



RESEARCH CENTER FOR FINANCIAL SERVICES  
STEINBEIS-UNIVERSITY BERLIN

## “SEPA Cards: success factors for sustainable card schemes in Europe”

Research Analysis

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**Card payments have great importance in Europe**

## European Card Market

Card-based payment services have a great importance in Europe. 700 million cards are currently in circulation, with which more than 32 billion transactions were processed in 2009. However, this is seen alongside cash transactions, the dominance of which continues to be high. Currently, approx. 70-80% of all payments on POS in the retail sector are still processed in cash. The costs incurred with cash in comparison to electronic payment methods are very high – in total, around two-thirds of the entire payment services costs (retail + institutional) are attributable to cash. In addition to the high costs, other disadvantages exist with cash, such as a lack of protection from loss and counterfeit, as well as benefitting the shadow economy. For these reasons, the share of card payments in Europe is intended to be increased further (current growth 7.5% p.a. on average over the last five years). With this, incentives are also intended to be created with the implementation of the SEPA Cards Framework. Particularly by eliminating differences between payment with cards domestically and abroad (cross-border transactions between European countries), as well as increasing transparency of all participants involved in card payments. In order to determine how the objectives of the SEPA Cards Framework, as well as those of the ECB (European Central Bank) and the EU Commission (strengthening of European payment services) can best be realised, the Steinbeis-University Berlin has conducted a current study ("SEPA Cards: success factors for sustainable card schemes in Europe"). Within the context of this study, a representative survey among customers in Germany, Italy and France was performed concerning national payment habits, especially relating to cards. By choosing these three countries the majority of European customers using cards have been represented. In addition, merchants and issuers in all three countries were interviewed about their opinion in card payments and card schemes. One result of the survey is that today about 96% of all card transactions are national transactions (see Fig. 1).

**Virtually all transactions are currently national transactions**

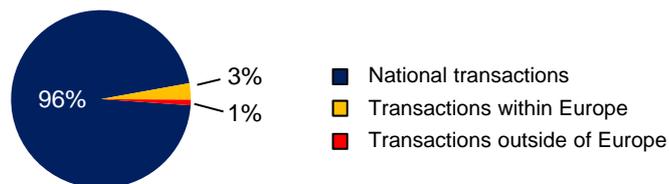


Fig. 1: Card use domestically and abroad by consumers in Germany, Italy and France

The objective of the SEPA Cards Framework is therefore, inter alia, the creation of a standardised card payment market in which "Any card at any terminal" applies, whereby no technical obstacles or hindrances can obstruct the cross-border use of cards within Europe.

**The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes**

Currently, out of the large countries in the euro zone (Germany, France, Italy, Spain) at least one national card scheme is operated in each, so that the majority of European card transactions are currently processed through national schemes (see Fig. 2).

**Europe has numerous national card schemes, through which the majority of all transactions are processed**



**Cross-border card transactions are to be aligned (IT standards, etc.)**

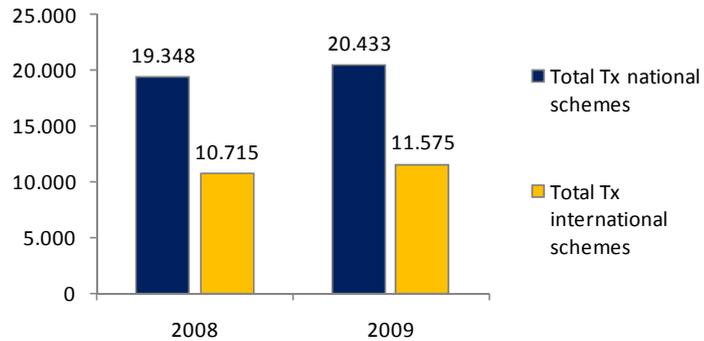


Fig. 2: Proportion of transactions processed in Europe according to national/international schemes

With the SEPA Cards Framework, all cross-border card transactions are now intended to be adapted for consumers, as well as acceptance points among all countries participating in SEPA. In future, no difference should exist with payment by card domestically or in European countries outside of e.g. Germany (however, actual acceptance of a card continues to be the responsibility of the acceptance point). So that cards can basically also be used for cross-border transactions, the technical/organisational acceptance of the cards must be ensured. Furthermore, through uniform standards (technology, approval processes, etc.), each vendor shall also offer its scheme on a cross-border basis, whereby there must not be any systematic/organisation obstacles, or market foreclosures. For the achievement of the required SEPA compatibility with cards (“Any card at any terminal”), four options are available, which are analysed in the study by the Steinbeis-University Berlin, particularly regarding the objective of "strengthening European payment services", as well as regarding advantages for all participants:

**For the achievement of SEPA compatibility with cards ("Any card at any terminal"), four options are available to choose from**

- **Option 1:**  
Use of existing international card schemes
- **Option 2:**  
Co-branding of national and international card schemes
- **Option 3:**  
Expansion/merger of national card schemes
- **Option 4:**  
Establishment of a new, joint, European card scheme

**International schemes are not suitable for strengthening European payment services**

**The SEPA compatibility is intended to be achieved in a first step through the expansion and merger of national card schemes**

Within the context of the analysis of the four options, the study shows that Options 1 and 2 cannot be recommended for a sustainable achievement of SEPA compatibility, as with both options, a main objective of the ECB, to strengthen European payment services, cannot be achieved. Furthermore, both options are suitable for reducing the competition among the card schemes. In addition to this, Option 1 specifically holds the risk that a change to existing international card schemes could result in disadvantages (particularly cost rises) for consumers, as well as issuers. In contrast, Option 4 (establishment of a new, joint European card scheme) is very well suited to the realisation of the required SEPA compatibility, to strengthening European payment services, as well as to increase transparency. However, the realisation of this option requires very high investment costs (the establishment of a new European card scheme would require investments of approx. €750 million to €1 billion, according to experts), a longer lead time (lead time for scheme development, setup of technical development and establishment of a relevant brand) and would simultaneously also not include the existing infrastructure of the national schemes in Europe. Therefore, Option 4 is regarded as a further development of Option 3 (expansion/merger of national card schemes), as this option can transfer to Option 4 in the conceptual objective. With a decision in favour of Option 3, the objective of "strengthening European payment services", which is associated with the requirement of the ECB and the EU Commission for creating a European card scheme, can already be largely achieved. Therefore, the expansion and merger of national card schemes represent a crucial step toward strengthening European payment services, as well as a foundation for the establishment of a joint European card scheme.

**European schemes are very efficient and relatively cost-effective**

Particularly the high feasibility speaks in favour of this option, so that implementation can be realised in the short term, as well as within a manageable investment framework. For the successful realisation, implementation requirements (alignment of the interfaces, joint development of standards, etc.), as well as framework conditions and incentives for the national card schemes must be created in Europe.

In addition to the expansion/merger of national schemes, the strengthening of European card payment services also requires sensitisation of the cardholders and retailers regarding the efficiency and security of the national card schemes, as these are also very efficient and relatively cost-effective for cardholders, as well as retailers. Against this background, it is important to expand and utilise the national schemes further.

**European card schemes are among the most secure schemes worldwide**

**European card schemes guarantee high security with the processing of card-supported payment services**

Particularly with the important topic of security, European card schemes can score points. Therefore, e.g. the German "girocard scheme" is a worldwide leader with a very high security standard and enjoys a very high level of trust with consumers. In addition to the current security standard, the historical security (losses in the past) also play an important role, as these contribute significantly to the perceived security by the consumer. If this high security standard should later (e.g. realisation of the international acceptance without co-branding within the context of a European scheme) also be upheld in countries outside of Europe, in which processing still occurs using magnetic strips (currently, only 1% of all card transactions occur outside of the EU), this can take place through the introduction of geoblocking. Geoblocking means that the cardholder has his/her card released for a specific time period, prior to use outside of the EU. With a survey among consumers, the majority of those surveyed (62%) would carry out a necessary activation to improve the security (prevention of skimming) of their cards.

However, so that these future-proof European schemes can develop, the relevant regulations must create equal competition under the schemes.

### **EU Commission must create reliable incentives for the further development of card schemes**

#### **The regulations of the EU Commission must permit economically supportable business models for card schemes**

In order to realise the objectives of the SEPA Cards Framework within the context of European card schemes, clear, economically sustainable framework conditions are necessary. With this, the regulations of the EU Commission should allow business models for the card schemes, which enable long-term and sustainable investment incentives for scheme operators, issuers and service providers. Without a reliable and secured investment environment, no issuer will invest/further develop its scheme. The investment incentives should be created systematically through the interplay of market forces between partners at eye level (e.g. that interchange fees are negotiated unilaterally or – quasi concentrate through sales or purchasing cooperatives – multilaterally). The current lack of clarity regarding framework conditions and the continuing discussion on fee structures and business models are therefore detrimental to the further development and harmonisation of card-supported payment services and jeopardises the competitiveness of the European card schemes. Therefore, the EU Commission and institutions are required to create proactive and sustainable framework conditions in goodtime, which should be based on the following points:

### **Regulations must enable long-term planning capability for card schemes**

- Stringency (specification of clear, non-interpretable rules)
- Objectivity (rules should be defined on the basis of objective arguments)
- Feasibility (acknowledgment of the current market situation and competitive situation)

### **Due to their high complexity, international card schemes have advantages with the structuring of fees**

#### **Only through standardised and binding regulations for all active card schemes in Europe (national, European, international), can future-proof, European schemes establish themselves**

The card schemes on the market in Europe are essentially divided into two groups: On the one side, transparent, national schemes with only few types of fees (financing particularly through interchange fees), on the other side, complex, international schemes with numerous types of fees, categories and individual fees (financing particularly through fees). The currently volatile environment of the European card markets regarding valid regulations primarily benefits international schemes. The reason for this is that due to their high complexity and extensive fee catalogues, they can react very flexibly to changed framework conditions, as these schemes are not primarily financed through interchange fees, but rather, through fees.

**The competition authority must ensure equal opportunity for all active card schemes in Europe**

**Issuers do not rule out a change of their national card portfolios to international schemes**

**Interchange fees ensure low-priced card payment for the consumer**

**A discontinuation of interchange fees leads to rising costs for consumers**

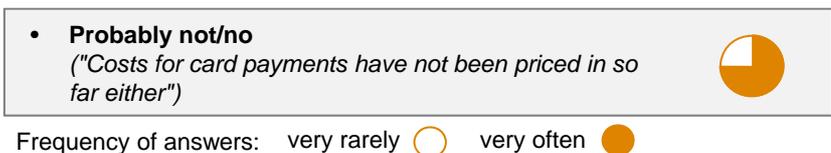
If the objectives of increasing transparency for all participants, as well as strengthening of European payment services are to be achieved, this imbalance between the card schemes must be removed, as future-proof European schemes can only establish themselves in such an environment. Otherwise, the interviews conducted with experts clearly show that issuers have also recognised the possibilities of international schemes for themselves and are basically not dismissive of changing their portfolios to an international scheme. However, the surveyed issuers simultaneously complain about the complex and not very transparent fee structures of the international schemes.

**Framework conditions which permit interchange fees (multilateral or unilateral), secure low-priced card payments for the consumers**

As interchange fees are one of the main causes for the imbalance between national and international card schemes, due to the system-immanent relevance, their significance was specifically analysed within the context of the study. Interchange fees are payable by card acceptors, these cover the costs of the system for the card-issuing bank (issuer) (inter alia, running costs for transaction processing, settlement, prevention of misuse). National competition authorities and the EU Commission particularly criticise the level, as well as the type of charging of interchange fees, as so-called multilateral interbank fees (referred to as MIF).

However the study by Steinbeis-University in Berlin shows that numerous objective factors speak in favour of continuing to permit interchange fees. Therefore, interchange fees ensure a low-priced card payment for consumers, guarantee efficient processing of the card payments and offer the economic incentive for issuers to expand and merge the transparent, national schemes. Particularly the low-priced card payment for consumers is linked systematically to interchange fees. As became clear in numerous interviews, retailers would only pass on a reduction of the interchange fees to their customers to a small extent, if at all (See Fig. 3).

Fig. 3: Answers by merchants to the question of whether they would pass on decreasing acceptance fees to consumers



**Unilateral interchange fees promote competition and guarantee a fair market price**

**Surcharging is largely rejected by consumers**

On the other hand, a reduction would directly or indirectly lead to rising costs for cardholders. The surveyed issuers indicated that with a further reduction of the interchange fees, they would compensate the resulting fall in income from card business by increasing the fees for the cardholders (e.g. increase in annual card fees or account management fees). Therefore, from the point of view of the study results, the current battle of the competition authorities is not in the interest of consumers, as they would particularly need to fear the discontinuation of the issuers' cost rises.

In the study, the possible scenarios are therefore analysed on the basis of retaining the interchange fees, whereby the existing criticism of interchange fees is also taken into consideration.

A possibility for the promotion of competition while maintaining interchange fees is the changeover from multilateral to unilateral interchange fees, while simultaneously revising the "honour all cards rule". For this, the parallel introduction of non-guaranteed Chip/PIN-based payment methods lends itself as a processing platform for the cards of a scheme and as a supplement to the national, guaranteed card systems of the SEPA countries. In order to ensure the feasibility of unilateral interchange fees, the possibility should exist of mergers forming on the issuer side (e.g. banks) and on the acceptance side (e.g. retailer associations, purchasing cooperatives, etc.). Through this, market power on both sides would meet at eye level, which is advantageous for promoting competition and forming a fair market price. The study also shows that issuers can absolutely imagine a changeover to unilateral interchange fees. Particularly larger issuers regard the introduction positively.

However, another option, which gives retailers the opportunity to charge additional fees for card payments at the cash register (surcharging) and thereby reducing the costs of card acceptance, is rejected by the majority of the surveyed consumers. Nearly two-thirds of those surveyed would revert to cash in this case. The sensitivity is particularly high in Germany, where 70% would even no longer pay by card (see Fig. 4).

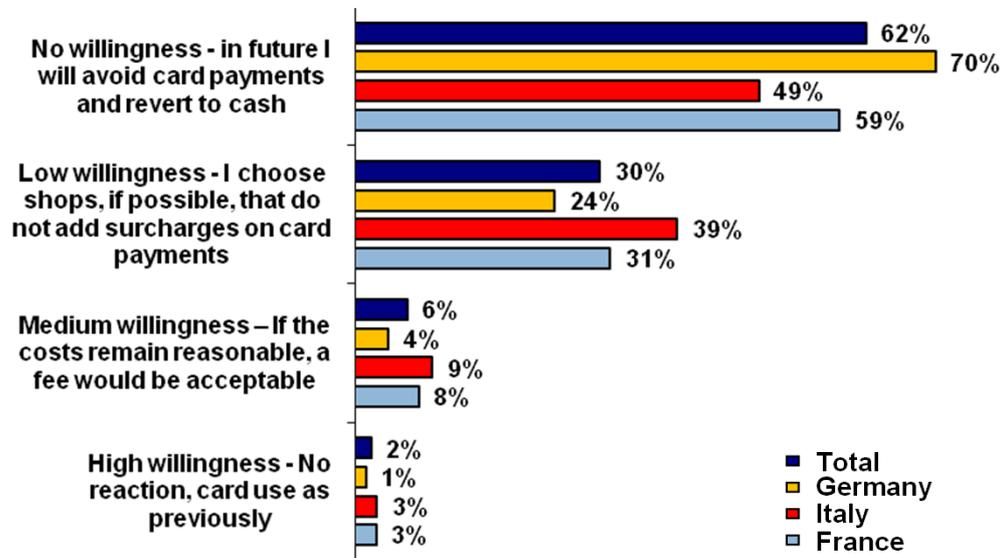


Fig. 4: Question about behaviour with the introduction of surcharging

**European card schemes ensure competition in card-based payment services**

**The introduction of access fees at the ATM ensures a fair market price for cash disposals**

**Through European card schemes, the competition will be ensured on both a European and international level**

The current success of the international card organisations is also shown by the fact that particularly smaller, national schemes are being replaced by international processes. If this trend should continue, the risk exists that international card organisations will gain a dominant market position in the medium term, due to their current, actual structuring autonomy. The example calculation in the study for Germany shows that with the replacement of electronic cash by international schemes, the transaction costs for cards would increase significantly. These extra costs, insignificant whether primarily borne by the acquirer or end customer, make payment services more expensive, prevent efficient processing and must at least be borne indirectly by the end customers, according to the surveyed issuers. In order to prevent these extra costs for consumers, strong European card schemes need to be placed in competition with the international schemes. Another positive example for the promotion of competition by a European card scheme is the introduction of access fees at the ATM (cash machine) in Germany (exemplary for Europe). Access fees promote market forces, increase transparency and ensure a fair market price for withdrawals at the cash machine, through competition. In contrast, international card schemes are not suited for creating competition at the ATM, due to the allowance of issuer fees with cash withdrawals at cash machines, as well as the additional limitation of interbank fees.

**The objectives of the SEPA Cards Framework can best be realised within the context of European card schemes**

### **Conclusion**

Overall, it is shown that through the combination of European card schemes and maintaining/changing over to unilateral interchange fees, efficient and competition-promoting processing of payment services is ensured. With this, all participants in card business profit (cardholders, card acceptors, issuers and acquirers) from a strengthening of the European card schemes. Furthermore, the necessary economic incentives are set for issuers for the expansion/merger of national card schemes, as well as, prospectively, for further development into a joint European card scheme (through alignment of the national schemes, a joint European scheme is created over time). The possibility is thereby created that sustainable European card schemes and prospectively, a joint European card scheme can be established, as a success factor for European payment services. Now it is up to the EU institutions to create the necessary, sustainable framework conditions, which enables the national schemes in Europe to be competitive.

### Detailed results of “SEPA Cards: success factors for sustainable card schemes in Europe”

#### ■ Objectives and results of the study

- The objectives of the SEPA Cards Framework can best be realised within the context of European card schemes
- The realisation of the objectives of the SEPA Cards Framework requires clear economic framework conditions and incentives for all participants
- Appendix
  - Detailed results
  - Questionnaire
  - Glossary
  - Methodology/Assumption
  - Sources

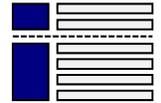
### Key objectives of SEPA Cards Framework (SCF) and also for regulators

- The SEPA vision is that there is no difference between paying (or being paid) in euros<sup>1</sup> for goods or services anywhere in Europe than there is in one's own country
- A majority of payment cards already have international interoperability with wide ATM and point-of-sale acceptance, for example through international card schemes, or through participation in initiatives where national card schemes cooperate for cross border transactions. However, payment cards from SEPA countries will lack this functionality if they are not branded or co-branded or integrated in a wide-acceptance card scheme initiative
- The SCF enhances levels of interoperability within SEPA, by defining common standards, improving transparency and removing other barriers to the development of SEPA
- ECB request for the emergence of (at least one) additional European Card Scheme in the coming years

 **The evaluation of these objectives should be in compliance with the European Commission**

### Factors of success for card schemes in Europe

- The objectives of the SEPA Cards Framework can best be realised within the context of European card schemes
- The realisation of the objectives of the SEPA Cards Framework requires clear economic framework conditions and incentives for all participants



## Study results

**The objectives of the SEPA Cards Framework<sup>1</sup> can be realised best within the context of a European card scheme**

- The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes
- European card schemes guarantee high security with the processing of card-supported payment services

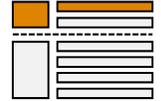
**The realisation of the objectives of the SEPA Cards Framework requires clear economic framework conditions and incentives for all participants**

- The regulations of the EU Commission must permit economically supportable business models for card schemes
- Only through standardised and binding regulations for all active card schemes in Europe (national, European, international), can future-proof, European schemes establish themselves
- Framework conditions which permit interchange fees (multilateral or unilateral), secure low-priced card payments for the consumers
- Through European card schemes, the competition will be ensured on both a European and international level

### Detailed results of “SEPA Cards: success factors for sustainable card schemes in Europe”

- Objectives and results of the study
- **The objectives of the SEPA Cards Framework can best be realised within the context of European card schemes**
- The realisation of the objectives of the SEPA Cards Framework requires clear economic framework conditions and incentives for all participants
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The objective of "Any card at any terminal" is achieved through a common, European card scheme, which is based on national schemes



## The objectives of the SEPA Cards Framework are currently being realised in various ways

### Main objective of the SEPA Cards Framework

#### "Any card at any terminal"

- **This means:**
  - Cross-border card transactions should be adapted for consumers, as well as acceptance points among all countries participating in SEPA. In future, no difference should exist with payment by card domestically or abroad (actual acceptance of a card continues to be the responsibility of the acceptance point).
  - For this, the technical/organisational acceptance of the cards on a Europe-wide basis must be ensured. Furthermore, through uniform standards (technology, approval processes, etc.) each vendor should also be able to offer his scheme on a cross-border basis. No systematic/organizational obstacles/market foreclosures should exist with this.
  - All card schemes should correspond to the EMV standard, including the use of the personal secret number<sup>1</sup> (Chip & PIN)

### Where do we stand today?

- **At the present time, each country in the euro currency zone has a card scheme at a national level ...**
- ... in these countries, most banks are **also at least linked to one international card scheme**, which is used for transactions outside the country ...
- ..., **have alternatively joined together with other national card schemes for pan-European card transactions, ...**
- ... **or international schemes have already replaced the previous national schemes in their home market** and already function there as a quasi "national" scheme

1) At the end of the third quarter of 2010, 79% of cards, 95% of POS (Points of Sale) and 95% of cash machines were EMV-compatible

The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes



## For the achievement of SEPA compatibility with cards, there are basically four options available

### European card landscape - today -



### European card landscape – Four options for achieving SEPA compatibility

- 1 Use of existing international card schemes**

Use of one (or several) international and SCF-conform card schemes to replace the national process
- 2 Co-branding of national and international card schemes**

Co-branding of national and international card schemes, whereby both schemes must fulfil the SCF requirements
- 3 Expansion/merger of national card schemes**

Further development of national card schemes to fulfil the SEPA requirements and expand the implementation region to additional countries or linking up with other national card schemes
- 4 Establishment of a new, joint, European card scheme**

Card scheme Europe

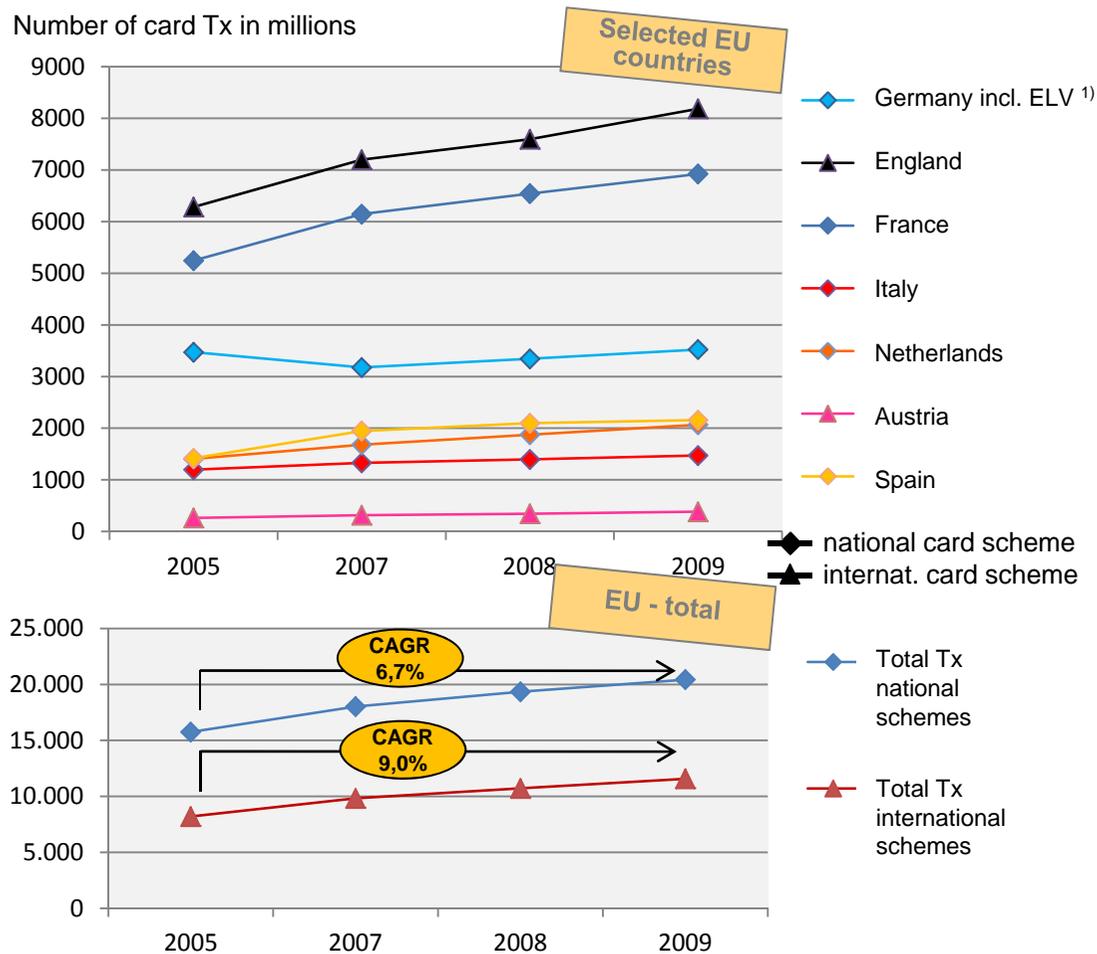
ECB favours further measures than expansion/merger of national card schemes

The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes



## England and France are the two countries with the most card transactions in Europe, most card transactions are currently processed through national card schemes

### Development of card transactions in Europe

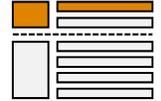


### Conclusion

- England and France have the most card transactions in the EU, ahead of Germany
- With more than 20 billion transactions, the most transactions in Europe are currently processed through national schemes
- Nearly 12 billion transactions are processed through international schemes
- In the EU, national card schemes are currently still dominant - however, international schemes are growing, with an average transaction increase of 9 % p.a. faster than national schemes (6.7 % p.a.)
- With more than 20 billion transactions per year, the national schemes offer the quantitative requirements for organisation in a dedicated European card scheme

1) ELV: Next to electronic cash, ELV (electronic direct debit process) has a relevant position in Germany. This involves a card-based direct debit, which is created on the basis of the card data. The retailer receives a one-off, signed direct debit mandate – not an official payment method

The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes



**The change over to existing international card schemes means disadvantages for consumers and issuers, in addition to this the objective of the EU Commission to strengthen European payment services is not achieved**

1



Use of existing international card schemes



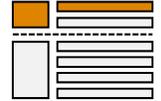
### Advantages

- **Possibility of building on existing technical systems**, consequently **no investment costs** for scheme development, technical processing, brand development, etc.
- **Functioning technology/infrastructure**
- **Known partners** due to previous co-branding
- **International acceptance of the cards**

### Disadvantages

- **Cementing the dependency** of third parties (international schemes)
- **No or only limited influence on scheme regulations**, etc. possible
- **No strengthening of European payment services**
- **Possible price increases** (cf. Great Britain, previously Switch – now Maestro – increase in processing costs 68%<sup>1)</sup>) with replacement of national schemes or too much market power for one scheme
- **Complicated, partially intransparent fee structure for issuers and acquirers**
- **Doubts regarding data protection**<sup>2)</sup>
- Through parallel operation of the magnetic strip for international acceptance **continued high risk of skimming**

The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes



Through the long-term processing of cross-border transactions using co-branding, the objectives of the ECB, the strengthening of European payment services, are also not achieved

2



Co-branding  
of national  
and  
international  
schemes



### Advantages

- **No investment costs** for scheme development, technical processing, brand development, etc.
- **Functioning technology/infrastructure**
- **International acceptance of the cards**
- **No adaptation requirement compared to the status quo** in countries with national schemes (cf. Germany, co-branding electronic cash with Maestro or V Pay)

### Disadvantages

- **Continued high dependency** of third parties (international schemes)
- **Dependency with the structuring of national scheme regulations** on international co-branding (no absolute structuring authority regarding the national scheme)
- **No strengthening of European payment services**
- **Complicated, partially intransparent fee structure for issuers and acquirers**
- **Doubts regarding data protection**
- Through parallel operation of the magnetic strip for international acceptance **continued high risk of skimming**

The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes



**Through the merger of national card schemes, the requirements of the European Central Bank and the EU Commission for the creation of a European card scheme is largely achieved**

**3**



**Expansion/  
merger of  
national card  
schemes**

### Advantages

- **Merger between national card schemes is an important step for strengthening European payment services and for the creation of a European card scheme**
- **Within the context of the merger, existing initiatives, such as EAPS<sup>1</sup>, Eufiserv<sup>2</sup> or Monnet<sup>3</sup> can be included, thereby creating the possibility of building on existing standards, interfaces, etc.**
- **Merger promotes transparency in card-based payment services** (national card feature high transparency for all participants)
- **Increase in security** in card-based payment services through a waiver of international acceptance or the introduction of e.g. geoblocking

### Disadvantages

- **Existing interfaces problem** between the individual, national card schemes
- **Attractiveness of the fee models** between the national card schemes is partially **compromised by international schemes**(e.g. international schemes partially offer cross-border transactions below the price for national transactions)
- **Harmonisation** of the European card schemes only moves forward very slowly due to a lack of economic incentives

1) EAPS (Euro Alliance of Payment Schemes) is a union of six European card schemes for processing pan-European card transactions

2) EUFISERV (European Savings Banks Financial Services) is a joint company of the European savings banks, with a focus on the organisation of cashless payment services

3) Monnet (debit card planned by German and French banks since 2009) – still in the concept phase, realisation point open

The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes



**The establishment of a European card scheme, the requirements of the European Central Bank, as well as the EU Commission, to create a European card scheme, are fulfilled**

4



**Establishment of a new, joint, European card scheme**

### Advantages

- **Long-term strengthening of European payment services through independence from international schemes**
- **Increase in transparency and security in card-based payment services**
- **Joint European card scheme is suitable for building up international acceptance without co-branding**

### Disadvantages

- Establishment of a new European card scheme is associated with **high costs (min. €750 million)** and requires longer **lead time**
- **Interests in Europe are currently distributed unequally, differently<sup>1</sup>**
- An immediate change from existing national card schemes to a joint, European scheme would make the further development of the new scheme, the integration of innovations and the strengthening of competition difficult

- **Digression: Requirement criteria for a joint European card scheme:**
  - Origin, business model and regulations come from Europe
  - Business model based on efficient, former national debit card schemes
  - Legally anchored in Europe
  - Processing in accordance with the Commissions' requirements
  - Initiated by European banks
  - Ownership and management/control by European banks
  - Issuing & acquiring is carried out by banks

1) Several countries are issuing-heavy, e.g. Germany, others are acquiring-heavy e.g. Spain. Conception of a scheme, which takes all interest into consideration poses major challenges

The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes



**Through the expansion/merger of the national card schemes, all objectives that are intended to be achieved with the European card scheme are already largely achieved**

### Evaluation of feasibility per option with regard to ...

### Conclusion

	... SEPA compatibility	... demand of ECB	... improving transparency
<b>1</b> Use of existing international card schemes	<ul style="list-style-type: none"> <li>Immediate technical international acceptance of cards</li> </ul>	<ul style="list-style-type: none"> <li>No independence</li> <li>No strengthening of the European payment market</li> </ul>	<ul style="list-style-type: none"> <li>No consistent merchant service charges of different card types</li> </ul>
<b>2</b> Co-branding of national and international schemes	<ul style="list-style-type: none"> <li>Technical international acceptance of cards</li> </ul>	<ul style="list-style-type: none"> <li>Poor independence</li> <li>No strengthening of the European payment market</li> </ul>	<ul style="list-style-type: none"> <li>No consistent merchant service charges of different card types for cross border transactions</li> </ul>
<b>3</b> Merger of national card schemes	<ul style="list-style-type: none"> <li>Technical Europe wide acceptance of cards</li> </ul>	<ul style="list-style-type: none"> <li>Strengthening of the European payment market</li> </ul>	<ul style="list-style-type: none"> <li>High transparency, simple fee structure</li> </ul>
<b>4</b> Establishment of a new European card scheme	<ul style="list-style-type: none"> <li>Technical Europe wide acceptance of cards</li> </ul>	<ul style="list-style-type: none"> <li>Strengthening of the European payment market</li> <li>Counterweight to international card schemes</li> </ul>	<ul style="list-style-type: none"> <li>Very high transparency, simple fee structure</li> </ul>

- **Option 1 and 2 are not appropriate for achieving the objectives of the ECB**, to strengthen European payment services
- **Option 3 represents a crucial step in strengthening European payment services–** Framework conditions/incentives for a merger in the short term between the national card schemes must be created accordingly
- **Option 4 is the most appropriate for achieving the objectives of the ECB**, to strengthen European payment services
- However, in a joint European scheme, as a first step, national schemes should also form the basis

The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes



**For the successful merger of the national card schemes in Europe, the appropriate implementation requirements need to be realised in good time**

### Merger of national card schemes in Europe

3

#### Expansion/merger of national card schemes



Further development of national schemes to fulfil the SEPA requirements and expand the implementation region to additional countries or linking up with other national schemes

### Implementation requirements for a successful merger

- **Convincing countries that are still critical** about the necessity of a merger of national card schemes (inter alia, sensitisation regarding the requirement for strengthening European payment services)
- **Alignment of the interfaces** between the participating national card schemes
- **Joint development of standards** among the participating national card schemes
- **Strengthening/increasing competitiveness** of the national schemes compared to current co-branding solutions of international card organisations by creating incentives
- **Creating competitive conditions for economic success** (Processing cross-border transactions through co-branding must not be preferred by the competition authority (cf. waiver of cross-border fee through an international card organisation))

**Prospectively: After the merger of the national card schemes (technically, regulatory, etc.) - systematic organisational development and integration of the national schemes into a joint, European card scheme is possible (through alignment of the national schemes, a common, European scheme is developed over time → corresponds to the realisation of option 4)**

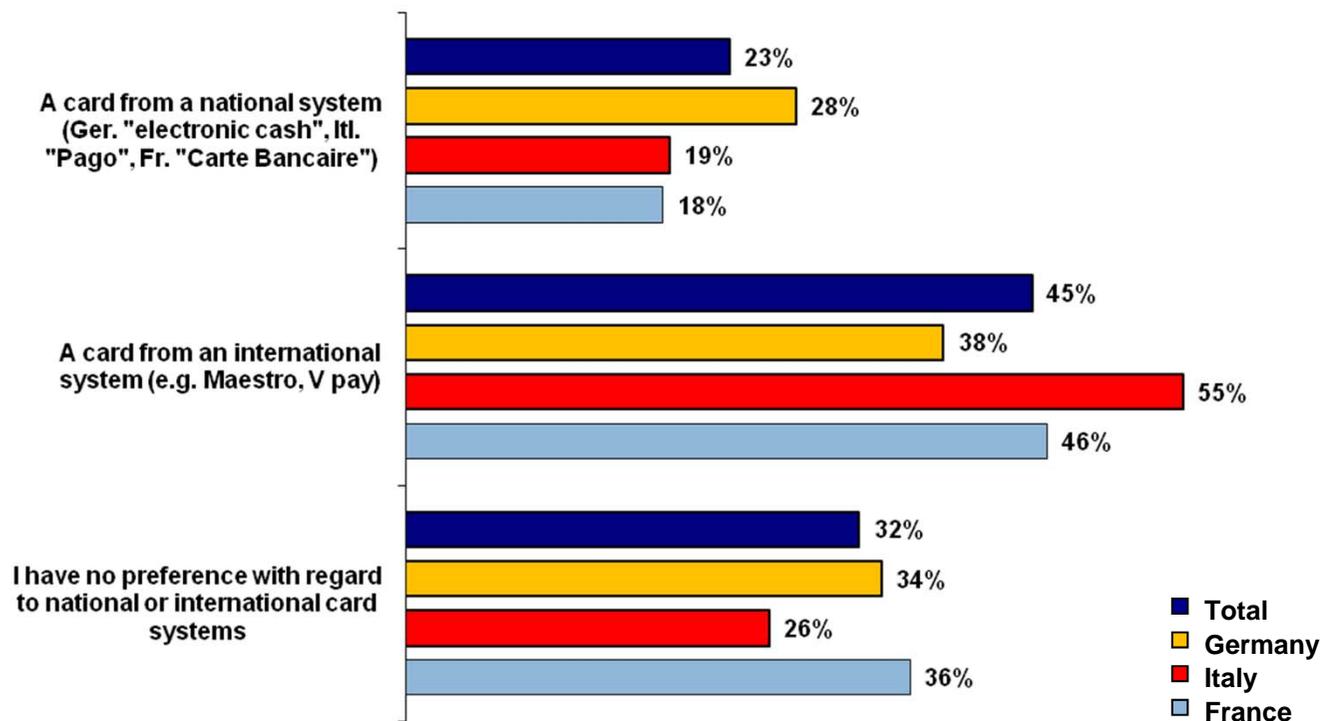
The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes



**Overall, international card schemes are favoured by consumers ahead of national schemes - however, every third person surveyed has no preference regarding the scheme used**

**Preferred card schemes from the consumer's point of view – Identification of potential for European card schemes**

If you could choose and all cards offered you the same services, which card would you prefer to use?



**Derivation**

- The majority of consumers prefer cards of the international schemes
- In Germany, nearly 1/3 prefer the national card scheme
- More than 1/3 of all people surveyed have no preference regarding the card scheme used
- The awareness of efficiency, security, etc. of the national schemes needs to be strengthened with consumers
- Potential exists for European card schemes

**Question to end customers:**

If you could choose between the cards and everyone will offer you the same service, which card would you prefer? (National Systems asked: Germany – electronic cash, Italy – Pago, France – Carte Bancaire)

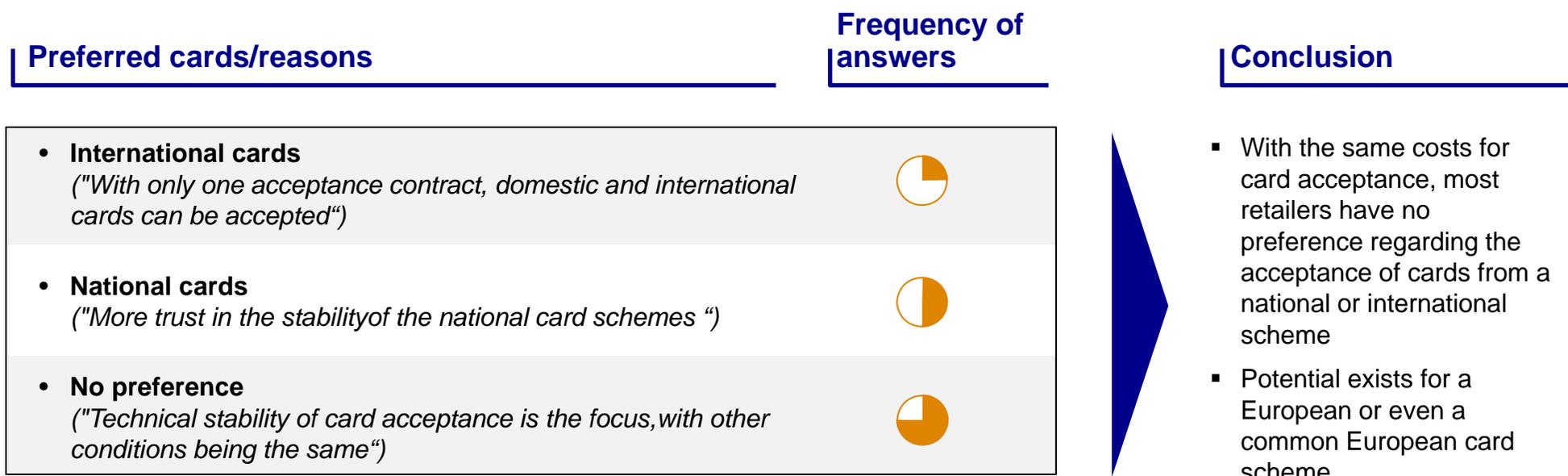
The objective of “Any card at any terminal” is achieved through a common, European card scheme, which is based on national schemes



## With the same conditions for card acceptance, most retailers have no preference with the choice of card scheme - positive positioning of national schemes necessary

### Preferred card schemes from the retailer's point of view – Identification of potential for European card schemes

Assuming that all customers had national cards (in Germany, the “EC-Karte” was asked about, in Italy, “carta bancomat”, in France, “Carte Bleue”), as well as international cards (“Maestro”/“V Pay”), which cards would you accept as a preference, although the fee for the card acceptance is the same?



#### Question to card acceptor/retailer:

Question regarding preferred card acceptance





## The subject of security with processing of card transactions is a critical success factor for the success of card schemes

### Problem area

- **Security with processing is not only an economic factor** – consumers must have trust in the card-supported payment systems, only then will a card scheme be unreservedly accepted by consumers

#### Excerpt from a current study on card use:

- **35 percent of all credit card users prefer to use their card at the POS rather than online, due to doubts about security**
- Reason: **Nearly half fear that they will become victims of credit card fraud**, online. According to the study, around one-quarter of all people surveyed even assume that their personal and confidential card details will already be distributed uncontrolled on the net, with the first online use

- These **results show that alone the presumption of possible gaps in security with card schemes can result in resorting to alternative types of payment**

### Solution

- **Use of card schemes with a very high security standard** (Chip & PIN – no need for unsecure magnetic strips)
- In addition to the current security standard, the **historical security (loss cases in the past) also play a major role**, as this makes a significant contribution to the security perceived by the consumer
- **Card schemes such as the German girocard scheme are global leaders with regard to security** and therefore enjoy a high level of trust by consumers



## The German girocard scheme is a worldwide leader in security

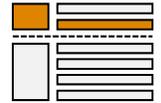
### Counterfeit fraud with German debit cards

	Worldwide <sup>1)</sup>	Europe
2007	€ 21.019 million	< €0.5 million <sup>2)</sup>
2008	€ 33.749 million	< €0.5 million <sup>2)</sup>

1) Note: Maestro represents less than 4 % of all German debit card transactions

2) Option money without acknowledgement of a legal obligation

**▶ In the German girocard scheme the use of card counterfeits has always been effectively avoided through early investments in the “MM” feature at ATM’s and in chip technology at POS**



**For the purpose of worldwide acceptance, geoblocking offers a good compromise between international acceptance and high security with the card payment, from a technical point of view**

**Problem area**

- **Card schemes** that will also be equipped with a **magnetic strip** in the future, for the purpose of worldwide acceptance, pose a high security risk in the form of skimming

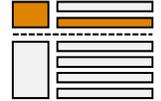
**Mode of operation for skimming:**

- A typical attack pattern is the simultaneous spying out of magnetic strip content from the credit card or EC card, together with the PIN, at a cash machine
- As copied cards no longer work at cash machines in the EU, the misuse occurs in countries that have not yet changed over to the EMV process (Chip/PIN)
- As the card remains in the owners possession, the owner of the account generally only notices the attack when collecting account statements or when the bank intervenes after the overdraft is exceeded.

- **Increasing skimming requires a solution regarding the unsecured magnetic strip**

**Solution**

- Introduction of secure alternatives to conventional magnetic strips, with simultaneous assurance of worldwide card acceptance (from a technical point of view):
  - **Introduction** of concepts for **geoblocking**. (Geoblocking offers an efficient option for increasing security, with simultaneous assurance of international acceptance of card schemes over magnetic strips)
  - **Second card with magnetic strip** (Second card is only used abroad, therefore, reduction of attack frequency)



## Geoblocking ensures the international acceptance technically, without the need for a second card

### Mode of operation of geoblocking...

#### ... within Europe

- Cards from schemes that use geoblocking generally only work within the EU. These transactions are all processed using the secure Chip/PIN method
- The magnetic strip, as a technology that is susceptible to loss, is therefore no longer in use within the EU, in the context of geoblocking



#### ... outside of Europe

- If the card should be used outside of the EU (the chip and magnetic strip are required for this), it must be released separately by the customer
- The release by the customer only occurs for those countries and for a specific time period, in which the transactions should occur. All other countries will continue to remain blocked
- In this way, the use of counterfeit cards is largely prevented in non-liability-shirt countries

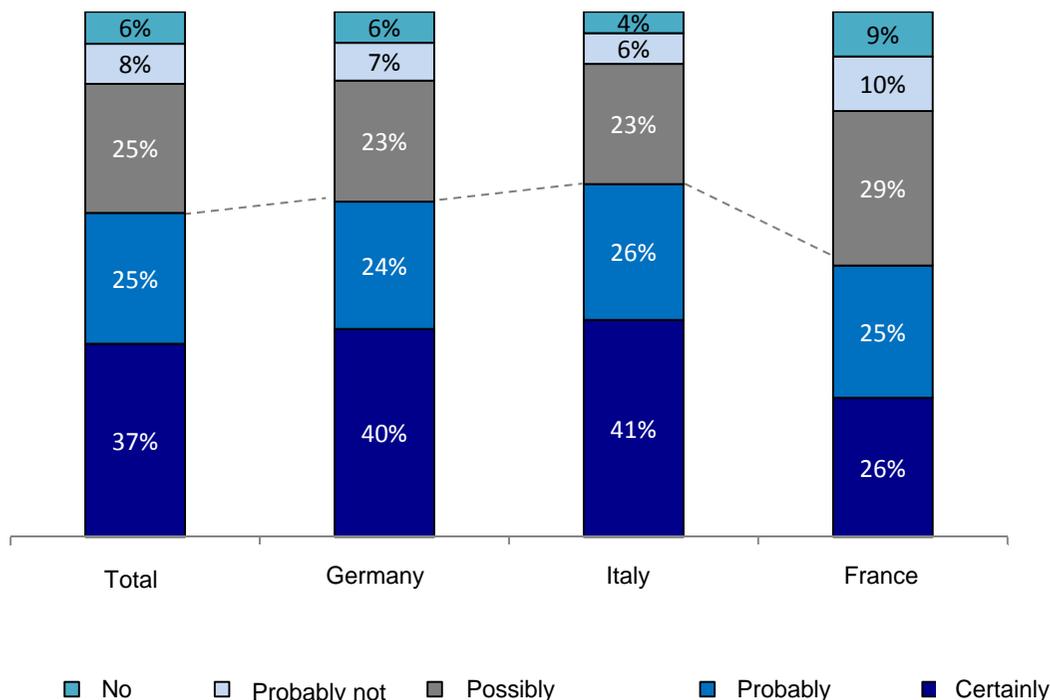




## The majority of those surveyed regard the introduction of geoblocking positively

### Release of the card for use outside of Europe – Question about acceptance of geoblocking

In order to improve security against misuse, it can be envisaged that you need to release your card prior to using it outside of Europe (by calling your bank). Would you be prepared to do this?



#### Derivation

- The majority (62%) of the consumers surveyed would be prepared to have their card release prior to use in countries outside of the EU, in order to improve the security of their card
- Italian consumers would particularly be prepared to do this, 67% of them would at least "be likely" to do it
- In contrast, French consumers are more undecided, with only half of those surveyed being definitely willing to use geoblocking

#### Question to end customers:

Willingness to have the own card released for use outside of Europe



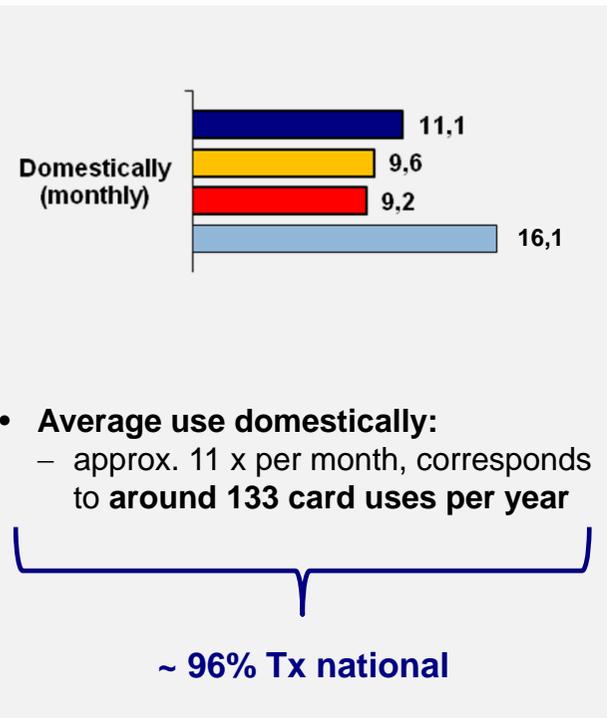
**The cards of those participating in the study are almost exclusively used nationally (96% of all transaction). Outside of Europe, only 1% of the card transactions take place**

**Frequency of card use domestically and abroad – Question about potential demand for geoblocking**

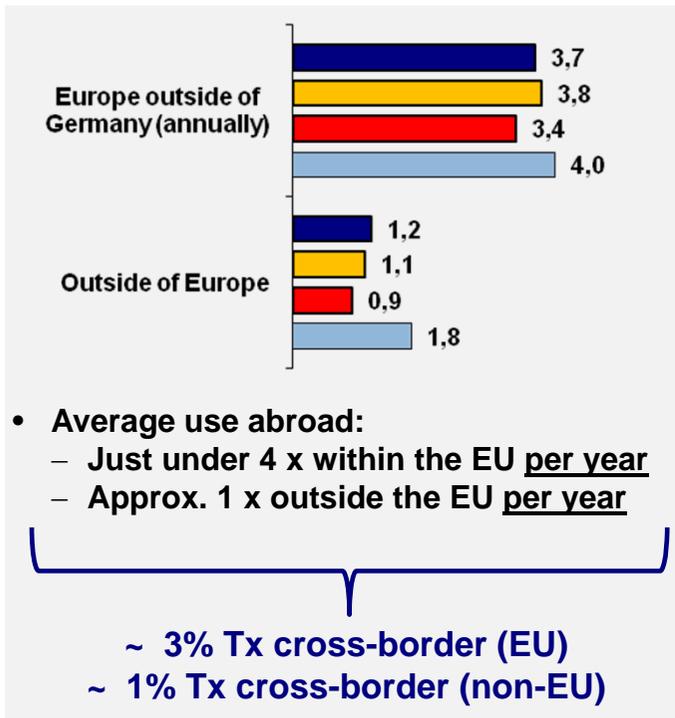
**How often do you use your card...?**

(In German, "EC-Karte" was asked about, in Italy "carta bancomat", in France, "Carte Bleue")

**... domestically in a month**



**... abroad in a year**



**Derivation**

- The surveyed consumers use their cards almost exclusively in the relevant domestic country (cf. 133 Tx domestically to 4 Tx within the EUR and 1 Tx outside of the EU)
- Consumers in France are the most active card users, with around 200 transactions per year

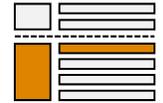
- Total
- Germany
- Italy
- France

**Question to end customers:**

How often do you use your debit card? Please calculate

### Detailed results of “SEPA Cards: success factors for sustainable card schemes in Europe”

- Objectives and results of the study
- The objectives of the SEPA Cards Framework can best be realised within the context of European card schemes
- **The realisation of the objectives of the SEPA Cards Framework requires clear economic framework conditions and incentives for all participants**
- Appendix
  - Detailed results
  - Questionnaire
  - Glossary
  - Methodology/Assumption
  - Sources



## A continuing discussion on fee structures/business models of the card schemes leads to stagnation with the further development of the European schemes

### Problem area

- **Lack of clarity regarding sustainable framework conditions in card-supported payment services in Europe**, (this is detrimental to the further development and harmonisation of card-supported payment services and jeopardises the competitiveness of the European card schemes)

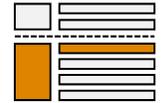
#### Lack of clarity regarding framework conditions using the example of interchange fees in Germany<sup>1</sup>

- Through regulation by the EU Commission, current **cross-border card transactions** using **Maestro (approx. 0.2%<sup>2</sup>)** are lower priced than **national transactions** using **Maestro/electronic cash (0.3%)**
- **Investigation** by Federal Cartel Office, whether a **higher national Maestro fee is justified**. **Risk** that the fee also needs to be **reduced domestically** → Maestro would then be lower priced nationally than electronic cash – retailers change over from electronic cash to Maestro
- **Risk** that the reduction of the Maestro fee **could affect electronic cash** (Retailer fees already a focus of the Federal Cartel Office)
- Discussion regarding **discontinuation of multilateral and introduction of unilateral interchange fees** – precise **structure still open**

### Solution

- **The EU Commission and EU institutions are required to proactively and expediently create sustainable framework conditions** for economically viable business models for **card schemes**
- The **framework conditions should be based** on the following points:
  - **Stringency** (Specification of clear, non-interpretable rules)
  - **Objectivity** (Rules should be defined on the basis of objective arguments)
  - **Practicality** (Acknowledgement of the current market conditions and competitive situation)

The regulations of the EU Commission must permit economically supportable business models for card schemes



## Framework conditions of the EU Commission must create the possibility for long-term and sustainable investment incentives for issuers and service providers

### Problem area

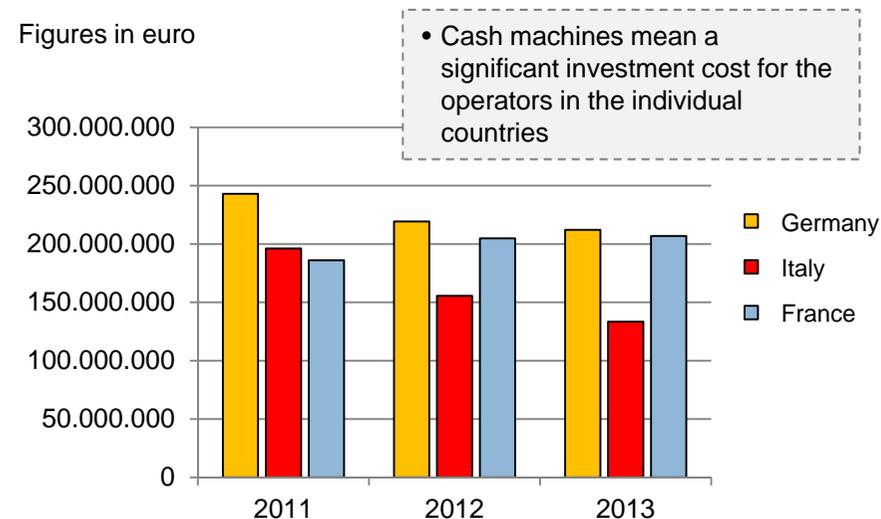
- **Lack of investment incentives for issuers and service providers** (without a secured investment environment, no issuer will invest in/further develop its scheme, etc. Investment cycles in card business are a minimum of 10 years<sup>1</sup>)

### Solution

- **Long-term and sustainable investment incentives** for issuers and service providers **should systematically be created through market forces** between partners at eye level (appropriate framework conditions must create the necessary environment for this)

## Investment requirement using the example of cash machines until 2013 in selected EU countries

Figures in euro



- Investment cycle for cash machines is an average of nine years (however, some cash machines are operated for significantly longer)
- Investment cycles not only relate to the original card business (card production, card validity, etc.), but also to all facilities used in relation to cards, cash machines, self-service machines, etc., as the income and costs are strongly determined on these devices by regulations and framework conditions in card business

<sup>1</sup> Investment cycles: Card issue 5 years (4-year card term + 1 year lead time), card terminals and facilities for supplemental applications (secondary systems) 10 years

Only through standardised and binding regulations for all active card schemes in Europe can future-proof, European schemes establish themselves



## International card schemes have significantly higher complexity and intransparency than national schemes and therefore escape from regulation by the competition authority

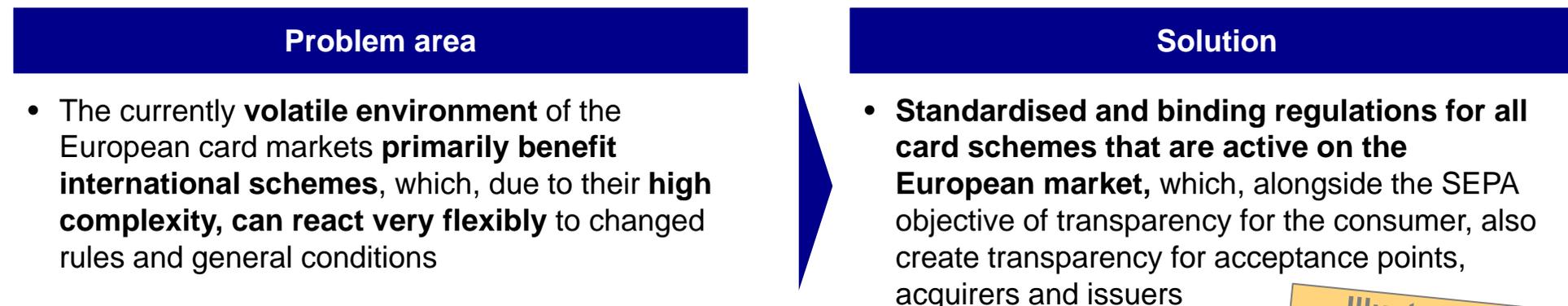


Illustration in excerpts

### Examples for the high complexity of international card schemes

Fee catalogue	Examples
	<ul style="list-style-type: none"> <li>Differentiated fee models with up to 17 different categories and more than 100 individual fees</li> </ul>
	<ul style="list-style-type: none"> <li>Volume-based fees for support/operation of the scheme, scaled and separated by issuer/acquirer</li> </ul>
	<ul style="list-style-type: none"> <li>Cross border fee: Incurred for all issuing and acquirer volumes, where the card issuing country differs from the country of the retailer</li> </ul>
	<ul style="list-style-type: none"> <li>Access fee to the authorisation system; settlement per connection</li> </ul>
	<ul style="list-style-type: none"> <li>PIN validation/SEPA authorisation fee: Pricing of the authorisation requests through the scheme networks, differentiated according to Domestic + Intra European + Inter Regional</li> </ul>
	<ul style="list-style-type: none"> <li>Clearing &amp; Settlement Fee: Pricing of the transactions processed through the scheme networks, payer – issuer/acquirer, scaled according to Tx (ATM, POS, Cash) – differences for Domestic + Intra European, Inter Regional and distinction between Issuer/Acquirer</li> </ul>

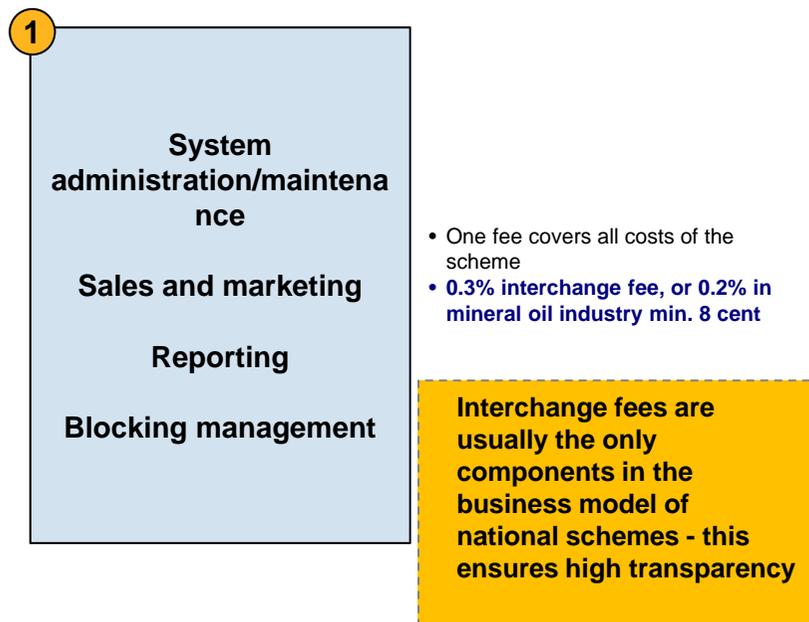
Only through standardised and binding regulations for all active card schemes in Europe can future-proof, European schemes establish themselves



## The high complexity of international schemes offers high flexibility with the business model - interchange fees do not play a crucial role and can be compensated

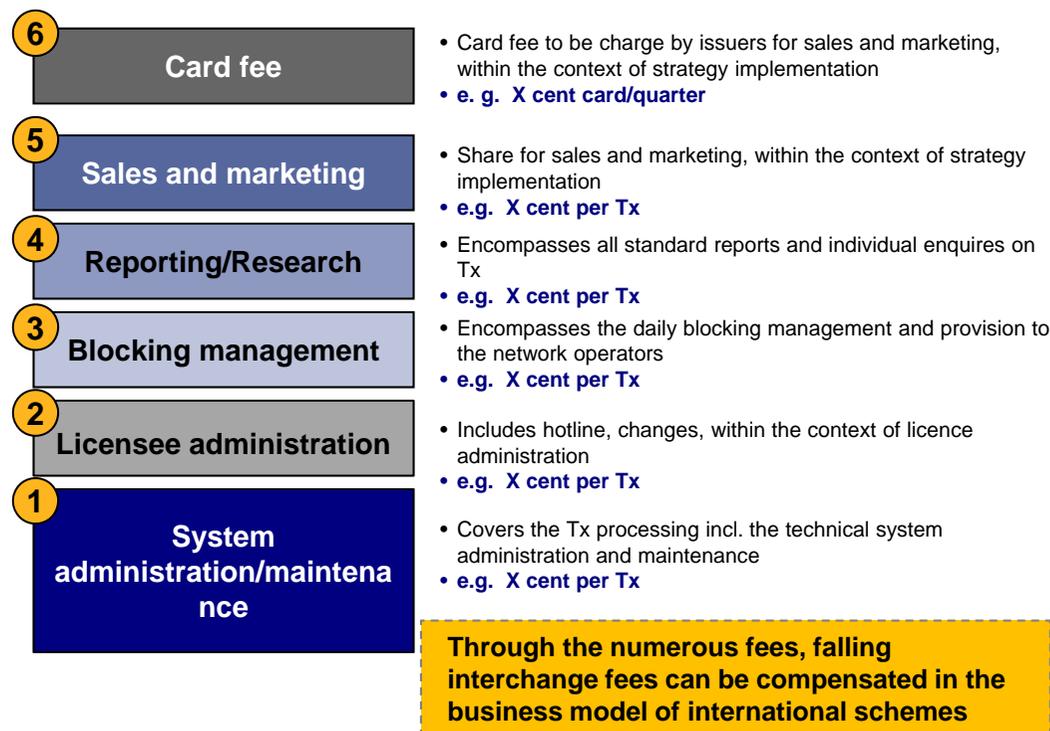
**Example illustration**

### Example of card scheme in Germany: electronic cash



Transparent fee model

### Example of an international card scheme



Complex fee model



Through the numerous types of fees, interchange are much less significant within international schemes than within national schemes - international schemes compensate possibly falling interchange fees with an adjustment to other types of fees

Only through standardised and binding regulations for all active card schemes in Europe can future-proof, European schemes establish themselves



## Issuers attribute more structuring scope to international card schemes with the fee structure and are basically also prepared to change their portfolios

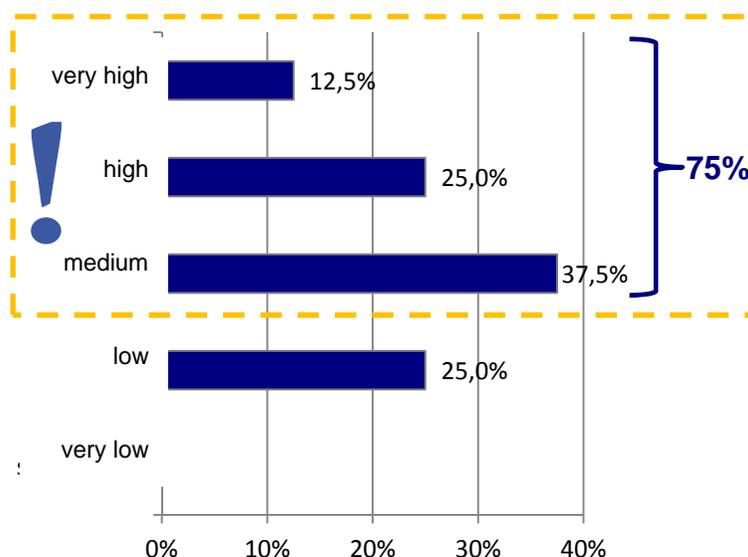
### International card schemes – Flexibility with the business model from the point of view of issuers and willingness to change

In your view, do international card schemes have more options/scope for the configuration of the fee structure?

Assuming the international card schemes would allow you more scope for configuring your own income/fee structure, due to the higher complexity (e.g. granting alternative payments to interchange fees). How prepared would you be to change your previous national card portfolio to an international scheme?

#### Frequency of answers

- **Agree**  
("Possibility of alternative remuneration of the issuer<sup>1</sup>") 
- **Neutral**  
("Advantages, yes, but so far not in favour of the issuers") 
- **Disagree**  
("Interchange debate also relates to these schemes") 



#### Derivation

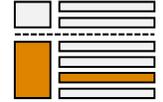
- Issuers attribute more scope to international schemes with the configuration of the fee structure
- Issuers are basically willing to change over own national card portfolios to international schemes (75%)

1) Mentioned here, was, inter alia, the possibility of alternative remuneration for the issuer, such as through reverse fees of the card organisations, instead of interchange fees

#### Question to issuers:

Flexibility of international card schemes

Willingness to change from a national to an international card scheme



## Interchange fees secure the low-priced card payment for consumers and simultaneously offer an important economic incentive for issuers to expand national schemes



### Digression interchange fees

<b>Reasoning</b>	<ul style="list-style-type: none"> <li>• <b>Interchange fees form the basis of the business model for transparent card schemes.</b> They are charged to the retailer (card acceptor) within the context of a discount (on the merchant service fee/charge) by the acquirer. Through these, the costs of the scheme are intended to be covered by the card issuing bank (issuer), (e.g. running costs for transaction processing, customer service, settlement, prevention of misuse, prefinancing as far as debiting the card holder or writedowns due to card defaults)</li> </ul>
<b>Criticis</b>	<ul style="list-style-type: none"> <li>• Multilateral interchange-fees (MIFs) are currently too high for debit cards and credit cards, in the EU Commission's opinion (regarding the amount of the MIF, EU Commission promotes the principle of payment method neutrality at the retailer level)</li> <li>• In the EU Commission's opinion, the MIFs restrict competition among the card issuers, as well as among the retailer banks</li> </ul>
<b>Current</b>	<ul style="list-style-type: none"> <li>• Reduction of the interchange fess has already partially occurred, cf. Reduction of the interchange fees for cross-border transactions through Maestro (MasterCard) and generally with V Pay (Visa)</li> </ul>



## Falling acceptance fees are only passed on to a small extent by retailers, if at all - the vast majority is for the purpose increasing own returns

### Reduction of interchange fees – Willingness of retailers to pass on cost reductions to consumers

Assuming that the acceptance of cards would be more favourable for you – would you pass this cost saving on to your customers?

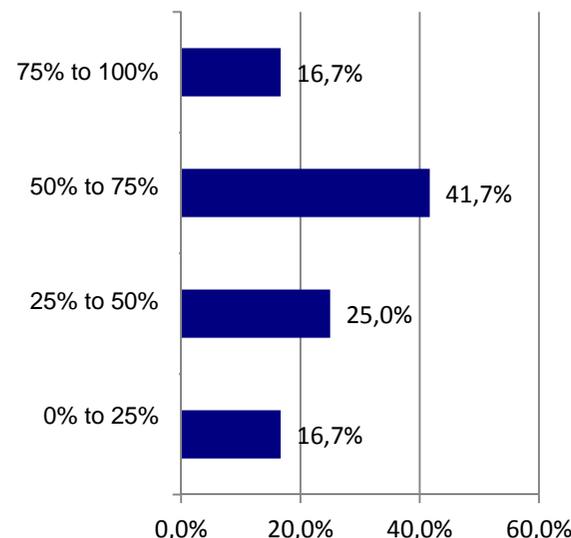
If you pass on your own cost saving to your customers, what percentage of the saving would you pass on to your customers?

#### Frequency of answers

- **Certainly**  
*("Cost reductions lend themselves to this in strong price competition")*

- **Possibly**  
*("Depending on the product, possibly conceivable")*

- **Probably not/no**  
*("Costs for card payment were also not previously priced in for card payments")*

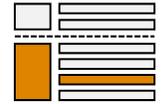
#### Derivation

- Only very few of the retailers surveyed would pass on a cost saving to their customers
- The vast majority of the retailers surveyed do not plan to pass on the cost saving
- The majority of retailers that do intend to pass on the cost saving plan to pass on only a maximum of half of their own saving to their customers

#### Question to card acceptor/retailer:

Use of cost saving with the acceptance of cards

Framework conditions which permit interchange fees (multilateral or unilateral), secure low-priced card payments for the consumers



## The costs for card acceptance are not the reason for non-acceptance of cards for most retailers who do not accept any cards

**Reasons for the non-acceptance of cards from a retailer point of view – Analysis of the relevance of costs for card acceptance**

If you do not accept cards at the checkout, what are the reasons for this?

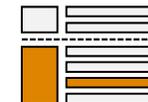
Frequency of reasons

<ul style="list-style-type: none"> <li>• <b>Complexity with contract structure, with settlement, etc.</b>  <i>("Cashiers are only trained workers - card acceptance would mean additional sources of errors")</i></li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Costs for card acceptance</b>  <i>("Acceptance and settlement of cash is cheaper")</i></li> </ul>	
<ul style="list-style-type: none"> <li>• <b>No relevant demand from the customer side</b>  <i>("Average receipts are below €10 – customers want to pay cash", applies to kiosks, drugstores and smaller food retailers)</i></li> </ul>	
<ul style="list-style-type: none"> <li>• <b>No relevant competitive pressure</b>  <i>("So far, no customer losses due to lack of card acceptance")</i></li> </ul>	

**The most frequent reason why retailers do not accept any card are not the actual costs for card acceptance, but rather, the flexibility of the process until cards can be accepted and the presumed cost for settlement after cashier closing time**

**Question to card acceptor/retailer:**

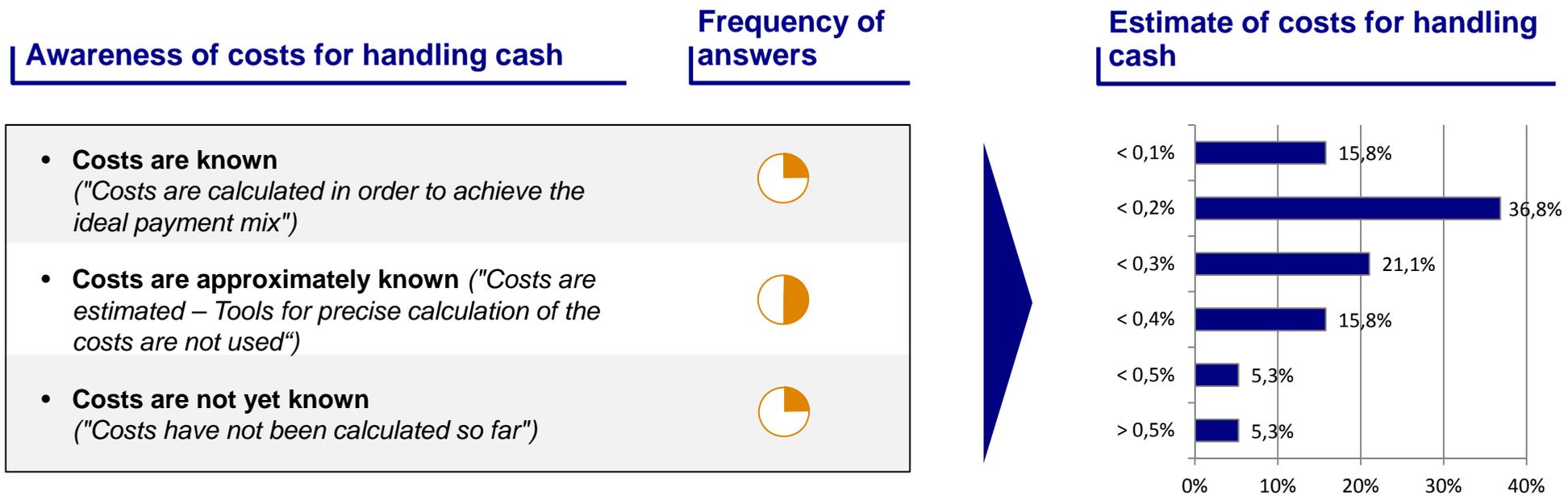
Reasons why cards are not accepted



## The majority of retailers are not aware of their own costs for cash acceptance

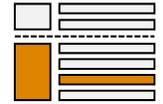
**Costs of handling cash – necessary opportunity costs for comparing costs of card acceptance**

Do you know the real costs of handling cash (costs for cash accounting, risk of missing amounts, cash transport, insurance of cash, etc.) and how high do you think these are?



**Very few retailers are aware of the exact costs for handling cash**  
**The majority of retailers estimate the costs of handling cash at up to 0.3%**

**Question to card acceptor/retailer:**  
 Questions regarding the costs of cash



## Interchange fees prevent a higher cost charge for consumers - assurance of competition through a changeover of the interchange fees from multilateral to unilateral

### Problem area

- **Previous reduction of interchange fees resulted in a higher cost charge for the consumers in individual countries:**
  - Rise in card fees
  - Rise in account fees
  - Increase in the price of other bank services, etc.

### Solution

- **Approval of interchange fees** (multilateral or unilateral) by the competition authority
  - Unilateral interchange fees are suitable for promoting competition among card issuers. At the same time, the "honour all cards rule" should be revised/a non-guaranteed scheme on a Chip/PIN basis should be introduced as a settlement platform for the cards in a scheme
  - In order to ensure the feasibility of unilateral interchange fees the possibility should exist that mergers can be formed on the issuer side (e.g. banks) and on the acceptance side (e.g. retailer associations, purchasing associations, etc.). Through, market power would meet on both sides - promotional for competition and the formation of a fair market price

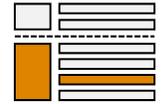
### Difference between multilateral/unilateral interchange fees

#### multilateral

- The amount of interchange fees is determined in a standardised manner for all card issuers

#### unilateral

- The amount of the interchange fees can be independently defined by each card issuer for the cards issued by it within the context of the scheme



## With a further reduction of interchange fees, issuers will pass on the costs to their customers - cardholders must compensate the fall in income

### Reduction of interchange fees – Reactions by issuers

How would you react to a further reduction of interchange fees?

(Multiple mentions possible)

#### Reactions to a reduction of the interchange fee

#### Frequency of answers

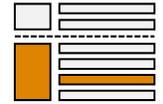
<ul style="list-style-type: none"> <li>• Increase in minimum turnover for making the card cost-exempt</li> </ul>	
<ul style="list-style-type: none"> <li>• Increase of annual card price</li> </ul>	
<ul style="list-style-type: none"> <li>• Increase in account management fee within the context of package prices</li> </ul>	
<ul style="list-style-type: none"> <li>• Cross-subsidisation of the card business from other business areas</li> </ul>	

#### Derivation

- A further reduction of interchange fees leads to issuers compensating the resulting fall in income from card business with an increase in fees for cardholders
- In contrast, the possibility of cross-subsidisation is only mentioned by few issuers as a possibility for compensating falling interchange fees
- **Cardholders are indirectly or directly charged through fee rises**

#### Question to issuers:

Reaction to a further reduction of the interchange fee

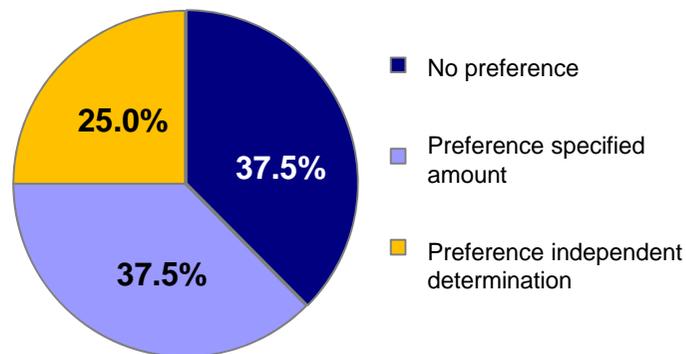


## Larger issuers regard the introduction of unilateral interchange fees positively - smaller issuers are still sceptical

### Changeover of interchange fees from multilateral to unilateral – Acceptance by issuers

(Each card issuer should be able to define the price for card acceptance at the POS itself for its own cards)

If you had the option to choose, would you prefer to define the amount of the interchange fees yourself, or would you prefer a standardised level of interchange fees determined by the scheme, as previously?



#### Derivation

- One-quarter of the issuers surveyed are open to unilateral interchange fees, while nearly 40% do not yet have any preference
- Particularly smaller issuers prefer to remain with the current policy for interchange fees

#### Comment:

- The majority of issuers surveyed are only approximately aware of their own income and costs in card-based payment services
- Around one-third are not aware of their own income and costs in card-based payment services
- Issuers that prefer independent pricing expect an overall increase in card transactions through rising competition

#### Question to issuers:

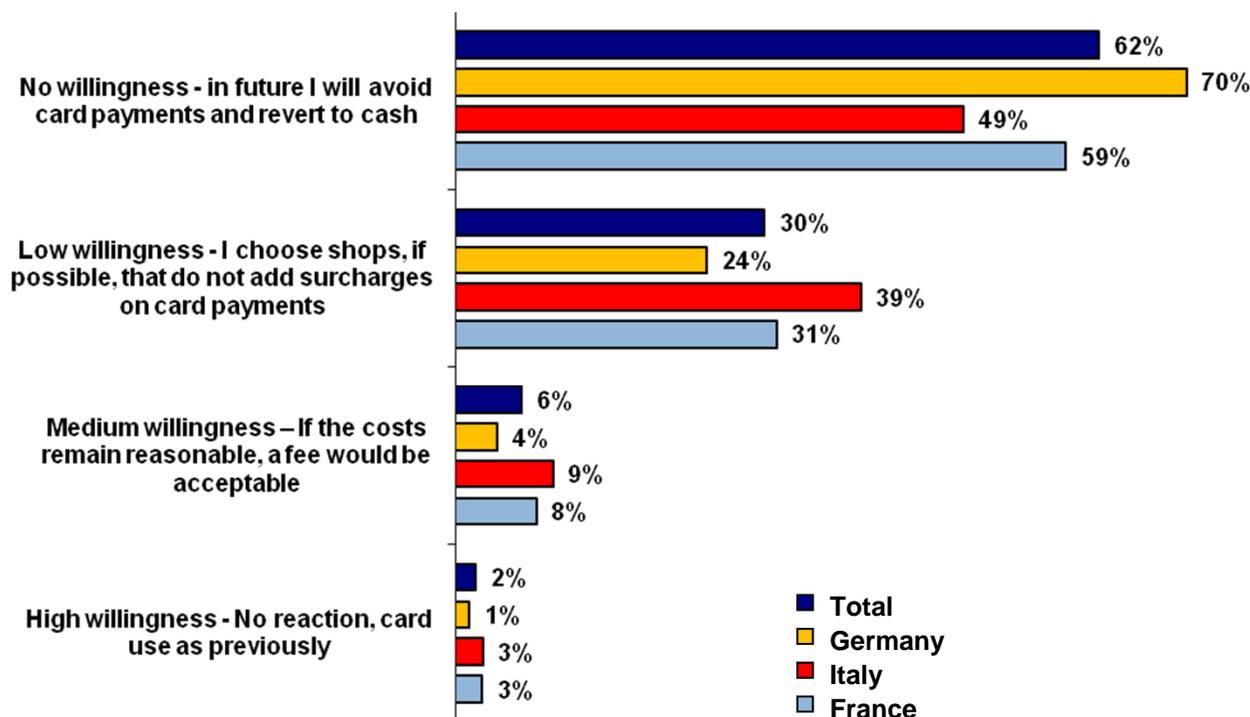
Interchange fee multilateral or unilateral



## End customers show no willingness to accept a surcharge with card payments compared to cash payments, the answer to this would be to revert to cash for most of those surveyed

### Additional fees with card payments at the checkout (surcharging) – Reactions by consumers

What would your reaction be, if you needed to pay a surcharge when paying with your card ("EC-Karte" or credit card) compared to a cash payment?



#### Derivation

- Nearly 2/3 of those surveyed would revert to cash with surcharging at the POS
- The sensitivity is particularly high in Germany, where 70% would not pay by card anymore
- The greatest willingness to pay an additional fee is shown by participants from Italy

#### Question to end customers:

Question about the acceptance of surcharging



## National card schemes are increasingly being replaced by international schemes in Europe

### Problem area

- **International card organisations have larger and further growing market power**, which is being further expanded at the expense of the relevant, national card schemes. In the medium term, this can lead to competitive distortions, if one or two card schemes should gain a dominant market position



### Solution

- **Limitation of the current actual structuring autonomy of international card schemes**, (Result of the high complexity and resulting flexibility in their fee models) **by the competition authority**

### Current examples of the expansion of the competitive position of international card organisations

- International card schemes occupy the same topic fields as national schemes (debit, credit, prepaid, contactless, mobile payment, online banking, etc.) - "unregulated" gateways for international schemes
- Together with retail and service companies, co-branding cards are increasingly being issued by international card schemes (e.g. Germany: PAYBACK Maestro cards of West LB)
- Card portfolios are increasingly being changed from previous co-branding logic to "international scheme" only, see e.g. changeover of German Barclaycards at the end of 2010
- Several European countries are currently implementing products by international card organisations. E.g. start of Debit MasterCard in Norway, as well as changeover of cards in Finland and Denmark

Through European card schemes, the competition will be ensured on both a European and international level



**The example of Germany shows that with the replacement of electronic cash by international schemes, the transaction costs for cards would increase significantly**

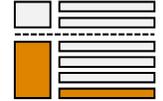
**Possible effects of a substitution of the national electronic cash scheme in an international card scheme**

**Example of Germany**

<b>Quantitative effects</b>	<ul style="list-style-type: none"><li>• <b>Extra costs of international card schemes</b> compared to electronic cash: (Costs POS issuing international schemes e.g. 5 cent/Tx + extra costs for processing in the 4-party system approx. 3-5 cent/Tx; calculated on 1,800 million Tx)</li></ul>	<b>Up to approx. €160 million extra costs per annum alone in the issuing sector</b>
<b>Qualitative effects</b>	<ul style="list-style-type: none"><li>• <b>Dependency on international card companies</b> → No/barely any possibility for influence on the business model</li></ul>	<b>Extra costs not quantitatively verifiable, possible extra costs from losses with efficient processing, etc.</b>

**Extra costs, insignificant whether primarily borne by the acquirer or end customer, make payment services more expensive, prevent efficient processing and must at least be borne indirectly by the end customers**

Through European card schemes, the competition will be ensured on both a European and international level



## Card schemes that permit access fees with disposals at cash machines (e.g. national scheme Germany) ensure competition at the ATM in favour of the consumer

### Problem area

- **International card schemes are not suitable for creating competition at the ATM.** Organisation of international card schemes at the ATM:
  - International schemes allow **issuer fees** for cash withdrawals at cash machines. This means that the customer does not find how much his issuing bank will charge him at the time of withdrawing at the cash machine - no transparency for cash withdrawals
  - In addition to this, the international schemes limit the **interbank fees**, so that cash machine operators have no influence on this – no incentive for operators with main ATM business to invest in this field

### Solution

- **Introduction of access fees at the ATM** (access fees promote the market forces, increase transparency and secure a fair market price for withdrawals at cash machines through the competition)
- Possible illustration of a competitive situation in an environment with access fees



Example of Germany

### Creation of competition at cash machines

- 2011 Introduction of **access fees** at cash machines (each operator of cash machines can determine the fee for cash withdrawals itself and must display this to the customer prior to disposal) – Price for disposals formed by supply and demand since then
- Differentiated prices for withdrawals at cash machines (access fees/operator fees) offer business possibilities for operators of cash machines (main business ATM). This and the increase in competition ensure a fair market price for consumers with the supply of cash



## Complex fee structures of international schemes make traceability difficult and consequently the competition in card-based payment services for issuers and acquirers

### Problem area

- **International card schemes are frequently not traceable** with their complex fee structures for acquirers and issuers (**little transparency**)



### Solution

- **Prioritisation of national card schemes by issuers and acquirers, as they show significantly higher transparency** in comparison to international schemes (due to lower number of fee types)

### Reasons for more difficult traceability of international schemes for issuers and acquirers

- Differentiated fee models with partially more than a dozen different categories with more than 100 individual fees
- Still substantial merchant service charges differences between debit and credit cards (delayed debit included)
- Different MIFs for debit and credit cards
- Blended rates per card brand or even between different brands
- Surcharging by the merchant is allowed (different surcharging rates for each card type)
- No mandatory bundling of all card types at the same acquirer
- Different card types → Different MIFs → Different MSCs → Selective card acceptance and/or surcharging
- Reasons for different MIF between debit & credit<sup>1</sup>, but inconsistency of MIF-logic if prepaid cards are within the same MIF fee tier as for credit cards
- ...

Through European card schemes, the competition will be ensured on both a European and international level



## All players in the European card market will benefit from a future situation with strengthening national schemes and in finally from one European card scheme

### Who benefits from ..

### Conclusion

	... current situation (strong international schemes)	... future situation (strengthening national schemes – one European scheme)
Merchant	 <ul style="list-style-type: none"> <li>• Pays one price to his acquirer – no lack of transparency</li> <li>• Less competition – high merchant service charge</li> </ul>	 <ul style="list-style-type: none"> <li>• More competition because more schemes on market – reduce in merchant service charge is probable</li> </ul>
Customer	 <ul style="list-style-type: none"> <li>• High acceptance – existing fraud risk because of magnetic strip of several schemes</li> <li>• Possibly lack in personal data (cf. current discussion about SWIFT-agreement)</li> </ul>	 <ul style="list-style-type: none"> <li>• Greater security because of intelligent solutions about magnetic strip such as geoblocking</li> <li>• More security about personal data</li> </ul>
Issuer	 <ul style="list-style-type: none"> <li>• Need to issue cards with co-branding or international scheme to offer European-wide acceptance</li> </ul>	 <ul style="list-style-type: none"> <li>• More transparency compared to international schemes</li> <li>• No international scheme necessary for European-wide acceptance</li> </ul>
Acquirer	 <ul style="list-style-type: none"> <li>• Less transparency about card transactions with international schemes</li> </ul>	 <ul style="list-style-type: none"> <li>• More transparency compared to international schemes</li> </ul>

- All players in the European card market will benefit from a future situation with strengthening national schemes and in finally from one European card scheme

### Detailed results of “SEPA Cards: success factors for sustainable card schemes in Europe”

- Objectives and results of the study
- The objectives of the SEPA Cards Framework can best be realised within the context of European card schemes
- The realisation of the objectives of the SEPA Cards Framework requires clear economic framework conditions and incentives for all participants

- **Appendix**

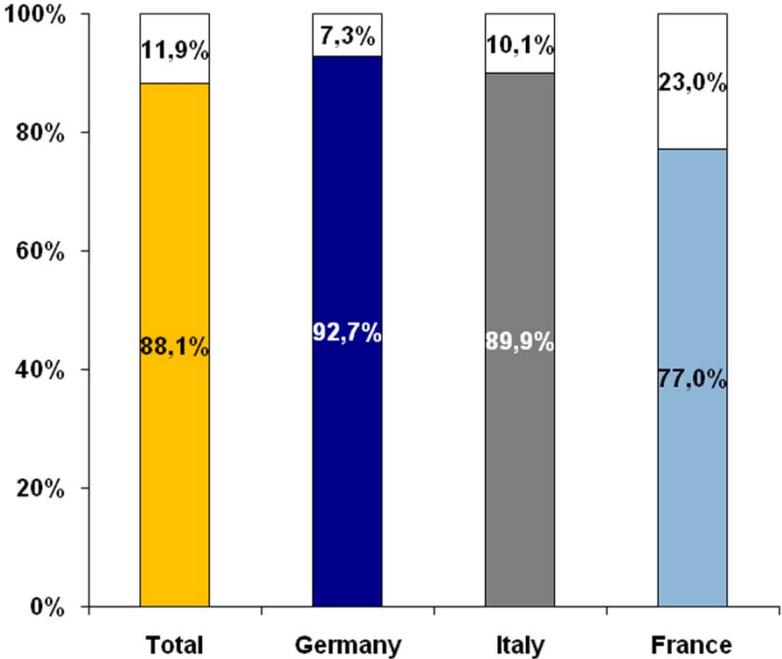
- Detailed results
- Questionnaire
- Glossary
- Methodology/Assumption
- Sources

Detailed results

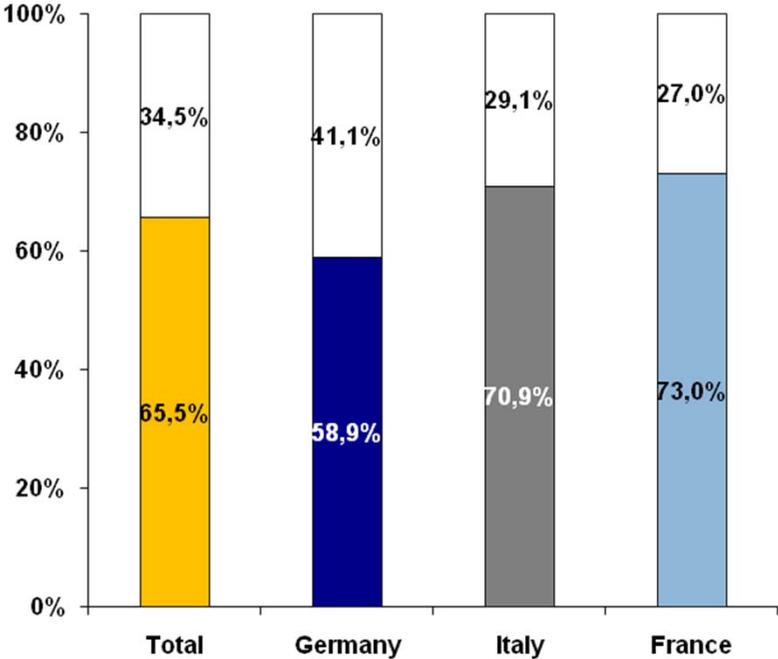
**Debit card and credit card possession**

Do you have one or several cards?

**Debit card**



**Credit card**



■ Total ■ Germany ■ Italy ■ France

**Question to end customers:**

Do you have one (or several) EC Card(s)/credit cards?

## Nearly half of those surveyed indicate that they currently pay an annual fee for their debit card

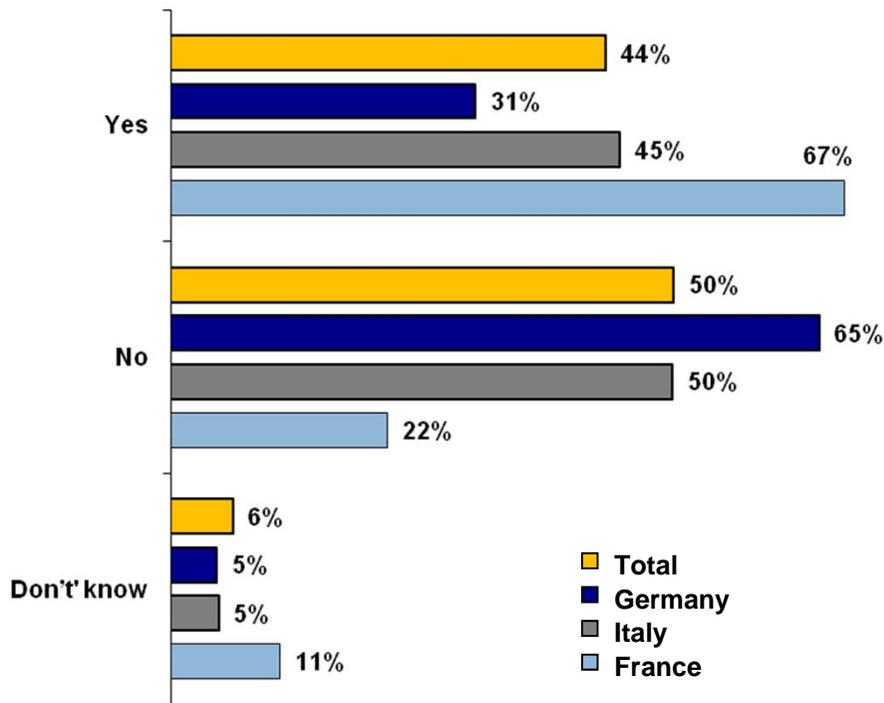
### Card fees with debit cards – Annual fee for the card holder

Do you currently pay an annual fee for your card, if so, how much approx.?

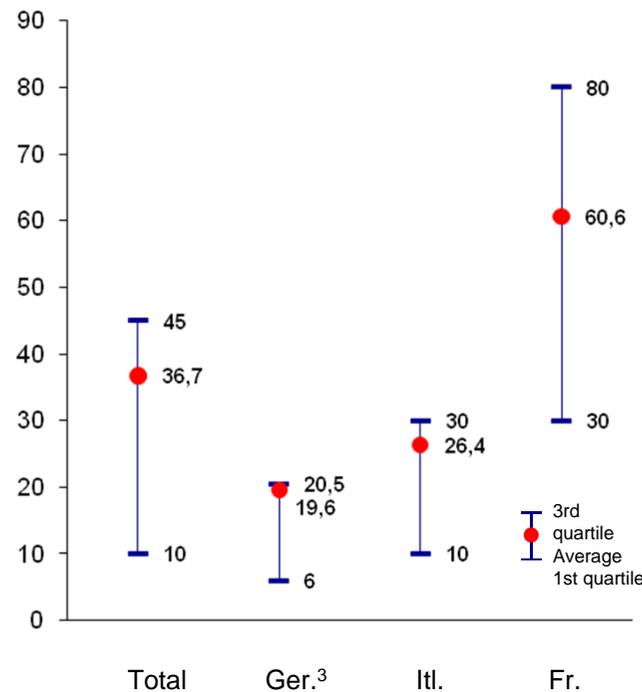
#### Derivation

- Nearly half of those surveyed indicate that they currently already pay an annual fee for their debit card (44%)
- In France, 2/3 even currently pay an annual fee, while in Germany, only around 1/3
- The amount of the fee is the highest in France, at an average of EUR 60

Share of fee payers<sup>1</sup>



Amount of fee in euro (annually)<sup>2</sup>



#### Question to end customers:

1) Questions regarding the debit card: "EC-Karte" (Ger.), "carta bancomat" (Itl.), "Carte Bleue" (Fr.)

2) Only taking the participants into account who pay an annual fee

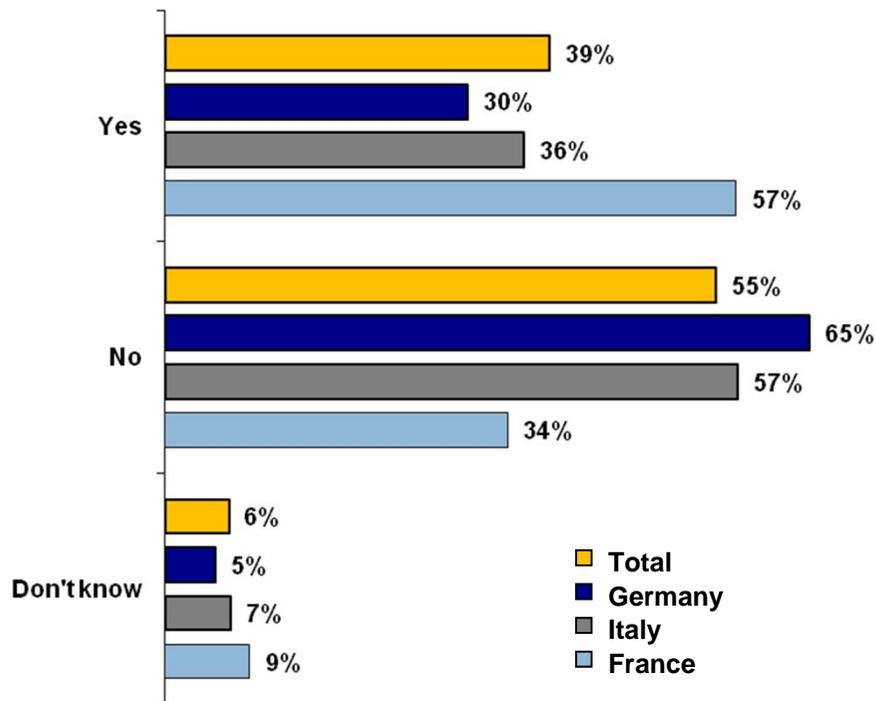
3) E.g. Germany: Typical card fees are approx. €10 p.a. Fees indicated that are above this can possibly be due to the package price models, or the price is "perceived" by the customer as being higher

## Nearly 40% of those surveyed indicate that they currently pay an annual fee for their credit card

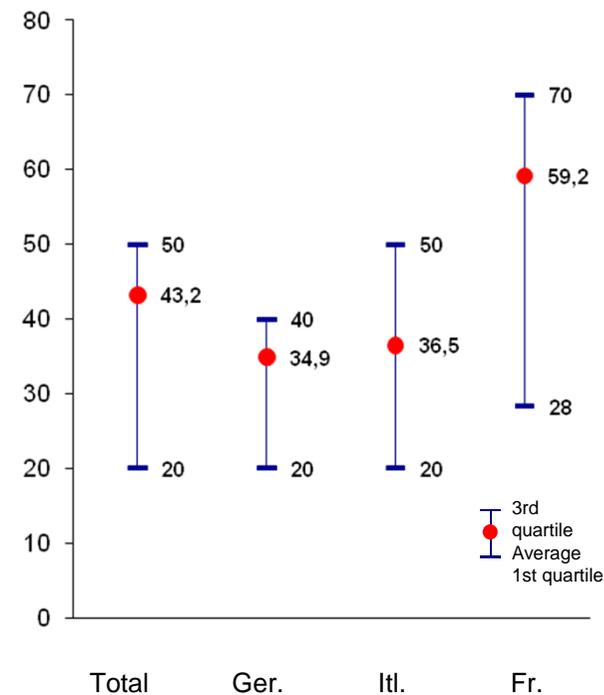
### Card fees fees credit cards – Annual fee for the cardholder

Do you currently pay an annual fee for your credit card (MasterCard, Visa, etc.), if so, how much approx.?

Share of fee payers<sup>1</sup>



Amount of fee in euro (annually)<sup>2</sup>



#### Derivation

- At 39%, 5% fewer indicate that they pay an annual fee for their credit card than for the debit card
- In France, as with the debit card, more than half pay for their credit card, whereas in Germany, only every third person
- In contrast, the annual fee for the credit card is an average of around €43 p.a. above that of the debit card

#### Question to end customers:

1. Questions regarding the credit card
- 2) Only taking the participants into account who pay an annual fee

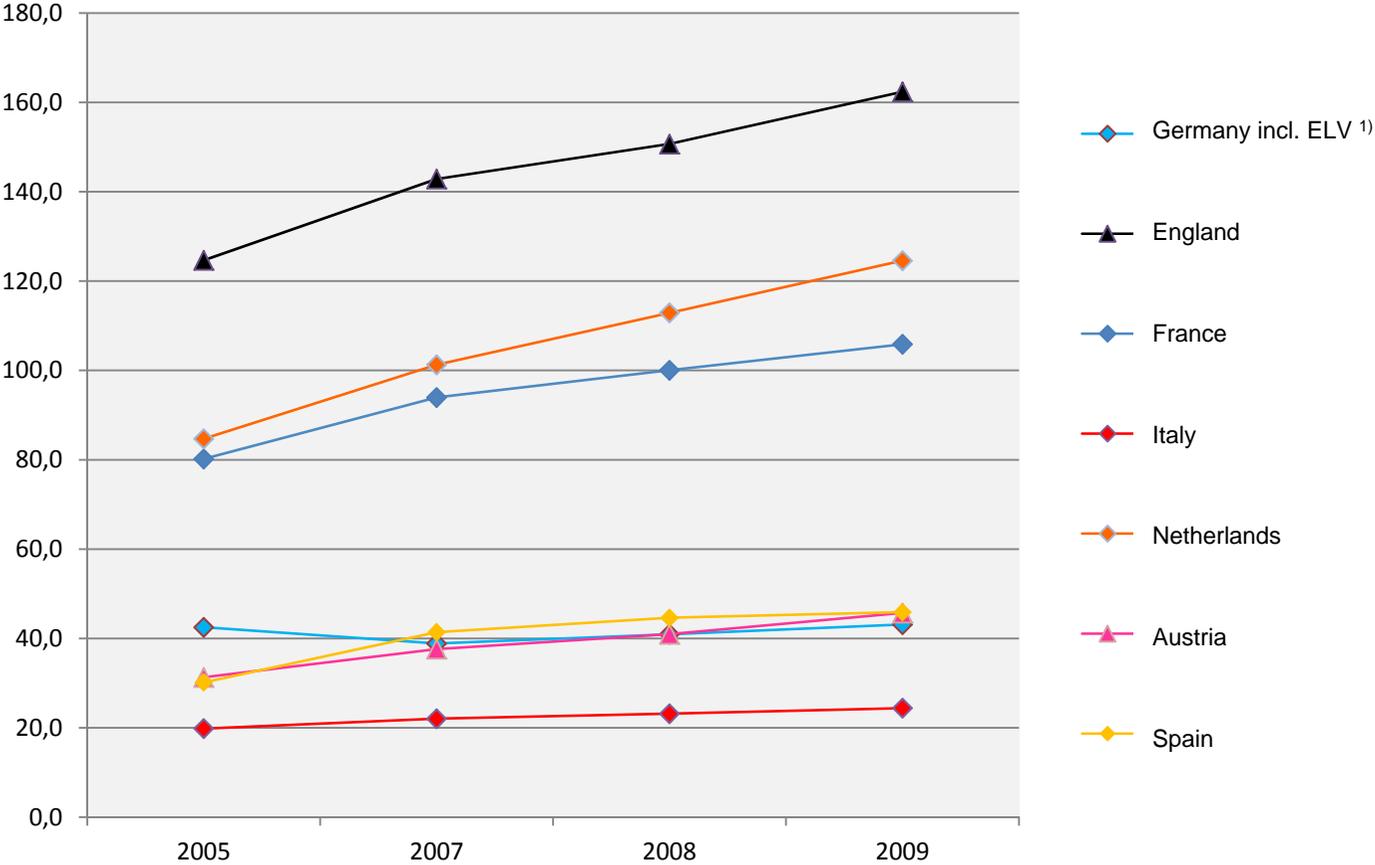
Detailed results

The majority of the "large" EU countries rely on national card schemes - however, with an international scheme, England shows the highest number per capita transactions in Europe

Development of the number of card transactions per inhabitant

Conclusion

Number of card Tx per inhabitant



- Out of the "large" countries in the EU, only England relies on an international card scheme, however, it also has the highest per-capita number of card Tx

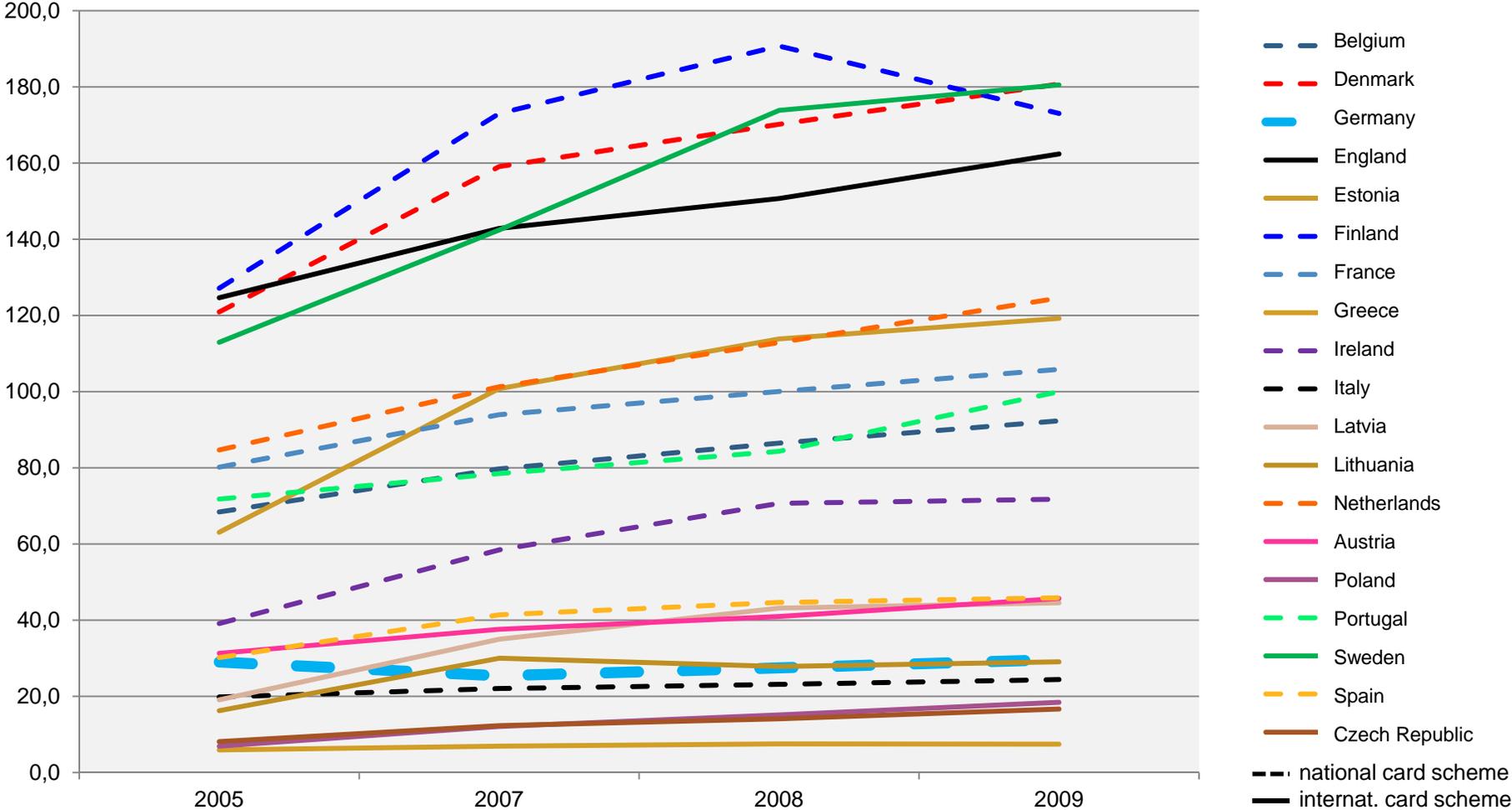
◆ national card scheme  
▲ internat. card scheme

# Detailed results

**In relation to the number of inhabitants, in countries with national card schemes, more card transactions are conducted than in countries with international card schemes**

## Development of the number of card transactions per inhabitant

Number of card Tx per inhabitant



# Questionnaire to consumers 1

## Representative survey among consumers in Germany, Italy and France

### 1. Questions to consumers (Germany)

- 1.1. Do you pay an annual fee for your debit card „EC-Karte“?
- Yes → How much do you pay per year (EUR)?
  - No
  - Don't know
- 1.2. Do you pay an annual fee for your credit card (MasterCard, Visa etc.)?
- Yes → How much do you pay per year (EUR)?
  - No
  - Don't know
- 1.3. What would your reaction be like, if you have to pay a cash extra charge at the cash desk, in case of paying with your card (debit card or credit card), against a cash down payment?
- No attendance - I avoid card payments and change to cash in the future
  - Minor attendance - I choose shops, which do not have the extra charges, if it's possible
  - Medium attendance - if the charge is within reasonable limits, it's acceptable
  - Great attendance - no reaction, usage of the card as before
- 1.4. If you could choose between the cards and everyone will offer you the same service, which card would you prefer?
- A card from a national system („electronic cash“)
  - A card from an international system (e.g. Maestro, V pay)
  - I don't have any preference related to national or international card systems
- 1.5. To optimize the safety of your card against abuses, you have the possibility to unlock it (by calling your bank) before a usage outside Europe. Would you be willing to do so?
- Full agreement
  - Agreement
  - Possibly
  - Rather no
  - No
- 1.6. How often do you use your debit card? Please calculate
- At home country – commonness per month?
  - Abroad
    - Europe – commonness per year?
    - Rest of the world – commonness per year?

### 1. Questions to consumers (Italy)

- 1.1. Attualmente paga una tassa annuale per la Sua carta bancomat?
- Si → Tassa annuale "carta bancomat" in Euro
  - No
  - No so
- 1.2. Attualmente paga una tassa annuale per la Sua carta di credito (MasterCard, Visa ecc.)?
- Si → Tassa annuale "carta di credito" in Euro
  - No
  - No so
- 1.3. Quale sarebbe la Sua reazione se dovesse pagare un costo aggiuntivo quando vorrebbe pagare con la Sua carta (carta bancomat o carta di credito) invece di pagare in contanti?
- Nessuna disponibilità - Eviterei i pagamenti con la carta nel futuro e praticerei pagamenti in contanti
  - Disponibilità limitata - In quanto possibile, scelgo i negozi che non richiedono tasse aggiuntive per i pagamenti con la carta
  - Disponibilità media - A condizione che i costi rimanessero ragionevoli, una tassa aggiuntiva sarebbe accettabile
  - Grande disponibilità - nessuna reazione, utilizzerei una carta come prima
- 1.4. Se si possa scegliere e se tutte le carte offrissero i stessi vantaggi, quale carta preferirebbe utilizzare?
- Una carta da un sistema nazionale
  - Una carta da un sistema internazionale (per esempio Maestro, V pay)
  - Non ho alcuna preferenza in termini di sistemi di carte nazionali o internazionali
- 1.5. Per il miglioramento della sicurezza contro l'uso improprio, si potrebbe sistemare che Lei debba sbloccare la Sua carta per l'utilizzo fuori Europa (attraverso una chiamata telefonica alla Sua banca). Sarebbe pronto(a) a fare questo?
- Certo
  - Piuttosto si
  - Forse
  - Piuttosto no
  - No
- 1.6. Quanto spesso utilizza la Sua carta bancomat? Si prega di valutare.
- Nel paese:– Utilizzo carta bancomat – Al mese?
  - In un paese straniero europeo – All anno?
  - In un paese straniero non europeo, Resto del mondo – All anno?

## Questionnaire to consumers 2

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### 1. Questions to consumers (France)

- 1.1. Payez-vous à présent des frais annuels pour votre « Carte Bleue »?
- Oui → Frais annuels en euros pour la « Carte Bleue »
  - Non
  - Je ne sais pas
- 1.2. Payez-vous à présent des frais annuels pour votre carte de crédit (MasterCard, Visa etc.)?
- Oui → Frais annuels en euros pour la carte de crédit :
  - Non
  - Je ne sais pas
- 1.3. Comment réagiriez-vous si vous aviez à payer un supplément lorsque vous voulez payer avec votre carte (« Carte Bleue » ou carte de crédit) au lieu de payer en espèces ?
- Je ne le ferais pas - j'éviterais les paiements par carte dans l'avenir et je paierais seulement en espèces
  - Je le ferais peut-être - je choiserais les magasins en fonction de possibilité, ceux qui n'imposent pas de frais supplémentaires pour les paiements par carte
  - Il est possible que je le fasse - Tant que les coûts restent raisonnables, un supplément serait acceptable
  - Je le ferais certainement - Pas de réaction, j'utiliserais la carte comme avant
- 1.4. Si vous aviez le choix et que toutes les cartes offrent les mêmes avantages, quel type de carte seriez-vous le plus susceptible d'utiliser ?
- Une carte d'un système national (monnaie électronique)
  - Une carte d'un système international (par exemple Maestro, V PAY)
  - Je n'ai aucune préférence en ce qui concerne les systèmes nationaux ou internationaux de cartes
- 1.5. Pour améliorer la sécurité contre les abus, vous pouvez faire en sorte que vous deviez débloquer votre carte pour pouvoir l'utiliser en dehors de l'Europe (par appel téléphonique à votre banque). Cela vous conviendrait ?
- Bien sûr
  - Plutôt oui
  - Probablement
  - Plutôt non
  - Pas du tout
- 1.6. A quelle fréquence utilisez-vous votre « Carte Bleue »? Veuillez évaluer.
- Dans votre pays - Usage Carte Bleue – en mois
  - Dans un pays étranger européen – en année
  - Dans un pays étranger non-européen – en année

# Questionnaire to merchants and issuers

## Interviews with experts in Germany, Italy and France

### 1. Questions to merchants

- 1.1. Do you accept card payments at the POS?
- 1.2. What are the reasons why you accept card payments?
- 1.3. If you do not accept cards at the POS, what are the reasons for this?
- 1.4. Assuming the all customers had national cards (in Germany, the "EC-Karte" was asked about, in Italy, "carta bancomat", in France, "Carte Bleue"), as well as international cards ("Maestro" / "V Pay"), which cards would you accept as a preference, although the fee for the card acceptance is the same?
- 1.5. Assuming that the acceptance of cards would be more favourable for you – would you pass this cost saving on to your customers? If so, what percentage of the savings would you pass on to your customers?
- 1.6. Do you know the real costs of handling cash (costs for cash accounting, risk of missing amounts, cash transport, insurance of cash, etc.) and how high do you think these are?
- 1.7. How do you see the future in card-supported payment services in the national market, which expectations do you have?
- 1.8. How do you see the future in card-supported payment services in Europe, which expectations do you have?
- 1.9. Will national or international card schemes dominate the national market in the future? Which schemes will basically prevail on the market, in your opinion?
- 1.10. What are the reasons for a specific card scheme prevailing on the market?
- 1.11. Which card scheme do you personally prefer, what are the reasons for this?

### 2. Questions to issuers

- 2.1. Which cards (from which scheme) does your company issue?
- 2.2. Since when has your company been issuing these cards – if your company previously issued cards from a different scheme, what were the reasons for the change of scheme?
- 2.3. Do you know the income and costs of card-based payment services with the cards issued by your company?
- 2.4. If you had the option to choose, would you prefer to define the amount of the interchange fees yourself, or would you prefer a standardised level of interchange fees determined by the scheme, as previously?
- 2.5. How would you react to a further reduction of the interchange fees?
- 2.6. In your view, do international card schemes have more options / scope for the configuration of the fee structure?
- 2.7. Assuming the international card schemes would allow you more scope for configuring your own income / fee structure, due to the higher complexity (e.g. granting alternative payments to interchange fees). How prepared would you be to change your previous national card portfolio to an international scheme?
- 2.8. How do you see the future in card-supported payment services in the national market, which expectations do you have?
- 2.9. How do you see the future in card-supported payment services in Europe, which expectations do you have?
- 2.10. Will national or international card schemes dominate the national market in the future? Which schemes will basically prevail on the market, in your opinion?
- 2.11. What are the reasons for a specific card scheme prevailing on the market?
- 2.12. Which card scheme do you personally prefer, what are the reasons for this?

### Definitions

#### Acquirer

- A contract company settling bank with contractual relationships with the retailer. The bank settles the card turnover data sent by the retailer with the relevant payment systems

#### Acceptance point/ Merchant

- Retailers and service companies that conclude a contractual agreement with an acquirer bank for the acceptance of payment cards. Such an acceptance contract (retailer contract) regulates the conditions under which payment cards are accepted.

#### Clearing

- Clearing describes the settlement of the payment (debit and credit of the payment amount).

#### Cross-border debit Processing

- The processing of turnover generated with domestic debit cards abroad/with foreign banks' cards domestically

#### Cross-border transaction

- International transactions/cross-border transactions, where the acquirer and the bank (issuer) are in various countries

#### Commission rate

- Percentage share of the turnover that an acceptance point pays to its acquirer

#### Debit card

- Payment card linked with a bank (giro) account. Each transaction that is generated with this card results in a direct debit to the account

Definitions	
<b>Domestic transaction</b>	<ul style="list-style-type: none"><li>▪ A transaction that is generated domestically between the retailer and cardholder</li></ul>
<b>EAPS</b>	<ul style="list-style-type: none"><li>▪ Euro Alliance of Payment Schemes</li></ul>
<b>electronic cash</b>	<ul style="list-style-type: none"><li>▪ National PIN based on the debit payment process of the German banking industry</li></ul>
<b>EMV</b>	<ul style="list-style-type: none"><li>▪ Europay, MasterCard, Visa = EMV: The abbreviation "EMV" also refers to the technical specifications adopted by all three companies to guarantee global compatibility and interoperability for chip cards, chip terminals and the relevant data formats in the transaction</li></ul>
<b>EPC</b>	<ul style="list-style-type: none"><li>▪ The European Payments Council (EPC) was founded in 2002. It calls itself "the decision-making and coordination body of the European banking industry in relation to payments". The main task of the EPC is the development of the Single Euro Payment Area. The 74 members are banks and banking associations.</li></ul>
<b>"Honour All Cards" rule</b>	<ul style="list-style-type: none"><li>▪ Retailers that accept the cards of a specific scheme must accept all cards of this scheme, without excepting specific issuers, i.e. debit cards and credit cards, as well as various versions of these cards (standard, gold, etc.)</li></ul>
<b>Interchange fee</b>	<ul style="list-style-type: none"><li>▪ The interchange fee is pay by the acquirer to the card-issuing bank (issuer) for each processed transaction</li></ul>
<b>Issuer</b>	<ul style="list-style-type: none"><li>▪ Member bank that issues payment cards to its customers, which administers the card accounts of its customers, authorises (either itself or through authorised service providers) and guarantees the acquirer bank the payment compensation for valid card turnover.</li></ul>

Definitions	
<b>Licence fee</b>	<ul style="list-style-type: none"><li>▪ Licence fee that a member bank must pay to the card organisation (MasterCard, VISA) within the context of a licence agreement</li></ul>
<b>Maestro</b>	<ul style="list-style-type: none"><li>▪ Payment system von Maestro International. Enables worldwide electronic use at cash machines and in shops of the approved cards</li></ul>
<b>Merchant Agreement</b>	<ul style="list-style-type: none"><li>▪ Written contract between the retailer and acquirer bank. It contains the conditions, rights and duties of the contracting parties regarding card acceptance.</li></ul>
<b>Non-Discrimination Rule (NDR)</b>	<ul style="list-style-type: none"><li>▪ The acceptance partner is obligated not to differentiate (e.g. discount with cash payment, etc.) regardless of the type of payment used by the customer (credit card, debit card, cash, etc.)</li></ul>
<b>PIN-based transaction</b>	<ul style="list-style-type: none"><li>▪ Card transactions where the personal identification of the cardholder occurs by checking the PIN, which the customer enters at the site of the transaction ("point of interaction") into a POS terminal or a PIN keypad of a cash machine</li></ul>
<b>POS</b>	<ul style="list-style-type: none"><li>▪ Point of Sale</li></ul>
<b>Skimming</b>	<ul style="list-style-type: none"><li>▪ The illegal copying of the magnetic strip content of a card. The fraudster swipes the card through a magnetic strip reading device that is controlled by him. Subsequently, the counterfeit cards are transferred to so-called "white plastic" cards</li></ul>
<b>S.W.I.F.T.</b>	<ul style="list-style-type: none"><li>▪ „Society for Worldwide Interbank Financial Telecommunication“: Organisation that offers, inter alia, cross-border money transfer services for banks internationally.</li></ul>

## Methodology/Assumption

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### Objectives/Assumptions:

- The study “SEPA: Sustainable card schemes as a success story for the European payment market” is the second study by the research centre for financial services of the Steinbeis University Berlin in the area of card payments and cards schemes in Europe
- The main objective of the study is to identify criteria for strengthening the European card payment market
- The prognoses and computations represented in the study are based on present market conditions and - circumstances. When unforeseen events of the basic conditions and/or developments in the payment markets occur, prognoses must be computed again

### Advance:

- The study of the Steinbeis-University Berlin is based on a survey with 2,172 customers (cardholders) in Germany, Italy and France. In addition 8 interviews with issuers and 19 interviews with merchants were carried out in this three countries.
- The overall evaluation is not weighted according to the single countries, citizens, respectively, card transactions.

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