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1. Are domestic card schemes extinct species in Europe?

In its new version of the report “Card payments in Europe” (April 2019), the ECB regrets not only the lack of a European card scheme, but also the disappearance of national schemes and the constantly rising market share of the American schemes in the period between 2009 and 2016. The ECB recommends the cross-border expansion of national schemes as a way to complete SEPA for Cards and to tear down the duopoly of Mastercard and Visa in this segment. A critical examination of the initial data shows that several statements and recommendations of this report are questionable.

2. Why is the German national scheme “girocard” rocketing?

The German girocard system recorded extraordinary growth of 15.1% in 2018. The German banking industry points to the implementation of contactless payments as the main cause. At the same time, the competing ELV procedure recorded a considerable decline (estimated at minus 18.8%). In 2018, ELV transactions were massively replaced by girocard transactions. If this substitution effect is eliminated, the national system again shows "normal" growth rates.

3. Payment speed: Cash versus Cards

So far, speed of payment has been an important factor helping to explain the fact that cash is still widely used. On average, cash payments have been faster that “normal” card payments. However, contactless cards are a new threat to cash. Empirical estimates show that contactless card payments are about as fast as cash payments.

Are domestic card schemes extinct species in Europe?

(hg) In its new version of the report "Card payments in Europe" of April 2019[1], the ECB regrets not only the lack of a European card scheme, but also the disappearance of the national schemes. In 2013, 22 schemes were counted, now there are only 17. On the basis of card transactions (sales), the national schemes are constantly losing market share to the International Card Schemes (ICS), ECB said. In the period 2009-2016 their market share (measured by the share of all card sales transactions within the EU) fell from approx. 47% to 32.5%. Later figures are not yet available.

The German central bank board member Burkhart Balz even stated recently an ICS market share of more than 70% for 2016.[2] During this period (2009-2016), according to Balz, almost a third of the national card schemes, such as in Finland and the Netherlands, were discontinued.

The sobering result of the ECB analysis is the continued national orientation of the "national schemes": hardly any cross-border expansion and thus the duopoly of the two ICS (Visa and Mastercard) in the area of card-based cross-border transactions via co-badging. The analysis also shows that cross-border card payments have been increasing continuously (from 6.8% in 2014 to 8.3% in 2017). The ECB wonders why the national schemes leave this growth market to the ICS. Increasing cross-border acceptance of national scheme cards would be *"the completion of a SEPA for cards"* (p. 6).

Our Comment:

In order to better understand this development, we need to immerse ourselves a little bit in the history of national schemes in the EU. It started with the SEPA Cards Framework (SCF) as an act of self-regulation by EU based card issuers and acquirers in 2005, first written as an internal document (version 1.0), then published in 2006 (version 2.0) and updated in 2009 (version 2.1). It was part of the SEPA initiative of the European Payment Council (EPC), created through pressure from the Commission and constructively but critically accompanied by the ECB.

It was a very generic framework with high level principles and rules. Unlike SEPA direct debits and credit transfers, competition between general purpose card schemes was the core principle. The long-term goal of this market-driven process was to establish several cross-national card schemes that compete intensively with each other and meet the criteria of the SCF (SCF compliance), such as the open business and licensing model without territorial restrictions, technical standardisation, EMV instead of magstripe, separation of scheme and processing, no mandatory brand selection by the scheme, etc. Several of the SCF requirements were picked up in the business rules of the Interchange Fee Regulation (IFR) of 2015, writing self-regulative principles of the card industry into European law. The end-date for SCF compliance for the cards and schemes in scope was set for the end of 2010.

For a card scheme and its licensees, there were simply two options: to become SFC-compliant or to terminate the scheme and replace the cards with a brand of a SCF-compliant scheme. To reach cross-border ac-

Why still issue cards with two brands, if one brand (of an ICS) is no longer a complementary application but a fully-fledged substitute of the national brand?

ECB:
National schemes should increase cross-border reachability!

ceptance for the cardholders, the SCF suggested several options:

- expansion from within,
- alliances between schemes,
- issuance of cards with multi acceptance brands (co-badging).

The EPC explicitly said that the option "*creation of a new EU card scheme*" was not pursued with the SCF (p. 13). Furthermore, the framework *"does not mandate any level of geographical coverage within SEPA'* (p. 8).

Two years after the start of SEPA for Cards, the ECB published in 2013 a list of 12 (national and international) schemes active in Europe, that claimed to be SEPA compliant by self-assessment. From a legal-formal point of view, each SEPA-compliant card scheme has ceased to be "national" by offering licenses to all European PSPs. Most of the 17 national schemes recently identified by the ECB in its report could only be regarded as being still "national" according to its factual territorial expansion of acceptance at physical POS.

The SCF stopped at version 2.1, as the SEPA for Cards goal had apparently been achieved and the document had been "*much helpful*". The document owner decided at the end of 2015 to archive the framework after 10 years. The EPC blog said in November 2015, *"in an increasingly regulated payment context, the SCF has become out of date and superseded by several higher-ranking measures (in particular the Card Interchange Fee Regulation in April 2015)."*[3]

Was SEPA for Cards a success story for the "national" card schemes?

What are the results at the end of the day? A few findings:

- Due to self-regulation, some scheme owners (card issuers) won´t go for SCF compliance and terminated their schemes prematurely (e.g. the Dutch scheme PIN replaced by Maestro cards).

- As in the pre-SEPA era, the usual way to reach cross-border acceptance of cards with national brands is still co-badging. Alliances between schemes and the setting up of a new EU card scheme failed.

- Overseers and regulators turned the (obviously from their perspective not successful) self-regulation by the SCF into external regulation by the IFR.

- The slogan "SEPA stands for Sending European Payments to America" is – according to the ECB - still relevant for cross-border card transactions within the EU.

SEPA for Cards seems not to be a compelling success story. However, competition between the national and the two international four-party schemes (Mastercard & Visa) has intensified significantly in the new SEPA for Cards era, especially since the end of 2015, when Visa Europe was sold to Visa Inc. and the IFR led to more attractive conditions for card acceptance by merchants.

In several Member States, the IFR levelled the playing field between national and international schemes by the uniform IF caps, which benefitted the ICS, formerly with higher IF levels. The followed expansion of the acceptance of the ICS-branded cards to the same level as the national schemes have made these cards more attractive for users since 2016.

The ubiquity of these cards (worldwide at physical POS and on the internet) and the initial technical advantage (e.g. contactless payments, usage as payment instrument in mobile wallets) put the old national schemes under considerable competitive pressure. The question seems to be justified: why still issue cards with two brands, if one brand (of an ICS) is no longer a complementary application but a fully-fledged substitute of the national brand? Do we have to protect the endangered species "national schemes" in reservations, so that at the end of the day the European card business is not dominated by the American duopoly?

Market development of the national schemes

Let us first take a closer look at the market development of the national card schemes as analysed by the ECB before discussing its recommendation "*increasing cross-border reachability of national card schemes*".

The ECB stated the diminishing number of national card schemes since the publication of the last report (2014) from **22** (2013) to **17** (2018) in Ireland, Spain, France and Malta, however without naming them.

Further, the market share of the national schemes decreased steadily by **15 percentage points** from approx. 47% (2009) to 32.5% (2017), based on the statistics of the ECB data warehouse. For this development, the ECB identified four factors (p. 9):

1. The co-badging practice was the easiest way to solve the cross-border reachability for national schemes.
2. The option to make online and contactless payments was implemented earlier by the ICS.
3. New card issuers opted for cards only ICS-branded in countries with national schemes.
4. Since the end of 2015, the IF caps have given the ICS a comparative advantage on the acquiring side.

We agree, these four factors were advantageous for the ICS. But were these factors also decisive for the alleged decline of the national schemes?

Disappearing schemes?

Six (not five as stated in the ECB report) national schemes have left the stage since 2013:

- **Ireland:** Laser card (domestic debit card scheme; February 2014)
- **France:** Cofinoga (three party private label card scheme; merger with the three-party scheme BNP Paribas Personal Finance mid 2014)
- **Spain:** Merger of the 3 domestic schemes ServiRed, Sistema 4B and Euro 6000 into a new scheme STMP[4] (2018)
- **Malta:** Quikcash (debit card issued by HSBC Bank; January 2018) and APS Premier card (debit card issued by APS Bank; December 2018)

The scheme shrinkage had no negative impact on the market share of the national schemes vis-à-vis ICS.

The erosion of the **Laser card scheme in Ireland** already began in 2007. During the following years, more and more issuing banks cancelled their membership and migrated their debit cards to ICS-branded cards. In 2011, the National Irish Bank was the last remaining issuer. As a non-profit organization, the owners were not willing to invest in new technologies to make the scheme fit for the digital future. It took a few years before the last Laser card was replaced. The official closing date was February 2014. In 2011, the sales value generated with Laser cards was still about 10.5

b €, which represented a market share of 44% of the total value of cards issued in Ireland. Later scheme figures were not published. The statistical impact of this relatively small scheme on the total market share figures of national schemes after 2012 can be ignored. Actually, the scheme was already phased out in 2013.

Therefore in the last 5 years (period in focus by the ECB) only two micro proprietary private label cards, issued by two Maltese banks (although practicing interoperability) ceased to exist. The total sales volume in 2017 generated by all Maltese cards was 1.9 b € (= 0.06% of the total EU-volume). Yes, according to the formal definition of "national scheme", the EU lost 2 national schemes in **Malta**. No need to panic, a national scheme still exists in Malta (CashlinkMALTA card issued by the Bank of Valletta).

Interesting are the official reasons announced for the scheme closures. Quikcash says the migration to a Visa debit card would "*increase security and mitigate fraud*". The issuer of the APS Premier card (replaced also by Visa debit) stated, *"this change permits the bank to be aligned with the latest European regulations."* Probably the SCA requirements for card-not-present transactions are a big hurdle for micro card schemes.

If the statistical inconsistencies are eliminated, the picture is quite different.

In **France,** a small three party scheme was bought out by another one. In **Spain**, the three "real" national schemes (ServiRed, Sistema 4B and Euro 6000) merged to form a new national scheme, which will enhance their competitive position against the ICS. In both cases, no former "national" cards are replaced by cards of the ICS.

Our initial conclusion:

The development of the number of national schemes in Europe during the last 5 years is not alarming at all, although a quarter of former schemes have disappeared. The scheme shrinkage had no negative impact on the market share of the national schemes vis-à-vis ICS.

On the contrary, as a result of the Spanish merger, the position of the ICS has not become any easier in Europe. Other factors must be responsible for the alleged loss of market share of the national schemes (2009-2016: 15 percentage points according ECB).

Disappearing market shares?

According to the ECB analysis, national schemes lost about **10 percentage points** in the period 2011-2016 based on transaction volumes. However, these results are based on annual figures that are not comparable due to the new statistical methodology (since 2014) and incorrect reporting by the respective national banks of UK and Denmark (see appendix).

If these inconsistencies are eliminated, the picture is quite different. In the period 2011-2016, the relevant and dominant national schemes in the 7 member states (Belgium, Denmark, France, Germany, Portugal, Spain and Italy) lost only **5 percentage points** compared to the EU totals in this period (see appendix). Based on the value (euro) of payments of cards issued by resident PSPs, the total market share of the dominating national schemes decreased from **41.4%** (2011) to **36.4%** (2016). If we consider the market shares for 2017 (data are available), the negative trend reversed in 2016 and market shares stabilized in 2017 at the level of 36.4%.

In fact, it is more informative to look at the national competitive environment, since e.g. cards issued by the national scheme "Cartes Bancaires" do not compete with ICS cards issued in the Netherlands. The development of market shares at the respective national level of the 7 countries with relevant national schemes shows the same picture: minus 5.1 percentage points during 2011-2016.

However, we see different trends per country. Some national schemes are losing market share to a considerable extent (e.g. Belgium and Denmark), others can hold their own.

<u>Our second conclusion:</u>
The supposed decline of the national schemes is by no means as dramatic as it is presented in the ECB analysis. Most schemes have continued to assert themselves in the last few years in relation to the competition from the ICS with only small market share losses of a few percentage points.

A core recommendation of the ECB report is the expansion of the cross-border reachability of the national schemes. It suggests a common European acceptance logo, however without establishing a European card scheme. We will discuss the ECB suggestions to achieve SEPA for Cards in a future issue of our report.

The ECB's statement that cross-border card transactions are dominated by the ICS is questionable.

The report mentions several reasons for the recommended cross-border expansion.

First, the volume of cross-border transactions by cards issued in the EU is growing (from 6.8% in 2014 to 8.3% in 2017[5]), therefore a good opportunity for further growth of the national schemes.

Second, Mastercard and Visa are dominating this market.

Third, it could *"contribute to achieving the SEPA for cards "any card at any terminal" objective, and foster a further take-off of card payments in Europe"* (p. 33). Despite the increase in XB-card transactions, the share of 8.3% seems to be insufficient for the ECB. "*It is considered to be one of the signs that a SEPA for cards is incomplete when users are not yet fully comfortable using their cards abroad."* (p. 6)

We doubt the suitability of the XB transactions as SEPA for Card indicator and we doubt the assumption of the ECB report, *„today, cross-border card payments in Europe are mainly made through two international card schemes: Visa and MasterCard."* (p. 8).

Not only because Amex (with an estimated market share in the EU of 8 - 10 %) is neglected. A considerable part of the XB-transactions is initiated outside Europe and therefore out of the reach of SEPA.

Another reason is more generic. Usually one thinks of travellers abroad (geographically) who use their card at the POS. However, a cross-border payment according to the methodology of the ECB statistics is *"a payment transaction initiated by a payer or by a payee, where the payer's PSP and the payee's PSP are resident in different countries."* The residence of the involved PSP (not the cardholder or the merchant) is the relevant criterion. If a huge French supermarket shifts its acquiring business from a French bank to an UK acquirer, the de facto national transactions become per definition cross-border. In this case, all transactions made with CB cards (national scheme) should be statistically recorded as cross-border transactions.

One of the main drivers behind the increase of (cross-border) card payments in Europe are card-not-present transactions in ecommerce. Today, about 20% of the French card payments are initiated remotely (2014: 9.2%). A French shopper on the amazon.fr-platform is probably mainly using its CB card (of course accepted at the platform). The legal residence of amazon.fr is Luxembourg and its acquirer is probably located in the UK. All these transactions in the CB scheme should be recorded as "cross-border" in the ECB statistics.

Leading international acquirers in ecommerce are offering the acceptance of the brands of the national schemes to the online merchants. The hurdle of cross-border reachability of national schemes is the acceptance at the physical POS-terminal abroad, but not in ecommerce. At least the big cross-border operating ecommerce player will accept local card payment brands.

<u>Our remaining question:</u>
The ECB's statement that cross-border card transactions are dominated by the ICS is questionable.

The general growth of cross-border transactions (issuer view) as a SEPA for Cards indicator is not very suitable. The growth of cross-border transactions at the physical POS terminal (acquirer perspective) would be more revealing.

The ECB used this SEPA-indicator for a few years (2008-2014). As the ECB stated on its website,

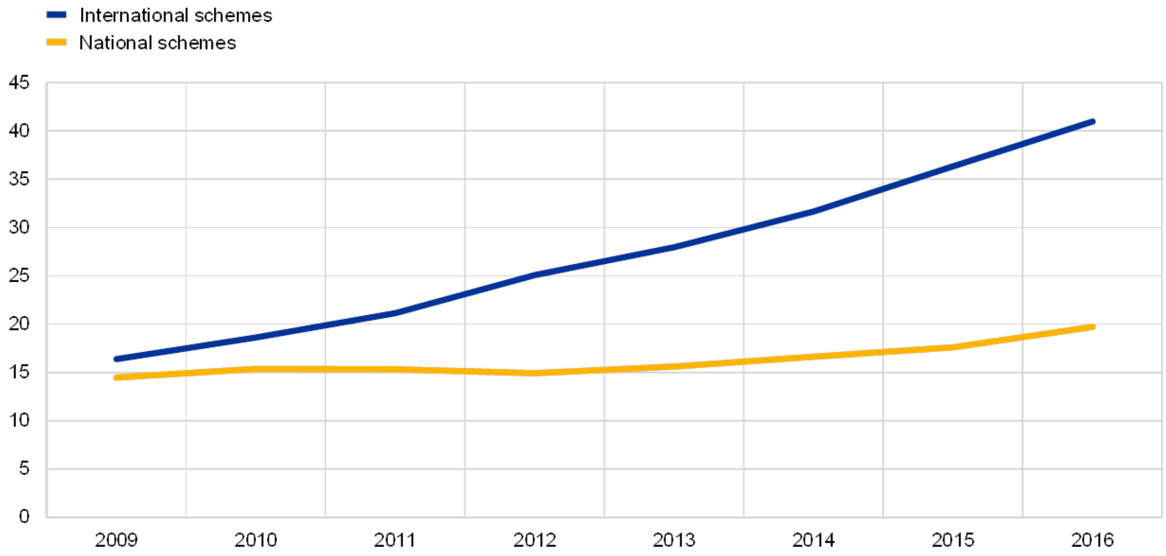
"*A move to a significantly higher level would indicate that SEPA had been successful in changing the card industry, the card acceptance practices of merchants and/or the payment behaviour of cardholders.*"[6]

Just after all schemes became SCF compliant (Dec. 2010), this hoped-for rise in the proportion of XB payments failed to materialize. The indicator even went downhill in the period 2011-2014. For this reason, the ECB probably stopped monitoring this indicator after 2014.

The ECB concluded, *"overall, a SEPA for cards has not yet been achieved"* (p. 2). Accordingly, the proclamation by EPS that the old SEPA Cards Framework (SCF) had been archived was somewhat premature. However, the original vision of SEPA for Cards was linked to a card payment at a physical POS-terminal ("any card – any terminal"). Maybe in the digital world, we have to rethink the SEPA for Cards idea. By the way, the ECB Report contains many interesting thoughts on this subject. We will come back to it in a future report.

In an indirect way, self-regulation by SCF has probably been the main driver for the termination of several national schemes. The subsequent regulations like the IFR and the PSD2 have put new obstacles in the way for national schemes in competition to the ICS Still, that does not mean that the former or still "national" schemes in Europe are doomed.

Appendix: Critical comments on the ECB's analysis of market shares "national vs. international card schemes"



Number of transactions made with national and international card schemes on payment cards issued in the EU (ECB, Card payments in Europe, April 2019, p. 8)

The methodological and reporting framework for the national payments statistics within the EU was amended as of the reference year 2014.[7] The transaction volumes used for the ECB diagram above are based on the old methodology for the years 2009-2013, whereas the new approach is taken for the years 2014-2016. Regarding the volumes of payment transactions by cards (domestic and cross-border) issued by resident PSPs in the respective Member States, the new methodology had no significant impact for most of the Member States. The use of data based on different methodologies for the whole 2009-2016 observation period as practiced by the ECB is therefore unobjectionable.

However, only the **data for the UK** changed considerably in the year 2014. Based on the old methodology the volume of card payments of cards issued in the UK was 606.2 b GBP (2014), however, 791.3 b GBP for the same year in the current statistics (new methodology). Taking into account that, based on these figures, 38.4% (!) of all card payments issued in the EU in 2014 were generated by UK cards with the brands of Mastercard and Visa[8], it blows up the overall EU volume from 2,332 to 2,559 b € (9.7%).

What happened? We compared the UK figures as published by the ECB with national card statistics produced by the UK Cards Association[9] and the UK Payments Administration[10] and we asked UK card experts. The solution to the riddle is not difficult: ATM transactions are clearly included in the volume of "*card payments with cards issued by resident PSPs*", which is not allowed according to the ECB methodology. Regarding the relatively high transaction value of an ATM payment compared to a sales payment, the effect of this error is less pronounced when market shares are compared on the basis of transaction data (not value), as in the ECB graph. However, it leads to an erroneous deviation of approximately 2.8 b (number of transactions UK figures 2014). This effect is noticeable in the graph from 2014 onwards, as the data for the UK (including ATM) are used by the ECB from that date.

It is remarkable to see that the Danish National Bank (as deliverer of the Danish data to the ECB data warehouse) is making the same mistake. The value of payments by cards issued in **Denmark** exploded by 24% in 2016 (in DKK) compared to the year before. From that year, ATM transactions are definitely included in the ECB card sales figures ("card payments"). We are aware that Scandinavia is on the verge of introducing a cashless society, but somebody must have been perceptive to this huge increase within one year in Denmark (growth rate in years before and after was maximum 10%) It is therefore questionable whether plausibility checks are carried out in the statistics department of the ECB.

We asked the payment statisticians of the Danish central bank. From their perspective, ATM transactions are also "card payments". It is conceivable that statisticians in other central banks of the Member States (except

Denmark and UK) share this view too which, however, is not in accordance with the methodological specifications of the ECB. We have not been able to check all the figures.

The figures used by the ECB for **Germany** must be corrected too. Up to and including 2013, the figure “card payments” included a substantial volume of ELV transactions (approx. 25% of the ELV volume of EUR 63.5 b in 2013). Since 2014 card payments via ELV are excluded and presented separately. The figures after 2014 for Germany (excluding ELV) are therefore not comparable with the figures before 2014 (partly including ELV). For this reason, we have corrected the ECB figures for the entire period (2011-2016) and included both types of card transactions generated by the national debit card "girocard".

From our perspective and with regard to the objective of the analysis (development of the market shares of domestic schemes vs. ICS), card payments via ELV must be taken into account in the German figures. There is a highly substitutive relationship between ELV and the German girocard scheme and both debit card-based payments compete with the ICS at the POS.

For the year **2017**, both the card data of the Member States and the data of the most important national schemes are available. Accordingly, we are also able to indicate the market shares for 2017 (after necessary modifications of the ECB data for UK, Germany and Denmark as explained above).

Regarding the availability of the data of the national schemes, we have analyzed the market shares, based on the **value** (measured in euro) of the sales payments of the cards, generated by the national brand (still mainly domestic payments). Most of the cards of these national schemes are co-badged. The card transactions, made via the ICS brand, are not included as being transactions of the ICS.

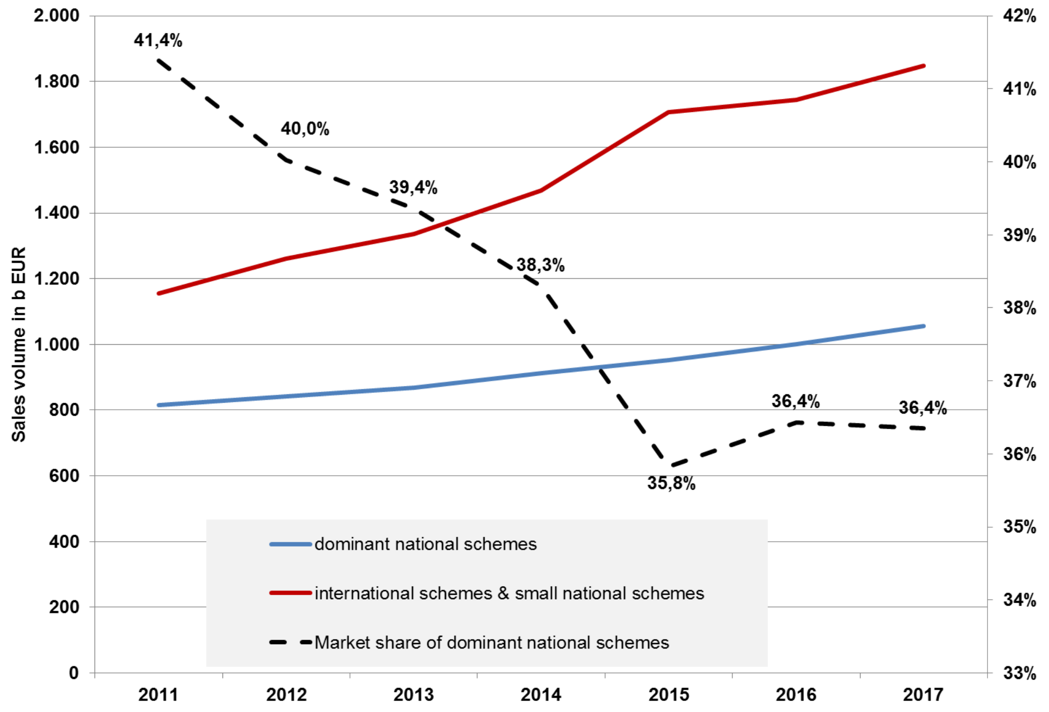
We considered the dominating national schemes in 7 Member States:

- Belgium (Bancontact)
- Denmark (Bankort)
- France (Cartes Bancaires)
- Germany (girocard & ELV)
- Italy (PagoBankomat)
- Portugal (Multibanco)
- Spain (ServiRed & Euro6000 & Sistema 4B)[11]

The remaining 9 small schemes in Bulgaria (Bcard), Slovenia (Activa and Karanta), France (Oney Bank, BNP Paribas Personal Finance, Crédit Agricole Consumer Finance, Cofidis and Franfinance) and Malta Cashlink MALTA) are ignored (relatively low volumes and lack of publicly available data).

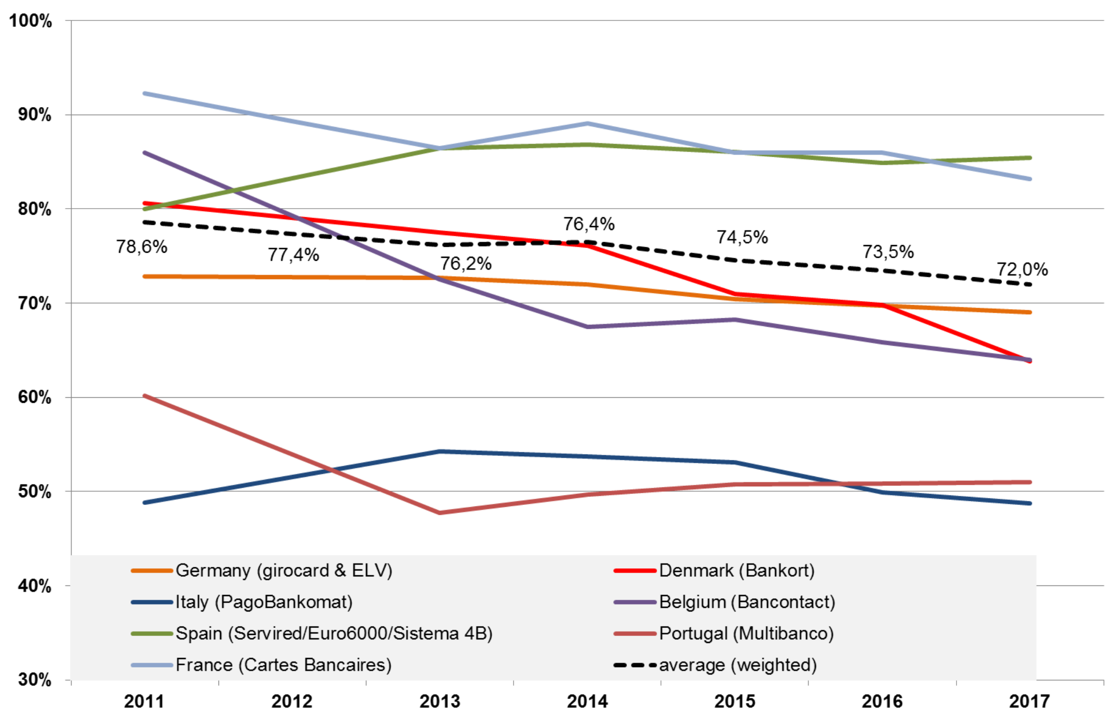
The market share of the ICS results from the difference between the corrected total figures of the ECB statistics minus the volumes of the 7 national schemes. The smaller national schemes are therefore included in the market share of the ICS. The market shares of all national schemes are therefore slightly higher.

The **7** dominant national schemes achieved a market share of 41.4% in 2011 (ECB-analysis: approx. 42% for <u>all</u> schemes) and 36.4% in 2016 (ECB-analysis: 32.5%). See figure.



Market share development of ICS (incl. small national schemes) and the dominant national schemes based on the value of card payments (sales) (2011-2017)

The national schemes only compete with the ICS cards (not co-badged with national brands) issued by resident PSPs in the respective countries due to the predominantly national expansion. The development of market shares of the national schemes within the respective countries is therefore revealing (see figure below).



Market share development of national schemes as percentage of the total value of payments (sales) by cards issued by resident PSPs per country (2011-2017)

Why is the German national scheme "girocard" rocketing?

(hg) The German national card scheme "girocard" published for the year 2018 a remarkable increase in sales transactions of nearly 25 b. Euro (+15.1% on the year before).[12] The successful scheme, owned by the German banks and set up at the beginning of the 90s, has never achieved such a huge growth in the last ten years.

The scheme stated that the main driver of this development is contactless payment. In 2018, the share of contactless transactions (cards and mobile) accelerated from 5.4% (January) to 15.7% (December). Contactless payments for low-value transactions probably replaced cash payments in particular.

Recently the EHI Retail Institute published the results of its extrapolation of the POS payments at physical POS terminals in the German retail sector for 2018. In this merchant segment, cards beat cash for the first time in payments history with about 30 basis points based on sales value (cards: 48.6%; cash: 48.3%).[13] The German love of cash is obviously waning..

Our Comment:

The surprising success of the German national scheme "girocard" seems to be in contradiction to the overall medium-term decline of the national schemes in Europe as concluded by the ECB in its recent report "Card payments in Europe". The system seems to have found the "magic bullet" against the international cards schemes (ICS). The name of this secret weapon is: contactless.

This conclusion is particularly noteworthy because most ICS cards could be used contactless earlier than the cards of the national system. In addition, the girocard has only recently (still as a mobile application only) been introduced for e-commerce payments.

The German debit card can be used for sales transactions at the POS in two different ways: as payment via the girocard scheme and as instrument to initiate a traditional direct debit, called ELV[14]. Both debit card payment procedures compete with each other.

The signature-based procedure ELV fell dramatically in 2018 from 78.3 (2017) to 63.6 b € (minus 18.8%).[15] In the same period, the German debit card scheme "girocard" recorded its extraordinary growth of 15.1%. In 2018, merchants massively replaced ELV transactions with the girocard procedure. This abruptly stopped the decades of continuous growth of the ELV system. Only every fourth payment with the girocard is now made via ELV (in the period 2005-2017 every third payment).

As a result of the abolition of the uniform merchant fee (formerly 0.3%) ordered by the Cartel Office and the European Interchange Fee Regulation (IF upper limit for debit card transactions of 0.2%), the fees for the acceptance of the girocard at the POS negotiated bilaterally since November 2014 have fallen continuously. The average fee is now well below 0.2%.

Compared to ELV, the girocard system has become more competitive because the costs for ELV are largely determined by the relatively stable default costs. Since then, the card market statistics show a slower growth of ELV compared to the girocard scheme.

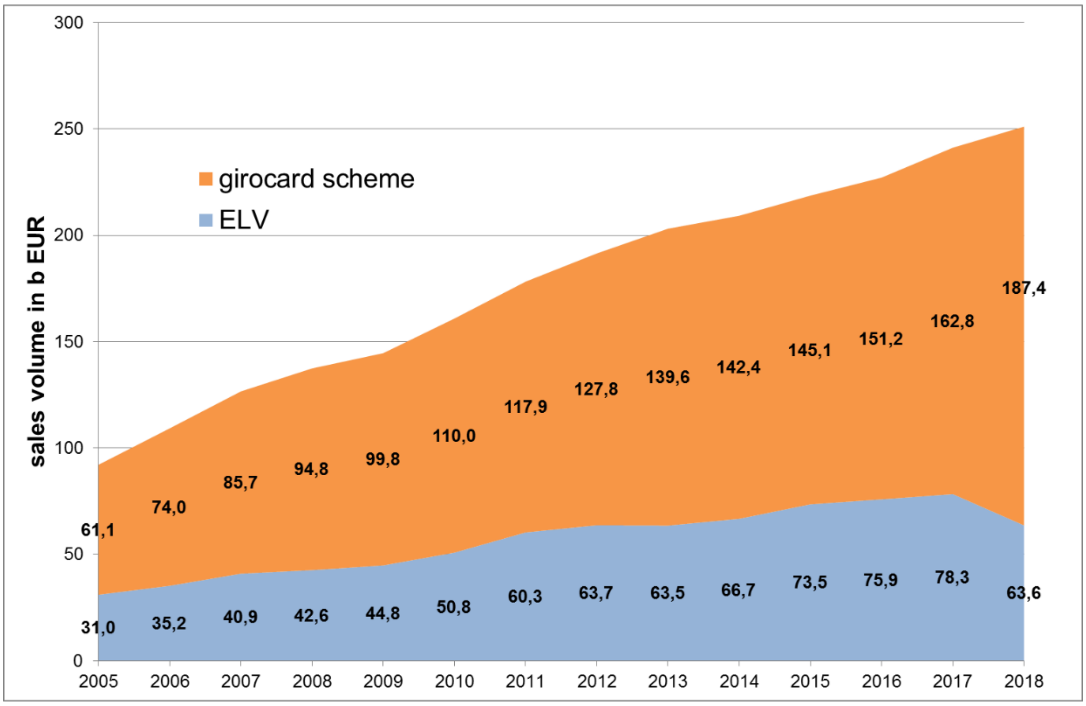
In 2018, merchants massively replaced ELV transactions with the girocard procedure

The card-issuing banks have succeeded in considerably weakening the competing ELV procedure through substitution-dependent prices. The mineral oil companies, which in recent years had deliberately opted for ELV for reasons of price tactics, have obviously given up their resistance. In this price-sensitive segment, too, the girocard system replaced the ELV to a considerable extent in 2018.

Excluding the massive shift of ELV in favor of the girocard system, the total sales generated with the girocard 2018 continue to show a moderate growth of 4.1% compared to the previous year, which corresponds to the growth rates of the last years (2016: 3.9%, 2017: 6.2%).

The average receipt for payments made with the girocard has been falling continuously for years. This trend shows that more and more cash payments are being replaced by debit cards.

The increasing popularity of contactless payment for payments with small amounts certainly reinforced this trend in 2018. However, the 2018 figures clearly show that the ELV substitution, rather than the "contactless" factor, has led to record values in the girocard system.



Card sales with girocard in Germany 2005 - 2018 (b €)
(ELV: preliminary extrapolation; source: PaySys card market statistic Germany)

“Dear customers, unfortunately, for some months now there has been a tendency for ec cash without PIN (= ELV) *to take advantage of our trust in a payment ethic of integrity. For this reason, we can now only accept ec cards with PIN* (= girocard). *Exceptions to this rule are determined solely by the management. We ask for your understanding.”*
(notification at a retail till in Germany (May 2018)

Payment speed: Cash versus Cards

(mk) It is a time-honoured practice of the card industry to invoke the image of the old lady wishing to pay for her groceries and endlessly searching for change in her wallet. This image is duly contrasted with a young and modern person that swiftly uses her card (or mobile).

However, such a comparison has been completely misleading. In the past, analyses of card and cash payments almost uniformly showed that it took more time to complete a card payment than a cash payment. Thus, speed was an important advantage of cash. This may be about to change, however, due to the increasing use of contactless card payments. Contactless card payments are substantially faster than conventional card payments which make it necessary to insert the card into a card reader. As contactless card payments are rolled out in an increasing number of countries, expectations are rising that cash may be doomed. For instance, in the UK, the Independent asks "*Are contactless cards putting your cash at risk?*".

Our Comment:

Indeed, contactless payments do seem to give cards (and mobile phones) a push. But a look at research carried out at the POS shows that in terms of payment time, cash remains surprisingly competitive.

In terms of payment time, cash remains surprisingly competitive.

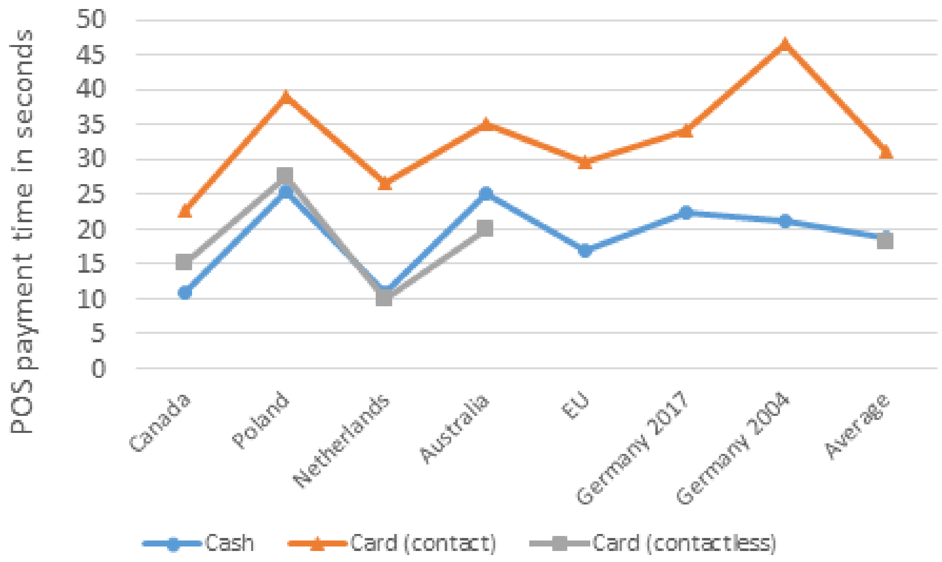
There are data on the duration of contactless card payments for four countries, Canada, Poland, the Netherlands and Australia. For two of these countries, Canada and Poland, cash still is the fastest means of payment. For the other two, however, contactless cards are faster. But in all of the four cases, payment times for cash and contactless cards are almost equal.

Overall, there is a wide variety of payment times. As can be seen in Table 1, the EU data derived by the Eurosystem are close to the international average. The EU estimates confirm the results if a large number of older studies. It is interesting to note that the difference between "normal" card payments and cash is almost equal (about 12-13 seconds) in all of the countries included in Figure 1. This suggests that differences in payment time between countries are due to methodological differences.

Unfortunately, the Eurosystem study came too early to include contactless. The same can be said of the recent study published by the Bundesbank. Time measurements took place just months before contactless took off. Still, the recent German figures are interesting because when compared with 2004 data they show that "normal" card payments seem to have become faster over time. In 2004, in Germany, a card payment took almost 47 seconds, on average. In 2017, payment time was down to 34 seconds. It does not seem unlikely that there is also scope for improved performance when it goes to contactless payments. At least in the initial phase, consumer and shop personnel are still insecure.

However, the average time it takes to carry out a contactless payment also depends on risk management parameters. The lower the maximum value for PIN-less transactions the higher the ratio of transactions that require PIN entry. It remains to be seen at what ratio of PIN/no PIN the market (or regulators) will settle.

The time it takes to carry out a contactless payment could also be improved by standardisation. At the moment, consumers often do not know at what side of the terminal to place the card. This varies from terminal to terminal.



POS payment time in several countries

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Notes

1 https://www.ecb.europa.eu/pub/pubbydate/2019/html/ecb.cardpaymentsineu_currentlandscapeandfutureprospects201904~30d4de2fc4.en.html

2 According to Balz, the market share increased from 50% (2009) to more than 70% (2016). According to the ECB the market share rose, less dramatically, from 53% to 67.5% (about 15 percentage points). See speech of Burkhart Balz of 7 February 2019; https://www.bundesbank.de/de/presse/reden/der-zahlungsverkehr-der-zukunft-wohin-bewegen-sich-deutschland-und-europa--776224

3 https://www.europeanpaymentscouncil.eu/news-insights/insight/sepa-cards-framework-bows-out-after-ten-years-good-and-faithful-service

4 STMP: Sistema de Tarjetas y Medios de Pago

5 Cross-border payments transactions (in- and outside the EU) as percentage of the total number of payment transactions with cards issued by resident PSP´s

6 https://www.ecb.europa.eu/paym/retpaym/paymint/indicators/html/migration_card_payments.en.html

7 See the Regulation on payments statistics (ECB/2013/43) for the new reporting requirements and methodology.

8 Card payments of other schemes (e.g. American Express) are not included in the UK country statistics of the ECB.

9 http://www.theukcardsassociation.org.uk/facts_figures/index.asp

10 https://www.ukpayments.org.uk/

11 For some years, only the data of the dominant scheme ServiRed was publicly available. For these years, the volumes of the other smaller schemes are estimated according to the local market share of ServiRed.

12 https://www.eurokartensysteme.de/ueber-uns/presse/2019/27022019.html

13 https://www.ehi.org/de/pressemitteilungen/liebe-zum-bargeld-laesst-nach/

14 ELV: Elektronisches Lastschriftverfahren

15 This is the conclusion reached by the consultancy PaySys Consultancy GmbH in its preliminary projection of the annual card market statistics for Germany.

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