REPORT ON PAYMENT SYSTEMS



Executive summary

In 2022 payments in Portugal increased significantly, in line with economic activity growth.

Financial market infrastructures and the retail payment system under the responsibility of the Banco de Portugal operated safely and efficiently, responding to the needs of market agents.

In the interbank clearing system (SICOI), the Portuguese retail payment system, 3.7 billion transactions were processed, amounting to \le 655.5 billion. This accounts for annual increases of 20.8% in volume and 16.2% in value. In 2022, 10.2 million retail payments were processed per day, on average, to the amount of \le 1.8 billion.

Domestic consumers continued to prefer electronic payment instruments (payment cards, direct debits, credit transfers and instant credit transfers). These instruments were used in 99.7% of non-cash retail payments, i.e. 0.2 percentage points more than in 2021. The use of all electronic payment instruments went up both in volume and amount. Instant credit transfers grew by 34.3% and 54.4% respectively, despite continuing to represent a minor share in SICOI's total (0.3% in volume and 2.1% in value).

Payments with cheques decreased by 15.1% in volume but grew in value for the first time since 2014 (6.2%). More cheques of an amount greater than €50,000 were used, particularly in the range between €100,000 and €500,000, which may be related to house purchases (as investment and for own residence). The average value of cheques increased by 25.1% to €4,962. Returned cheques also increased (12.2%), with most returns due to insufficient funds in accounts (58.0%). Nevertheless, only 0.4% of cheques processed in SICOI were returned.

Cards were the most commonly used electronic payment instrument on a day-to-day basis: they accounted for 88.0% of SICOI payments (86.5% in 2021). On average, there were 9 million card payments per day. All types of card-based payments – purchases, low-value transactions (such as toll and car park payments), withdrawals, services payments and payments to the State – grew compared to the previous year, both in volume and in value. Card-initiated transfers (at ATMs and via apps) were the transactions that recorded the highest increase: 45.2% in volume and 26% in value. The shift from cash withdrawals to card purchases continued: while in 2021 4.2 purchases were made for every cash withdrawal, in 2022 that number increased to 5 purchases.

The use of contactless technology, be it with physical cards or via mobile devices (e.g. mobile phones and smart watches), which was strongly boosted by the COVID-19 pandemic, continued to grow in 2022. Overall, contactless payments increased by 58.6% in volume and 65.7% in value compared to 2021. The average value per contactless transaction was €24.5 (€14.5 before the pandemic), and the share of contactless purchases in the total volume of card purchases amounted to 48.8% (8.2% before the pandemic). Contactless purchases played a more relevant role in retail trade (accounting for 60.6% of the total volume of card purchases) and in restaurants (22.1%).

Online purchases with domestic cards also rose further (28.4% in volume and 32.2% in value). These transactions accounted for 14.0% of the volume and 15.4% of the total value of purchases made with domestic cards, 6 and 6.6 percentage points more than in 2019 (the year before the pandemic) respectively. The majority of online purchases with domestic cards were made from retailers located outside Portugal (66.3% in volume and 65.9% in value).

On 31 December 2022 the payment card acceptance infrastructure in Portugal included 450 thousand point-of-sale (POS) terminals (4,0% more than in 2021) and 13.5 thousand ATMs, including

of internal networks (1.5% less). On average, there were 1.3 ATMs and 43.5 POS terminals per every thousand inhabitants.

The levels of fraud in the use of electronic payment instruments in Portugal remained quite low. The most common frauds in 2022 were the result of social engineering mechanisms, such as phishing, where perpetrators are able to appropriate the user's security credentials or strong customer authentication elements, acting on the user's or customer's behalf to initiate and validate payment transactions. In the first half of the year, fraud rates were higher for card transactions (242 fraudulent transactions for every million card transactions), although the average value per fraudulent transaction was the lowest (\leq 45). Credit transfers recorded an average value per fraudulent transaction of \leq 4,059, but only five in every million were fraudulent. For direct debits, the average fraud value was \leq 499, and there was only one fraudulent transaction per every million transactions.

In 2022 payment service providers reported 55 major incidents to the Banco de Portugal (one less than in the previous year), of which 50 were operational and five were security incidents. These incidents affected around 1.9 million users and led to the failure of 3.7 million transactions worth €975 million. As in the previous year, homebanking and mobile banking were the channels most affected by the reported incidents.

TARGET2-PT – the Portuguese component of the Eurosystem's large-value payment system – processed two million transactions (13.0% more than in 2021), amounting to €10.6 trillion, i.e. around 51 times Portuguese GDP. The value settled, a record high, was more than six times higher than in the previous year. This reflected the rise in the ECB's official interest rates, which led to large growth in deposit facility operations. Over the course of the year, there were no significant incidents affecting the smooth functioning of the system and the settlement of payments.

In TARGET2-Securities (T2S) – the Eurosystem's platform providing securities settlement services in central bank money – the Portuguese community settled 185.8 thousand securities transactions amounting to €155 billion. These transactions decreased by 10.3% in volume and increased by 11.2% in value compared to 2021.

In TIPS – the system provided by the Eurosystem for pan-European instant credit transfers – payment service providers from the Portuguese community sent and received 7.5 million transactions worth €6.5 billion, i.e. ten times the volume and six times the value recorded in 2021. Such very marked growth reflects the impact of the measures outlined by the ECB Governing Council, which have been in place since December 2021, to ensure the pan-European reach of instant credit transfers. During the year, two countries (Belgium and Slovakia) joined TIPS, which now operates in 13 markets. In terms of volume, Portugal was the 11th most active country in TIPS.

The Banco de Portugal continued to prepare the Portuguese community for the implementation of the TARGET2 with T2S consolidation and the TARGET Services evolution project. The project was scheduled to go live in November 2022, but this was postponed to March 2023. The consolidation of TARGET2 with T2S represents the largest transformation in infrastructures for settling real-time gross payments in euro since the launch of TARGET in 1999, which coincided with the implementation of the single currency.

Also transformative were the 42 initiatives of the National Strategy for Retail Payments | 2022 Horizon (the 'Strategy'), which were completed by the end of 2022. This Strategy reflected a broad consensus around action lines for the payments market in Portugal and translated into achieving initiatives that helped to make this market more innovative, efficient, open and secure. The next National Strategy for Retail Payments is being prepared and will be implemented by 2025. Continuing to build on dialogue and cooperation with market players, the key objectives of the new Strategy will be outreach and

transparency, security, innovation and efficiency, and the resilience and sustainability of the Portuguese payments market.

The mechanisms for reporting and processing payment data are also evolving. In 2022 the Banco de Portugal launched the **PAY project**, aiming to redesign payment information reporting. The new reporting mechanism will go live in stages, by payment instrument, between May 2023 and July 2024.

The ongoing **regulatory developments** will help shape payment services in the coming years. Of particular note is the proposal for a Regulation of the European Parliament and of the Council on instant credit transfers in euro, which aims at making accessible, secure and unhindered instant credit transfers available throughout the European Union (EU). Currently, only around 13% of all credit transfers in euro in the EU are instant credit transfers (4.4% in Portugal), and there is a wide disparity in access and fees applied by payment service providers across different Member States. This proposal aims to remove obstacles to the widespread use of instant credit transfers and will bring multiple benefits to economic operators.

Work is also continuing on the European Commission's legislative proposals under the 'Digital Finance Package', in particular the Regulation on digital operational resilience for the financial sector (the DORA Act) and the Regulation on Markets in Crypto-assets (MiCA Regulation). DORA, which entered into force on 16 January 2023 and will apply from 17 January 2025, will require payment service providers to implement requirements relating to governance and organisation, systems, protocols and tools, so as to ensure effective management of information and communication technology risks. The MiCA Regulation should be completed in the near future and aims to establish uniform rules for the issuance of crypto-assets (in particular those used as a means of payment) and the provision of related services.

If eventually issued, the **digital euro** will be a new form of central bank money, which will complement cash and, like it, will be a means of payment. In 2022 the investigation phase of this project continued. The two main objectives for the issuance of the digital euro have been set: to preserve the role of public money as a monetary anchor for the payment system and contribute to the strategic autonomy and economic efficiency of the euro area. The Governing Council approved a set of design options for the digital euro and work continued on the development of prototypes for user interfaces. In April 2022 the Banco de Portugal set up the Market Contact Group on the Digital Euro, to gather the different stakeholders' input on the main options for the design and distribution of a potential digital euro and the opportunities the introduction of the digital euro could bring.

At the same time, the Eurosystem is investigating the use of new technologies, such as distributed ledger technology (DLT), for wholesale payments and securities settlement in market infrastructures. A central bank digital currency for wholesale payments – commonly referred to as **wholesale CBDC** – would not necessarily imply the use of DLT, as it could be based on any technology. Despite the uncertainties surrounding the potential of DLT, the Eurosystem should be prepared for a scenario in which economic agents use this technology to settle wholesale payments and securities, safeguarding the role of central bank money in these transactions.

To promote the efficient and innovative functioning of the Portuguese payments market, the Banco de Portugal has engaged in dialogue and cooperation with market agents, particularly with regard to innovative payment services solutions. In May 2022, jointly with the other financial supervisors, the Bank launched the 4th edition of Portugal FinLab. It also alerted consumers to the risks associated with crypto-assets. In October 2022 the Bank launched a public consultation to gather the market's input on its strategic approach to innovation. It also produced two studies in this field: one on stablecoins (Occasional paper on stablecoins) and one on the establishment of business relationships through digital channels (Perspetivas sobre Onboarding Digital).

To ensure a level playing field in the entry and operation in the Portuguese market and to remove technical and legal barriers, the Banco de Portugal oversees the implementation of the regulatory framework governing the provision of payment services in Portugal. In this context, in 2022 the Banco de Portugal: (i) assessed the functioning of interfaces for common and secure communication with account information service providers and payment initiation service providers; (ii) continued efforts towards a more uniform and widespread application of strong customer authentication mechanisms; (iii) started work to simplify the authentication journey designed by payment service providers; and (iv) enhanced communication for users. It also checked compliance with the requirements relating to independence between payment card schemes and processing entities operating in Portugal and issued a corrective measure. Additionally, it analysed cases of IBAN discrimination in Portugal, promoting the elimination of these practices.