

A close-up photograph of a person's hands holding a gold smartphone and a credit card. The person is wearing a blue and white striped shirt. The background is blurred, showing a laptop keyboard and some greenery. A dark grey semi-transparent box is overlaid on the bottom right of the image, containing the title and author information.

**THE DUAL NATURE OF THE COMPETITIVE
RELATIONSHIP BETWEEN CARD
SCHEMES AND DIGITAL WALLETS**

By Elena Salomone

In recent years, the payment industry in the European Economic Area (EEA) has undergone significant innovation. Consumers have become accustomed to using payment methods that offer innovative functionalities: for example, they can now pay with their phones, using contactless technology in stores and biometric identification (e.g. Face ID on iPhones) for online purchases.

As a result of these developments, new market players have populated the competitive landscape. Notable examples include Big Tech companies such as Amazon, Apple and Google: their digital wallets¹ have managed to obtain meaningful shares of supply in a relatively short time.

Innovation in the sector has resulted primarily in the addition of layers to the value chain, which has become more complex and intricate, rather than in disruption at those stages of the value chain where the basic payment services—e.g. cards and bank transfers—are supplied. All new payment solutions continue to rely on the established infrastructures provided by banks and card schemes, allowing the execution of payments via traditional payment services.

In particular, most digital wallets allow consumers to store their cards and pay for their online purchases by logging in to the wallet, instead of entering card details. They are, therefore, both commercially and technically linked to card schemes.

Card schemes are established players in the payments industry, providing the networks under which card-based transactions are executed.² The scope of their business can be international or domestic. The largest international card schemes (ICS) in the EEA are Mastercard and Visa.

Domestic card schemes in the EEA include Bancomat (Italy), Bancontact (Belgium), Cartes Bancaires (France), Dankort (Denmark), Girocard (Germany) and Scheme MB (Portugal). Their online presence is often limited and, in any case, confined to domestic transactions.

The majority of card schemes, including Mastercard and Visa, operate under the so-called “four-corner” model, in which their relationship with consumers and merchants is intermediated by issuing and acquiring banks, respectively: the issuing bank provides the card to the payer, the acquiring bank accepts the payment on behalf of the payee. Card schemes collect fees from issuing and acquiring banks for any card transaction; these fees are their main source of revenue.

The way digital wallets operate suggests that they are vertically related to card schemes: card schemes provide digital wallets with a crucial input to operate in the market. Wallets also significantly contribute to ICS business volumes. At first glance, this might suggest that digital wallets cannot compete with card schemes. The [Market Study on Competition in Online Payments](#) conducted for the European Commission by Lear (lead partner), Capgemini and Verian argues that this conclusion may be premature.

The study investigates the competitive relationships among industry players active at various stages of the value chain and concludes that the nature of the competitive relationship between card schemes and digital wallets is mixed – both vertical and horizontal. This conclusion is supported by an analysis of publicly available information and information collected through a consultation of industry stakeholders.

¹ Digital payment wallets are payment methods that allow individuals to make electronic transactions via their computer or smartphone. Consumers can link their preferred payment card (or bank account) to their digital wallets and make online transactions by accessing their funds directly via the wallets (European Commission - [Study on the application of the Interchange Fee Regulation](#)).

² A payment card scheme can be defined as a single set of rules, practices, standards and/or implementation guidelines for the execution of card-based payment transactions and which is separated from any infrastructure or payment system that supports its operation, and includes any specific decision-making body, organisation or entity accountable for the functioning of the scheme ([Interchange Fee Regulation](#), Chapter 1, Article 2(16))

The evidence collected suggests that 27.6% of ICS transactions are processed through digital wallets. Some digital wallets (e.g. PayPal, Amazon Pay, Meta Pay) also support payment services alternative to cards – e.g. allowing the payer to transfer money directly from their bank account. As such, these wallets both contribute to ICS transaction volumes and compete with them.

Other wallets, such as Apple Pay and Google Pay, currently only support card-based payments. Yet they could integrate non-card payment solutions into their wallet. Therefore, they currently contribute to ICS business volumes but may become a potential competitive threat in the future. In a 2022 [discussion paper](#) the UK Financial Conduct Authority (FCA) noted that Big Techs could facilitate the adoption of payments through a non-card payment rail.

This dual nature of the competitive relationship between card schemes and digital wallets impacts their incentives to partner with one another.

For digital wallets, ICS are almost essential partners: digital wallets need the major brands' cards to be compatible with their service to establish a presence in the online payment sector. For card schemes, collaboration with wallets offers both opportunities and risks, which need to be balanced:

- on the one hand, digital wallets may allow card schemes to capture volumes of transactions that would otherwise be made through alternative payment rails (e.g. Satispay, an Italian payment application relying on bank transfers), thereby helping card schemes to maintain/strengthen their market position;
- on the other hand, by partnering with wallets, card schemes risk favouring the growth of players that may become capable of challenging their position in the payment industry. Such competitive threat may be actual (e.g. in the case of PayPal) or potential (e.g. in the case of Apple Pay).

Which of the two effects prevails cannot be anticipated. Information collected for the purpose of the Market Study on Competition in Online Payments provides some further insights on card schemes' incentives to partner with digital wallets. The study finds that card schemes, overall, seek to collaborate with the main wallets; but also that ICS may perceive certain wallets — especially those from Big Tech firms (and mostly Apple Pay) and PayPal — as credible competitive threats. This perception may lead ICS to structure their partnerships with these wallets in a way that limits their ability or incentive to develop rival payment services.

According to publicly available information (available [here](#)), Visa, MasterCard and American Express and several major US banks collaborated with Apple for the development of Apple Pay in the US, starting in 2013. This collaboration enabled the development of the technology necessary for card tokenisation, essential for uploading cards into mobile wallets, and has likely benefited other Big Techs as well.

The US Department of Justice (DOJ) has disclosed strategic partnerships between Visa and digital wallets in the US – Apple Pay and Paypal, in particular – whereby digital wallet providers are rewarded with financial benefits for their commitment not to develop payment solutions competing with Visa or not to encourage the use of such solutions (see [DOJ complaint](#)). Similarly, in an [ongoing market review](#), the UK Payment System Regulator (PSR) found that in the UK Paypal has entered into agreements with Mastercard and Visa not to steer customers away from those schemes' cards.

While these allegations concern conducts implemented in other jurisdictions, there are some indications that ICS could have similar incentives in the EEA. The Market Study on Competition in Online Payments argues that ICS perceive alternative payment rails as a competitive threat:

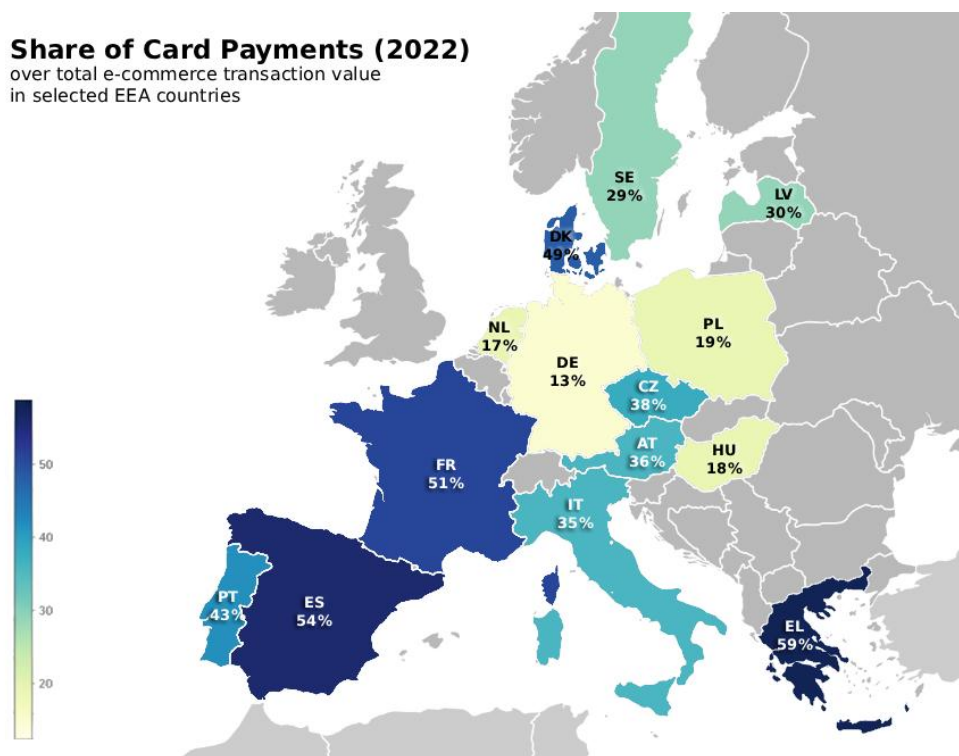
- card schemes participating in the stakeholder consultation carried out by the project team reported they perceive payment solutions that enable a transfer of funds between the bank accounts of the payer and the payee (so-called account-to-account (A2A) payment solutions) as a competitive threat;

- this threat is likely to grow in the future, as a result of recent initiatives backed up by European banks aimed at fostering cross-border A2A payment solutions (the European Payment Initiatives (EPI) and EuroPA Project);
- both Mastercard and Visa have been involved in acquisitions targeting fintech companies active in the provision of A2A payment solutions, signaling strategic interest in this area.

In this context, strategic partnerships between ICS and key players in the digital wallets' market segment may help ICS maintain and/or strengthen their position in the online payments arena, possibly to the detriment of competition and innovation.

From a competition law enforcement perspective, strategic partnerships between ICS and digital wallets may raise concerns if ICS are able to secure such agreements by leveraging their market power and a similar behaviour cannot be replicated by competitors.

The Market Study indicates that in the EEA consumers have a strong preference for ICS cards; and that the acceptance of ICS cards by merchants is close to universal. Consumers' and merchants' preferences are, however, heterogeneous across Member States. The graph below shows the share of card payments³ over e-commerce transaction value in the 14 Member States covered by the Market Study.



The figures include online payments through domestic scheme cards – which, however, are marginal in several Member States. In addition, they do not include payments through digital wallets or other payment applications that rely on cards and thus contribute to ICS volumes of transactions.⁴ Despite these limitations,

³ All payments through credit, debit and prepaid cards have been considered.

⁴ This contributes to explaining the low share of card payments observed in Germany, where Paypal is widely used.

the above data provides a useful indication of ICS relevance in the selected countries and the threat that alternative payment methods may pose.

For example, in certain Member States (Germany, Hungary, the Netherlands and Poland) card payments reach a share of less than 20% of the total e-commerce value in the country. This likely reflects the more widespread use of payment methods relying on alternative payment rails in those countries. In the Netherlands and Poland, in particular, domestic A2A payment applications (iDEAL and Blik, respectively) are widely used for e-commerce.

Overall, the data collected for the purpose of the Market Study suggests that, while ICS may be among the most widely used payment methods in certain Member States, they also face competition from alternatives relying on different payment rails. Despite the heterogeneity observed across countries, the competitive threat posed by such alternatives appears credible, at least potentially, and it may intensify in the future as different domestic A2A payment solutions pool their resources. As a result, traditional operators such as ICS are required to rethink the way they operate in the market – including by partnering with digital wallets – giving rise to new competitive dynamics.

If you wish to find out more, the full Market Study is available [here](#).