

A future-proof retail payments ecosystem for Europe – the Eurosystem’s retail payments strategy and the role of instant payments therein

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Abstract

Electronic retail payments are a vital part of the financial infrastructure, as recent experiences during the coronavirus disease 2019 (COVID-19) have underscored. Already existing upward trends in popularity of e-commerce and contactless payments at the point of sale have increased, possibly with a structural impact. Although significant efforts have been made since the inception of the euro to integrate the European retail payments market, some shortcomings still remain. In particular, the landscape of payment solutions for the point-of-sale and e-commerce remains fragmented. National solutions are not interoperable, resulting in a reliance on global solutions based outside Europe for cross-border transactions. To overcome this fragmentation and strengthen the autonomy of the European retail payments market, the Eurosystem supports market initiatives for retail payments that they fulfil five key objectives: pan-European reach, customer friendliness, cost efficiency, safety and security, European identity and governance, and, in the long-run, global reach. Instant payments are well-suited to form the basis for new European solutions. It is therefore essential for instant payment services to become available to all citizens and businesses across Europe. The Eurosystem therefore promotes the further implementation of instant payments, including in its role as payment system operator, through its TARGET Instant Payment Settlement service.

1 Introduction

Since the outbreak of the coronavirus (COVID-19) pandemic, electronic payments in general and specifically contactless payment methods at the point of sale have surged in popularity across Europe, as reported to the Euro Retail Payments Board (ERPB) in July 2020 [ERPB Secretariat, ECB Directorate-Banknotes (2020)]. Ad-hoc surveys carried out by national central banks (NCBs) show a significant shift from cash to cashless payments: e.g., 43% of German consumers reported a change in their payment habits in shops [see Koch (2020)]. Online and mobile payments generally increased during the COVID-19 crisis, with most NCBs observing double-digit growth rates in terms of number of payments. In addition, e-commerce increased in particular in March, April and May 2020 [see Eurostat (2020)]. In this respect, the pandemic appears to have accelerated an already existing trend towards cashless payments. In 2019, the total number of non-cash payments in the euro area increased by 8.1% to 98.0 billion in 2019 compared with the previous year, with a total value of €162.1 trillion [ECB (2020a)], which may result in a structural increase induced by positive experiences of first-time users and potentially further strengthened by commercial promotions.

These developments underline the need for electronic payment solutions that meet the needs of European consumers and businesses. Technological innovations both enable and increase the social demand for faster, cheaper and more user-friendly payment services that work seamlessly across borders. It is essential for both the industry and central banks to respond to these developments by taking action to ensure the continued availability of safe and efficient payment services, which is vital for fostering public trust in a currency [see e.g. CPMI (2012)]. After all, of all the functions of money, its means of payment function is particularly central to – and visible in – people’s daily lives.

These considerations are at the core of the Eurosystem’s retail payments strategy, which was relaunched in November 2019 and has its initial focus on point-of-sale and e-commerce payments. Building on past achievements such as the Single Euro Payments Area (SEPA), the Eurosystem has called on the industry to provide a competitive pan-European point-of-sale and e-commerce payment solution that meets the needs of European users and exploits the benefits of the Single Market. The European Central Bank (ECB) supports market-based initiatives that are working towards such a pan-European payment solution, such as the recently announced European Payments Initiative (EPI) [see ECB (2020b)].

Instant payments play an important role within the Eurosystem’s retail payments strategy. Relying on previously unavailable instant payments technology could be the key to considerable efficiency gains compared to existing payment solutions. Subsequent cost savings for merchants will eventually also be passed on to consumers, thereby benefitting every European citizen.

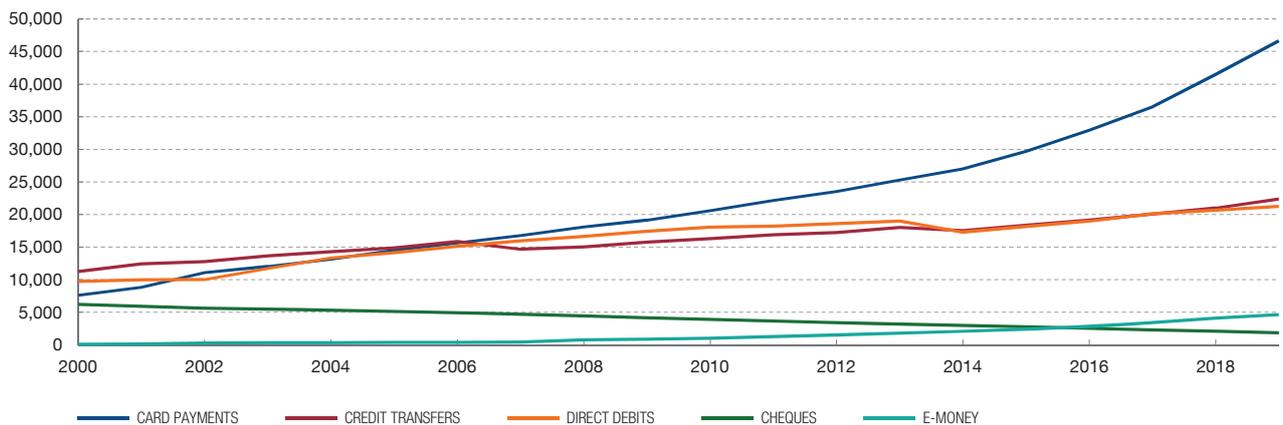
This article discusses the Eurosystem’s retail payments strategy (section 2), with a particular focus on instant payments (section 3). It addresses achievements made so far as well as remaining shortcomings, and how these can be overcome. It concludes with an outlook for the European retail payments market of the future (section 4).

2 Eurosystem retail payments strategy

2.1 Current retail payments landscape

The most commonly used retail payment instruments in Europe are cards, credit transfers and direct debits. Cards have been the fastest growing means of payment in Europe for several years now, as can be seen in Chart 1. This trend points towards an increasing importance of electronic payments at the point-of-sale, since this is the main use case for payment cards. Credit transfers (e.g. via online banking or sent in bulk by businesses) and direct debits (mainly used for recurring payments such as utilities) show more modest growth levels.

Chart 1

USE OF THE MAIN PAYMENT SERVICES IN THE EURO AREA

SOURCE: ECB payment statistics.

Traditionally, the provision of retail payment services in Europe can be described as a set of layers. Payment services for end-users are provided by several thousand banks and other payment service providers. Transactions between customers of different banks are made possible through on common interbank rules and infrastructures for the processing, clearing and settlement of transactions.¹ At each level, different actors play a role, as set out in figure 1.

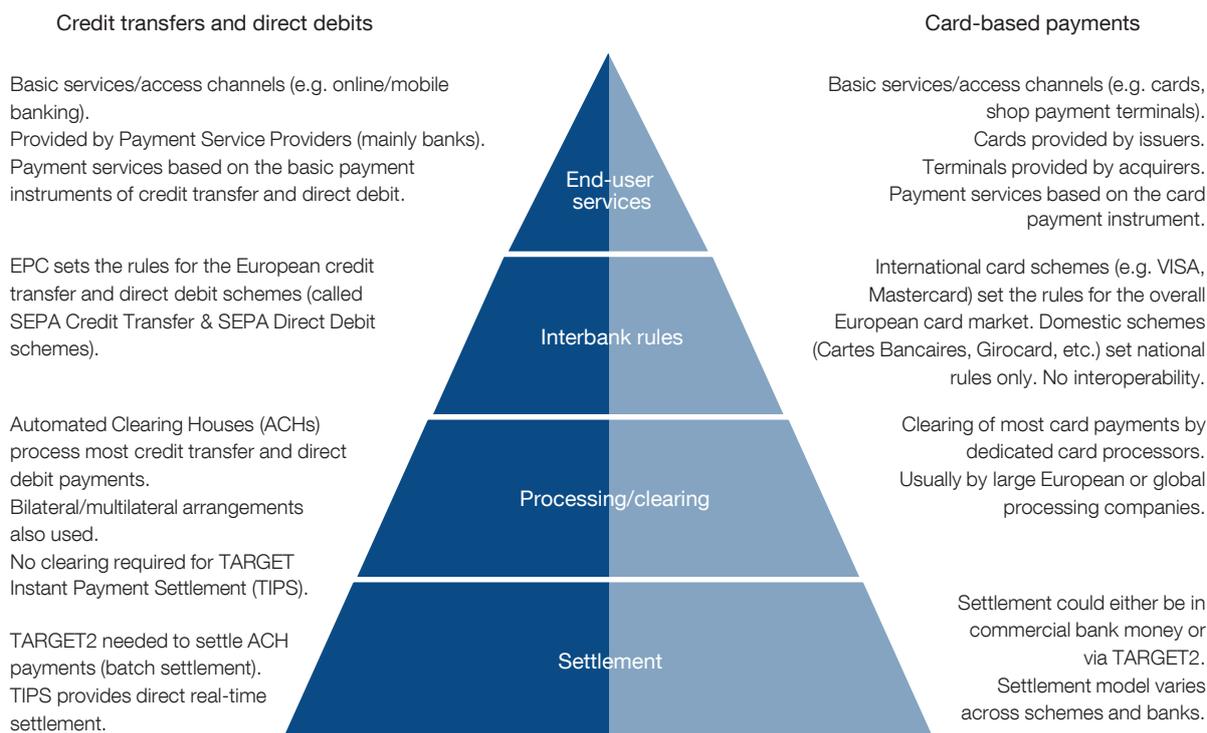
Before the euro, each country had its own retail payments “pyramid”, or even multiple pyramids. Transactions between pyramids were costly and inefficient. Cross border credit transfers took several days, and cross-border direct debits were impossible. Likewise, people were often unable to pay with their card when travelling in another European Union (EU) country. Significant work has been carried out by the Eurosystem, the European Commission and private stakeholders (e.g. banks, payment schemes, processors) in order to harmonise and integrate these national pyramids. This work is referred to as the migration towards a SEPA, the main milestones of which are set out in figure 2.

The main focus of retail payment integration in the EU has been on credit transfers and direct debits, which now have been standardised. National schemes have been replaced by SEPA Credit Transfers (SCT) and SEPA Direct Debits (SDD), managed by the European Payments Council (EPC). European citizens and businesses can use these payment instruments across Europe under the same conditions as in their country of residence. This has led to a significant increase in the number of cross-

¹ Alternatively, in “closed-loop” systems, payments can only be made between the customers of an individual provider.

Figure 1

RETAIL PAYMENTS PYRAMID



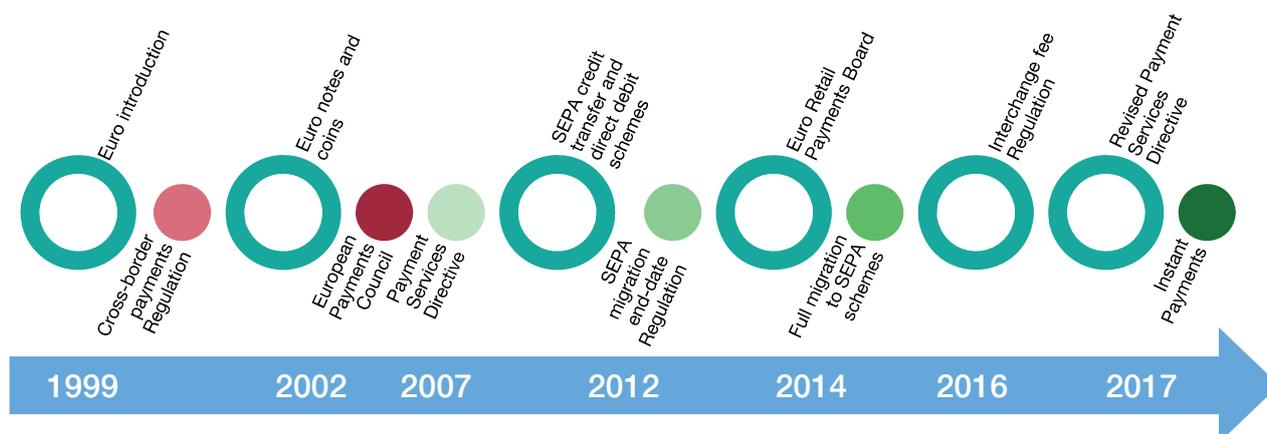
SOURCE: ECB Payment Statistics.

NOTE: A *payment scheme* is a single set of rules for the execution of payment transactions between banks (or other payment service providers) and to a varying extent covering also their end-user services. Card schemes typically include more detailed rules on end-user services than credit transfer and direct debit schemes, due to the need to ensure technical interoperability between the card and the payment terminal and the need to have clarity on users' rights and obligations. A *payment solution* covers at least the end-user services layer, and usually relies on (one or several) more generic schemes for the interbank rules. It is however also possible for a solution to develop its own rules for this layer.

border payments, as reported in ECB (2019a). In 2017 instant payments [more specifically: SEPA instant credit transfers (SCT Inst)] were added to this set of pan-European payment instruments.

For card payments, technical standardisation did take place but a European card scheme was not developed. The remaining national card schemes are not interoperable, and therefore cannot be used cross-border. For this reason, an international card scheme (such as VISA or Mastercard) is needed for paying by card when travelling within Europe. The role of the international schemes has become more and more important, not just for cross-border but also for transactions within national EU jurisdictions. Following their efforts to expand their acceptance beyond their traditional segments (travel and entertainment) they have entered the terrain of the national card schemes. In fact, some banks have concluded it was no longer worthwhile to issue cards with both the national card scheme and the international card scheme. By the end of 2016, international card schemes represented more than two-thirds of transactions made with payment cards issued in the EU [see ECB (2019b)].

Figure 2

REALISATION OF SEPA – TIMELINE OF EU PAYMENT INTEGRATION

SOURCE: ECB.

In e-commerce, too, global companies play an important role. A significant amount of e-commerce payments are done via PayPal or with credit cards (usually of international schemes). In addition, tech giants such as Apple and Google have entered the market with payments solutions for both in-store and mobile commerce payments. These in turn mostly rely on the international card schemes, thereby further strengthening the position of these global companies.

Increasing dependency on global companies may have significant side-effects in the area of governance and sovereignty. Global players may not or cannot fully take the needs of European payment service users on board. Furthermore, it cannot be excluded that geopolitical tensions may negatively affect the smooth functioning of the European payments ecosystem. Moreover, dependency on only a handful of large payment providers may lead to a lack of competition to the detriment of end-users.

In light of this, the Eurosystem considers the absence of a European payment solution for point-of-sale and e-commerce payments a major gap in the European retail payments market.

2.2 Eurosystem objectives

In order to address the shortcomings described in the previous paragraph, the Eurosystem supports market initiatives for payment solutions that fulfil the following objectives:

- i) *Pan-European reach and customer experience:* The solution should enable consumers to make payments at the national and EU level under the same

conditions and with a consistent customer experience. Pan-European reachability with wide merchant acceptance is needed in order to drive consumer adoption and trust.

- ii) *Convenience and cost-efficiency*: The solution needs to enable an easy, friction-free, user-friendly and superior payment experience for consumers and merchants. It should cater for their needs and characteristics in order to drive wide adoption. The solution should enable the initiation of payments via different tools (e.g. payment cards, mobile phones and wearables), channels and technologies (e.g. near-field communication - NFC) and be offered under cost-efficient conditions.
- iii) *Safety and security*: The solution should comply with all relevant legal, regulatory and oversight requirements. It should offer high levels of fraud prevention in line with Strong Customer Authentication under the revised Payment Services Directive (PSD2) and offer consumer protection with robust complaint and refund procedures.
- iv) *European brand and governance*: To provide clarity to payers about the possibility of using the solution across Europe, a common European brand should be adopted. This will visually position the European payments market in the global ecosystem. To ensure that the solution fully caters for European needs, a transparent European governance structure should also be adopted. This structure should allow relevant stakeholders to have direct influence in terms of the strategic direction and business model.
- v) *Global acceptance (a longer term deliverable)*: To meet the needs of end-users, the payment solution should also be usable by EU citizens for transactions to merchants based outside the EU (i.e. to facilitate travel, commerce and tourism). If a European solution would not cater for this, consumers would need to resort to other providers for these payments. Therefore the longer-term objective of global acceptance should be targeted from the beginning.

2.3 Role of instant payments within the retail payments strategy

A new European payment solution should ideally build on the existing achievements of SEPA. This means: using the existing interbank rules and infrastructures where this is possible. Of the SEPA payment instruments, the instant credit transfer is the one that has the greatest potential. In a context where the close-to-real-time delivery of goods and services is increasingly becoming the norm, the need for payment services that match this speed is growing. Instant payments are well suited as the basis for innovative solutions that address this need. Furthermore, they have the potential to be a cost-efficient alternative for merchants, because (in contrast to card payments) there is no

need for a guarantee (given the instant transfer of funds). Instant payments should therefore be a core element in a future pan-European solution.

2.4 Market response to the Eurosystem's strategy

In July 2020, a group of 16 large euro area banks announced an initiative to launch a unified payment solution: the EPI [see EPI (2020)]. The envisaged solution encompasses a payment card and a digital wallet, enabling in-store, online and person-to-person payments as well as cash withdrawals. The aim of the initiative is to replace national schemes for card, online and mobile payments with the new European solution. As it is based on the SCT Inst scheme, it can capitalise on the existing harmonised rules and state-of-the-art infrastructures underpinning the scheme. The launch of the EPI was welcomed by the ECB (2020b) and the European Commission (2020). However, to fully meet the Eurosystem's objectives the EPI "will have to tackle the fragmentation in European retail payments and should encompass all euro area countries, and eventually the entire European Union", as noted by ECB Executive Board member Fabio Panetta [in ECB (2020b)].

3 Instant payments

3.1 Background

Instant payments are electronic retail payment solutions that process payments in real time, 24 hours a day, 365 days a year, where the funds are made available immediately for use by the recipient. There is a global trend towards instant payments: as reported by Bech, Hancock and Zhang (2020), as of March 2020 instant payment systems were live in 55 jurisdictions, and planned in another 10. As discussed by the Committee on Payments and Market Infrastructures (CPMI)² [CPMI (2016)], advances in information technology are an important driver behind this trend. They have made cost-efficient real-time processing possible, and also commercially viable thanks to the spread of advanced mobile communication devices. Furthermore, these technological advances have changed end-users' expectations. Instant payments bring payments up to speed with other digital services such as messaging and streaming services, where real-time is the norm.

In many jurisdictions, central banks have played an active role throughout the process of introducing instant payments. In what is called their catalyst role, many central banks have used their influence, knowledge and analytical capabilities to solve coordination issues in their markets, by adding a strategic, long-term perspective and/or fostering the use of common standards [see CPMI (2016)].

² A committee located at the Bank for International Settlements.

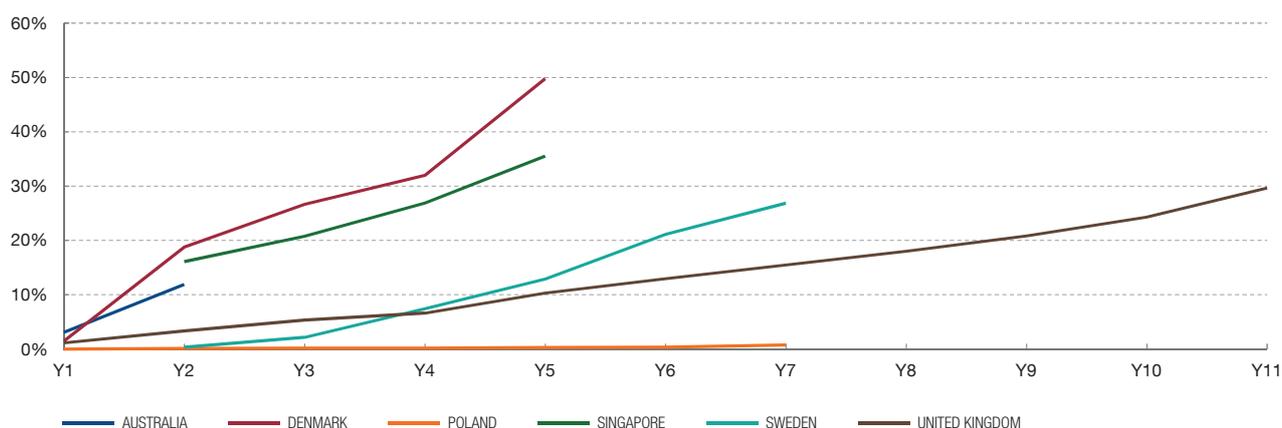
Depending on their specific mandate, central banks may go beyond this and take action as regulator. A key example of this is Hungary, where the central bank introduced legislation to make it mandatory for payment service providers to offer instant payments as a “new normal” [see Kajdi et al. (2019)].

Another way in which central banks support instant payments is in their role as operator of payment systems. As described by the CPMI (2016), some central banks have made changes to their settlement systems to support private instant payment systems, for example by providing instant payment systems operators accounts in which central bank money liquidity can be blocked to guarantee settlement. Other central banks decided to build a 24/7/365 service for instant settlement in central bank money.

Based on the information provided by the CPMI (2016), it appears that at the time the latter approach was fairly rare, although two of the examples provided could be considered to fall into this category (Australia and Mexico). However, in the years thereafter additional central banks decided to follow this approach. A particularly interesting case is Sweden, where the central bank (Sveriges Riksbank) is moving away from its previous approach in which it provided a private operator with an account to back its operations [as described in CPMI (2016)]. The decision to move towards 24/7/365 settlement in central bank money was based on the consideration that “central bank money is the safest way for banks and other financial institutions to make payments” [Sveriges Riksbank (2020)]. Another relevant case is the Federal Reserve, which decided to develop a settlement service for instant payments to “permit banks of every size in every community across the country to provide real-time payments to their customers” [Federal Reserve Board Governor Lael Brainard, in Federal Reserve (2019)].

This example illustrates that when deciding on their approach towards instant payments, central banks take into account not only considerations related to payments, but implications for other central bank tasks: in particular monetary policy and financial stability. For example, there is the risk that instant payments due to their speed could aggravate bank runs. As noted in the European System of Central Banks’ response to the European Commission’s consultation on a retail payments strategy for the EU [European Commission (2020)], mechanisms to stop the payment process in the case of a bank run or other severe problem need to be in place. The CPMI (2016) furthermore notes that for financial stability, risk management in instant payment systems is essential, in particular if an instant payment system becomes systemically important. Moreover, a potential migration of high value transactions from central bank’s settlement systems to private instant payment systems could raise financial stability concerns. However, instant payments could also have a positive effect on financial stability, since the possibility for banks to make urgent payments 24/7/365 could enable them to manage operational or financial risks outside business hours. As for monetary policy concerns, the CPMI notes that central banks need to consider how to handle balances held in instant payment systems with

Chart 2

INSTANT PAYMENTS AS A SHARE OF ALL CREDIT TRANSFERS

SOURCES: ECB payments statistics, BIS Committee on Payments and Market Infrastructures, Reserve Bank of Australia, Narodowy Bank Polski, Monetary Authority of Singapore, Faster Payments.

NOTES: Data up to 2018; Singapore: share of credit transfers and direct debits; United Kingdom: instant payments defined as Single Immediate Payments only.

respect to reserve requirements. Also, the demand for or supply of the balances that depository institutions place with their central banks may be affected, which could have implications for monetary policy implementation. Such broader considerations may affect the choices central banks make on how to support instant payments.

In some countries, instant payments have quickly become a widely used payment instrument, whereas in others usage has grown more slowly, as can be seen in Chart 2.

These different levels of uptake may be explained by several factors, as discussed in Hartmann et al. (2019). Some of these are external to the instant payment service, such as end-user access to telecommunications and payment infrastructures and the existing payment behaviour within a country. Countries with a rapid uptake of instant payments tend to be highly digitalised, including high usage of electronic payments (e.g. high usage of card payments as compared to cash). Other determining factors are characteristics of the instant payment service itself, i.e. reach of the service, fees charged to end-users and usability for various use cases, such as person-to-person, point-of-sale or corporate payments.

As for reach, an interesting example is the United Kingdom, where the initial uptake of Faster Payments was lower than expected [see VocaLink and PriceWaterhouseCoopers (2009)]. Usage really took off only after a change in legislation made participation in Faster Payments de facto mandatory for all banks [as noted in CPMI (2016)]. In Sweden³

³ Swish, the Swedish instant payment solution, was launched by a cooperation of six of the largest banks in Sweden, as reported on Swish's website (n.d.a).

and Denmark⁴, by contrast, the reach of their respective instant payment services was elevated from the start. In both of these countries, uptake of these services was fast, and high levels of usage were reached much faster than in United Kingdom.

With respect to fees, in countries with high levels of instant payments usage, such as the three mentioned above [see Jacob and Wells (2011); MobilePay (n.d.), Swish (n.d.b)] as well as Singapore [see Menon (2016)], instant payments are typically free for consumers. A contrasting example is Poland, where fees for instant payments are typically considerably higher than those for traditional credit transfers [see Narodowy Bank Polski (2015)]. This 'instant payments as a premium service' approach has led to much lower transaction volumes. Relatedly, there are cases where instant payments are not just priced at the same level as traditional credit transfers, but positioned as their replacement. For example, in the United Kingdom, Faster Payments has become the norm for online banking [see Faster Payments (2018)]. Likewise, many banks in Australia are re-routing transactions to the new instant payment system (New Payments Platform) without customers being aware of it [see Fitzgerald and Rush (2020)]. This has likely contributed to the fast initial uptake of instant payments in that country.

Finally, it appears that the wide availability of a payment solution enabling instant payments via mobile devices has contributed to the success of instant payments in several countries. Key examples include Sweden [see Sveriges Riksbank (2019)] and Denmark [see Danish Payments Council (2019)]. Such solutions make it more convenient to make instant payments to other individuals and/or to merchants, depending on their specific features. They also make instant payments easier to promote thanks to their clear branding. As for usability for payments by businesses, this depends on the extent to which banks make instant payments available via corporate channels, as well as on the maximum transaction amount for an instant payment. In both the United Kingdom and Singapore, these maximum amounts have been raised over time in response to increasing demand [see Faster Payments (2015); ABS (2015, 2018)].

3.2 Instant payments in euro

3.2.1 History and set-up

The Eurosystem has been a strong supporter of instant payments in euro since 2014, when it brought the topic to the attention of the ERPB. The ERPB, which brings together high-level representatives of the demand and supply side of the euro retail

⁴ The Danish instant payment system, the Straksclearing, started with 46 direct and 43 indirect participants, as compared to 51 direct and 43 indirect participants in the other Danish retail payment systems, as reported by Danmarks Nationalbank (2015).

payments market to foster the integration, innovation and competitiveness of euro retail payments in the EU, recognised the need for a more innovative payment instrument with pan-European reach. Following the migration to the SCT and SDD schemes, the Eurosystem and the ERPB sought to prevent renewed fragmentation in the euro retail payments market through the introduction of non-interoperable instant payment solutions. The ERPB therefore invited the EPC to design a scheme for instant payments in the SEPA countries: the SCT Inst scheme.

The SCT Inst scheme required infrastructures capable of processing transactions in real-time and on a 24/7/365 basis. Several Automated Clearing House (ACHs) developed such infrastructures. Transactions processed in the instant payment systems of the ACHs are backed by a pool of funds held in Second-generation Trans-European Automated Real-time Gross settlement Express Transfer system (TARGET2). The Eurosystem implemented enhancements in TARGET2 to support this. The Eurosystem also developed its instant payment system, TARGET Instant Payment Settlement (TIPS), which settles SCT Inst transactions immediately in central bank money. The Eurosystem's approach towards instant payments in its operator role has therefore been twofold: both providing private operators with central bank accounts to back their operations and providing an instant, 24/7/365 settlement service in central bank money.

By providing TIPS, the Eurosystem aimed to ensure the availability of a pan-European instant payment system accessible to all market players. To this end, it implemented a flexible participation structure enabling direct participation as well as the possibility to become reachable without having a TIPS account, settling using the account of a TIPS participant. It also provided the possibility to send instructions to TIPS via a third party such as an ACH (called an instructing party within the TIPS context), as an alternative to interacting directly with TIPS. Furthermore, it implemented a pricing policy based on equality, transparency and non-discrimination. It was decided not to charge fees for opening and maintaining accounts, nor for receiving or reporting, but only for sending transactions (set at € 0.002 per transaction for the first two years of operation) [see Bayle de Jessé (2018)]. Such a pricing model makes TIPS accessible also for parties with low transaction volumes, for which fixed fees may be a barrier.

The Eurosystem's approach thus shows that the key considerations behind the Federal Reserve's and the Riksbank's decisions to provide instant payment settlement services also played a key role: enabling settlement in central bank money and facilitating the provision of instant payment services by all relevant market participants.

3.2.2 Current status

As of 11 September 2020, 2254 payment service providers participate in the SCT Inst scheme, i.e. 56% of SCT scheme participants. Although there are SCT Inst

participants in 22 SEPA countries, the vast majority are located in the euro area [see European Payments Council (n.d.)].

The usage of instant payments in the euro area is increasing, but still relatively low. As of June 2020, 7% of credit transfers in the euro area are instant, according to ECB estimates [based on data provided by Eurosystem NCBs; see ECB (2020c)]. The potential level of usage is likely to be considerably higher. The conditions for instant payments in the euro area generally favourable, as discussed by Hartmann et al. (2019). The infrastructure needed to support the use of instant payments is quite widely available. A large majority of the population uses the internet and many of them access the internet via mobile devices [see Eurostat (2019)]. Moreover, the EU's Digital Single Market strategy [see European Commission (n.d.)] includes initiatives to improve internet access and connectivity, which should improve the situation in those countries that are still lagging behind.

Instant payments do not seem to have reached their full potential in the euro area. Several underlying factors may explain this.

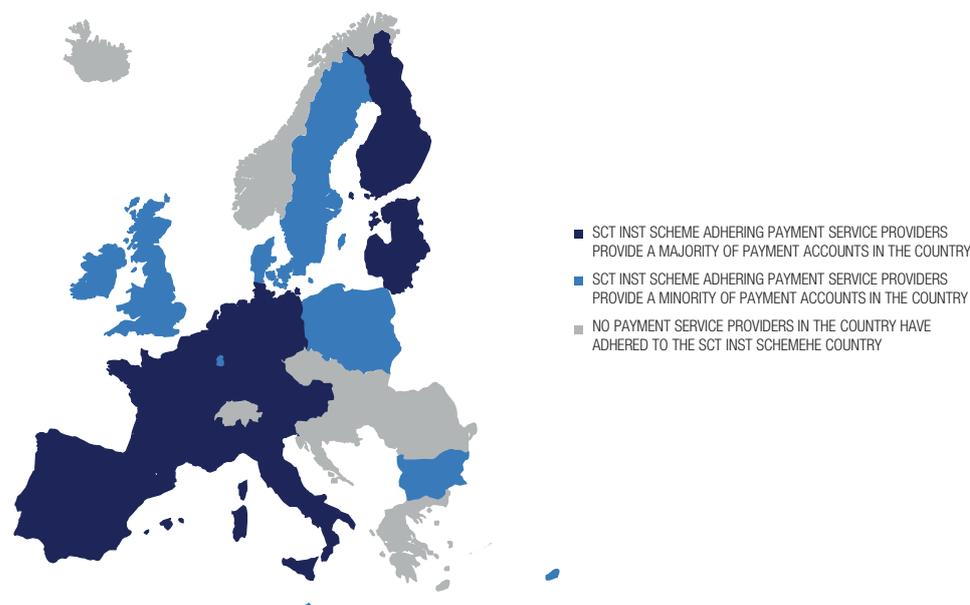
First of all, the availability of instant payment services to end-users differs between countries. For instant payments to become one of the major payment instruments, they need to be available to all consumers and businesses, regardless of where they hold their payment account. In many countries payment service providers made considerable progress towards this, often working together to ensure wide reach. Examples of such cooperative efforts include Spain [see Langa (2018)], Belgium [see De Lepeleire (2019)] and the Netherlands [see Van Dijk and Mallekoote (2019)]. However, according to EPC data, in a number of euro area countries instant payments can be sent from or received on only a minority of payment accounts, or even none at all (see figure 3).

Secondly, within the euro area, business models for instant payments differ between countries and between individual banks. Although statistics per country are not currently available, anecdotal evidence points towards vastly differing levels of usage, with higher usage being linked to lower fees. Particularly high levels of usage have been reported in countries where banks have taken the 'instant by default' approach, for example in the Netherlands [see Van Dijk and Mallekoote (2019)] and in Estonia [see Estonian Retail Payments Forum (2019); Soosalu (2020)].

Thirdly, convenient end-user solutions are not yet widely available in all euro area countries. The importance of this can be seen by looking at the example of Spain, where the mobile payment solution Bizum has quickly become popular [see Rodríguez Ferrer (2020)]. Around Europe, many end-user solutions have either recently been used or are being planned, as can for example be seen in a recent stocktake by the ERPB Working Group on a framework for instant payments at the point-of-interaction (2020). In this stocktake, 43 existing or planned instant payment

Figure 3

SCT INST SCHEME ADHERENCE LEVELS IN THE SEPA COUNTRIES



SOURCE: ECB.

solutions for the point-of-sale and/or e-commerce were reported. The implementation of these solutions is expected to contribute to the usability of instant payments by consumers. Usability of instant payments for businesses was initially limited due to the maximum transaction amount of €15,000. This amount has been increased to € 100,000 in July 2020, which should facilitate higher usage by businesses [see EPC (2020)].

Evidently, that there is still considerable room for growth in instant payments in the euro area. There is, however, another factor to take into account. For instant payments to become one of the main European payment instruments, and the basis for new European payment solutions, they have to work across Europe. Currently, this is not always the case. This is because there is a lack of interoperability in the bottom layers of the retail payments pyramid: the clearing and settlement layers. For this reason, many banks have chosen to join – directly or indirectly – more than one instant payment system. However, even those that have done so cannot necessarily reach all other banks, because this depends on those other banks’ choice of infrastructures. Moreover, participation in several instant payment systems means that banks have to split their liquidity. Each of the systems requires banks to prefund their payment capacity within the system, and funds can only be moved from one system to another within the opening hours of TARGET2 [see also Bindseil and Terol (2020)].

There is also fragmentation at the top of the pyramid. This is not just because there are many existing and planned end-user solutions: that in itself could be a sign of healthy competition. The issue is rather that these solutions are not interoperable with each other. Since many of these have a limited geographical scope (as reported in the above mentioned ERPB working group interim report), a continued lack of interoperability could lead to a situation similar to that of the national card schemes. These solutions may become successful at national level, but for cross-border payments reliance on global companies would remain.

3.2.3 Ongoing developments

It is clear that there are still efforts to be made by all parties in the instant payments pyramid for this new payment instrument to achieve its full potential. Many of these efforts are already underway.

Central banks of the Eurosystem continue to act as catalysts to increase the reach of the scheme, if not to all banks then at least to a level that ensures that all European consumers and businesses can use instant payments. Should market forces not be sufficient to achieve this, there may be a need to consider a mandatory end-date (as noted by the European Forum for Innovation in Payments – co-chaired by the ECB and the European Commission – in its November 2019 statement).

Also in its catalyst role, the Eurosystem promotes the implementation of end-user solutions with pan-European reach. To this end it seeks to overcome fragmentation, on the one hand by promoting standardisation and interoperability and on the other hand by supporting initiatives for pan-European end-user solutions. The ERPB is the Eurosystem's primary channel for the promotion of standardisation and interoperability. ERPB work is currently underway on an interoperability framework between solutions for instant payments at the point-of-sale and in e-commerce. Other standardisation and interoperability initiatives can also make an important contribution to overcoming fragmentation. Among those, the upcoming SEPA Request-to-Pay scheme (developed by the EPC) is particularly notable. It will enable both individuals and businesses to request a payment, including all the details needed for the intended payer to initiate the transaction [for further details see Jacquelin (2020)]. As for pan-European end-user solutions, supporting these is the core of the Eurosystem's retail payments strategy. The ECB has publicly welcomed the EPI as a market response to the Eurosystem's retail payments strategy, and will continue to monitor the initiative to foster further alignment with the Eurosystem's objectives.

The Eurosystem is also taking action to overcome the fragmentation in the clearing and settlement layer. In July 2020 it announced changes in TIPS that should ensure pan-European reach of euro instant payments. Firstly, all payment service providers which have adhered to the SCT Inst scheme and are reachable in TARGET2 should

also become reachable in a TIPS central bank money liquidity account. Secondly, all ACHs that offer instant payment services should migrate their accounts from TARGET2 to TIPS. This will enable each SCT Inst scheme participant to reach all others, without depending on the actions of other payment service providers or ACHs. In addition, all ACHs will be able to offer pan-European reach to their customers, without the need bilateral agreements to establish links, and there would be no potential credit exposure for cross-ACH transactions. Furthermore, liquidity traps can be prevented, since ACHs' accounts will be funded from TIPS rather than TARGET2. This facilitates moving liquidity from one ACH to another without the current limitations posed by the opening hours of TARGET2 [see ECB (2020c)]. With this new set-up, the Eurosystem will continue to offer choice. Banks can choose to send their payment instructions to an ACH or directly to TIPS. If they send them to an ACH, they can choose to have them settled in TIPS one-by-one, or for the ACH to provide finality in its books backed by funds held in the ACH's TIPS account [see Bindseil and Terol (2020)].

4 Concluding remarks: future outlook for the European retail payments market

As businesses and public authorities are currently thinking of how to shape the new normal in a post-COVID-19 world, it is essential to ensure that retail payment services can meet the changing demands. There may be a continued higher use of e-commerce or of mobile devices to initiate payments. Authorities may wish to enable faster pay-outs of e.g relief payments to households and businesses in emergency situations, as also noted by Federal Reserve Governor Lael Brainard in an August 2020 speech. Whatever these future demands will be concretely, it is clear that changing demands ask for innovation to ensure that payment services can be integrated smoothly into new business and private sector processes. Instant payments form a good basis for innovative payment solutions that enhance efficiency and user convenience. Furthermore, European governance is required to ensure that the needs of European stakeholders are met. Therefore, the successful implementation of the above mentioned initiatives for further development and implementation of instant payment services, standardisation, interoperability and pan-European payment solutions has the potential to be a real game-changer for the European retail payments market. Payment services in Europe would increasingly be based on instant payments, aligning the speed of retail payments with that of other digital services. Retail payment services would support real-time processes in digital services, e-commerce, physical commerce, industry, logistics and beyond. European citizens and businesses would no longer be faced with barriers preventing them from using their familiar (national) payment solutions for transactions to other EU countries. Instead they would be able to use the same European solution across the EU. Rather than continued fragmentation along national lines and increasing reliance on a few global companies, Europe would have its own payment solution that would be able to compete with global solutions, supporting our Single Market and single currency. The SEPA would be completed.

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