Executive summary and main take-aways

This study seeks to provide the European Central Bank (ECB) with a thorough understanding of the current payment habits of citizens of euro area countries and specifically their attitudes towards digital payment methods. In addition, it aims to explore the user perspective on new digital payment methods and potential key features which could drive the adoption of a new digital means of payment with a view to further informing the Eurosystem’s investigation of a possible digital euro.

Participants were not immediately presented with the concept of a digital euro for a number of reasons, including the inherent complexity and novelty of the concept of central bank digital currencies in general and the concept of the digital euro in particular, as well as the need to avoid allowing people’s perceptions of the provider to prejudice their views on the payment method. Instead, the concept of a new “digital wallet” was introduced to encourage discussions about possible desirable features and functionalities of a new digital payment method in comparison to those already on the market. The concept of the digital euro was introduced towards the end to explore the existing level of knowledge and understanding among respondents as well as people’s perceptions of a digital euro backed by the ECB/Eurosystem.

This report is based on insights from qualitative research conducted in all euro area countries. To ensure the robustness of the research and to obtain a holistic overview of the perceptions and attitudes on the topic, a carefully selected range of target audiences were interviewed across all 19 euro area countries, including 2,160 members of the general public, 142 tech-savvy participants, 138 merchants and retailers, and 89 individuals with limited access to banking services or the internet, all of whom were interviewed using a qualitative approach tailored for each target group. The research methodology is presented in more detail in the full report.

The summary provides an overview of the main findings by target group.

Disclaimer:
The Study on New Digital Payment Methods was commissioned by the European Central Bank (ECB) in September 2021. The study was designed in line with the methodological requirements set out in the ECB’s call for tender and subsequently fine-tuned and co-designed in close collaboration between Kantar Public and the ECB to ensure methodological rigour and adherence to the highest research and ethical standards while remaining within the original tender specifications. The complexity of the topic and the objectives set out by the ECB team determined many important aspects of the study design. The analysis was carried out by Kantar Public and the report reflects the findings of the research.

The report does not necessarily reflect the views of the ECB.
Most important features that could underpin the adoption of a new payment method

Discussions with the general public and the tech-savvy indicate that, in order to encourage interest in, and engagement with, and to possibly drive acceptance of any new digital payment method, this method will need to offer compelling advantages over current options or novel benefits that simplify daily life. The following features, in order of importance, were considered to be the most critical by participants in this respect:

- **Universal acceptance** was considered the most important feature – ideally, across the euro area, all merchants in physical and online stores would need to accept it, regardless of the size of the purchase.

- **Instant, contactless and open person-to-person payments** – instant, easy, contactless payments came up as a very important selling point. Even more appealing would be a digital wallet that allowed these payments regardless of the platform or device used by the payers and payees.

- **A one-stop-solution** was envisioned by participants, allowing them to combine multiple payment methods into one, reducing the need for multiple cards and personal identification numbers (PINs), streamlining financial management and giving them access to a range of payment options on one device. Some participants would also welcome accounting and financial reporting functions, with customisable spending reports or enabling them to set spending limits.

- **Easy to use, secure, reliable and fast: biometric authentication.** Security not only encompasses privacy of personal data and protection from fraud and hacking, but also secure and reliable authentication for payment. Biometric verification, including fingerprint, face or iris scans, are indicated as being highly desirable. Any feature that would make a payment convenient, fast and easy, without compromising security, was particularly popular with the tech-savvy. For younger respondents in particular, a higher level of convenience compared to their already competitive current payment methods would be a strong motive to adopt a new payment method.

- **Cost-efficiency:** The digital wallet or digital euro would need to be able to provide and optimise all of the functions mentioned above at no cost or with very low fees.

In discussing a new digital payment method, referred to as the “digital wallet”, the following features and functionalities were raised by participants:

- When it comes to setting up the new digital wallet, the onboarding must be user-friendly, fast and easy. In line with the convenience requirement, participants would not wish to have to purchase and learn to use yet another device, preferring to integrate the wallet into one they already own and use. As a result, they would prefer the wallet to be seamlessly available on a broad range of devices and operating systems, so users are not tied to a particular solution.
• **Privacy:** Several participants among the general public, but also among the tech-savvy, indicated they do not really think about privacy when making payments. However, the availability of flexible privacy settings that can be adjusted to suit the payment occasion could be an additional feature to drive adoption. Most respondents would opt for a medium level of financial privacy without special concerns for the visibility of their transaction to their bank as long as they could avoid exposure to bank advertising. Many would like the option to adjust privacy levels based on the specific payment situation.

• When it comes to **funding a digital wallet**, the majority preferred manual funding with customisable payment reminders when the balance of the digital wallet is below a set threshold. The option of automatic top-ups was most appealing to the tech-savvy.

• Conditional payments (only discussed with the tech-savvy) were seen as nice to have and interesting, but not a key driver for the adoption of a new digital payment method.

• Other features that were less widely mentioned and not so highly rated were the ability to use the device with or without an internet connection, devices that do not need recharging, devices that would be free to acquire, and value-added services, such as cashback, loyalty schemes or discounts. Some tech-savvy participants would also like the wallet to have smart ways of recognising a payment, for example via a QR code or scanning capabilities.

• **Risk-freeness,** a feature that sets the digital euro apart from any other digital payment method currently available, is appreciated, but many participants did not fully understand its intrinsic added value. Unsurprisingly, most did not see a difference between central bank money and commercial bank money – both were seen as safe and secure, particularly as amounts up to €100,000 in their bank are protected by public deposit guarantees, something which the vast majority were actually unaware of. Therefore, being able to hold risk-free central bank money in the form of the new digital euro may not, on its own, be a strong incentive for adoption.

• More generally, **functional aspects and features are considered more important factors than the provider of the service** when participants consider adopting a new digital payment method, although nearly all participants would prefer a bank, a central bank or a European entity to a big technology company. While many perceived big technology companies as more innovative, when explicitly asked, participants said they trusted them less, particularly with their personal and financial data. A bank or central bank would be preferred as the provider, as these are considered more trustworthy, reliable, and safe. A European entity is also preferred, as it is seen as well-regulated and expected to be able to provide a solution covering the whole euro area or the whole of the EU.
Current payment behaviour and recent experience with new payment methods

- With regard to current payment habits, both the general public and the tech-savvy reported using a range of payment methods, depending on the occasion and situation. **Debit cards were the most commonly used for day-to-day shopping, with cash and mobile payments (including via apps and global online payment solutions) also widely mentioned**, particularly by the tech-savvy. Other payment methods such as credit cards, bank transfers and direct debits were used in specific circumstances.

There was a **strong preference for payment methods that are convenient, fast, easy to use and widely accepted, at least domestically.** Older participants, particularly those aged 65+, usually reported using a more limited number of payment methods, with a preference for more traditional means such as cash and debit cards. Younger participants reported using mobile payment methods more frequently than older cohorts. There are also geographical differences, with more widespread use of mobile payment options in technologically mature markets, particularly Estonia, Finland and Ireland.

- **Few of the general public and tech-savvy participants had recently adopted a new payment method or had actively been seeking a new one.** Almost all felt well served by the range of options they currently use, and they expressed no desire for change. Many, particularly among the tech-savvy, reported actively looking to reduce the number of payment options they use. Thus, simply having access to a new payment option would not be a sufficient motive to switch for these populations; rather, they feel that to consider a new payment method they would need to have an innovative product that optimises and simplifies, rather than increases their options.

The digital euro

- **Few participants among the general public or the tech-savvy had heard of the digital euro, or knew much about it.** The most common spontaneous assumptions they reported were that it was likely to be a cryptocurrency like Bitcoin, or a digital currency that could be used to purchase online goods and services. **However, once it was explained to them, participants appreciated the difference between the digital euro and cryptocurrencies and liked the fact that it would be backed by the ECB. This is considered an added value in terms of safety, regulation and stability.**

- Some participants worried that the introduction of a digital euro would lead to a phasing out of cash. Often, participants were less concerned for themselves, but for other groups, like older people or those without access to the internet, who they perceive to be dependent on the use of cash.
1.2 Merchants

Critical features that could underpin the acceptance of a new payment method

There were a number of similarities between the responses of the general public and this specific target group. However, when it comes to offering and accepting a new digital payment method, the following elements were considered key by merchants:

- The overarching key driver for acceptance by merchants of any new payment method, whether digital or non-digital, would be customer demand. Even high operating fees were not seen as a deterrent when payment methods are very popular among customers, and merchants feel compelled to accept them.

- An element that currently hinders some merchants from accepting new payment methods are the fees involved. It is worth noting, however, that fees were not seen as a determining factor in whether to accept a payment method in isolation; rather, it is weighed against customer demand. Lower fees than current fee levels could convince merchants to accept a new digital payment method as long as there is a significant group of customers demanding it.

- Another critical feature was speed of transactions: fast or instant payments and instant access to the funds are very attractive features for merchants, as they make cashflow management easier and improve the shopping experience. As merchants were not fully satisfied with the speed of their current payment instruments, a new high-performing digital payment instrument with reliable instant payments could provide significant value for this group.

- Technical reliability backed up by agile and good customer service was also important for merchants when it comes to their payment methods. They want a new payment instrument to be easy to use and intuitive, with minimal investment in appliances and payment technologies, e.g. by using their existing payment technology or using scanning technology available on their smartphone (QR codes, etc.).

- Crucial for merchants to accept a new digital payment method was a good level of integration with their day-to-day business activities and existing payment and accounting systems. The integration of accounting tools, cash back, bonus points, and marketing activities as a way of supporting the introduction of a new payment service would be appreciated.

- A final critical feature for both merchants and their customers is assurance of security and safety. In addition, for some merchants, digitalisation was associated with a notion that the payment system would become unsafe and exposed to more risk (e.g. phishing).

Current experience with payment methods

- In principle merchants reported accepting a wide range of payment methods such as cash, credit cards (mainly Visa and Mastercard), debit cards, online payment methods (e.g. PayPal, Klarna, SOFORT, eps-transfer), mobile-to-mobile payments, banking apps (e.g. Revolut), bank transfers,
and pre and post-sale invoicing and, to a decreasing extent, cheques. But the range of payment methods accepted is driven by the need to satisfy customer preferences, as flagged at the beginning of this section. Another important factor reported by merchants in the discussions, was the image of their business – it is important to offer the latest payment methods, so that their companies are seen as technologically up to date. Few merchants reported that they have recently started accepting a new payment method and if they did, the main reason was popular demand.

- In general, merchants seemed to be satisfied with the current payment methods they use. They value speed, convenience, reliability and customer-friendliness. Payments must be easy for the customer and the money must move as fast as possible, whether towards their own bank accounts or those of their suppliers.

- Fees, especially those charged by credit card providers and some digital payment providers, are an issue for merchants, who feel they have little choice. Their preference is obviously for payment methods that carry the least cost to the seller.

- When it comes to the payment solution provider, the country in which the provider is based seemed not to be an issue. For merchants, the most important thing is that payments work without error. In the event of problems, they like having a local contact at their bank or a reliable hotline; however, most have had good experiences with digital payment providers, with some notable exceptions.

- The most important improvements for merchants are enhanced technical reliability, good customer service, low fees and additional services (e.g., integration of accounting tools, cash back, bonus points, marketing activities ahead of the introduction of a new payment service, etc.).

Attitudes towards digitalisation

- Although there is an obvious trend towards digital payment methods, in some countries cash is highly valued. Cash is preferred due to perceived lack of charges and because it suits some customers’ profiles, although the handling, collecting, transporting and processing of cash by banks and cash-in-transit companies have become increasingly expensive. For those merchants accepting digital payment methods, all of them accept debit cards and many also accept mobile payments. The advantages of digital payment methods for merchants were transaction speed and reliability, and ease of use for both customer and merchant. They also provide a traceable proof of payment.

- Online payments have increased considerably in recent years and merchants expressed a readiness and willingness to cater for this development in order to serve their customers, especially younger customers, who demand more modern payment methods. They would expect this trend to continue over the next 5-10 years, but point out the importance of also keeping cash and other payment options available for their customers.
The digital euro

- Few merchants have heard of the digital euro and their awareness of the digital euro is generally very low. This was also the case in technologically advanced countries such as Estonia and Finland. Most participants in this group had not heard about a digital euro before the session, and those who had did not have specific information to share about it.

- When the concept of the digital euro was explained, merchants were at best neutral to the idea. They remained sceptical about the introduction of this new means of payment, as many worried it would mean the start of the disappearance of cash. The initial reactions of merchants to the digital euro varied: some associated it with developments in the crypto market, others saw it as a means for central banks and governments to increase oversight and control over their citizens, and others perceived such a development as an attempt to end the black economy. Merchants tended to not understand the difference between a digital euro and the euro they already use in digital form. They also expressed the view that online payments are already digital money and did not see how the digital euro is any different.

- Features specific to the digital euro, such as the digital euro potentially becoming legal tender and, as central bank money, being risk-free, were also relevant to merchants. The concept of legal tender is perceived by merchants as a requirement they would need to comply with. Indeed, most merchants would not object to the digital euro becoming legal tender and would accept the digital euro as such.

- Merchants indicated that they would need clear communication about the critical features outlined above (fee levels, speed of transactions, technical reliability, customer service, integration with day-to-day business activities and existing payment and accounting systems, envisaged levels of security and safety, etc.). Nevertheless, along the same lines as the key drivers already mentioned, customer demand would remain pivotal to merchants’ acceptance of the digital euro as a means of payment. To them, the digital euro would be yet another alternative for accepting payments.

- On the flipside, the main barriers to the acceptance of new methods would be low customer demand, possible financial charges and fees for merchants, poor levels of integration with their existing systems, the possible need to invest in additional technology (terminals, point-of-sale (POS) equipment) and the time and effort required to “get up to speed”.
1.3 Unbanked / underbanked / offline population

Participants in this study had different reasons for being unbanked, underbanked and/or offline that went beyond the narrow realm of payments. The main rationale usually related to unfavourable life circumstances (such as no steady income, not in charge of finances, personal bankruptcy), emotional barriers (distrust of banks, reluctance to use the internet and digital banking tools, negative banking experiences in the past) and functional barriers (the lack of technical skills). Frequently, this was a matter of age, with older people and women being more used to traditional payment methods such as cash.

Critical features that could underpin the adoption of a new payment method

The key features that a new payment method should have to make it attractive to at least a subsection of the unbanked, underbanked and offliners are being easy to use, secure and free of charge. In essence, it should act like cash as much as possible.

- **The most important feature** was that a new payment method should be easy to use without requiring technological skills and have a very low bar for the onboarding process. Ideally, it would have the same features as current payment methods – allowing people to make low-value private payments (like cash), to make instant payments, to have full control of their expenses, to withdraw money using a card, to make automatic payments, to have a monthly statement, and to have the possibility of offline use without an internet connection.

- **A second element was safety and security:** personal information needs to be kept secure, in view of the high level of mistrust of banks among this group, and users need to be protected against misuse in the event of loss or theft as an added value compared to cash.

- The payment method also needs to be free or with low fees, no maintenance costs and, for some, ideally with an option to borrow a certain amount of money for more difficult months.

- A final, important feature to potentially drive adoption of a new payment method was a robust customer support system. Participants felt that a significant level of initial support would be needed to set up a new digital payment system and overcome reluctance. They expressed a clear preference for face-to-face support where they could learn how to use the device or payment method step by step. Personal contact, information, and clear, patient explanations, supported by, at least, textual and visual explanatory leaflets or video tutorials, and some backing from the banking system or public financial institutions, would be an important factor to win some over.

- In addition, the adoption of any new payment method among this group will heavily depend on the advice and support they can receive from family, friends and acquaintances.

- It is worth nothing that there was a general lack of interest in payment services provided by banks, in particular for the unbanked. This, coupled with the absence of any strong need, partly stemming from the perception that cash is accepted everywhere and in any amount, is the reason this particular target group has remained unbanked or underbanked. Older participants, in particular, are often unwilling and see no need to deal with new things and learn new skills, especially if they are not perceived as necessary for life, such as using the internet.
• When respondents were asked about the potential provider of a new payment method, there was widespread mistrust of the idea of foreign corporations managing their money. Some respondents were indifferent, and others clearly expressed a preference for a local bank or a public authority, which they felt would care more, comply with their own country’s privacy laws and work harder to safeguard the privacy of its customers.

### Current payment behaviour and recent experience with new payment methods

• When it comes to payment habits, the main payment method used by unbanked, underbanked and offline individuals is cash. The main reason for this strong preference is that cash was seen as the most accessible, most trusted form of payment, and the easiest to handle. It provides a sense of control and ownership. According to participants, cash enables them to keep track of their expenditure and control their spending behaviour. In addition, the participants, especially the offline participants, preferred cash due to concerns over the privacy, security and safety of other payment methods.

• Debit and credit cards and other digital payment methods in general are their least favourite, and only for very occasional and unavoidable use, such as to withdraw cash from an ATM. The participants almost never use credit cards and tend to have them, if at all, for emergencies and instalment payments only. Underbanked individuals tended to lack awareness of payment methods other than cash and cards.

• Unbanked individuals had mixed feelings about, and an evident level of resistance to, the possibility of adopting a new digital payment method. Overall, there was a general reluctance and lack of openness towards new digital payments, explained by low interest and low perceived or actual need, and driven by apparent satisfaction with their current payment methods. Some participants indicated a fear of loss of control and independence, for example if they needed to turn to others to use their card or had to disclose their password details to others. This emerged from the interviews with these segments of the population in all the countries. Participants felt that they could handle their own finances and felt in control. With new digital methods this could change, and they might depend on others to set up, use and account for the way they use the new method, and might also need help to resolve issues or get their money back. Concerns were also expressed about the security and safety of such new digital payments.

### The digital euro

• The unbanked in general have not heard of the digital euro. This group expressed little interest in this concept or in financial information, which they found vague and incomprehensible. Conceptually, it was understood as the evolution of the euro in the new digital times, but it remained very abstract.

• The unbanked, underbanked and offline population felt slightly overwhelmed by the idea of a new digital payment method. They expressed the need to receive information on the advantages of a digital euro as opposed to the payment methods they currently have at their disposal, and how it would be beneficial for them.

• Freedom of choice was also very important to these participants, who fear a digital euro would endanger commercial banks and mean the end of the use of cash. They do not want to be forced to use a new means of payment.