Economic analysis of SEPA

Benefits and opportunities ready to be unlocked by stakeholders

SEPA
Single Euro Payments Area

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pwc

About PwC's Corporate Treasury Solutions

We are 500 professionals working in 150 countries who specialise in corporate treasury. Our specialists combine a variety of professional backgrounds including treasurers, bankers, system developers, accountants, integrators and management consultants.

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Contents

Executive summary

With Single Euro Payments Area (SEPA) deadline of 1 February 2014 rapidly approaching, the European Commission DG Internal Market and Services asked PwC to estimate the ongoing benefits of SEPA 'once fully embraced'. This report summarises the findings and includes the perspectives and feedback of the stakeholder representatives we interviewed in November and December, 2013. It also describes the assumptions underlying our calculations and the limitations of the model used for this study.

The underlying analysis and the discussions among the project team members have highlighted to us that SEPA and its benefits cannot be assessed in isolation. SEPA is one piece in a jigsaw of measures and initiatives being introduced with the aim of creating a more competitive Europe. Some of the benefits identified – although clearly related to SEPA – may therefore depend on other initiatives too. In our study, we group the findings in terms of direct and indirect benefits, quantitative savings and other benefits. Key findings from our research include:

- Potential yearly savings to all stakeholders of €21.9 billion – a recurring annual benefit resulting from price convergence and process efficiency;
- A reduction of up to 9 million bank accounts, resulting from more efficient corporate euro cash-management infrastructures;
- Up to €227 billion in credit lines and released liquidity, resulting from enhanced cash pooling and more efficient clearing; Around 16.5 million companies and over 6,000 banks and clearing houses in the EU-16 Member States unlocking up to 973,000 man years that are currently involved in various steps of the payment and reconciliation processes, as a result of more transparent and standardised information and the rationalisation of corporate bank account infrastructures; and
- Indirect additional benefits from, for example, the adoption of e-invoicing; the extended use of XML ISO20022; companies' wider use of in-house banking and payment factories; a SEPA-cards framework; mobile payments; and alternative sourcing by companies and consumers due to the redefinition of the Eurozone as a domestic financial market (SEPA 2.0).

Although not all stakeholders will benefit equally from SEPA, all will see the benefits. While companies, banks and clearing houses will enjoy most of the economic benefits, consumers may benefit from improved consumer protection.

This report focuses on the benefit of SEPA 'once fully embraced'. The benefit might seem theoretical unless or until some items that are still outstanding are resolved – such as niche products, non-compliant electronic transfer products, further standardisation of SEPA messaging, and restructuring of the clearing settlement market for euro-denominated transactions. We have therefore included recommendations that advance the harmonisation of payment processing in Europe in the coming years. The recurring benefits included in this document should be regarded as encouragement for completing the SEPA journey that Europe embarked on 12 years ago by adopting the Lisbon Agenda for Europe.

The recent proposal by the European Commission amending Regulation No 260/2012 which allows banks and other payment service providers for a short period of 6 months to continue processing non- SEPA compliant payments through their legacy schemes alongside SEPA Credit Transfers and SEPA Direct Debits has no impact on the findings of this study. This study estimates the annual benefits for SEPA 'once fully embraced' and does not consider intermediate scenarios or the time required to get to a 'fully embraced' SEPA.

SEPA is an infrastructural project. It is vital for the integration and increased competitiveness of European capital markets. History has shown that it is difficult to estimate upfront the full benefit of infrastructure changes. This is not because it is difficult to calculate the direct effects of the investment but because it is hard to imagine, let alone calculate, the secondary effects. In this sense, SEPA may prove to be similar to the harmonisation of the power supply in Europe during the second half of the last century. At the time, many citizens had to switch plugs and buy new appliances. Now we benefit not only from larger markets for those appliances, but we also travel lighter across Member States meeting people and getting new ideas while powering our computers and cell phones without the need for adapters.

Introduction

This report summarises the high-level analysis by PwC's Corporate Treasury Services, as requested by the European Commission DG Internal Market and Services (hereafter referred to respectively as 'the study', 'PwC', 'the report' and 'the Commission'). The study analyses the recurring benefits of SEPA 'once fully embraced' and highlights the main areas that currently make full adoption difficult, if not impossible.

For the purpose of this report, we have defined 'fully embraced' as the end-game whereby 100% of electronic payment transactions denominated in euros are defined as SEPA-compliant within the Eurozone. 'Fully embraced' includes all standard legacy credit transfers, direct debit instructions and all niche products having migrated to SEPA. We have defined the 'end-game' as the clearing of SEPA transactions having been rationalised.

For practical purposes we limited our study to the analysis of financial data for the EU-16[1], ignoring the implementation of SEPA in the non-Eurozone countries and in the non-EU Member States within the SEPA-zone that will switch to SEPA processing as of February 2016. First of all, the size of these economies and the number of transactions in these countries is relatively small, and the overall impact on the presented number marginal. Furthermore, for these countries, little information is available to model the transaction and value of euro transactions in the near future.

We have taken December 2013 as point of reference for the benefit calculations. We assume that all intra-European credit transfers denominated in euros are already processed as SCT and that, compared to domestic direct debits, the volume on cross-country SEPA direct debit transactions is negligible.

Given the scope and short timeframe of the study, the Commission and PwC agreed to develop a high-level benefit calculation populated with readily available market data variables. For cross-check validation purposes, PwC interviewed a number of representatives of the stakeholder groups that are mentioned in this report.

We realise that, in order to achieve the benefits discussed in this report, all stakeholders have already invested time and effort in SEPA. We even believe that additional investments need to be made, as the upcoming 1 February 2014 deadline does not mark the end of the SEPA project. For our study, we have not considered the costs incurred by the various stakeholders before February 2014.

Although the study is by no means scientific, and its high-level approach only allows for limited nuanced analysis of geography and technical and operational aspects, we are confident that the results presented in this report provide a fair understanding of the cost and benefit related to the adoption and further roll-out of the SEPA framework across Europe.

We believe we have included the most important and generic drivers of SEPA benefits across all relevant stakeholders. However, the findings as presented in this report are by no means exhaustive and were subject to our interpretation.

We would like to thank all people from within and outside PwC that have provided input for this study.

Figure 1 – SEPA-zone (textured countries are included in EU-16)

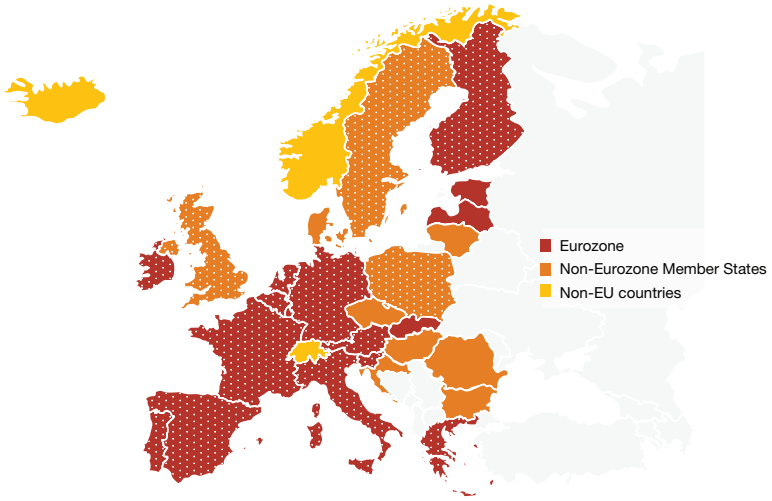
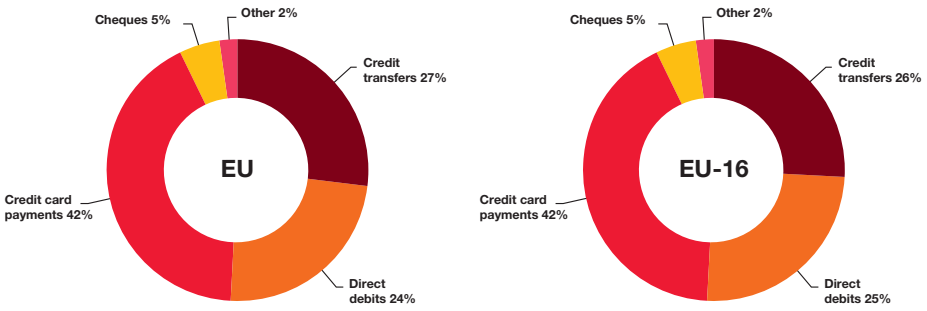


Figure 2 – Split of transaction processing markets by transaction type



1 The EU-16 consists of the following EU Member states; Great-Britain, Germany, France, the Netherlands, Spain, Italy, Sweden, Poland, Belgium, Finland, Austria, Portugal, Luxembourg, Ireland, Slovenia and Greece.

The European payments landscape

In 2012, a total of about 88.6 billion transactions were processed within the EU-16 by the payments processing industry. As shown in Figure 3, the EU-16 is fairly representative for the Eurozone and the European markets as a whole. For the purpose of our model, the transaction volumes for countries within the EU-16 that are not in the Eurozone have been adjusted.

The SEPA framework

The SEPA project for a common European payments market is rapidly approaching a key milestone: as of 1 February 2014, all domestic Automatic Clearing Houses (ACH) and direct debit instructions within in the Eurozone have to comply with the SEPA standard. Within two years of this date, similar euro transactions in all other EU Member States and in the countries of the European Economic Area will also have to be migrated to the SEPA framework.

This 1 February 2014 milestone will bring an end to an era of dual euro-clearing infrastructure, which started on 28 January 2008 when the first SEPA credit transfer was processed. While 28 January 2008 was important for the payments industry, it had little bearing on businesses and consumers. The impact of the 1 February 2014 milestone on consumers and businesses will not go by unnoticed; as of that day, standard domestic euro credit and debit transactions within EU Member States – together, more than 50% of all electronic transactions in Europe – will have to be processed according to the SEPA framework. Legacy domestic formats and/or local data requirements will no longer be acceptable for transferring cash locally, as they do not incorporate the information defined in the SEPA Rulebook. XML ISO 20022 is not mandatory for all communications between corporates and banks[2], but the SEPA Rulebook for processing and interfacing is developed on the back of this standard for financial messaging, and it requires end-users to use IBAN (and BIC) as well as structured transactional reference information that is not covered in legacy domestic messaging standards. And even in cases where local formats have been enhanced to be SEPA-compliant, these enhancements need to be incorporated in existing interfaces in order to create SEPA-compliant transactions that can be processed by the bank and clearing houses.

The SEPA framework also provides a new, common standard for direct debit mandates, which as of 1 February 2014 will be mandatory for SEPA-compliant domestic direct debit transactions.

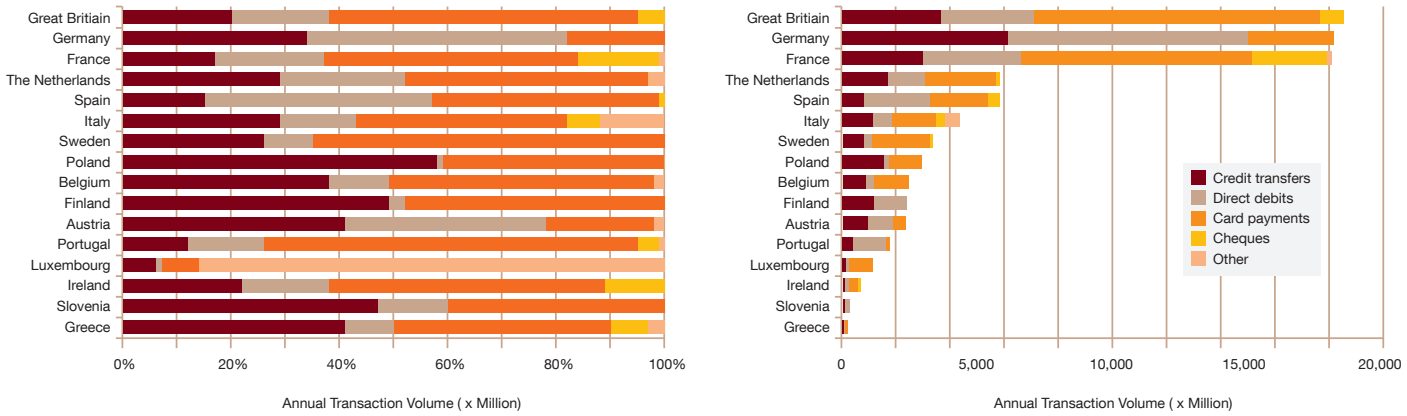
Despite being a major milestone, the 1 February 2014 deadline is not the final stage in the common European payments market. In most Eurozone countries, 'niche products' are exempted. These niche products have to be migrated to SEPA standards in the next two years. As well as 'niche products', most countries also support SEPA non-compliant electronic payment products for which no end-date has been defined and will therefore exist well beyond 2016.

Key to SEPA is not only that it standardises the processing of electronic transactions across the SEPA-zone, but transactional reference data is also fully integrated in the payment message and is not touched by banks and processors that pass on the message between payor to payee. This provides end-to-end transparency in processing and routing between the payor and payee, and will improve straight through processing (STP) for all stakeholders (see also figure 4).

How to estimate the benefit of a promise yet to be delivered

SEPA stands for Single Euro Payments Area and is one of the initiatives resulting from the 2001 Lisbon Agenda for a more competitive internal market. As the acronym suggests, its aim is to create a harmonised, common market for payment processing across Europe comparable to any efficient domestic clearing market. The European Commission's intention for SEPA has always been not only to further integrate the economic markets in Europe,

Figure 3 – Transaction volumes EU-16



2 Article 5 (1) d of the SEPA Regulation states that PSPs "must ensure that where a PSU that is not a consumer or a micro-enterprise, initiates or receives individual credit transfers or individual direct debits which are not transmitted individually, but are bundled together for transmission, the message formats specified in point (1)(b) of the Annex are used". Point (1) (b) of the Annex to the SEPA Regulation specifies that the message formats referred to are the ISO 20022 XML message standards. Article 16 (5) of the SEPA Regulation, however, allows EU Member States to waive the requirement to use the ISO 20022 message formats for PSUs until 1 February 2016. Information on transition arrangements in EU Member States permissible under the SEPA Regulation is published by the European Commission and the European Central Bank (see links below).

but also to drive out inefficiencies by promoting competition among payment service providers and clearing mechanisms to the benefit of the corporate and consumer end-users.

Early on in the project, representatives of banks, clearing houses, software vendors, multinational companies and consumer representative bodies worked together in the European Payment Council (EPC) to define the project scope, agree on standards and implement roadmaps. They also made recommendations to the European Commission regarding pre-requisites for the SEPA project to succeed – for example, the need to revise and harmonise payment legislation as defined in the Payments Service Directive (PSD 2007/64/EC).

Right from its inception, SEPA has been recognised as a major infrastructural change, yielding substantial benefits 'once fully embraced'. Pragmatists may argue that the assumption that this will be 'fully embraced' is a bold and unrealistic one. The project is huge and complex, and the ultimate scope and consequently its success is highly dependent on interpretation, resolution of obstacles and bargaining by independent representatives across all sectors and stakeholders. Each of these representatives has been involved in SEPA from a different perspective and has therefore brought his/her own perspective and interest to the table.

The more sceptical pragmatist may also argue that, because the cost and benefit of SEPA will not be distributed proportionally across end users and other stakeholders, the outcome of the SEPA project will never be more than a shadow of the original grand design.

With a major milestone in the SEPA project coming up, and given the shared knowledge on SEPA to date, PwC has assessed the costs and benefits of SEPA as realistically as possible. The aforementioned sceptical pragmatist may argue that SEPA cannot be assessed in isolation and that it is difficult to calculate an exact value that compares a world with and without SEPA. Other sceptics may claim that it is pointless calculating the benefit of any infrastructural change because we cannot imagine what changes it might bring. They may quote one of the many false predictions that proved to be wrong, such as Mr. Ken Olsen, former CEO of DEC, who in 1977 allegedly said: "There is no reason for any person to have a computer in his home". Infrastructural changes can spark new ways of working, each with its own dynamics. The steam engine, the car, electricity, all changed our behaviour and psychology. On a less grand scale – and closer to the topic of SEPA – the harmonisation of the power grid across Europe and the introduction of the euro changed the way Europeans think about travelling across the EU and about their fellow EU-citizens. We travel with our computers without the need for adapters and do not have to change money when crossing borders. This makes it easier for us to travel abroad and meet other people. And by meeting people we tend to appreciate more their culture, habits and beliefs.

In a similar way, SEPA may help reduce – although almost certainly not eradicate – the mental barrier to engaging in business beyond the borders of an individual Member State. The impact on the economy is at this point in time difficult to predict.

Given the complexity of the SEPA project and the interdependency with other initiatives and/or programmes, it is not possible to provide a precise, single value for the (net) benefits of SEPA or similar infrastructure projects. The model for our analysis of the underlying benefits and the choice of parameters is equally relevant. We believe that the benefit of SEPA can be summarised in a two dimensional grid:

- Quantifiable and other benefits; and
- Direct and indirect benefits.

We can only put a credible estimate on the benefit drivers in 'Quantifiable/Direct benefits'. For the other areas, we can at best provide a benefit range for each driver.

The benefits we have identified derive from a calculation model built for this project. This model is built bottom-up and takes as input a diverse set of data sources, parameters and assumptions.

Figure 4 – Clearing of euro transactions pre- and post-SEPA

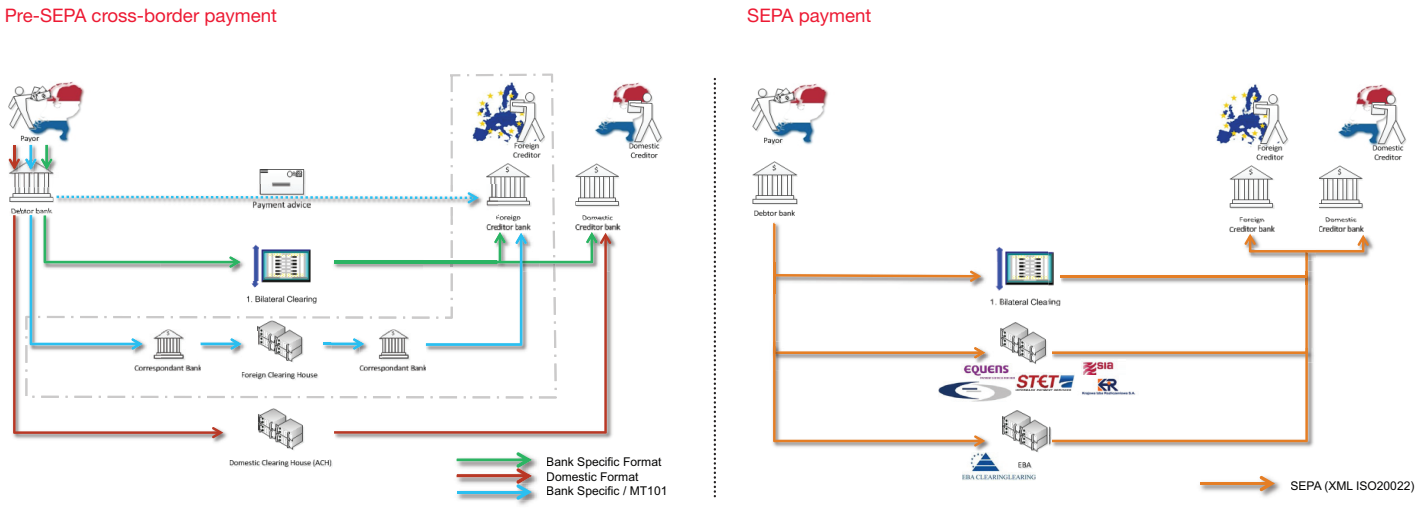


Table 1 – Summary of recurring annual benefits and opportunities of SEPA 'once fully embraced'

	Direct	Indirect (not quantified)
Quantifiable	• €21.9 billion quantifiable savings • €227 billion credit and liquidity unlocked • Reduction of 9 million bank accounts	• E-invoicing • 'SEPA 2.0' – catalyst for in-house banking and payment factories • Further use of XML ISO 20022 (CGI)
Other benefit	• A total of up to 973,000 man years can be unlocked from mundane payment processing and refocused on higher value added activities such as credit management.[3] • The unlocked credit and liquidity represent as much as €23 billion in lost opportunity	• More transparent transaction reporting • Improved STP for reconciliation • Improved, near-real-time credit management • Redefinition of 'domestic market' in mind of consumers

Most of the parameters and assumptions have been validated during interviews with stakeholders. Where necessary, we have erred on the side of caution; we typically incorporated the higher estimate for cost ranges and the lower estimate for benefits. Consequently, we believe that the monetary expression of our benefit calculation is a conservative estimate. For a more comprehensive description of the benefit calculation model, please see 'Appendix 1: Methodology and assumptions'.

A quest still to be finished

PwC has been asked by the European Commission to estimate the ongoing benefit of SEPA 'once fully embraced.' As discussed above, we are not there yet. The full potential of SEPA depends on the clearance of a number of outstanding issues and progress in other EU initiatives related to the Lisbon Agenda. In order to provide additional depth to the presented numbers, we also include a list of key outstanding items that need to be concluded before the full potential of SEPA can be realised.

3 Given the scope for this study of over 16.5 million companies and almost 6,800 banks and clearing houses, it is not likely that many jobs will be lost due to SEPA as the average amount of time potentially unlocked per company, however, is limited (e.g. less than 3 hours a week per clerk in a small to medium sized company). It is therefore more likely that SEPA will release resources to focus on, for example, credit management, other administrative processes, compliance and transparency. The potential benefits of these secondary effects have not been subject of this analysis.

Benefits of SEPA

For the purpose of this report, we have categorised the stakeholders into five distinct groups of end-users and industry stakeholders. We recognise that none of these groups is highly homogeneous. However, given the approach in this report, we have only sub-categorised two of the stakeholder groups.

Defining the stakeholders

End user stakeholders: consumers and companies

Given the overall objective of harmonised and cheaper payment processing across the Eurozone, the ultimate beneficiaries of the SEPA project are the consumers and corporates. While consumers form a fairly homogeneous group, companies do not.

The vast majority of consumers maintain a relationship with a single, local bank for payment processing. Their payment processing requirements are predominantly within the current domestic market. They receive salaries from their domestic employer, pay utility bills domestically, withdraw cash from local ATMs and use debit or credit cards for local and some international purchases. Migrant workers from within the EU might be a growing but still a small exception to this rule. We believe it highly unlikely that SEPA will change consumers' approach to bank-relationship management in a way that would have a significant impact on payment volumes in individual countries or pricing policies.

The more than 16.5 million registered corporates in the EU-16 form a far more diverse group. International operating companies may be small in number, but given the size of their payment traffic and cash management requirements, they will benefit in a different way from small enterprises or sizeable, but otherwise local, operating businesses. For instance, large companies have typically organised their cash management within a treasury and are eager to reduce the number of local bank relationships and stand-alone accounts to further concentrate cash balances across the Eurozone; whereas local businesses, given the nature of their business, do not have the same kind of opportunities.

For the purpose of this report, we have defined three corporate stakeholder sub-types as per Table 2.

Table 2 – Profile of corporate stakeholders

	Corporate Type A Large multinational companies	Corporate Type B Small-cap companies	Corporate Type C Local business and public companies
Country presence	• Global operations • Several (operating) entities in many Eurozone countries	• Regional operations • On average two operating companies in a limited number of Eurozone countries	• Local businesses
Cash management	• Many bank relationships, such as one overlay bank • Several bank accounts per entity • Advanced types of cash pooling in place • Mature treasury operations	• A few bank relationships including one per Eurozone country for local businesses • Basic cash-pooling structures in place for part of the infrastructure • Treasury in its infancy but certainly not mature	• Typically one, possibly two, local banks; few if no accounts abroad • Typically no cash management infrastructure • Larger organisations may have a cash management function
System costs	High	Medium	Low
Idle cash per account	Medium	High	Low
Corporate population	4,490	328,028	16,180,775
Example of companies	• Blue chip companies • Multinational companies • Global operating private companies	• Majority of private companies • Niche suppliers • Wholesale businesses	• Shopkeepers • Sport clubs • Individual contractors • Local businesses • Hospitals • Housing corporations • (Local) government

Industry stakeholders: banks, clearing settlement mechanisms and regulators

Next to the consumer and corporate end users, we have defined three industry stakeholder groups:

- Banks and payment services providers (PSPs);
- Clearing settlement mechanisms (CSMs); and
- Market regulators.

Like the corporates, the 6,895 banks and PSPs within the EU-16 are not homogeneous. Their business profiles are different, which implies that the benefits they may get out of SEPA are driven by different parameters.

For the purpose of our analysis, we defined three bank and PSP stakeholder sub-types, as per Table 3.

A fourth group of stakeholders is the clearing settlement mechanisms (CSMs). Currently each country within the Eurozone has its own clearing mechanism, including in most cases separate domestic standards. National clearing houses typically have a domestic monopoly on clearing and settlement of legacy and non-SEPA compliant payment products. They also have an advantage when it comes to clearing of local niche products. Many of the domestic clearing houses are owned by the local banking community. These domestic clearing houses are typically aligned in the European Association for Automatic Clearing Houses (EACHA). By working together within EACHA, they have created universal reach for SEPA transactions.

Over the past five years and next to these domestic CSMs, EBA Clearing has gained a substantial market share. EBA is the only truly pan-European clearing organisation for both high and low value clearings (EURO1, STEP1 and STEP2). It is owned by 62 banks, which are often also shareholders of one or more domestic clearing houses.

The fifth and last group of stakeholders is the market regulators. Each Member State has its own regulator, as defined by the Payment Services Directive. This can be located inside the national central bank or the financial markets regulator, or an even more independent body. These bodies typically operate from the perspective of the domestic payments market with the objective of safeguarding the interests of end-users and participants.

Table 3 – Profile of banking stakeholders

	Bank Type A Global bank	Bank Type B Regional bank	Bank Type C Local bank
Country presence	• Global operations • Branches in most EU countries, and a number operating as domestic banks	• Regional operations • Branches in several Eurozone countries, operating as domestic bank in only one	• Smaller domestic bank, savings banks, local PSPs and niche players
Share in payments volume	• Substantial in a few Eurozone countries, sizeable in others • Linked to most local clearing settlement mechanisms (CSMs)	• Sizeable in home country, small in other Eurozone countries • Linked to a few local CSMs	• Few participants in home country, negligible in other Eurozone countries • Linked to home country CSM only
System costs	High	Medium	Low
Number of banks	34	698	6,172

Benefits attributable to SEPA

Companies

Arguably corporates and public sector companies have the best opportunity to benefit from SEPA. Almost three-quarters of the calculated annual net hard euro benefit could fall to private and public organisations.

All public and private organisations will be able to benefit directly or indirectly from the integration of clearing markets in Europe, as it makes the differences in transaction fees between countries more transparent. We expect that companies will review their bank account structures and consolidate processing of euro-denominated transactions across the SEPA-zone to a central location of a prime cash management bank. By doing so, organisations aim to economise on bank account fees and operate simpler and more efficient cash-pooling structures. At the same time, organisations may try to leverage economies of scale to reduce transaction fees. See Table 4.

During the past few years, we have already noted price convergence within pan-European cash management tenders as a result of the evaluation of cash management infrastructures in Europe. We assume that after the February 2014 milestone, price convergence will be even more in evidence for the following reasons:

- Transparency in transaction fees across countries;
- Rationalisation of account structures and the resulting migration of transaction volumes; and
- Migration of transaction volumes towards the more efficient transaction banks.

Companies will also be able to reduce IT maintenance costs as more companies are consolidating applications and increasingly outsourcing services to more standard services 'in the cloud.'

The smaller and domestic companies of type C will realise the greatest share of the calculated benefit for corporates. When expressed by company, however, the value may not be that impressive, as it is based on the assumption that these companies in this segment may not see the benefit of increased competition and price convergence immediately.

Large and international operating companies of type A are best positioned to benefit directly from SEPA. The main drivers for this category of companies include the consolidation of transaction volumes and simplification of the management of the corporate bank accounts as a result of closing out stand-alone, in-country bank accounts at domestic banks, and concentrating euro cash-pooling within one bank branch. These companies have the leverage and knowledge to divert transaction volumes and negotiate with their cash management banks' standardised fees across the Eurozone. Furthermore, by closing out stand-alone accounts and simplifying cash-pooling structures, companies reduce account fees and unlock idle cash balances across the Eurozone.

Large and international companies will be able to streamline their bank account infrastructure across the Eurozone to the extent that niche products and domestic non-SEPA electronic transaction types are dissolved or incorporated in the SEPA scheme. Dissolution and incorporation will further harmonise the payments markets across Europe and level the playing field for banks and PSPs. Both strategies will come at a cost. While the dissolution strategy may erode services that local markets have grown accustomed to in the past, incorporation implies an extension of the SEPA framework and additional implementation costs for all stakeholders.

Another direct but more qualitative benefit that companies may be able to realise from SEPA is process efficiency. Both payer and beneficiary will receive transactional information in a standardised way. This information includes end-to-end (E2E) references as agreed by end-users. The E2E references will improve automatic matching of open items and consequently reduce administrative effort. Higher auto-matching rates will improve credit

Table 4 – Summary of corporate benefits and opportunities

	Direct	Indirect (not quantified)

Quantifiable	• €13.2 billion resulting from:
	  • Reduced banking fees
	  • Price convergence
	  • Simplification of bank account structures
	• €179.5 billion idle cash unlocked
	• Reduction of 9 million bank accounts
		• Efficiency as e-invoicing picks up
		• Improved transaction processing data
		• Lower handling cost per error
		• Lower IT cost due to wider use of XML ISO 20022 (CGI[4]).
		• 'SEPA 2.0' – catalyst for in-house banking and payment factories (unlikely for SMEs)
		• Improved trade credit management due to higher auto-matching of open items

Other benefit	Up to €115 billion in efficiency gains related to process efficiency and the opportunity-loss related to cash balances currently trapped in payment processing	Increased cross-border sales opportunities

4 The Common Global Implementation (CGI) initiative provides a forum for financial institutions (banks and bank associations) and non-financial institutions (corporates, corporate associations, vendors and market infrastructures) to progress various corporate-to-bank implementation topics on the use of ISO 20022 messages and other related activities, in the payments domain. See also http://www.swift.com/corporates/cgi/index?lang=

management because non-payment can be detected sooner, as 'open-item' lists will become shorter or less 'polluted' by unmatched items. Furthermore, administrative staff will have more time to focus on credit management, as they will need less time to do reconciliations. SEPA also caters for longer description fields, making obsolete the complex and often far-from-automated processes of remittance advices.

Consumers

Arguably and without fully appreciating it, consumers have already benefited substantially from the SEPA project. The introduction and roll-out of EMV cards has improved security on consumer card transactions. Furthermore, the SEPA project has triggered the implementation of the PSD, which has improved and harmonised consumer protection, including standardised and, in many cases, improved terms for refund rights for all payment products; the ability to black-list certain creditors; and the ability to limit the amount of a direct debit. For the purpose of this report, and as these benefits have for the large part already been absorbed, we have not quantified these in detail. See Table 5.

The migration of domestic legacy-transaction types to SCT and SDD and the harmonised clearing are key to guaranteeing these consumer rights efficiently and transparently. The savings potential of SEPA for consumers of the completion of the SEPA project is negligible. This may explain why banks and governments have downplayed the impact of SEPA on consumers as 'just a switch of BBAN to IBAN.'

However, the implementation by the payments-processing industry of consumer-protection features has not taken place without investment. Where the migration to EMV cards fitted well with normal operations and could be done without reference to SEPA, the introduction of SDD is different. As the banking industry and governments have so far tended to downplay the impact of SEPA, consumers do not understand the need for change and might be annoyed by the additional charges banks confront them with, as the recent upheaval around SEPA direct debit charges in Slovenia illustrates.

The harmonised and improved consumer protection as incorporated in the PSD poses a dilemma for banks. Since the adoption of the PSD in 2009, the charges and protocols for legacy products had not typically been updated. In many cases, banks created temporary, manual procedures to comply with the improved consumer protection rules, pending permanent solutions for the SCT and SDD. Banks hardly ever updated the pricing of legacy payment products for this.

While there is a strong desire keeping transaction costs for SEPA products in line with the legacy products they replace, banks are tempted to position the improved consumer protection – as enforced under the PSD – as additional services, including separate charges (for example, black-and-white listing of debtors, inquiries into erroneous transactions, mandate management services, etc.). While these additional charges relate to the additional consumer protection rules within the PSD, consumers may perceive the increased cost of services as relating to the conversion to SEPA.

Also, many of the niche and non-SEPA-compliant electronic transaction types and local extensions to the minimum requirements in the SEPA Rulebook are often presented as being additional conveniences for consumers, as they mirror legacy products. However, from a different perspective, local agreements and variants prevent market competitiveness and increase the cost to the banking industry of SEPA's universal reach. Last but not least, residents of a Member State may still face legal and fiscal barriers when opening an account abroad.

Consequently, we believe that consumers are still restricted in their bank selection and are typically limited to the local retail banks of type C, which will see their per-transaction cost increase. And as competition for retail business is already limited, consumers run an elevated risk of upward pressure on banking charges.

Unlike corporates, consumers may be unable to unlock liquidity. Their stand-alone local bank accounts balances are not pooled and are not typically interest-bearing.

Over time, SEPA may contribute to a shift in consumers' views of domestic financial and banking markets. It is highly likely that, gradually, consumers will appreciate that transferring money across the Eurozone is the same as paying the landlord or a newspaper subscription. This may well influence their sourcing decisions, which might have a positive effect on the economy. We do not see SEPA as a main driver for this, as we believe that other harmonisation efforts, such as VAT and consumer protection, are more significant.

Table 5 – Summary of consumer benefits and opportunities

	Direct	Indirect (not quantified)
Quantifiable	• Not applicable: we see upward price pressure due to reduced competition in this market segment	• E-invoicing services • SEPA cards
Other benefit	• Improved consumer protection	• Increased cross-border sales opportunities

Banks and payment settlement providers

The benefits attained by the end-users will be realised at the expense of the banks and payment service providers. It is most likely that banks will compete on price in order to attract transaction volumes from large and international companies. Such competition will trigger price convergence for banking transactions, which will also affect pricing for local businesses.

Due to price convergence and the migration of transaction volumes, the transaction-banking industry will need to operate more efficiently than before. Not all banks will be successful, and some will acquire new volumes from existing and new clients; other, more locally operating banks may not be able to maintain existing volumes to cover their SEPA investments.

All banks will not benefit equally from SEPA. In particular, banks that service corporates in countries with high transaction fees risk losing transaction volumes and experiencing increased pressure on price. While loss of volume will increase their transaction processing costs, price pressure will erode their operating margin. Local type C banks will have less opportunity to improve process efficiency or expand their volume to recoup their SEPA investments.

Type A and B banks are in a better position to attract additional transaction volume and improve process efficiency. Firstly, their larger transaction volumes allow for bigger investment budgets, which put them in a better position to operate more efficiently on a per-transaction basis. This lower transaction cost, as well as the ability to leverage their IT systems, put them in a good position to attract additional transaction volumes. Secondly, type A and B banks can reduce their operational costs by switching off domestic clearing connections. By concentrating and routing transaction volumes more efficiently across the SEPA-zone, they will be able to reduce the absolute settlement values and daily volatility in settlement values, which will unlock bank liquidity required for settlement.

We assume that ultimately banks will be able to reduce the number of clearing house connections. However, for several reasons, we do not expect this to happen any time soon. This is because of (among other factors):

- resilience of payment processing;
- reputational risk;
- protection of shareholder interest in clearing houses; and
- continued existence of niche and non-SEPA compliant products only cleared via local CSM.

All banks may have an opportunity to expand their information services. The SEPA Rulebook and the four-corner clearing model underlying the SEPA Framework are highly suitable for e-invoicing. By integrating the invoice exchange with payment processing, we see the potential to create alternative credit products and the elimination of local cross-over products that are currently not SEPA-compliant, such as flexible discounting of invoices and supplier finance.

Local banks are likely to be connected to one domestic clearing house only, and only indirectly to domestic clearing houses in other countries. They are unlikely to want to develop SEPA-processing capabilities across the SEPA-zone, as this will not match their client profiles sufficiently to justify the investment. These banks will lose their attraction as local banks within the international cash management infrastructure of a regional or global company, at the expense of the global and regional banks. Consequently, type C banks are likely to see their settlement volumes reduce, whereas the regional and global banks might well absorb this transaction volume.

Type B banks, and particularly type A banks, will be able to reduce their processing costs, as their IT investments can now be leveraged across larger, standardised transaction volumes and a reduced number of clearing connections. This benefit may only kick in after niche products and non-SEPA electronic transaction products are phased out and the electronic payments market is truly harmonised for euro-denominated transactions. Until such date, the effect depends on the willingness to invest in systems that support the local legacy products.

Table 6 – Summary of banking benefits and opportunities

	Direct	Indirect
Quantifiable	• Reduction in operational expenses with a net total of €5.9 billion per annum • Release of an additional €9.3 billion in credit and liquidity	• E-invoicing • Other information services • Reduction in errors and manual processing • Outsourcing of transaction processing • Wider standardisation of XML ISO 20022
Other benefits	• The opportunity-loss related to the unlocked credit and liquidity amounts to at least €1.1 billion per annum • The standardisation of cash management services and the reduction in accounts held with banks may lead to a reduction in the workforce of up to 10,000 FTE across the industry. This amounts to up to €775 million per annum	• Increased cross-border sales opportunities

Clearing settlement mechanisms

If there is one market segment where the promise of SEPA has not been delivered as anticipated, it is CSMs. Possibly as a result of the balancing interests of shareholding banks in local clearing houses and in EBA, almost all of them have the necessary investment budgets to accomplish pan-European reach. With type A and type B banks having shareholdings in more than one clearing mechanism, consolidation of transaction volumes may trigger internal conflicts of interests. Consequently, without external incentives, rationalisation of the clearing mechanisms seems unlikely in the next few years.

In the short term, connecting to multiple CSMs directly will help to keep the European payment processing infrastructure resilient to failures and change-over. Interviewees have mentioned this as an important reason for banks to maintain connections to multiple CSMs for the time-being. Banks also voice their concern over the calibration of their processing schedules to the cycle times of the different clearing layers involved to reach the beneficiary. Both EACHA and the EBA accomplish global reach in layers. EBA has direct and indirect participants; all EACHA members have their own processing cycles.

It is therefore no surprise that few type A and B banks expect to reduce the number of connections any time soon. The opportunity loss to the banking industry related to this market inefficiency can be as much as €600 million per annum in IT and staffing costs, and up to €15 billion in liquidity locked up in payment processing.

EBA is price leader for SEPA clearing and has captured a solid market position in the last five years. Local CSMs have a competitive advantage in clearing niche products and non-SEPA compliant transactions, which they may leverage, attracting SEPA standard volumes.

Table 7 – Summary of clearing settlement mechanism benefits and opportunities

	Direct	Indirect
Quantifiable	• Loss of €4 million in revenue due to price competition	• Additional data services • New service models and additional IT services
Other benefits	• Reduction in labor costs of up to 3,500 FTE, or €237 million, resulting from efficiency, automation and consolidation.	• Redefinition of home markets • Market consolidation

Conclusions and recommendations

Conclusions

While the investment and effort to comply with SEPA to date have been substantial, so are the recurring benefits still to be realised. SEPA is able to reduce annual costs by €21.9 billion across all stakeholders and the EU-16 countries due to efficient processing and streamlined bank account infrastructures. Arguably even more importantly, SEPA may unlock up to €227 billion in liquidity and credit lines currently required for clearing transaction within the Eurozone. Furthermore, companies will be able to streamline their cash management infrastructures and close out up to 9 million bank accounts.

While SEPA will enable 16.5 million companies and almost 6,800 banks and clearing houses in the EU to streamline and automate mundane - often manual - activities, it also has the potential to unlock up to 973,000 man years of work across all organisations. However, considering the importance of the population of SMEs in the European corporate population, and the fact that the average amount of time saved per company is very limited, the time freed is likely to result more into a reallocation of resources within firms rather than a reduction in the labour force. Unlocked resources most certainly will predominantly be refocused on other, higher-value-adding activity such as credit management, compliance and transparency, resulting in a second tier of benefits that have not been modelled in this study.

While all stakeholders will attain additional benefits, these will not be distributed equally across all groups. The direct benefit for a larger company may be tangible; smaller and less international companies may also benefit from price convergence, processing efficiency and the unlocking of cash. Consumers will most like benefit more in terms of consumer protection than from reduction in banking charges. Despite the loss in revenue due to price convergence, the banking sector should be able to benefit from increased process efficiency. However, smaller local banks may find it harder to profit from SEPA, as they might experience reduced transaction volumes and an inability to reduce costs in response to price convergence.

This report focuses on the benefits of SEPA 'once fully embraced'. We are aware that the benefit might seem theoretical unless or until some issues that are still outstanding are resolved – such as niche products, non-compliant electronic transfer products, further standardisation of SEPA messaging and restructuring of the clearing settlement market for euro-denominated transactions. However, we highlight the recurring benefit as encouragement – or the carrot – to complete the project that started 12 years ago with the adoption of the Lisbon Agenda for a more competitive Europe.

Observations and recommendations

Theoretically, with SEPA fully embraced, one euro bank account would suffice for any end user – company and consumer alike. Even after the 1 February 2014 milestone, we have a long road ahead of us. When the dust has settled, stakeholders will realise that the payments markets in Europe are still not fully integrated. The following issues will remain to be addressed:

- The most obvious outstanding issues after 1 February 2014 will be the continued use of local niche products and non-SEPA compliant products. Banks and regulators across Europe will need to work together on further standardising the interpretation of the SEPA Rulebook and expanding the SEPA framework so that it covers all electronic transactions denominated in euros. Without further standardisation, banks will compete locally in only half open markets, and corporates and consumers will not be able to fully benefit from SEPA.
- Companies may look for assistance from the regulator on the topic of discontinuing niche products and non-SEPA compliant products. From an efficiency perspective, they will be in favour of further standardisation; at the same time, their local business partners and consumers may appreciate these niche and non-SEPA compliant products to the extent that banks' exclusion of these products may hamper their local business. Even though the end-date is set for niche products, companies will need local (stand-alone) banks accounts in their cash management infrastructure up until 2016.
- The regulators will need to enforce further standardisation of messaging. In some countries, domestic banks have agreed to additional fields on top of the minimum requirements, which have resulted in several local variants of the SEPA message. This practice contributes to the continuance of domestic payments markets, as it is a barrier to non-domestic banks and CSMs. One of the clearest examples to illustrate this point is that of a separate variant of the XML ISO Pain 001 and 008, as agreed in Germany amongst local parties.
- National tax and social security legislation may still force consumers and companies to operate a resident euro account. This local practice limits the free choice of consumers and reduces the competition for local retail banking services.
- This also holds true for multinational companies. In some countries there is still a requirement to pay social security and taxes from a local bank account, or a local product is created for such transactions with the government. Local governments might decide they need to change their processes to fully benefit from increasing competition in the banking sector.
- The extended use of niche products and the continuation of non-SEPA-compliant products also continues to separate markets for clearing local transaction types. Currently, this is one of the key reasons highlighted by banks for not reducing the number of their connections to clearing houses.
- The continued existence of interchange fees on card transactions is a substantial

barrier to new card schemes entering the market and might have a bearing on the cost of card transactions for consumers. This issue is more related to the SEPA cards framework, which is closely related but not included in the scope of this study.

The current picture regarding SEPA clearly suggests that defining and implementing common technical standards is not in itself sufficient for delivering on the promises made. The full €21.9 billion of calculated hard savings depends on a harmonised strategy for non-mandatory specifications and resolving conflicts of interest before markets can be integrated and a level-playing field is created across the SEPA-zone.

Realising the €21.9 billion in savings requires a continued and concerted effort from all stakeholders and politicians across Europe.

Appendix 1: Methodology and assumptions

Introduction

The quantitative results presented in this report are based on a bottom-up calculation (referred to as 'the model') developed specifically for this project. The benefits are calculated for the EU-16, which represents 94% of the total euro-denominated transaction volumes in the EU and 97% of the euro-denominated transaction values. A correction has been made for non-Eurozone countries within the EU-16, such as the UK and Sweden.

Data input

The model takes as primary input statistical data published by the ECB and Eurostat on transaction volumes and market segmentation. As we assume that the implementation of SEPA will not have an impact on the transaction volumes as such, we extrapolated the volume trend of the past five years across the EU-16 into the near future.

Parameters

The primary data is combined with parameters that, among others, define:

- company profiles;
- banks profiles; and
- cost and benefit drivers pre- and post-SEPA.

The project team interviewed in November and December 2013 several subject matter representatives within PwC and within the different stakeholder groups identified. These interviews had the objective of validating parameter settings and output, as well as better understanding the benefit drivers.

Summary of output

The model described in this appendix resulted in the following direct and quantifiable benefits, by stakeholder. See Table 8.

Model components

Price convergence

For the purpose of this project, we have modelled price convergence effects by assuming that, over 10 years, prices across standard and comparable products will converge. Price convergence is a benefit to end-users but at the expense of bank revenues.

The calculation of price convergence also considers that a relatively small proportion of SEPA-compliant transaction volumes may migrate from high-cost countries to low-cost countries. We assume that this migration will happen over the period of a few years, and will not necessarily start in 2014. While price convergence is a driver for migration initially, it is not the only driver. An even more powerful driver behind migration is liquidity optimisation. That will take over as consolidator of corporate transaction processes and cash flow. We also assumed that type A companies will set standard prices by country. These price effects may over time spill over to other market segments in a country.

The average annual price reduction included in our calculations is based on the reductions calculated until 2020 (six years). The net result of the price conversion has been split according to various sub-types of end-user. This benefit to end-users is offset by a loss for banks, which is also split across the different sub-types of banks.

Further elaborating on the benefits for companies, €1.5 billion out of the total hard savings of €13.2 billion is related to price convergence benefits. See table 8.

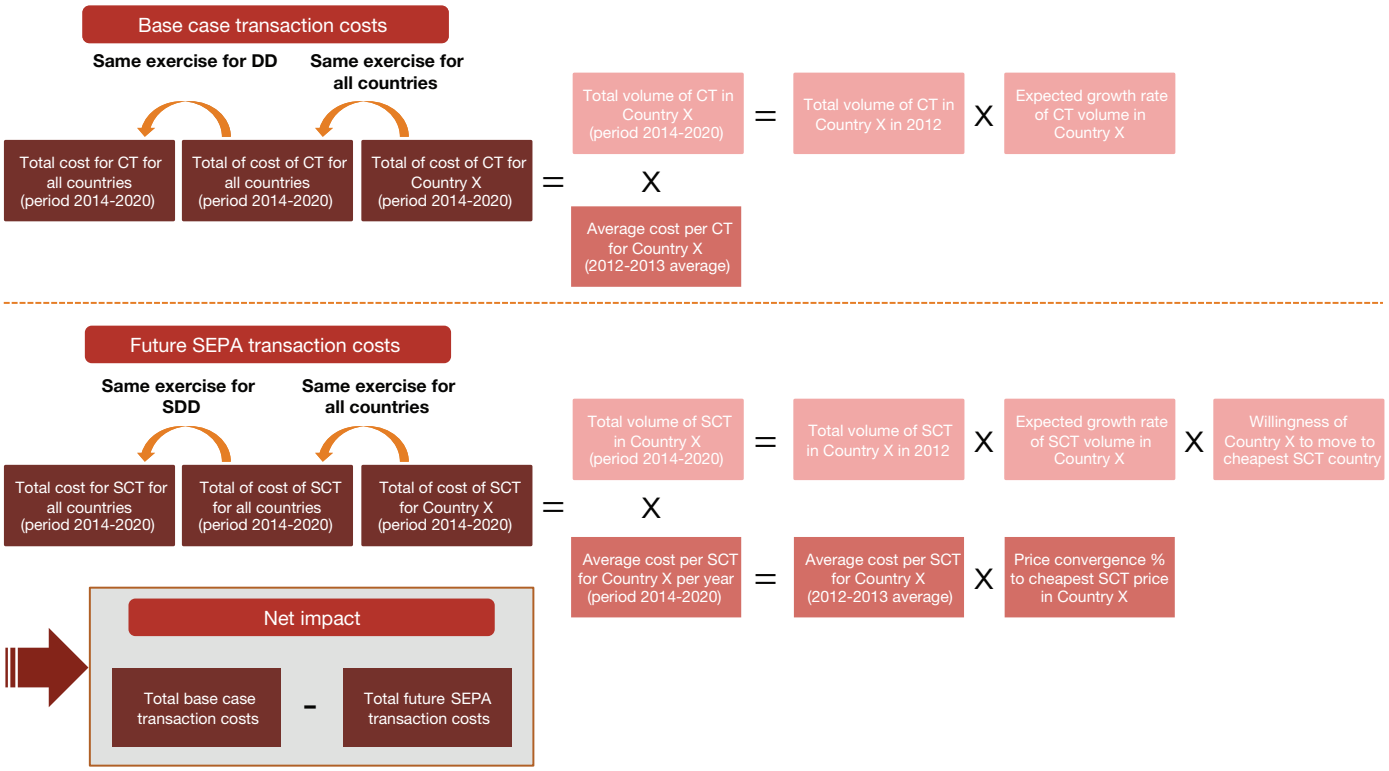
The base case transaction costs per country are calculated as follows: current CT/DD volumes (ECB data) are multiplied by the average transaction cost per CT/DD (gathered through public bank price lists in combination with PwC analysis). Payment volumes for the period 2014-2020 are obtained by current volumes multiplied by a historical payment volume growth rate of 3.78% p.a. For the period 2014-2020, the total cost equals €33.5 billion.

SEPA will open the door to increased competition, forcing (to a limited extent) the higher priced banks to lower their prices and allowing the cheapest banks to raise their pricing. Two drivers will affect the level of pricing converging:

Table 8 – Breakdown of direct/quantifiable savings by stakeholder and benefit driver

	Corporates	Public Sector	Banks	CSM	Total
Price convergence	€1.5 bn	€407 m	-€1.9 bn	–	€0.0
Processing cost	€11.7 bn	€2.5 bn	-€14.2 bn	€340	€21.9 bn
Clearing cost	–	–	€344 m	-€344 m	€0.0
Net annual savings	€13.2 bn	€2.9 bn	€5.9 bn	€0.0	€21.9 bn
Liquidity Unlocked	€179.5 bn	€38.1 bn	€9.4 bn	n/a	€227 bn

Figure 5 – Calculation of price convergence benefit



1. The willingness to move payments traffic to foreign banks (5% of the volume per country towards the EU cheapest); and
2. Pricing adjustments in the Member States.

In our model, this migration occurs over the period of a few years. The total future SEPA transaction costs equal €22.68 billion, leading to total savings of €10.86 billion for the period 2014-2020. On an annual basis, €1.5 billion of this benefit flows to the companies, mainly at the cost of the banks.

Simplification of bank account structures

The model includes a benefit calculation for streamlining the corporate bank account structures. The underlying assumption is that, 'once fully embraced', SEPA enables companies to close out stand-alone bank accounts and reduce the number of bank relationships within the Eurozone. We assume that the transaction flow will migrate to accounts in one of the remaining house banks, possibly in a low-transaction-cost country. This simplification of account structure and migration of transaction volumes not only reduces the transaction cost for these companies but also improves their liquidity positions. By pooling more cash flows, these companies will be able to reduce balance volatility and therefore unlock liquidity from their working capital. Such unlocking can be measured in the unlocked cash balance or at opportunity cost against the weighted average cost of capital.

In general terms, the reduction of bank accounts has a negative impact on bank revenue. However, it is likely to reduce banks' operational costs, including service-desk and IT staff. Furthermore, the anticipated migration of transaction volumes to lower-transactional-cost

Figure 6 – SCT and SDD transaction costs compared

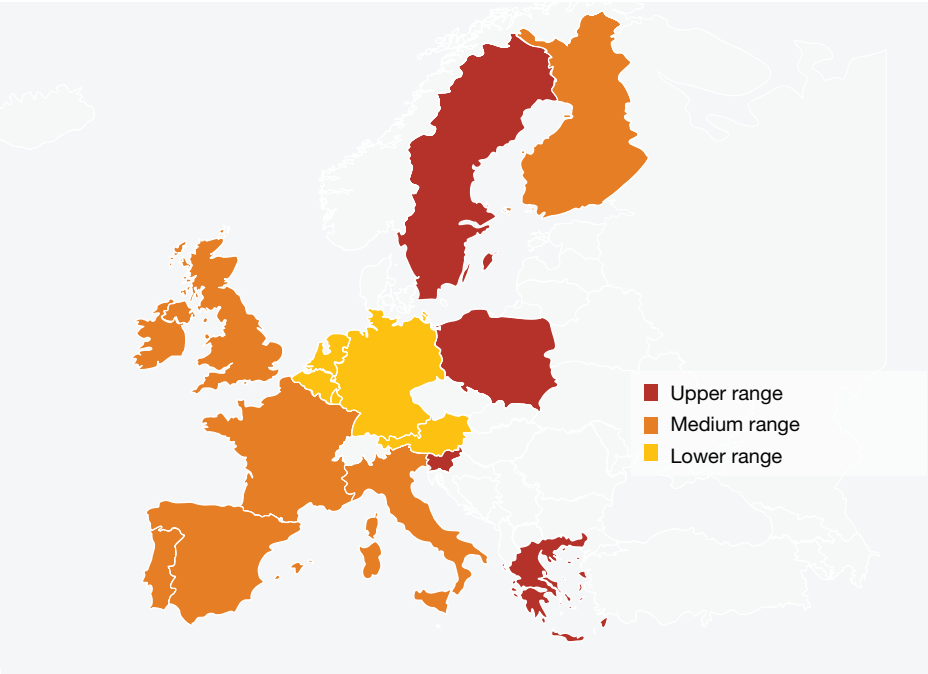
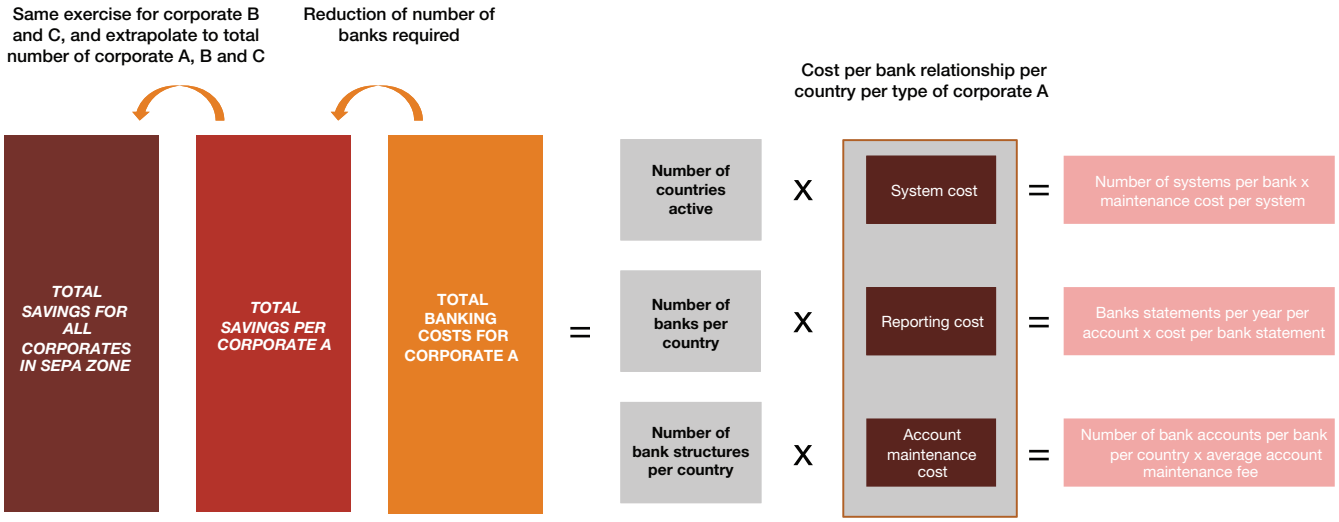


Figure 7 – Calculation of corporate benefits related to streamlining bank account strucutres



countries will reduce the average per-transaction cost across the industry. We assume that banks across the EU-16 do not have substantially differing operational margins.

As discussed in the previous section, we do not assume that all banks will benefit equally. Firstly, the cost structure and the pricing strategy of the three types of banks differ. We assume that corporates will predominantly close out relationships with type C banks, so type C banks will lose transaction volumes that they, as a sub-group, may not be able to compensate with growing business. The consequence of this assumption is that type C banks will erode net income from transactional services, as the per-transaction processing cost for the retained volume will increase.

Closing of bank accounts

The most substantial benefit companies could realise from SEPA is the streamlining of corporate bank account structures (€11.7 from the total direct benefits €13.2 billion). Please note that these benefits differ significantly for the three corporate stakeholder subtypes (for the definition, refer to the section above).

Per type of company (types A, B or C), the total pre-SEPA cost per bank relationship has been calculated based on the total account maintenance costs, bank system costs and bank reporting costs. The data for those costs consists of individual parameters (for example, per company A, B or C, the number of bank accounts, the average cost of a bank account, the number of bank statements, the amount of bank systems, etc.). These costs are multiplied by the total number of companies per subcategory identified in the 'Defining the stakeholders' section to obtain the total cost per subcategory.

SEPA will enable companies to reduce the amount of bank relationship and bank accounts that have to be maintained. The extent to which this will occur depends on the corporate subcategory. A summary of the savings is described in the table above. Multiplying all of those with the total number of companies per subcategory, we

Table 9 – Average saving by type of company and benefit driver

	Corporate Type A Large multinational companies	Corporate Type B Small-cap companies	Corporate Type C Local business and public companies
Systems	€43,200	€11,600	€120
Account maintenance	€15,480	€6,120	€45
Statement and reporting	€13,158	€5,202	€230
Total	€71,838	€22,922	€395

see total savings of €11.7 billion – largely at the cost of the banks.

Unlocking credit and liquidity

Companies will also face a direct quantifiable impact due to SEPA-triggered unlocked idle cash. The potential amount of unlocked liquidity totals €179.5 billion. Pre-SEPA, companies are assumed to have an average amount of idle cash per bank account. As SEPA enables centralisation and reduces the required bank accounts and connections, the total amount of idle cash will reduce per type of company. Not surprisingly, banks of type A have a bigger potential to reduce idle cash balances.

Bank processing cost

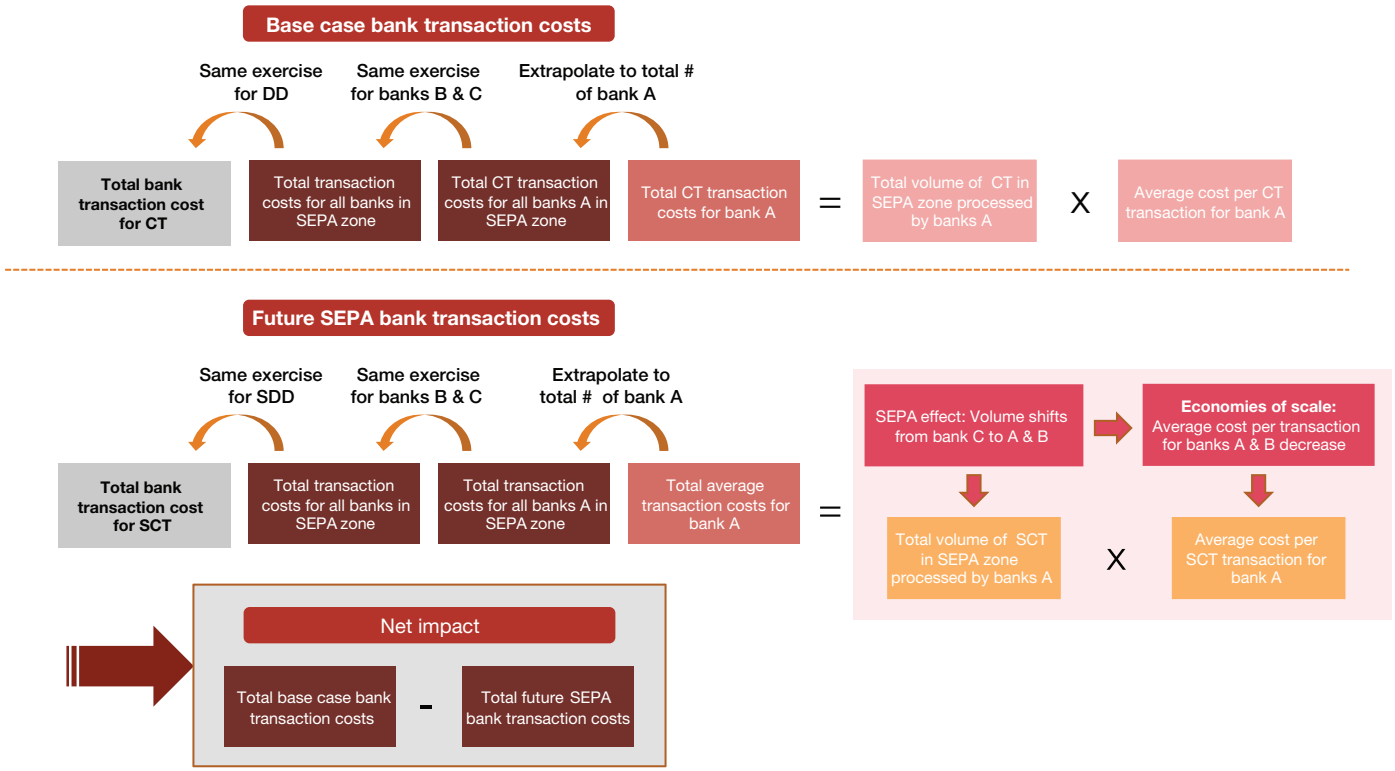
Once fully embraced, SEPA promises efficiency because of the obsolescence of local clearing cycles. Larger banks in particular that currently have connections to multiple domestic clearing mechanisms in Europe can reduce their connectivity costs. At the same time, they can consolidate the domestic transaction volume currently shared between several clearing houses. This enables banks – in particular type A, but also type B – to increase clearing volumes per clearing house. The increase in volume correlates with a steadier and lower liquidity balance required for the settlement of client transactions. Because banks of type C are assumed to lose clearing volume, and typically had on average a very small number of clearing connections, their clearing cost and the liquidity they have to consider for clearing activities will increase.

Depending on the type of bank (A, B or C), SEPA will trigger substantial benefits as a result of decreased processing costs (total benefit of €21.6 billion p.a.) and clearing costs (total benefit of €344 million p.a.), offsetting the losses.

Of the €21.6 billion of annual processing cost savings, €366 million is caused by direct SEPA-triggered economies of scale from lower average bank transaction costs, while €21.25 billion are savings from lower bank payment system costs.

The €366 million in economies-of-scale savings are the result of increased process efficiency for banks A and B, as they are expected to gain access to higher volumes at the cost of the smaller domestic banks – type C. See figure 8 for more detail of the logic behind the calculation.

Figure 8 – Calculation of bank processing efficiency benefit

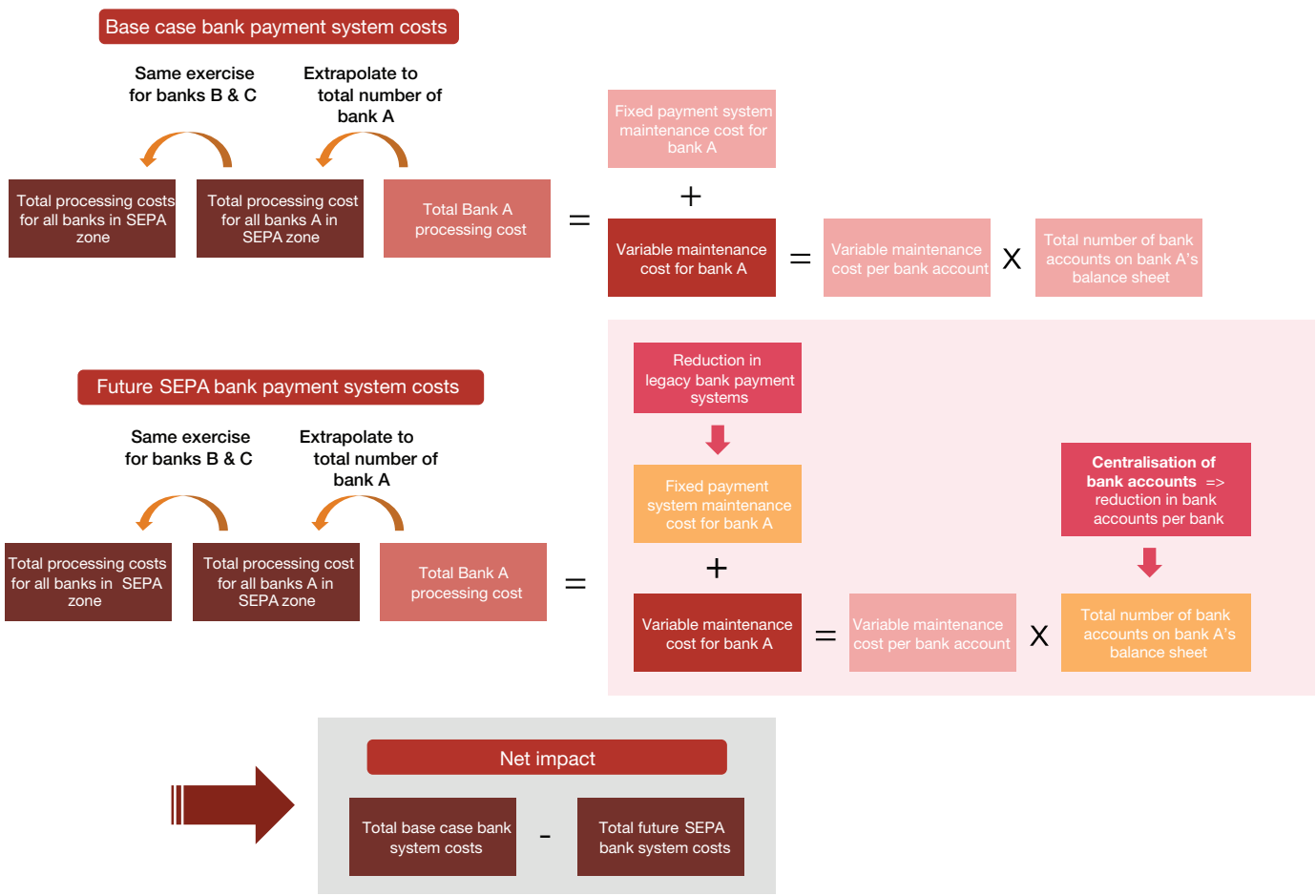


The calculated bank benefits due to system and maintenance cost reductions total €21.25 billion. Pre-SEPA, banks faced higher fixed and variable maintenance costs related to payment systems. The total costs differ per bank subcategory: banks of type A face higher fixed system costs than types B or C and have a number of total bank accounts outstanding on their balance sheets. However, as there are fewer banks of type A in the SEPA-zone, the net total IT costs for the total subcategory are not necessarily higher than for banks of types B or C. Total system costs pre-SEPA equal €91.8 billion across all banks.

SEPA has two direct effects on system costs. Firstly, the amount of bank accounts outstanding per bank is expected to decrease, driven by the bank account centralisation opportunities (see also the section on benefits for companies). This decreases the variable maintenance costs for banks. Secondly, the fixed costs related to maintaining the payment systems will decrease as the legacy payment systems that are country-specific and often based on old technology can be phased out and replaced by SEPA-machines, which are not country-specific. Both effects will result in total system costs of €70.5 billion, leading to total savings of €21.25 billion across the banks.

At the same time, some banks will be able to reduce the amount of clearing houses they have to connect to. ACHs have associated costs such as maintenance fees, subscription fees and IT costs. Due to the volume shift from banks of type C to banks of types A and B (the same as in the paragraph on bank economies of scale), total volumes cleared will shift between banks. In addition, banks will be able to reduce the clearing cost per item. The net result of this is €344 million of benefits for the banks at the cost of the clearing houses.

Figure 9 – Calculation of clearing efficiency benefit



Clearing and settlement

To an extent, clearing houses may be able to offset this loss in revenue of €344 million by efficiency gains of €340. The two main drivers behind ACH efficiency are the reduction in the total number of CSMs throughout the SEPA-zone and the change in fixed processing costs for clearing houses. The reduction in the amount of CSM parties in the SEPA-zone will bring the volume per CSM up, effectively reducing their costs per payment.

Process efficiency

We have modelled the process efficiency for corporate entities based on the assumption that standardisation of transaction and bank statement reporting, as well as interfacing with corporate financial software applications, may well improve on average the auto-matching of outgoing and incoming transactions.

Processing costs will also be reduced as a consequence of the assumed reduction in bank relationships and bank accounts per corporate group.

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