficiency of payment instruments and mitigating systemic risk, the Italian interbank payment system comprises two specialised systems: an RTGS system for large-value payments and a net system, BI-COMP, for retail transactions.

The first RTGS system, known as BI-REL, went live in 1997, with the aim of reducing systemic risk; in 1999 BI-REL became the Italian component of TARGET, the Eurosystem’s large-value gross settlement system. A second-generation version of BI-REL – designed for more efficient and economical management of intraday liquidity – was launched in 2003. Finally, in 2008, the BI-REL system was replaced by TARGET2, the second-generation iteration of TARGET.

Following the launch of the SEPA, the BI-COMP net retail settlement system was made interoperable with other clearing systems across borders so that it could handle pan-European credit transfers and direct debits.

3.2 Large-value payment systems

Please refer to the descriptive Red Book chapter on the euro area.

⁸ According to the PSD, “In order to promote transparency and competition, the payment service provider should not prevent the payee from requesting a charge from the payer for using a specific payment instrument. While the payee should be free to levy charges for the use of a certain payment instrument, Member States may decide whether they forbid or limit any such practice where, in their view, this may be warranted in view of abusive pricing or pricing which may have a negative impact on the use of a certain payment instrument taking into account the need to encourage competition and the use of efficient payment instruments.”

3.3 Retail payment systems

3.3.1 Institutional framework

The Bank of Italy manages the multilateral clearing and settlement component (BI-COMP) of the Italian retail payment system, which enables settlement in central bank money of euro retail payments using both electronic and paper-based instruments. The BI-COMP system consists of the local clearing and the retail subsystems and of the National Clearing Process. The local clearing subsystem performs the multilateral clearing of paper-based payments. The retail subsystem performs the multilateral clearing of electronic payments handled in an interbank process. The multilateral balances of each participant in the two subsystems are transmitted to the National Clearing process and contribute to the overall national multilateral balance, which is submitted for settlement in TARGET2. In 2010, the BI-COMP system settled 2 billion payments with a total value of about EUR 3,000 billion.

The current regulatory framework for the clearing and settlement of low-value electronic payments in Italy, which in 2010 represented 97.5% of the total retail payments in BI-COMP, is set out in a Provision of the Governor of Bank of Italy of November 2005. On this basis, “Assigned operators” conduct the activities preparatory to the multilateral clearing of electronic payments, while the operating activities of Bank of Italy are limited to calculating the multilateral clearing balances and their transmission for settlement in TARGET2. From a European perspective the Italian retail payment system can be regarded as a clearing and settlement mechanism (CSM) featuring the joint conduct of clearing and settlement activities by two different entities, namely (i) the “assigned operator” in charge of the clearing phase (CM); and (ii) the Bank of Italy (BI-COMP) which is responsible for the settlement phase (SM). At present there are three CSMs in Italy: SIASSB-BICOMP, ICBPI-BICOMP and ICCREA-BICOMP.

In compliance with the SEPA requirements⁹ for infrastructures, the multilateral CSM ICBPI-BICOMP is able to interact – according to the EACHA¹⁰ model – with other infrastructures processing retail payments in the euro area. At present, the system is linked with the Austrian STEP.AT system and the Netherlands’ EQUENS-SE. In 2010, some 313,000 payments with a value of EUR 1.8 billion were processed through these links. The Bank of Italy also offers an intermediation service to the STEP2 system managed by EBA Clearing so that SEPA cross-border payments can be executed with participants in that system.

3.3.2 Participation

The following entities can participate in BI-COMP: central banks, domestic and foreign banks, technical infrastructures providing clearing and/or settlement services, treasuries or equivalent bodies of central and/or regional governments of EU member states or public sector bodies.

3.3.3 Types of transaction

The local clearing subsystem handles paper-based transactions between participants, such as bills of exchange, money orders, cashier’s cheques, bank cheques, postal cheques, invoices, receipts and market paper. In 2010, the local clearing subsystem handled 51 million paper-based transactions with a total value of about EUR 1.5 billion. The retail subsystem

⁹ The four criteria set out by the Eurosystem for the SEPA compliance of infrastructures are: processing capability, interoperability, accessibility and choice for banks (Fifth Progress Report on SEPA, 20 July 2007).

¹⁰ The European Automated Clearing House Association, which has set technical standards for CSM interconnection.

handles electronic operations that include a set of specific and standardised (interbank) processes for different payment types. These include national and SEPA credit transfers,¹¹ national and SEPA direct debits¹² (Core and B2B), debit card operations (ATM and POS) and cheque truncations. In 2010, the retail subsystem handled 1.9 billion payments with a total value of about EUR 2.7 billion.

3.3.4 Operation of the system and settlement process

For paper-based payments, the physical exchange of the documents (items) takes place in the Rome and Milan clearing houses. The accounting information is sent via the national interbank network, the Rete Nazionale Interbancaria (RNI), to the local clearing subsystem for the multilateral balance of each participant to be determined. Payments that do not entail the physical exchange of documents are submitted to the electronic interbank process. The CMs calculate for each process and each participant the net bilateral balances and send this information – via RNI – to the retail subsystem in which the multilateral balance is calculated and then transmitted to the National Clearing Process. In the National Clearing Process, the retail subsystem multilateral balance is added to the local clearing subsystem multilateral balance so that a final position for settlement in TARGET2 can be determined for each participant.

3.3.5 Risk management

BI-COMP is compliant with the ESCB's security standards for retail payment systems. In the event of a participant default, an unwinding process is activated that proceeds from the calculation of bilateral balances. The process then isolates and removes the positions of the defaulting participant and calculates new bilateral balances *vis-à-vis* all other participants in order to allow settlement. To discourage delays in the settlement of the clearing systems, any participant (bank) that cannot settle its multilateral balances on time is penalised (if settlement is delayed by more than 10 minutes).

3.3.6 Pricing

The annual fee paid by direct participants for BI-COMP's settlement service is calculated on the cost recovery principle. In addition, a unit fee is charged for each paper-based item presented to the local clearing subsystem. As regards clearing services provided by assigned operators, the fee structure usually varies according to the type of payment instrument used and is published on each operator's website.

3.3.7 Major ongoing and future projects

The Bank of Italy continues to conform the retail payments system to the Eurosystem requirements for SEPA infrastructures. In addition, the Bank of Italy is at the planning stage for the Centro Applicativo Banca d'Italia (CABI) project, which will allow the Bank to execute all the activities preparatory to the clearing of electronic payments. In effect, this will give the Bank of Italy the capability to operate a CSM in its own right. CABI should start operations by the end of 2011.

¹¹ Since 28 January 2008.

¹² Since 1 November 2009.

4. Systems for post-trade processing, clearing and securities settlement

4.1 General overview

As the CSD through which title to securities is transferred by book entry to the accounts of market participants, the Monte Titoli is responsible for the overall efficiency of the clearing and settlement systems and hence of the Italian securities market.

Trades pending settlement may be backed by a guarantee of final settlement provided by a central counterparty, the Cassa Compensazione e Garanzia (CC&G), at the time of the original transaction.

The Express II securities settlement system provides settlement services on either a gross (transaction by transaction) or net basis (settlement of the balance resulting from the clearing of transactions).

4.2 Post-trade processing systems: Monte Titoli's X-TRM

4.2.1 Institutional framework

Trade confirmation systems are governed by a general regulation issued by the Bank of Italy with the agreement of CONSOB (see the legal provision of 24 December 2010 on the clearing and settlement of transactions involving non-derivative instruments under the CLFI Article 69).

The only trade confirmation system currently in operation in Italy is the X-TRM system, operated by Monte Titoli. This system daily matches and routes both exchange-traded and OTC transactions to central counterparties (CCPs) and settlement services.

4.2.2 Participation

Participation requirements are set out by the relevant security settlement system and/or by the relevant CCP guarantee system. With respect to Italian systems, see Sections 4.3.1.2 and 4.4.1.2 below.

4.2.3 Types of transaction

The X-TRM system manages a wide range of post-trade activities, including the management of settlement instructions, the enhancement and validation of settlement information, the calculation of net balances, the routing of settlement instructions, the management of corporate actions on failing trades and full reporting. The X-TRM system also establishes the bilateral balances between CC&G and LCH.Clearnet SA, the two CCPs participating in the security settlement system, and their counterparties, and sends this information to the settlement services. As part of the London Stock Exchange Group since 2007, Monte Titoli has extended its X-TRM process for matching and addressing contracts to the London Stock Exchange's International Order Book segment and its Electronic Order Book for the UK Retail Bond Market segment.

4.2.4 Operation of the system

The X-TRM system manages the submission of contracts for settlement, on the schedules agreed by intermediaries.

The X-TRM system is available on TARGET business days. Its operating times take into account the operating times of the other systems with which it interacts, ie:

- the gross and the net security settlement system;
- the gross cash settlement system (TARGET2).

Transactions subject to deferred settlement may be matched and routed throughout the X-TRM system's business day (07:00–22:30) and transmitted in the early hours of the settlement day. Transactions subject to immediate settlement are immediately matched and routed by the X-TRM system and transmitted before the settlement system's closing time.

For contracts already in the X-TRM system, the transactions to be cleared are batch-processed on the night before the clearing date. Contracts entered in the X-TRM system with a settlement date on the following day are executed up until the X-TRM system's cut-off time.

The X-TRM system sends instructions to the Express II net settlement process in the form of (i) individual contracts; (ii) bilateral balances from the netting process and forwarded to the X-TRM system; and (iii) bilateral balances from the aggregation of contracts via the intermediation of a CCP, which are automatically calculated by the X-TRM system. This latter process determines the net securities-cash exposure for each participant against the CCP and the general clearing member, as applicable.

Fails and transactions not settled at the end of the Express II net security settlement daytime cycle are transmitted to the X-TRM system and forwarded to the gross settlement process.

The X-TRM system also sends settlement instructions on exchange-traded and OTC transactions to systems other than Express II, currently Euroclear Bank and Clearstream Luxembourg. Intermediaries can execute trades through a foreign settlement system in which they may or may not participate. In the latter case, the settlement is possible through the bridge connecting the two foreign settlement systems.

Participants pay an admission fee on joining and then unit fees on each transaction automatically acquired or manually entered (or cancelled) for matching and routing for domestic settlement. Transactions processed for settlement abroad are subject to additional fees to cover SWIFT charges.

4.3 Central counterparties and clearing systems: the Cassa di Compensazione e Garanzia

4.3.1 Institutional framework

The general framework for guarantee systems is established by a general regulation issued by the Bank of Italy, with the agreement of CONSOB (see the legal provision of 24 December 2010 on the guarantee systems for transactions involving financial instruments under Articles 68, 69.2 and 70 of the CLFI). The operating rules of the clearing house are approved by the Bank of Italy in agreement with CONSOB after verification that:

- the clearing house fulfils certain requirements (a minimum capital level, as well as rules on accounting and organisational segregation); and
- the company's operational rules comply with official regulations and will assure the system's efficiency, soundness and stability.

The approval of managerial appointments at the clearing house is subject to legal and professional requirements that are set by the Ministry of the Economy and Finance.

Regulation on clearing house services covers risk containment measures, such as the collection of initial margins and, where necessary, intraday margins, as well as the monitoring of members' daily exposures.

CC&G manages the CCP guarantee system in Italy. The CC&G is a company owned by Borsa Italiana and since 2007, after the acquisition by the London Stock Exchange, has formed part of the London Stock Exchange Group.

4.3.2 Participation

The CC&G's operating rules provide for membership as either a clearing or a non-clearing member.

A clearing member becomes a counterparty to the CC&G. Clearing members are either individual (ICMs) or general clearing members (GCMs). ICMs may clear their own and customers' transactions, whereas GCMs, in addition to proprietary and customer transactions, also clear the contracts of non-clearing members. A non-clearing member (NCM) does not become a CC&G counterparty.

NCMs must be market members and must sign an agreement with a GCM. It is possible for both resident and non-resident institutions to become members of the CC&G. Members include:

- EU and non-EU banks and investment firms authorised to provide investment services in Italy;
- banks and investment firms that provide investment services in Italy subject to mutual recognition;
- other members of the markets guaranteed by the CC&G which, as NCMs, have signed an agreement with a GCM; and
- other entities, such as the Ministry of the Economy and Finance and legal persons, including non-Italian entities, that manage other central counterparty guarantee systems (as special clearing members).

In the course of 2009, the total number of clearing members was 144. At the end of 2009 the Italian Derivatives Market IDEM derivatives segment had 80 participants, the MTA electronic share market 115, the bond segment 21 and IDEX, the Italian derivatives energy exchange and energy futures market 22.

4.3.3 Types of transaction

The CC&G acts as CCP for: (i) the equity and derivatives markets operated by Borsa Italiana; and (ii) the markets regulated and managed by MTS SpA and BrokerTec (exclusively for Italian government bonds).

In 2009, the CC&G introduced a function in IDEX that allows traders to take physical delivery in lieu of cash settlement of the price difference at the expiry of futures contracts.

4.3.4 Operation of the system

The CC&G takes on the counterparty risk from the moment of contract execution, acting as the buyer to every seller and as the seller to every buyer, and guaranteeing final settlement.

The CC&G's activities include forcible execution of contracts that are not settled for lack of securities (buy-ins) or for lack of liquidity (sell-outs) to guarantee the successful completion of transactions when they reach the expiry date set by the market.

4.3.5 Risk management

The CC&G's risk management system is based on multiple levels of protection, which include margins, three default funds and capital requirements for members.

The CC&G monitors clearing members' positions in real time. Initial margins are called on a daily basis to cover the liquidation costs that the CC&G would incur in the event of a member's default if it were forced to close the open positions in the worst possible market scenario, within a maximum price variation range known as the "margin interval". The margin interval, specific for each financial instrument, is periodically reviewed.

Initial margins can be placed in cash (euros) or in euro-denominated securities, which can be MTS-traded Italian, French or German government bonds. Government bonds are marked to market daily at the weighted average MTS market price. Italian government bonds deposited as collateral are grouped in classes of haircut based on their duration; French and German government bonds are grouped according to their time to maturity.

Intraday margins are called by CC&G in the event of sudden sharp price variations or a member's excessive overall risk exposure. Intraday margin is calculated according to the same methodology as the initial margin. Intraday margins must also be deposited in cash (in euros).

The central counterparty service for MTS, provided jointly with LCH.Clearnet SA, contributed about 30% of total margins deposited in 2009. In November 2009, the service was extended to overnight repos, which raised the share of MTS margins in the total to about 50% at the end of the year.

Three default funds exist: one each for the equities and derivatives markets, the energy derivatives market, and the bond market. These cover risks associated with exceptional price/interest rate movements. While margins are intended to cover the risk under normal market conditions, the default funds cover the risk under extreme conditions.

In addition to the above risk control measures, the CC&G specifies financial and operational requirements for its members. The financial requirements are set according to the markets cleared. As far as general clearing members are concerned, capital requirements also depend on the number of non-clearing members they represent.

4.3.6 Links to other systems

The CC&G, LCH.Clearnet SA and MTS SpA agreed in December 2002 to establish a CCP service for Italian government bond transactions executed on MTS Italy and EuroMTS. The service has since been extended to cover BrokerTec.

That agreement states that the use of a CCP by market members is not mandatory. Participants in the MTS and EuroMTS markets can choose between the CC&G's services and those of LCH.Clearnet. In order to give effect to this right of choice, the two CCPs are linked: each CCP is a general clearing member of the other. Both CCPs use the same methods for calculating margins and capital requirements for membership.

In July 2009, the CC&G was granted "recognised overseas clearing house" status by the Financial Services Authority, a prerequisite for performing post-trading services in the United Kingdom.

Since 2010, the CC&G has also provided IT outsourcing for LCH.Clearnet Ltd, the UK central counterparty for the EDX share and bond derivatives exchange of the London Stock Exchange Group.

4.3.7 Pricing

Participants pay an annual membership fee as well as monthly fees on the average daily value of securities deposited as collateral.

A clearing fee is charged for each lot cleared. This fee varies according to the type of contract. Exercise/assignment fees, delivery fees for derivatives, account transfer and account keeping fees are also charged together with periodic fees for margin calculation and the infrastructure used. Additional charges apply to specific events or services (eg fails, buy-ins, historical reporting).

4.4 Securities settlement systems (SSS): Monte Titoli's Express II

4.4.1 Institutional framework

Monte Titoli is a company offering the central custody and administration of transferable securities (shares and bonds), as well as securities settlement services.

Since December 2002, Monte Titoli has been part of the Borsa Italiana Group. After the 2007 merger of Borsa Italiana and the London Stock Exchange, Monte Titoli has been part of the London Stock Exchange Group.

In August 2000, Monte Titoli was authorised by the Italian Ministry of Economy and Finance to manage government bonds, which until then had been managed by the Bank of Italy. The actual transfer of government securities from the Bank of Italy to Monte Titoli took place at the end of 2000. Thus, a single Italian CSD now manages both private and government securities.

Dematerialisation has increased the CSD's importance, as title to securities is now authenticated by means of book entry.

Securities settlement systems are governed by a general regulation issued by the Bank of Italy with the agreement of CONSOB (see the legal provision of 24 December 2010 on the clearing and settlement of transactions involving non-derivative instruments under Article 69 of the CLFI).

In August 1998, the ECB included Monte Titoli in the list of securities settlement systems meeting the standards set by the European Monetary Institute (EMI) for the ESCB's credit operations.

In October 2000, Monte Titoli received authorisation to operate the Express RTGS system, which was upgraded into the Express II system in January 2004.

4.4.2 Participation

A general regulation issued by the Bank of Italy with the agreement of CONSOB establishes categories of participants in the CSD services. Access to settlement services is regulated in Monte Titoli's operating rules, which are issued by and approved by the Bank of Italy in agreement with CONSOB.

Access to the settlement system is restricted to banks and investment firms authorised to provide investment services in Italy (or are permitted to provide such services subject to mutual recognition), asset management companies, other financial intermediaries, Italian stockbrokers, CSDs and other institutions that operate SSS or netting and guarantee systems, and some public entities.

Foreign participants may access the system remotely. In particular, a foreign institution which acts as a CSD or as the operator of an SSS or a guarantee system may participate in the Italian SSS on a remote basis, provided it fulfils the following requirements: (i) it is subject to supervisory measures equivalent to those in force in Italy; and (ii) there is an agreement between the supervisory authorities of Italy and those of the foreign institution's home country concerning the exchange of information and reciprocity.

Participants may clear and settle securities transactions both on their own account and on behalf of other authorised intermediaries. Moreover, participants may either settle their cash positions directly on their TARGET2 accounts or appoint a TARGET2 bank to settle for them.

In December 2009, Monte Titoli had 2,494 members and 2,197 issuers. At the same date, the security settlement system had 112 participants.

4.4.3 Types of transaction

Express II clears and settles the following types of market and OTC transactions:

- outright transactions and repos involving Italian government securities carried out on MTS;
- stock exchange transactions involving equities, corporate bonds and Italian government securities;
- outright and repo transactions involving listed and unlisted securities carried out over the counter; and
- monetary policy operations (in the real-time gross settlement process).

4.4.4 Operation of the system and cash leg process

The Express II system combines the real-time gross settlement process with net settlement functionalities in a single environment. Both the RTGS and net settlement operate on the DVP basis, whereby the cash and securities are settled simultaneously.

The real-time gross settlement process settles, on a gross basis, what is left of the net batches, as well as any transactions submitted to the system by participants.

The settlement process of the securities leg is carried out as follows:

- for every transaction, the system checks the securities account balance of the seller, reserves the securities and sends information to TARGET2 for the cash settlement; and
- if the securities are not available on the seller's account, the system starts the queue management process. Queued transactions are periodically processed in the following order of priority: monetary policy operations; priority input by the intermediary; matching time (FIFO); and stock-building on the seller's securities account (FAFO).

The settlement stages of the cash leg are as follows:

- TARGET2 checks the cash account balance of the buyer, settles the cash leg and sends information to the SSS, which settles the securities leg using the reserved securities; and
- if funds in the cash account are not available, payments are queued.

Transactions concluded on regulated markets are always sent to the net component of Express II and are settled on a rolling basis (T+3 for outright transactions, while for repo transactions the settlement lags are as follows: T+0 for overnight transactions; T+1 for "tomorrow next" transactions; and T+2 for all other transactions). In 1999, the option to settle with same-day value (T+0) was introduced for repo transactions involving government securities ("overnight repo"). The time lag for same-day settlement has now been extended owing to the RTGS component of Express II.

Transactions concluded on the OTC market can be sent either to the net settlement component or to the RTGS component and are settled with the settlement lag agreed between the parties.

Express II has two net settlement batches: an overnight batch and a daylight batch.

The net settlement process is activated only if cash and securities are available. The intermediaries advise the quantity of cash to be reserved for the overnight cycle to the TARGET2 system by indicating the maximum amount to be set aside as reserve (this may have a "default" value or may be specified each time). This instruction is sent to the

TARGET2 system by the participants directly at the time of their admission and may be subsequently varied.

If the participant does not have sufficient securities or cash and is not eligible for securities lending or intraday liquidity, the transaction will be excluded from the netting batch. The transaction will be excluded during the optimisation process on the basis of an algorithm that identifies the maximum amount of transactions that can be settled taking into account the securities and cash on hand.

During the overnight cycle, the liquidity reserve can be increased by the amounts resulting from coupons and redemptions of government securities and, if necessary, by the granting of additional automatically collateralised intraday liquidity. Self-collateralisation allows the securities deriving from the settlement process to be used as collateral for the liquidity obtained from intra-day advance facilities. The self-collateralisation process is based on the profiles sent by payers at the time of firm collateralisation.

Having established the availability of securities and cash, the cash multilateral net balances resulting from the overnight clearing process are settled through TARGET2 at the start of the business day; simultaneously the securities multilateral net balances resulting from the overnight clearing process are settled in the CSD's accounts. Transactions that are not covered by the securities or cash are set aside and placed in the subsequent daylight net settlement batch; if there is still a shortage of securities and/or cash, the transactions will be forwarded to the RTGS component.

At the end of 2009, the face value of instruments in custody amounted to EUR 2,537 billion and their market value to EUR 2,825 billion. At the same date, the volume of payments amounted to more than 106,000 a day with a total value of EUR 178 billion.

4.4.5 Risk management

A regulation issued by the Bank of Italy with the agreement of CONSOB establishes general risk management criteria for securities settlement.

Specific risk management measures must be adopted, such as intraday finality, a queuing mechanism, and a reduction in the time between the collection of data on transactions and the settlement of those transactions. Minimum requirements for risk containment and settlement finality must also be met. Moreover, operating hours must be consistent with those of TARGET2.

The Express II process and the CDS's account structure allow intermediaries' proprietary positions to be completely segregated from those of their customers. It also allows settlement banks to manage the securities positions of each of their institutional customers separately, thus avoiding the risk of commingling.

Monte Titoli participants may also settle their cash positions indirectly, through a settling bank; Express II offers cap management mechanisms to settling banks to help them keep their funds exposure under control.

4.4.6 Links to other systems

The settlement of securities takes place by book entry on the securities accounts held by participants at Monte Titoli, and the settlement of cash is carried out in central bank money through a real-time link to the TARGET2 system.

4.4.7 Pricing

Fees are charged individually on market or OTC transactions sent to the overnight net settlement batch, as well as on bilateral balances, whether or not these are guaranteed by a CCP. Higher fees are charged on transactions that fail the overnight settlement and go to the

daylight net settlement batch. Additional fees are charged on the multilateral cash balances for settlement in the TARGET2 system.

Fees are charged individually on OTC and exchange-traded transactions sent to the real-time gross settlement process, for both the security leg and the cash leg. Additional fees are charged for recovering SWIFT messaging costs.

4.5 Use of securities infrastructure by the central bank

Until July 2010 the Express II real-time gross settlement process was used to settle monetary policy operations.

Since then, a system operated by the Bank of Italy has allowed intermediaries that access the Eurosystem (for monetary policy operations and intraday credit operations) to collateralise the loans they receive with securities and other assets held at just one account (a so-called pool account) at the Bank of Italy.

Intermediaries can credit their pool accounts, either directly or through a designated agent, with: (i) securities held at or transferred to Monte Titoli's accounts through a system of ECB-approved links between CSDs; (ii) securities held on accounts with Eurosystem national central banks and transferred through the CCBM system; and (iii) bank loans.

The Bank of Italy monitors the valuation of the pledged assets on a daily basis according to the criteria set by the Eurosystem (market value net of haircuts).