RESEARCH NOTE NO. 2

Card Networks, Merchant Costs, and the Search for Alternatives

Why the Card Payment System Is Reaching a Structural Limit

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Abstract

The first note in this series established how value moves through a card payment transaction and who captures it at each step. The finding was unambiguous: the system is not neutral. It is structured to favour issuers and networks, and its costs are systematically borne by merchants.

This note takes the analysis one step further. If the cost structure is so clearly tilted, why does the system persist? And what does it take for an alternative to actually displace it? These questions require going beyond the mechanics of card payments and looking at the incentive architecture underneath: who decides, who pays, and why those two groups are almost never the same.

The central finding is this: the persistence of the card payment system cannot be explained by efficiency alone. It persists because it has successfully externalised its costs to a party, the merchant, that bears them without being able to escape them.

European regulators have tried to intervene. Alternatives are emerging. But none of this will resolve the underlying problem until the incentive structure itself is addressed.

Scope of Analysis

This note focuses on four-party card schemes operating within the European Economic Area, building directly on the framework established in Research Note No. 1. It examines the effectiveness of regulatory interventions under Regulation (EU) 2015/751 and PSD2, the structural constraints preventing merchant exit from card networks, and the economic logic behind emerging alternatives including SEPA Instant and account-to-account payment systems. Fee ranges cited are illustrative and drawn from publicly available sources.

Analytical Lens

This note approaches the problem through an incentive-structure lens rather than a purely technical one. The question is not whether alternative payment rails are architecturally superior, but whether the economic and behavioural conditions exist for them to displace the dominant system. The analysis draws on regulatory documents, central bank publications, and publicly available market data.

1. Introduction

The first note in this series ended with a question: does the level of intermediation built into card payments remain justified as faster, cheaper alternatives emerge? This note is the answer, or at least the beginning of one.

Before evaluating the alternatives, it is worth understanding precisely why the current system has been so resilient. Resilience, in this context, is not the same as efficiency. A system can be costly, opaque, and structurally asymmetric, and still persist for decades, if the actors who bear its costs lack the power or the alternatives to change it.

That is exactly the situation European merchants have faced. The card payment system works. It works at enormous scale, across borders, with a level of consumer trust that took decades to build. But it works on terms that were set by the most powerful actors in the system, and those terms have not changed meaningfully despite regulatory intervention, technological innovation, and the gradual emergence of alternatives.

This note examines why, and what it would actually take to shift the equilibrium.

2. The Problem Is Not the Percentage, It Is the Structure

Public discussions about card payment costs tend to anchor on the merchant service charge: typically between 1.5% and 2.5% of transaction value. That figure is real, and it matters. But it captures only the most visible layer of a cost structure that is considerably deeper.

2.1 The Working Capital Gap

Card payments create a structural mismatch between when a transaction is authorised and when it actually settles. Authorisation is immediate. Settlement typically follows on a T+1 or T+2 basis, meaning funds reach the merchant's account one to two business days after the purchase.

For small merchants, this is an inconvenience. For high-volume businesses, it is a permanent working capital gap. A retailer processing one million euros per day operates with one to two million euros effectively in transit at any given moment. That capital is not available to the business. It cannot be invested, deployed, or used to meet short-term obligations. It simply waits in the settlement pipeline.

This cost is rarely captured in comparisons between payment methods, but it is structurally significant. A system that settles in seconds, at near-zero cost, eliminates this gap entirely. SEPA Instant does exactly that. The economic comparison between the two systems is not 1.5% versus zero. It is 1.5% plus a financing cost versus near-zero with immediate liquidity. At volume, the difference is not marginal.

	Card Payment	SEPA Instant
Merchant cost (typical)	1.5% to 2.5%	Near zero
Settlement time	T+1 / T+2	< 10 seconds
Working capital impact	Significant	None
Cross-border coverage	Global	SEPA area
Consumer adoption	Universal	Growing

Table 1. Illustrative comparison of card payments and SEPA Instant Credit Transfer from a merchant economics perspective. All figures are indicative.

2.2 The Cost Layers Below the Headline

Below the merchant service charge sits a further layer of costs that rarely appear in headline comparisons. Chargeback management absorbs operational time and carries financial risk: a merchant that loses a dispute absorbs the full transaction value, plus an administrative fee. Fraud monitoring, reconciliation complexity, and the technical cost of integration with card network standards all add to the real cost of acceptance without appearing in any single line item.

2.3 The Asymmetry of Negotiating Power

The card payment system is not experienced uniformly. Large merchants, those with sufficient volume to negotiate directly with acquirers and PSPs, access materially better pricing than the published rate card. They employ treasury teams. They model payment costs across transaction types. They push back.

Small merchants do not. They accept standard terms, pay standard rates, and have no meaningful leverage over a system whose participation they cannot refuse. The result is that the highest costs are borne by the actors least equipped to absorb or contest them. This is not an accidental feature of the system. It is a structural consequence of how bargaining power is distributed.

3. Why Merchants Cannot Simply Exit

Given this cost structure, the persistence of card dominance may seem puzzling. The explanation is not irrational behaviour on the part of merchants. It is structural constraint.

3.1 The Acceptance Imperative

Accepting Visa and Mastercard is not, for most merchants, a commercial preference. It is a commercial necessity. The two networks together account for the overwhelming majority of card transactions in Europe. A merchant that stops accepting them does not save on fees. It loses customers. In many retail contexts, particularly in e-commerce, refusing card payments is equivalent to refusing a significant portion of the addressable market. This is not a pricing decision. It is a demand decision.

3.2 Technical and Operational Lock-In

Payment acceptance infrastructure is deeply embedded in card network standards. POS terminals, payment gateways, e-commerce integrations, and back-office reconciliation systems are all built around card processing logic. Switching to an alternative is not a matter of flipping a setting. It involves hardware replacement, software integration, staff retraining, and tolerance for operational disruption during the transition. For a small retailer, these switching costs may be disproportionate to the potential saving. For a large retailer, the coordination complexity across hundreds of locations makes the calculus equally difficult.

3.3 The Absence of a Comparable Alternative

Until recently, no alternative system offered a comparable combination of global reach, consumer familiarity, fraud protection, and dispute resolution. These are not trivial properties. They represent decades of infrastructure investment and trust accumulation. A merchant choosing to accept an alternative payment method accepts a narrower customer base, a different fraud liability model, and often a worse consumer experience.

The economics may improve. The risk profile does not necessarily follow.

4. The Limits of Regulation

European regulators have not been passive. Two significant interventions have attempted to correct the economics of card payments. Neither has achieved its stated objective, and understanding why reveals something important about the limits of regulation in multi-sided platform markets.

4.1 The Interchange Fee Regulation

Regulation (EU) 2015/751 introduced caps on interchange fees: 0.2% for consumer debit cards and 0.3% for consumer credit cards. The rationale was straightforward. Interchange is the largest single component of the merchant service charge. Capping it should reduce what merchants pay.

The outcome was more complicated. Empirical evidence from the European Banking Authority and independent market analysis suggests that total merchant service charges did not decrease proportionally to the interchange reduction. The cost structure adjusted instead. Scheme fees increased. Acquirer margins adapted. Pricing became more complex, with a proliferation of fee categories that made it harder, not easier, for merchants to compare and negotiate.

This is a predictable outcome in multi-sided platform economics. Regulating one revenue component in a system with multiple participants and multiple fee levers does not reduce the total cost. It redistributes it. The IFR reduced interchange and transferred value from issuers to acquirers and networks, without delivering a proportional saving to merchants. The structural bargaining power remained intact.

> **Key Finding**
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> The IFR reduced interchange fees as intended. Total merchant service charges did not decrease proportionally. Cost migrated to scheme fees and acquirer margins. Regulation corrected a component without addressing the structure.

4.2 PSD2 and the Open Banking Experiment

The second major intervention, the revised Payment Services Directive, took a different approach. Rather than regulating fees directly, PSD2 attempted to introduce competition by mandating that banks open access to account data and payment initiation services to third-party providers. The logic was that enabling account-to-account payment initiation would create a credible alternative to card-based transactions.

Technically, it worked. The infrastructure exists. Payment initiation services operate across the SEPA area. Banks have built the required APIs, however reluctantly in many cases.

Commercially, the impact has been modest. Adoption of open banking payment initiation in physical retail remains minimal. The reasons are not technical. They are economic and behavioural. Opening the infrastructure does not automatically create consumer demand for the product built on top of it. PSD2 created the conditions for competition without resolving the incentive problem that prevents consumers from choosing the alternative.

5. Emerging Alternatives: Superior on Cost and Speed, Commercially Constrained

Against this backdrop, a set of alternative payment models has emerged that are, on most infrastructure metrics, clearly superior to card-based systems. The question is not whether they are better. The question is why that superiority has not translated into displacement.

5.1 Account-to-Account Payments

Account-to-account payment systems bypass the card network layer entirely. Funds move directly between payer and payee bank accounts, eliminating the interchange fee, the scheme fee, and the working capital gap associated with deferred settlement. For merchants, the cost advantage is significant. For the system as a whole, fewer intermediaries means fewer points of value extraction and fewer points of friction.

The limitations are real but not permanent. Consumer experience in A2A payments remains fragmented across markets. Dispute resolution mechanisms, the chargeback equivalent, are underdeveloped relative to card networks. And the absence of global interoperability limits their relevance for cross-border transactions. These are solvable problems. They are not fundamental architectural constraints.

5.2 SEPA Instant Credit Transfer

SEPA Instant represents the most significant infrastructure development in European retail payments in recent years. It enables credit transfers across participating banks within ten seconds, continuously, at a marginal cost that approaches zero. From a pure infrastructure perspective, it is a materially better settlement rail than card-based systems for most domestic and intra-European transactions.

The problem is that SEPA Instant is a rail, not a product. It defines how money moves between banks. It does not define how a consumer initiates a payment, how a merchant integrates it at the point of sale, how disputes are handled, or how the experience compares to tapping a card. Without a consumer-facing product layer that makes the rail accessible and attractive, SEPA Instant remains infrastructure in search of adoption.

5.3 Wero and the Pan-European Product Challenge

Wero, developed by the EPI consortium, is the most prominent European attempt to build that product layer. It is designed to provide a consumer wallet experience on top of instant payment rails, positioned explicitly as a European alternative to Visa, Mastercard, and non-European wallet providers.

Its challenge is not technological. It is distributional. A payment method is only useful if both sides of the transaction have adopted it. A merchant will not integrate a payment method that none of its customers use. A consumer will not download a wallet that no merchant accepts. Breaking this coordination problem requires either a very large initial user base, strong regulatory support, or compelling consumer incentives. Wero is working through all three, but it is early, and the network effects that sustain card dominance do not dissolve quickly.

Common Pattern Across Alternatives

SEPA Instant, A2A systems, and Wero share a structural characteristic: they are superior to card networks on settlement speed, intermediation depth, and merchant-side cost structure, but commercially constrained by adoption dynamics. The infrastructure exists. The consumer behaviour has not yet followed. This distinction matters for understanding what kind of intervention is actually required.

6. The Core Problem: Who Pays and Who Decides Are Not the Same

The persistence of the card payment system, despite its cost structure, its regulatory failures, and the emergence of technically superior alternatives, has a single root cause. The actor who bears the cost of the system is not the actor who decides which payment method to use.

6.1 The Consumer's Rational Indifference

From a consumer perspective, card payments are not costly. They are beneficial. Cashback programmes, reward points, travel miles, and purchase protection are all financed, ultimately, by interchange fees that flow from merchants to issuers. The consumer who uses a premium credit card at a small retailer is receiving a subsidy that the retailer is paying for, without knowing it and without being able to refuse it.

This is not a consumer failure. It is a rational response to the incentives the system provides. A consumer offered a choice between a payment method that gives them cashback and one that gives them nothing, both at no visible cost to themselves, will choose the one with cashback. Every time. The fact that the merchant is absorbing that cost is invisible to the consumer at the moment of decision.

6.2 The Merchant's Structural Trap

Merchants pay the system's costs but cannot control its adoption. They can offer discounts for alternative payment methods in some jurisdictions, but surcharging for card payments is prohibited in many European

markets under PSD2. They can communicate, but they cannot compel. And in a competitive retail environment, a merchant that declines a customer's preferred payment method loses the sale.

The result is a structural trap. Merchants have strong economic incentives to shift payment volume away from card networks. They have almost no practical mechanism to do so.

6.3 Why Private Actors Cannot Resolve This

This is the point where the market-driven narrative runs out of road. A private payment provider can build a better rail. It can offer lower fees to merchants and a cleaner experience to consumers. But it cannot restructure the incentive that keeps consumers loyal to card-based systems. It cannot mandate acceptance, coordinate adoption across an entire economic area, or internalise the externality that the card system has successfully placed on merchants.

The problem is not technological. It is not even economic in the narrow sense. It is a coordination problem with a specific structure: the benefits of the current system flow to the actor who makes the choice, and the costs flow to the actor who cannot refuse. Private competition operates within this structure. It does not change it.

Core Insight

The persistence of the card payment system cannot be explained by efficiency alone. Its costs and its decisions are separated between different actors. Merchants pay. Consumers choose. As long as this separation holds, no technically superior alternative can displace the dominant system through market competition alone. The intervention required is structural, not marginal.

7. Conclusion: The Case for Structural Intervention

The analysis in this note leads to a conclusion that is uncomfortable for those who prefer market-led solutions: the card payment system will not be displaced by a better product alone. It will not be corrected by fee regulation alone. It requires a change in the underlying architecture of incentives, and that kind of change can only be initiated from outside the market.

European regulators have recognised this, at least partially. The emphasis on SEPA Instant as mandatory infrastructure, the broader regulatory and strategic push for European payment sovereignty and instant payment infrastructure, and the ongoing development of the digital euro all reflect a growing understanding that the payment system is not self-correcting. Market competition, on its own, appears unlikely to correct the incentive asymmetry described above.

The digital euro, in particular, represents something qualitatively different from previous interventions. It does not regulate the existing system. It does not mandate access to existing infrastructure. It proposes to introduce a new infrastructure layer entirely, one that sits at the base of the monetary system, carries legal tender status, and is not subject to the commercial logic of interchange and scheme fees.

Whether the digital euro can resolve the incentive problem described in this note depends on design choices that are still being made. But it is the first major initiative that appears designed to address the problem at the infrastructure level. Not the price. Not the access. The structure.

That is the subject of the next note in this series.

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Savion Systems analyses how value is created and distributed in modern payment infrastructures, with a focus on the economic and structural implications of emerging systems including instant payments, open banking, and the digital euro. The project publishes independent research aimed at practitioners, operators, and institutions working on payment infrastructure decisions.

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