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OVERSIGHT AND SUPERVISION OF MARKET INFRASTRUCTURES

Financial market infrastructures are a key component of the financial system, as most trade and financial transactions are cleared, settled and registered through them. Given their importance, the smooth operation of these infrastructures is a specific focus area for central banks, which justifies their supervisory and oversight role.

5.1 Oversight of payment systems and instruments

Payment systems provide essential services to the real economy, offering efficient mechanisms for the payment of any purchase of goods or services. Ensuring the smooth operation of payment systems has traditionally been the responsibility of central banks through their oversight function. This function extends to payment instruments, a key component of payment systems, as they enable end-users to transfer funds. Against this backdrop, the Banco de España is entrusted with overseeing the functioning of clearing and payment systems under Article 16 of Law 13/1994 of 1 June 1994 of Autonomy of the Banco de España.

Oversight is also one of the core functions assigned to the Eurosystem, of which the Banco de España is a member. This function is performed cooperatively, applying uniform criteria based on its oversight policy framework.

5.1.1 Payment systems

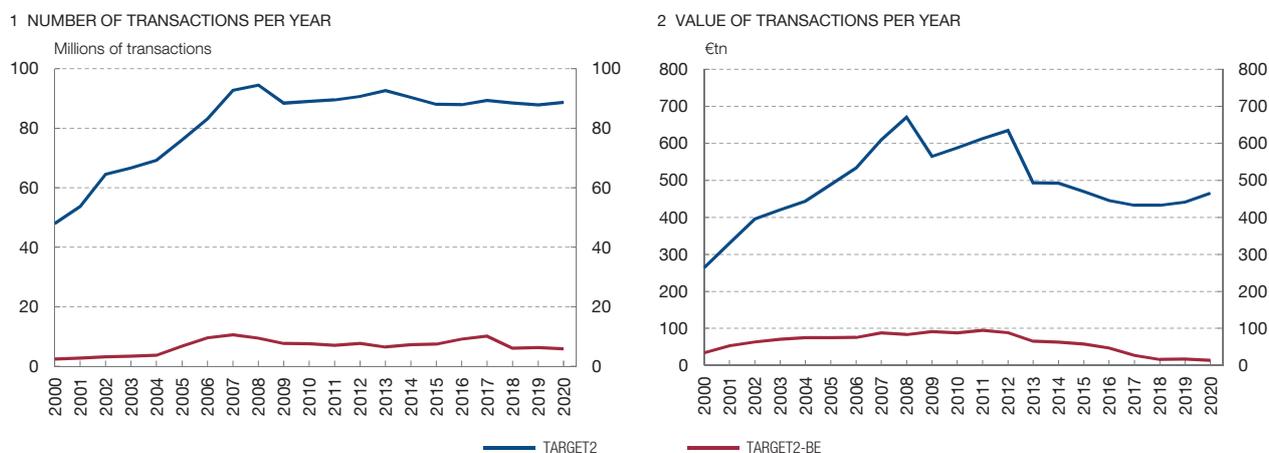
Within the Eurosystem's cooperative oversight arrangements, the Bank participates in the oversight of the real-time gross settlement system TARGET2, operated by the national central banks of the euro area countries and identified as a systemically important payment system (SIPS). The ECB coordinates these tasks and has primary responsibility for the ongoing oversight of the overall system. The majority of TARGET2 oversight activities are focused on the technical platform shared by the central banks using the system. Each central bank also monitors the specific aspects of its national component. In 2020 the Spanish component of TARGET2 processed a total of 5.9 million transactions, equivalent to a daily average of 23,000 transactions (see Chart 5.1).

The Banco de España also participates in the cooperative oversight of the other pan-European SIPSs, specifically EURO1 (large-value payment system), STEP2 (retail payment system) and RT1 (instant payment system), all of which are operated by EBA Clearing and for which the primary overseer is also the ECB, as well as Mastercard

Chart 5.1

OVERVIEW OF TARGET2 AND TARGET2-BE OPERATION

In 2020 the TARGET2-BE component represented 6.6% of the number of transactions processed in TARGET2 and 3% of the total value of the transactions.



SOURCE: Banco de España.

Clearing and Management System, operated by Mastercard Europe, whose oversight is jointly led by the ECB and the NBB and which was identified as a SIPS in May 2020.

The assessment of the degree of compliance of TARGET2, EURO1 and STEP2 with the new requirements introduced in the SIPS Regulation in 2018¹ continued in 2020. This Regulation also refers to the Eurosystem’s cyber resilience oversight expectations (CROE) for financial market infrastructures.

Also, as part of the Eurosystem’s implementation of the Committee on Payments and Market Infrastructures (CPMI) strategy on reducing the risk of wholesale payments fraud related to endpoint security, a follow-up has been conducted of the EURO1 and TARGET2 security measures, with a view to fostering steps to reinforce them, if necessary.

Several major TARGET2 incidents occurred in 2020 that caused a total system outage. These included most notably one on 11 August, which lasted six hours and was due to a technical problem, and another on 23 October, lasting 11 hours, owing to a software defect in an external provider. The ECB is analysing the operator’s management of the incidents and has initiated an independent review of the business continuity model, the regular recovery tests, the change management procedures and the communication protocols.

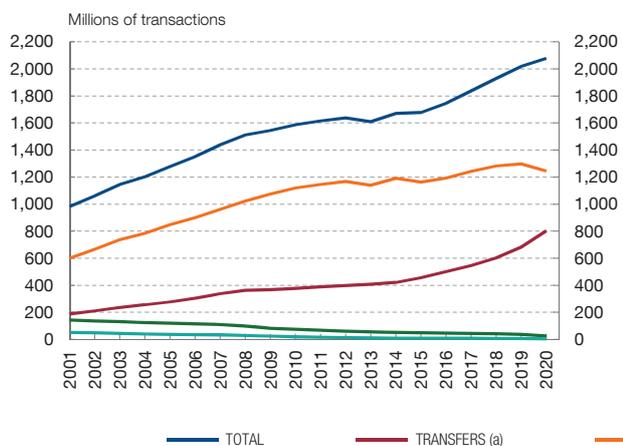
¹ Regulation (EU) No 795/2014 of the ECB of 3 July 2014 on oversight requirements for systemically important payment systems (ECB/2014/28).

Chart 5.2

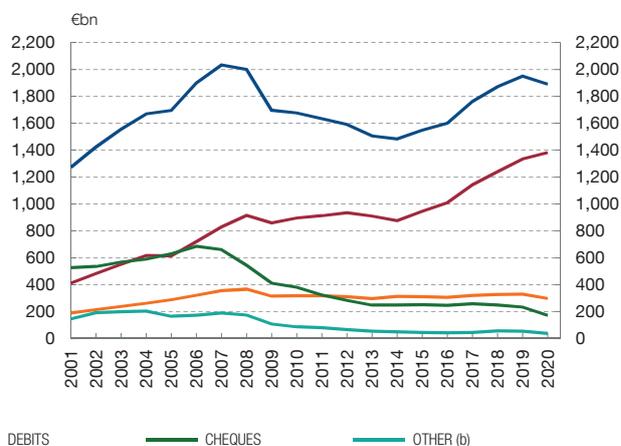
OVERVIEW OF SNCE OPERATION

Direct debits account for 60% of the number of transactions processed by the SNCE. In terms of value, credit transfers account for the highest share (73% of the total).

1 NUMBER OF TRANSACTIONS PER YEAR



2 VALUE OF TRANSACTIONS PER YEAR



SOURCE: Banco de España, based on Iberpay data.

a Including instant transfers from 2018.

b Including bills of exchange and other.

Monitoring of the T2-T2S (TARGET2 and TARGET2-Securities platforms) consolidation project continued in 2020. This project, which was launched by the Eurosystem, will enable the two platforms to be consolidated from a technical and functional viewpoint. The aim is to meet market demands, optimising liquidity management and providing access from a single entry point and new functionalities. Following the financial community’s suggestions, the extension by one year of the estimated timeline for the project was approved in July. The migration is scheduled for November 2022.

A review of the SIPS regulation was initiated in 2020, following a public consultation conducted that year, which includes, inter alia, more flexible criteria for identifying SIPS.

In the national arena, the Banco de España is the primary overseer of the National Electronic Clearing System (the SNCE, by its Spanish acronym), the Spanish retail payment system managed by Sociedad Española de Sistemas de Pago, SA (Iberpay). The SNCE processes a number of payment instruments, in particular credit transfers, including immediate or instant transfers, direct debits, cheques and bills of exchange. Chart 5.2 shows how its operation has been affected in 2020 as a result of the COVID-19 crisis, as mentioned in Box 5.1.

The COVID-19 crisis has had a significant impact on market infrastructures, including the SNCE, in 2020. The SNCE has operated fully remotely during certain

IMPACT OF COVID-19 ON FINANCIAL MARKET INFRASTRUCTURES

Despite the significant effect of the COVID-19 crisis, market infrastructures have operated uninterruptedly as an essential activity. The Banco de España, through its oversight function at the national level and as part of the Eurosystem, has monitored the effects of the pandemic on securities infrastructures, payment systems and their critical service providers on an ongoing basis.

In Spain and in the rest of Europe, infrastructures and their ecosystems have responded to the crisis swiftly and effectively, introducing remote working on a large-scale, coordinating teams remotely and strengthening operations and security without incidents in the continuity of activity. However, it has been necessary to revise the priority of certain projects in progress and their planning for 2020-2021.

In payment systems, sharp declines in activity were observed in the retail segment during the most critical periods of the pandemic. These year-on-year declines were close to 50% in domestic purchases using cards, as a result of the decrease in private consumption, and nearly 90% for cross-border card transactions, reflecting the collapse of the tourism sector. Although less sharp, the fall in SNCE operations has also been significant. Thus, the year-on-year decline in the value of the transactions processed in the system was 11.8% during the three months with the strictest restrictions (from March to May 2020) with sharper falls in the debits and cheques subsystems during this period (almost 20% and 42% year-on-year, respectively). The habits of the end-users of payment systems also changed with the pandemic. During the lockdown periods retail payment transactions

through remote channels grew over 40% year-on-year, compared with pre-COVID-19 levels of 23%. Up to 83% of all face-to-face card payments were contactless, including mobile payments, vis-à-vis pre-COVID-19 levels of 78%.

In contrast, the wholesale segment experienced greater activity year-on-year, except for foreign currency exchange transactions, which, as expected, decreased. These trends are reflected in TARGET2 figures, which recorded an increase in value but a decrease in the number of settled transactions owing to falls in customer operations.

This growth in the overall value of transactions settled in TARGET2 is in contrast with the across-the-board fall in wholesale operations via private operator systems, both in terms of value and of number of transactions. This could be the result of part of the traffic being diverted to TARGET2, as a risk-free mechanism operated by the Eurosystem and with settlement in central bank money.

Also notable were the developments in SWIFT messaging, which grew significantly in the initial phase of the crisis, associated with securities transactions, against a backdrop of high financial market volatility.

Infrastructures have proved the efficiency of their business continuity plans and their ability to rapidly adopt good practices, such as the creation of response plans with teams devoted to securing both critical functions and the supply chain (including external suppliers), dealing with staff shortage or lower staff availability and strengthening security in a setting of growing risk of cyberattacks.

periods, without this affecting the processing of transactions. A specific action plan was set up, within the general business continuity framework that was established by the company and reviewed by the Banco de España from the standpoint of oversight. Also, since the onset of the crisis, the Banco de España has stepped up the statistical follow-up of the SNCE's operations, and the exchange of information with the operator.

As part of its regular oversight activities, the Banco de España has continued to have regular contact with Iberpay for the purpose of assessing the implementation of its Eurosystem cyber resilience strategy for market infrastructures, and of certain measures to mitigate the risk of fraud or security problems that might derive from the access of its participants. These include the launch of the SNCE cyber security control framework, which encompasses very

diverse measures, such as strengthening the security protocols. All of these measures aim to mitigate as much as possible the risk in the system arising from weaknesses that may be used by criminals to launch a cyberattack against the SNCE. Once again, the exceptional situation we are in since March 2020 requires stepping up efforts in this area, since, as has been demonstrated, cyberattack attempts in Spain and in the Eurosystem have increased, although none has been successful.

The SNCE did not experience any major incident in 2020. However, the TARGET2 incidents mentioned above gave rise to a delay in the settlement of certain SNCE operations.

5.1.2 Payment instruments

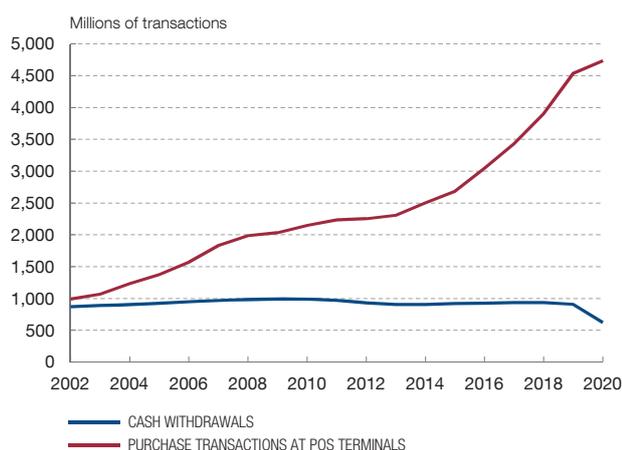
The oversight of payment instruments is also conducted in a cooperative manner in the Eurosystem, applying the same common standards that comprise the Eurosystem's oversight rules, which are currently being revised (see Box 5.2). In particular, the oversight of pan-European payment schemes is carried out through a central bank which leads and coordinates the tasks in collaboration with the other central banks. The current pan-European payment schemes are the Visa Europe, Mastercard Europe,² American Express, SEPA Core Direct Debit and SEPA B2B

Chart 5.3

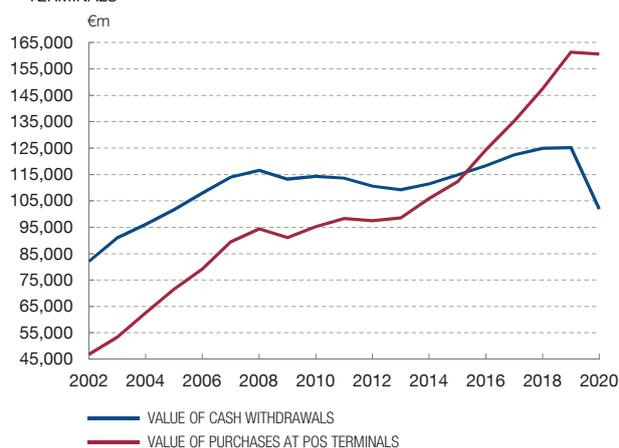
OVERVIEW OF OPERATION WITH CARDS

Fall in cash withdrawals and purchases with cards in 2020, in terms of both volume and value, deriving from the COVID-19 pandemic situation.

1 ATM CASH WITHDRAWALS AND TRANSACTIONS AT POS TERMINALS



2 VALUE OF ATM CASH WITHDRAWALS AND OF TRANSACTIONS AT POS TERMINALS



SOURCE: Banco de España, based on Sistema de Tarjetas y Medios de Pago, S.A. data.

2 It is important to distinguish Mastercard Europe's responsibility for the management of the card scheme from its role as SIPS operator.

THE NEW EUROSISTEM OVERSIGHT FRAMEWORK FOR PAYMENT INSTRUMENTS, SCHEMES AND ARRANGEMENTS

In order to promote the smooth operation of payment infrastructures and payment instruments by reinforcing their efficiency and security, the oversight function must have adequate tools, adapted, in particular, to any changes that may arise in the ecosystem overseen.

The Eurosystem has initiated a process to review the oversight framework for payment instruments for different reasons, including most notably:

- i) Extending its scope, with the aim of considering all the developments that have arisen in the field of payments, especially in the past decade, and those which may arise in the future (for example, crypto currencies, functionalities provided by certain supplier companies of smartphones for making contactless payments, etc.).
- ii) Simplifying it, establishing a single framework, although taking into account specificities when applied.
- iii) Harnessing possible synergies with the payment systems oversight framework.
- iv) Taking into account the experience acquired in implementing the current oversight framework for instruments.

The review work commenced in 2018. The new framework proposed is known as the oversight framework for payment instruments, schemes and arrangements (the PISA framework). It is comprised of three documents: i) the oversight framework itself, ii) the assessment methodology, which takes into account the specificities of each particular scheme or arrangement to which it applies, and iii) the exemption criteria, which are justified by a proportionality criterion.

The public consultation took place at end-2020 and the new framework is scheduled to be approved in 2021. The new aspects of the project include most notably the revision of terminology to adapt it to the current legislation (for instance, the Second Payment Services Directive). Additionally, new definitions have been included and new developments, such as crypto currencies, have been taken into account.

Also notable is the extension of its scope, which changed from focusing on certain payment schemes (cards, payment transfers, direct debits and electronic money) to including payment arrangements, both of which are defined below:

- A payment scheme is a set of formal, standardised and common rules enabling value between end-users to be transferred by means of electronic payment instruments. It is managed by a governance body.
- A payment arrangement provides certain functionalities which support payment users, customers of multiple payment service providers, in the use of electronic payment instruments. It is managed by a governance body which issues the relevant rules, terms and conditions for implementing the arrangement.

As an example, under the new PISA framework, an app provided by a smartphone manufacturer to make payments with it would a priori be considered as a payment arrangement, since the application allows the owner of the smartphone (the end-user) to use a payment instrument (for example, a debit card) to make payments (for instance, a payment in a physical store using contactless technology). Also, the use of such a card would be subject to a series of rules governed by the related card scheme and, therefore, this oversight framework would also apply to it.

Direct Debit schemes (the latter differs from the SEPA Core Direct Debit scheme in that none of the parties involved, not even the debtor, acts as a consumer), as well as the SEPA Credit Transfer (SCT) and the SEPA Instant Credit Transfer (SCT Inst) schemes. The primary overseer of Mastercard is the Belgian central bank (NBB), while that of all the others is the ECB. As regards the SEPA payment schemes, work was carried out to monitor the implementation of the recommendations made in previous assessment exercises, and to assess and monitor the updating of the scheme standards by their manager, the European Payments Council (EPC).

The Banco de España is the primary overseer of the national card scheme Sistema de Tarjetas y Medios de Pago, SA, the result of the merger of the former Spanish card schemes 4B, EURO 6000 and ServiRed. Monitoring of the implementation of the oversight recommendations issued in 2018 to the former card schemes concluded satisfactorily in early 2020.

As a result of the current crisis, the statistical monitoring of the operation of payment schemes and, in particular, of card schemes, has been strengthened (see Chart 5.3). Although the rate of card fraud by number of transactions in 2020 H1 was low (0.037%), it has increased slightly from previous figures.

5.2 Supervision of Iberpay

Under Article 17 of Law 41/1999 of 12 November 1999 on securities payment and settlement systems, management of the SNCE is entrusted to Iberpay, which in turn is supervised by the Banco de España. In the exercise of this function, the Bank is empowered to give prior approval to the company's articles of association and amendments thereto, and the basic operating rules of the systems and services that it manages, which are its core purpose.

In November 2020 the Executive Commission of the Banco de España authorised the proposed new SNCE regulation submitted by Iberpay. The regulation was modified to facilitate the access of payment service providers that are not credit institutions (payment institutions and electronic money institutions) to the SNCE. These will be accessible institutions designated by direct participants in the system, and shall in no case have member status. Direct participants in the SNCE will be able to identify transactions from payment services provided by such institutions, which will be considered for all purposes as transactions relating to the direct participants.

To encourage the participation of institutions in the European Economic Area (EEA) in the SNCE, a Dispute Resolution Committee was created to resolve potential conflicts between participants when any of them is not a member of a competent body from among those existing in the national sectoral associations.

In 2020 the Banco de España received the operating rules for four new services provided by Iberpay: account portability service, account holder confirmation service, fraud prevention service and remittance service for SEPA instant credit transfers. None of them were opposed by the Banco de España.

In 2020 a total of 11 operating instructions for the SNCE were also received, which were not opposed by the Banco de España. Notable among the changes introduced are: the elimination of individualised settlement in the cheque sub-

system, the updating of institutions' ways of connecting to the SNCE and the inclusion of the SNCE cybersecurity control framework governance model.

5.3 Oversight of securities infrastructures

An inadequate functioning of securities infrastructures, where securities transactions are cleared, settled and registered, could have adverse effects on financial stability. Risks must therefore be managed efficiently to prevent disruptions arising in financial markets and passing through to other infrastructures with which they have interdependent relationships, such as payment systems, and their participants.

The CNMV is responsible for the supervision of securities infrastructures in Spain. Additionally, under Article 255 of the consolidated text of the LMV, the CNMV and the Banco de España are jointly entrusted with ensuring the smooth operation of Spanish securities clearing, settlement and registration systems so as to preserve the stability of the financial system as a whole. To this end, the two authorities shall assess the degree to which the procedures of the Spanish market infrastructures comply with international best practices and recommendations.

The Banco de España's oversight of Spanish securities infrastructures is justified by its interdependence with TARGET2, its importance for the conduct and transmission of monetary policy and the possibility of central banks providing emergency liquidity to Central Counterparties (CCPs).

Spanish securities infrastructures include the central securities depository, Iberclear (which manages the securities settlement system) and the CCP, BME Clearing.

The activity of the two most significant segments of BME Clearing has been uneven. As seen in Chart 5.4, the clearing activity in the fixed income segment has declined progressively, in part owing to the improvement in the financing conditions of institutions, while activity in the financial derivatives segment has remained relatively steady since 2016 both as regards the number of transactions and in nominal terms.

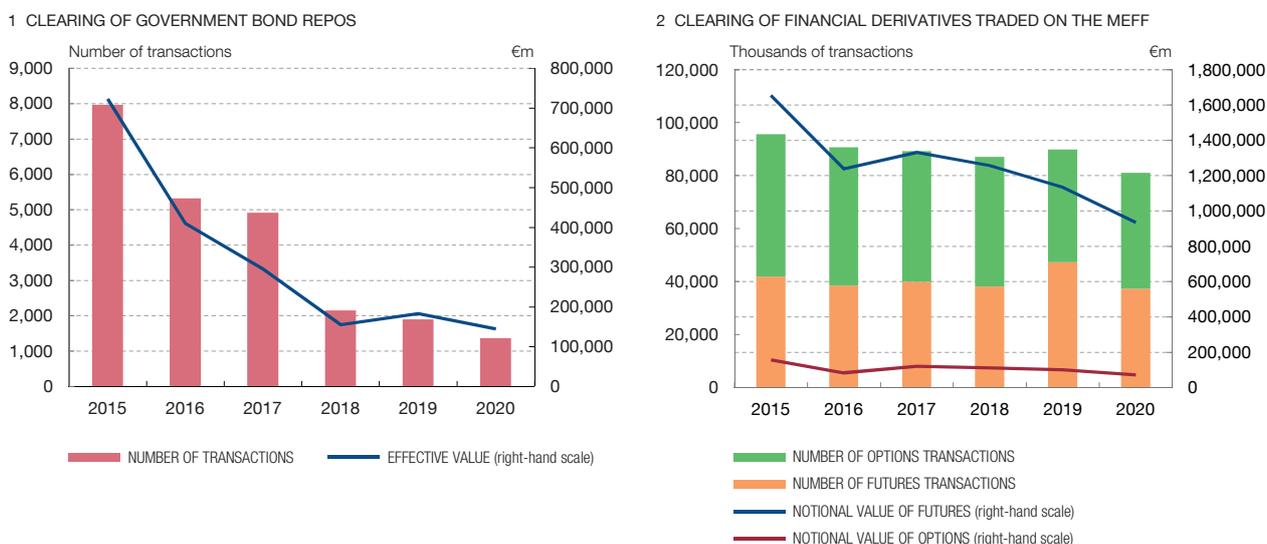
The CCP's financial resources arise mainly from members' margins and contributions to the default fund. The liquidity of these resources is essential in order to swiftly close positions in the event of a member defaulting. The liquidity of these resources at BME Clearing is quite high, as can be seen in Chart 5.5, with most being deposited in its account at Banco de España.

The performance of Iberclear's settlement activity differs by type of instrument (see Chart 5.6). As regards fixed-income securities, increases are

Chart 5.4

OVERVIEW OF BME CLEARING OPERATION

The clearing activity in the fixed-income segment (government bond repos), which for years broadened the range of cleared European sovereign debt, has declined, while that in financial derivatives remained steady.

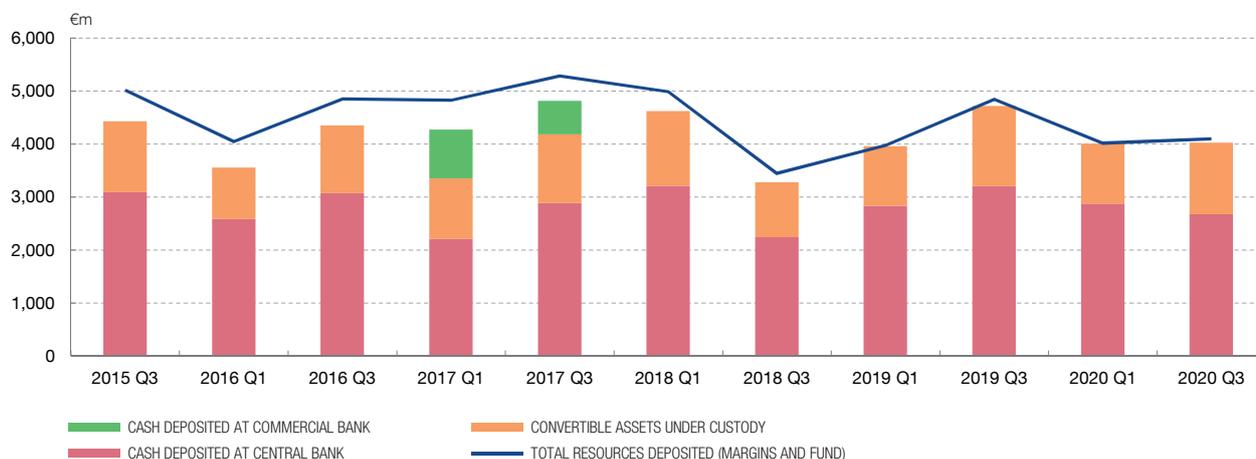


SOURCE: BME Clearing.

Chart 5.5

RESOURCES DEPOSITED AND LIQUIDITY THEREOF

The cash deposited at the central bank, which has remained steady over time, is BME Clearing's main resource.



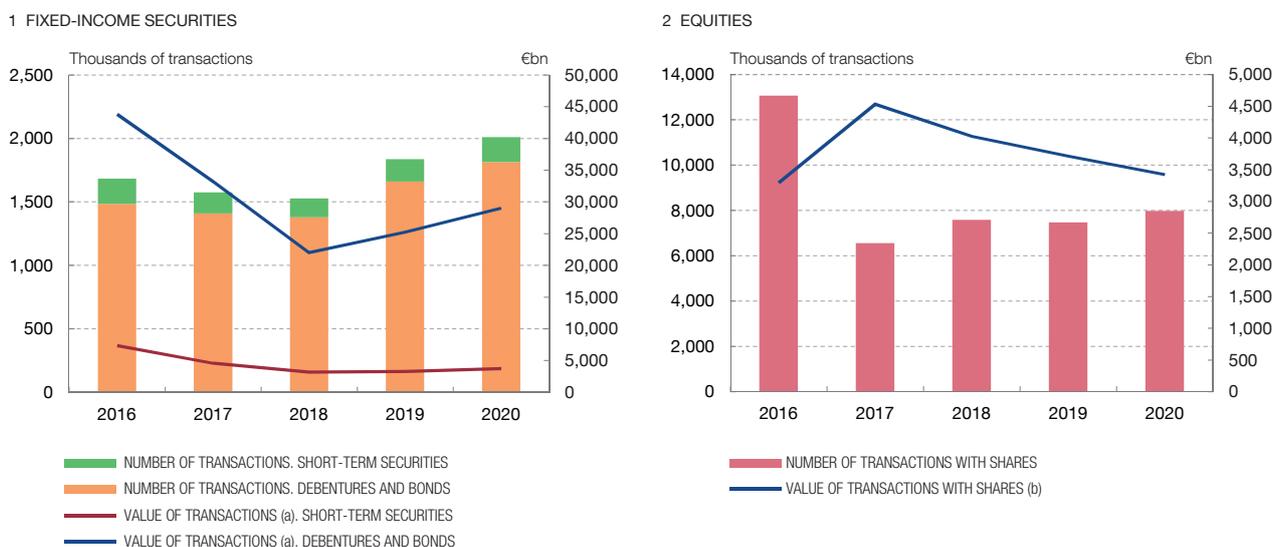
SOURCE: BME Clearing.

observed in terms of number of transactions and value, which are higher for debentures and bonds than for short-term securities. The equities settlement activity continues to decline in terms of value, with a slight increase in the number of transactions.

Chart 5.6

IBERCLEAR ACTIVITY DATA. TRANSACTIONS PROCESSED

Fixed-income transactions settled at Iberclear have increased in recent years, while the number of instructions relating to stock market operations remains steady.



SOURCE: Iberclear.

- a Nominal balances.
- b Cash settled.

5.3.1 Activities resulting from national legislation

In compliance with Article 73 of Royal Decree 878/2015 of 2 October 2015, implementing the LMV, Iberclear provides information to the CNMV and the Banco de España on its exposures to operational risk and the specific measures to be adopted to identify, monitor, manage and reduce these risks, within the framework of the annual assessment and review of compliance with the requirements of the Regulation on improving securities settlement in the EU and on central security depositories (the CSDR).³ Iberclear sends monthly information to the Banco de España on the activity of the links with foreign central security depositories, which enables the Bank to gain knowledge of cross-border mobilisation of securities.

Under Article 101 of the LMV, the Banco de España is also required to first provide a report before the CNMV can approve the internal rules of Iberclear and any amendments thereto. It also stipulates that circulars implementing these

³ Regulation (EU) No 909/2014 of the European Parliament and the Council, of 23 July 2014, on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012.

rules must be communicated to the Bank, as has been the case in 2020 with the circulars on the recycling period for matched transactions and the optional settlement procedure for financial intermediaries.

As regards BME Clearing, Articles 104 and 107 of the LMV stipulate that the Banco de España shall be required to provide a report prior to any amendments to the CCP's articles of association or internal rules, and to the establishment of any trade, clearing or settlement agreements with other entities. In 2020 the Banco de España issued a favourable report in connection with several changes made in the CCP energy segment.

In June 2020 the Swiss group SIX acquired the BME group, which includes Iberclear and BME Clearing. The Banco de España has collaborated with the National Commission on Markets and Competition, sending a letter of non-objection to this operation from the standpoint of the competition rules and has closely followed the purchase and authorisation procedure, paying special attention to its impact on financial stability and the euro.

5.3.2 Activities resulting from European legislation

The Banco de España, as relevant authority, monitored in 2020 the recommendations identified in the authorisation procedure for Iberclear in accordance with the CSDR, practically all of which have been addressed.

The Banco de España also participated in assessing the eligibility of two new relayed links, CBL_CBF Cascade_Iberclear and CBF Creation_CBL_CBF Cascade_Iberclear, against the Eurosystem's eligibility standards for the use of the securities settlement systems and their links in intraday credit operations.

The college of supervisors of BME Clearing is chaired by the CNMV and includes among its members the Banco de España, in its three-fold capacity as a central bank of issue of the euro on behalf of the Eurosystem, overseer of the CCP and supervisor of the CCP members in one of the three Member States with the largest contributions to the default fund. As a member of the college, it must issue an opinion when significant changes arise in the CCP and, among other things, it receives monthly information on its activity. This information allows the Banco de España to monitor the risks to which the CCP is exposed and the changes in its risk management framework. In 2020 the COVID-19 crisis did not have a significant impact on the activity of the CCP or on compliance by its members with their obligations.

The Banco de España also participates in the Eurosystem's cooperative oversight of the TARGET2-Securities platform. The implementation of the recommendations made in 2019 as a result of the assessment of compliance with

the CPMI-IOSCO Principles for financial market infrastructures (PFMI) has been delayed until 2021 as a result of the COVID-19 crisis. Other specific assessments are being conducted, such as that of compliance with CROE (which is closely linked to that relating to TARGET2, as they share internal rules and operating procedures) and the assessment in accordance with the PFMI of the penalty mechanism for compliance with the settlement discipline rules of the CSDR.

Furthermore, the Banco de España participates in the T2S Cooperative Arrangement, which is comprised of central banks and securities supervisors, to oversee TARGET-2 Securities. Much of the activity in 2020 focused on the assessment of a major incident which occurred in May.