Thriving in the new transaction banking ecosystem

From being the rising stars of the sector just a year ago, transaction banks now find their business model and competitive relevance under threat from new entrants and emerging market rivals. How can they adapt to today’s fast-evolving market ecology?

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Introduction by Julian Wakeham

‘Transaction banking is the rising star of the financial services industry… In an extraordinarily difficult time, this is potentially a good news story for the markets and the investor community alike.’

Welcome to this special series of articles written to accompany SIBOS 2010.

A year ago we said that ‘transaction banking is the rising star of the financial services industry… In an extraordinarily difficult time, this is potentially a good news story for the markets and the investor community alike’. Transaction banks have performed well in the intervening 12 months. Yet the challenges are mounting. As we examine in this paper, a combination of harsh economic realities, heightened competition from both new and existing players, changes in regulation and technology and the increasingly international focus of key customers are putting pressure on transaction banks to employ a greater level of innovation, agility and partnership.

While competitive strategy and internal efficiency are clearly critical, the ability to meet customer demands and sustain profitability are increasingly dependent on interaction and interdependencies with other organisations, including IT systems integrators, market infrastructure providers, other franchise owners and end customer aggregators. An understanding and appreciation of the institution’s role within this ‘ecosystem’ will be essential in identifying and executing strategies for success in the new world of transaction banking.

We have grouped the articles in this paper into three main sections reflecting the drivers shaping the new transaction banking ecosystem:

• Economic realities.
• The voice of the customer.
• Risk and regulation.

I hope that you find the articles interesting and useful. Please do not hesitate to contact either me or any of the authors if you have comments, queries or would like to discuss any of the issues in more detail.

Julian Wakeham
Partner, PwC
Economic realities and market infrastructure

Transaction banking is in the ascendant as analysts come to recognise its value in the wake of the financial crisis. In a selection of sum-of-parts valuations, the transaction banking units of Deutsche Bank, RBS and Citi have been valued at the highest multiples (RBS second highest) of all business units valued, based on 2010 and 2011 estimates. Figure 1 compares the average Price/Earnings (P/E) multiples of transaction banking units with other operations.

While many high-profile revenue streams largely dried up in a market battered by the liquidity crisis, transaction banking proved its value and demonstrated:

- Year-on-year growth patterns in volumes and values.
- Attractive performance results.
- The value of core banking relationships.
- Clear alignment with traditional brand values.

This success places even greater pressure on transaction banking units to continue to deliver. However, it is unlikely that this will be possible without banks fundamentally changing the way they interact with their environment. Changes in regulation and market standards, economic conditions and customer demands have resulted in irreversible changes in the ecosystem of transaction banking, creating a vastly interrelated system, where co-operation is a critical component of overall system success. We believe that forward-looking banks will therefore embrace ‘ecosystem thinking’ in which the interaction and interdependence with other market participants is a key part of the strategy and business model.

Our section on ‘economic realities and market infrastructure’ highlights the key macroeconomic and industry changes affecting banks and driving this more co-operative approach. The legacy of transaction banking rests in providing infrastructure for payments and cash management. Most banks rely on complicated legacy systems. In contrast, other market participants are building their business on new systems, which are integrated into, consistent with and often designed in consultation with other market infrastructure providers. Although significantly more commoditised, these systems are cheaper to develop, new products can be implemented more rapidly as less customisation is required and they are often better suited to customer needs. These infrastructure providers operate in an ecosystem rather than a purely competitive environment – after all, a systems approach has always been more relevant for IT industries, and transaction banking remains a systems industry.

These technological changes are allowing third parties to develop superior solutions compared to the fixes applied to bank’s legacy systems. It is far easier for market infrastructure providers to adopt new technology and roll it out almost immediately to its customers than it is for a bank to adapt its legacy systems. Improving technology allows for greater automation, which is something many governments are keen to implement. Corporates are increasingly replacing legacy systems with packaged alternatives that have built-in interfaces. Value-added services such as automated reconciliations, message transformation and anti-money laundering (AML) scanning are becoming feasible thanks to new software products on the market. Modern IP-based technologies and flexible connectivity options (e.g. SDSL, MPLS) allow deployment options which would not have been possible in the past.

In addition, the advent of Cloud computing is leading to wider acceptance of purchasing technology as a service rather than building and managing it in-house, even for critical functions. Generally, the emergence of new payments technology has the potential to be disruptive in the long run as it forces change through the ecosystem. However, if the industry embraces an ecology of transaction banking, a shared industry desire for greater standardisation could play to everyone’s advantage.

To remain relevant, banks may need to consider fundamental changes to the way they do business… or rather, banks may need to fundamentally change who they do business with.
The challenge for transaction banks is to be a first mover by strategically embracing ecosystem thinking in order to develop exclusive relationships with selected key infrastructure and technology providers, and so ensure continued access to and ability to service customers. This can be through merger, acquisition or formal/informal partnership. A trend has already begun – 2009 saw the formation of several large joint ventures (JV) between banking groups, most noticeably in the French market:

• Consumer credit JV between La Banque Postale and Société Générale.
• Asset management JV between Credit Agricole and Société Générale.
• Online banking JV between Société Générale and La Caixa.

These JVs reflect different strategies, including banks focused on keeping control over activities seen as important to customers, while benefiting from economies of scale and wider distribution networks. We anticipate that JVs and partnerships will increase in the transaction banking market as participants seek to achieve scale and cost efficiencies. However, these JVs are increasingly likely to take place across the broader spectrum of the value chain, rather than being focused on core business.

The article on ‘Gaining renewed confidence in your market infrastructure’ discusses the operating model principles for success in the new ecosystem of transaction banking and highlights the impact of technological change on the new operating environment.

**Risk and regulation – is regulatory change disintermediating banks?**

The financial crisis has pushed risk management to the top of the banking agenda. As our article on ‘Putting payments systems on the risk radar’ highlights, although payment system risk can pose significant reputational and other threats, it is still low on most banks’ risk agenda.

The previously exclusive domain of banks, namely electronic payments and clearing, is likely to come under increasing competition from other market participants as a result of pending regulatory changes. ‘Capitalising on faster payments’ reviews the introduction of the Faster Payments Service in the UK and discusses the likely impact on retail and corporate customers, implying that banks need to consider more carefully the customer segments they are targeting and the price-value requirements. The Payment Services Directive (PSD) is opening up the market to non-bank operators – the implications of this are discussed more in ‘The PSD has changed the rules of the game’. Similarly ‘Getting to grips with the new OTC regime’ examines how governments’ determination to provide greater transparency is likely to result in tighter regulation in the OTC derivatives market.

**Voice of the customer – changing demand requires solutions along the value chain**

The financial crisis has causedripples around the globe (with the latest upheaval coming from the actual and feared defaults of sovereign debt) and challenged the relationship corporate customers have with their banks. The response of bank managers to corporate needs during the crisis led to disillusionment among corporate customers. Whereas corporate customers needed increased financial support and levels of trust from banks during the crisis, banks often stipulated stricter lending criteria. This vicious circle – a lack of trust in the banks on the part of the corporates and a lack of delivery on the part of the banks – has allowed third parties to enter the frame. ‘Putting yourself in the treasurers’ shoes’ explores this relationship in more detail and highlights the expectations of corporates. A related topic is the significant benefits available to customers through e-invoicing – ‘E-invoicing: now is the time to act’ challenges banks to act to unleash these benefits.

Forward-looking banks are listening to what customers really want to pay for and, as will be the case for most global banks, where they cannot deliver quickly or affordably themselves, they are choosing to partner with third-party expertise to develop the solutions customers were demanding. Requests for faster payments, straight-through processing, supply chain solutions and greater transparency cannot usually be met by banks’ legacy technology and current investment budgets alone. Scale in developing and delivering some solutions can only be achieved by third parties servicing multiple banks or locations. However, as technology becomes more standardised, relationships between corporate customers and banks are also becoming less sticky. ‘How retailers can get paid faster’ reviews the new payment strategies arising in the retail industry as a result of Single European Payments Area (SEPA) and technology changes.

Banks more amenable to partnering with infrastructure providers will provide their clients with the best possible service – customers want greater connectivity at lower costs, given their own margin pressures. As such, they will consider price and complexity of solutions in terms of their propensity to outsource. Market participants seem likely to lose more by aggressively pursuing certain business, instead of settling for a shared portion of the revenue pie. At the crux is understanding what customers need, and recognising that certain non-bank providers are better positioned to meet customer needs. For example, Siemens announced in June 2010 that it had applied for a banking licence. Can a technology company provide better transparency and real-time information on financial transactions than a bank? ‘Custody’s big chance’ discusses the changing custody business and offers four strategic options available to global transaction banks, with technology, infrastructure partnership and niche markets featuring high on the list of options.
Economic realities and market infrastructure
‘In the landscape of extinction, precision is next to godliness,’ said Samuel Beckett. With developed market business stagnating, competition from emerging market banks escalating and net interest income (NII) possibly flat for some years to come, transaction banks can no longer afford to be all things to all people (‘ubiquity’). Successful groups are likely to be ever more ruthless in the defence and optimisation of their core franchise (‘precision’), while working more closely with technology providers and local partners to fill in the gaps.

Transaction banks have enjoyed a buoyant couple of years as their true value to the organisation is finally recognised in the aftermath of the financial crisis. Now, a number of forces are coalescing to create a much tougher environment in which stagnating revenues and even competitive marginalisation are a real threat.

Developed markets are struggling to sustain the momentum of economic recovery as they grapple with mounting fiscal pressures and faltering business and consumer confidence. The longer term picture is no more optimistic as GDP growth continues to slow and a combination of deleveraging, capital constraints and tighter regulation spur contraction within the transaction and wider banking market. The result will be ever more intense competition over the remaining business.

Many G7 banks are looking to offset this decline by strengthening their presence in emerging markets, whose growth is expected to outstrip the West (see Figure 2). Yet G7 groups are set to face stronger and more confident competition from E7 banks (those from the emerging markets: Brazil, Russia, India, China, Indonesia, Mexico and Turkey), both within emerging markets and, increasingly, on their own turf. The market capitalisation of some of the E7 banks is now bigger than their G7 competitors and they will want to take advantage of their growing scale and dominance at the manufacturing end of global trading flows by banking both ends of the ‘pipe’. What can developed market banks offer that their emerging market competitors cannot?

**Figure 2: E7 growth outstrips G7**

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP at constant prices, $tr</th>
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<tbody>
<tr>
<td>2007</td>
<td>28.2</td>
</tr>
<tr>
<td>2050</td>
<td>182.0</td>
</tr>
<tr>
<td></td>
<td>CAGR 2007-2050</td>
</tr>
<tr>
<td></td>
<td>Total 3.8%</td>
</tr>
<tr>
<td>E7</td>
<td>6.4%</td>
</tr>
<tr>
<td>G7</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

Source: IMF
As Figure 3 highlights, an increasing amount of world trade will bypass developed markets altogether. The growing determination of E7 banks to serve both ends of these new global trade flows is demonstrated by ICBC’s acquisition of a 20% holding in South Africa’s Standard Bank, which has a strong presence across this resource-rich continent. Regional banks will also want to stake a claim to this fast-expanding business. How can developed market banks make inroads into trading flows they rarely see, let alone transact at present?

Many transaction banking strategies are based on the assumption that NII will bounce back. Indeed many institutions have been hunkering down waiting for the return of ‘business as usual’ without questioning whether this is realistic. In fact the signs are that interest rate rises will be moderate at best, especially as governments and central banks are keen to keep rates low to help stimulate lending and offset the impact of cuts in public expenditure. Developing and securing other sources of revenue will therefore be critical for transaction banks.

**Differentiation**

Few transaction bankers will have experienced such tough market conditions during their careers. It is not all bad news, however. Managing, rather than simply reacting to, these challenges provides an opportunity to get ahead of the curve and pull ahead of your rivals.

Strategic precision will be critical as banks seek to identify, defend and make the most of their core relationships and sources of value. In the face of growing local and foreign competition, companies will need to greatly improve service, anticipate evolving customer requirements more effectively and be prepared to offer more price discounting to protect their core franchise. In an increasingly commoditised sector, investment in service is likely to sharpen differentiation more effectively and provide a better return than spending on new products.

Intelligent cost reshaping will be vital in a market where profitability is increasingly driven by the cost to serve rather than traditional sources such as NII. It will be crucial to develop a better understanding of the true component costs of delivery. This is especially important in a sector where rising revenues have often masked inefficiencies and generated favourable cost-income ratios that cannot now be sustained. Some marketing, administration and IT costs may not have been factored in or appropriately allocated. Banks will also need to assess what may be higher capital charges for particular types of business.

Acquisition can help to build cost-efficient scale, with the sellers likely to include companies that have chosen to concentrate on other territories or competencies. Recent years have also seen the development of innovative systems that can cut costs and improve service. Rather than making huge investments up front, many banks are likely to work in partnership with technology providers as part of what have come to be known as ‘co-opetition’ models (combining competition and co-operation). Co-opetition with systems companies or even other banks will also be important in providing services that may be unprofitable or
outside the core franchise, but would still be required because of the need to maintain a commercial relationship or meet government expectations. This will in turn demand more effective partner analysis and greater expertise in managing commercial networks.

The ability to capitalise on emerging-to-emerging business will require more effective market trade flow analysis. Many international banks are already seeking to establish footholds in emerging manufacturing centres and the oil, mineral and other resource-rich economies upon which they depend. Banking both ends of the pipe offers the most lucrative prize. With further acquisition likely to be increasingly expensive, many banks are likely to favour a co-opetition approach that seeks to build joint ventures with local partners on the ground.

A new ecology
The traditional transaction banking model operated by universal international banks is under threat as sources of revenue that were once taken for granted begin to fall away, banks find it harder to tap into evolving trading patterns and emerging market banks eventually come hunting in their home domains.

Forward-looking banks are already undertaking a critical review of what actually constitutes their core franchise and whether the returns from other segments are worth the effort, capital and future investment needed to remain relevant. The result will be more precisely targeted investment and development, enabling transaction banks to reassert their competitive pre-eminence in their chosen segments and in seeking to capitalise on shifting global trade flows. Underlying this is a new ‘ecology’ of co-opetition in transaction banking in which non-core areas of the business are increasingly delivered by service providers and local partners whose scale, technology or expertise is either superior or more cost-effective.
Balancing the benefits of competition and co-operation

How do transaction banks adapt their strategies and models to the changing ecosystem?

As we discussed in the previous article, transaction banks’ ability to meet customer demands while sustaining profitability and growth is likely to require greater collaboration with a range of partners as part of a new market ecosystem (see Figure 4). A level of competition is still required within this ecosystem, though not necessarily the level of competition associated with an extreme dog-eat-dog market.

‘Co-opetition’ is a business strategy based on a combination of co-operation and competition, in which companies and even competitors recognise that they can benefit when they work together, though at other times they may be going head to head as before.

Survival of the ecosystem is dependent on maintaining a balance between competing and co-operating. Banks are facing intense competitive pressure, though the response does not necessarily need to be competitive and combative in nature. In this article, we look at some of the practical steps needed to develop this co-operative model and demonstrate below how ‘ecosystem thinking’ can help transaction banking units deal strategically with three core challenges, namely:

1. Reduction of costs, particularly cost to serve.
2. Distraction of NII away from true drivers of revenue.
3. Organisation of a transaction bank within a bank.

Cost savings top bank agendas

In a slow growth environment, banks will need to either revise existing revenue targets or protect profitability by taking share from others, reducing leakage, improving cross-selling or optimising price dependency relationships.

Cost reshaping is also critical. Banks have been driving down costs for the past couple of years. Sustaining these gains is likely to require ecosystem thinking. This may mean having to hand over power to other participants in the system. It will no longer be possible to reduce costs in the usual way. They will need to work with other organisations to (i) reduce costs further and (ii) deliver customers the desired solutions (i.e. this will require leveraging off external IP for IT solutions).

Figure 4: An ecosystem of transaction banking

| Source: PwC |

1. ‘Co-opetition’ is a phrase coined by Ray Noorda, founder of the networking software company Novell and applied to the field of game theory by Barry Nalebuff (Yale School of Management) and Adam Brandenburger (Harvard Business School).
Cost efficiency through M&A and partnerships
Transaction banking remains a scale business. To increase profitability and revenues, banks must continuously grow organically or inorganically. Alternatively, market participants need to find innovative ways to grow sufficiently to achieve scale (the box below lists some of the most significant recent deals). We do not believe market expansion will support organic growth across the sector and M&A may not always be approved by regulators. The challenge is to understand whether an alternative way of working may provide banks with the much-needed scale benefits.

Reducing the cost to serve
Non-banking participants have a clear competitive advantage in not having to breathe life into ailing legacy systems. Many banks may choose to defer all large-scale investments in new product functionality due to current cost pressures and only approve incremental enhancements needed to maintain a presence in the market. Unless investment is supported by a clear long-term strategy, this can result in short-term reactive thinking, creating greater costs and challenges in the future.

Where do you operate?
The ability to enhance value by serving a customers total supply chain requires a complete review of the bank’s global footprint – and may highlight conflicting locational priorities of different business units and product lines. The reality is that trade routes are shifting. The future banking opportunities do not necessarily reflect the commercial strongholds of the past. Analysis of customer needs should be balanced with a review of future market trade flows to ensure that investment costs are minimised and that they deliver the most benefit. Where banks do not currently have a presence, but believe a location to be critically important, it will be important to identify a network partner. The future of transaction banking rests on making the most of the available partnerships, rather than attempting to dominate the entire system.

Apart from a number of acquisitions of core banking operations, there has been an increase in the acquisition of product and technology investments. Examples of these include:

- Deutsche Bank’s 8% stake in Eurogiro (specialists in cross-border payments) in 2010.
- Merger of MasterCard Europe and Accor Services prepaid and electronic payments businesses in 2009.
- HSH Nordbank’s monetary transaction business is acquired by Deutsche Bank in 2009.
- Citi’s acquisition of PayQuick (provider of money transfer solutions) in 2008.
- Numerous private equity and venture capital investments into payment-related businesses, particularly those based in emerging markets.
**Systems cost as R&D**
Overall, we believe that efficient cost management requires a strategic, long-term perspective to reshape costs in a sustainable way. This requires a deeper understanding of the long-term needs of the customers and a recognition that, as a result of the dependence on systems and IT solutions, transaction banking finds itself in a market more akin to pharmaceuticals or technology, with a heavier reliance on appropriate R&D investment (whether through partnership or outsourcing), than the rest of the bank. This in itself challenges assumptions about what drives revenue and how a transaction banking unit should be managed and evaluated.

2. NII distracts from strategic revenue growth
Reliance on NII may have held back investment and development. If it is not likely to bounce back as soon or to the level many banks may have anticipated, their approach will need to change. While NII has always been a crucial source of income, it is essentially passive as it is outside the control of the bank. By making NII the centre of modelling assumptions, transaction banks are essentially distracted from what should be their true strategic focus – namely how to actively drive fee income. This begs the question of how NII really fits into the transaction banking unit and how metrics and incentives need to be revised to demonstrate the true value of holding cash balances. Perhaps this requires a greater focus on internal liquidity and incentives for funding, instead of purely a revenue focus.

The reality is that transaction banking strategy cannot be designed at the corporate level, given the diversity of customers and markets large global banks service and operate in. These decisions therefore need to be owned by the business units. However, many business or product level revenue targets are not scrutinised enough because there is an underlying assumption that interest rates will recover and related NII revenues will return.

Chasing balances for the sake of NII growth at the cost of growing fee revenue is not a sustainable competitive strategy. Maintaining revenue growth requires disciplined strategic analysis of options, excellent MI to understand profitability at a customer level and authority over investment budgets which are large enough to make the transformation changes required.

A focus on NII will also camouflage the ecosystem dependencies that transaction banks need to be aware of. This ecosystem is driven by the movement of cash (and related fees), not static balances. Without focus on the transaction activity and the underlying value drivers, opportunities and challenges, banks risk losing their position in the ecosystem.

3. The role of transaction banking in a bank needs clarification
One would expect that the strong performance and external support for the transaction banking unit has resulted in a better understanding at a corporate level of the need for investment to realise the full value of these businesses. However, the transaction banking units of global banks face numerous challenges in obtaining and allocating investment:

- Customer groups are shared across other divisions in the bank, which provides limited levers for owning the customer relationship.
- Legacy IT systems generally require a complete overhaul, though investments are approved on an ad-hoc basis and for a limited scope.
- The former processing units are still struggling to move from the mindset of a back office function to a revenue-generating unit, therefore cost constraint is the key priority, even if larger investments could generate far greater return.
- Budgets are being spent on compliance requirements around SEPA and other initiatives.
- The units need sufficient scale to lower costs and improve profitability.

This suggests that more thinking may be required to judge exactly how a transaction banking unit fits into the overall bank in terms of revenue responsibility and strategic direction. Is customer segmentation driven by their transaction banking behaviours, or must transaction banking fit around wider bank customer segmentation? How does a bank reconcile its core strategic aims with the need to deliver transaction banking infrastructure to clients – is there conflict in partnering with a (non-bank) competitor? How much of a voice does transaction banking have at the board table? These are all questions a bank should consider in order to derive real value from its transaction banking units.

However, the key challenge that we can identify is how a single division of a bank can embrace ecosystem thinking, when the rest of the bank still operates in an environment of supra-capitalism.

**New thinking**
Transaction banking may still be seen as the rising star of financial services. However, this does not come without challenges. Instead of shadowing the meteoric rise of merchant and investment banks in the 1980s and 1990s, transaction banks must become involved in reshaping the role, ambitions and values of global banks. Balancing the benefits of co-operation and competition is likely to require a critical re-think of where and how the bank conducts business and the recognition that partnership may be a more cost-effective way to augment service and maintain a presence in non-core markets.
Gaining renewed confidence in your market infrastructure

Safe, efficient and value-enhancing market infrastructure is vital in providing inter-bank operability, including payment clearing services and settlement support. The market is evolving and leading organisations are now adopting different approaches to market infrastructure management. In this changing environment banks should ensure that their commercial third-party market infrastructures adhere to clear and explicit operating principles, which allow them to gain confidence in the way these platforms are managed.

The only certainty in the transaction banking world is massive change. The developments driving this period of considerable challenge and new opportunity include:

• Greater awareness of the value creation potential of transaction banking businesses as a result of the financial crisis.
• Polarisation between more commercial banks (de-mergers, new entrants, etc) but fewer and larger transaction banks.
• The search for cost savings and the related ambition to centralise transaction volumes in order to implement economies of scale.
• New technologies such as contactless chip cards and real-time clearing and settlement systems (e.g. Faster Payments in the UK).
• Better performing mobile networks and devices becoming available and forming the basis for new payment instruments.
• The ambition of corporates to further integrate their invoicing and payment processes.
• The moves to a Single Euro Payments Area (SEPA) and international standardisations and harmonisation.
• New regulations such as the Payment Services Directive and the e-Money Directive.
• Even more stringent security requirements to counter fraud and theft of data.

A range of organisations are keen to take advantage of the financial and customer benefits of these developments. This is leading to change in the ownership structures of existing market infrastructures and new market entrants. Examples of such new entrants include telecom companies, technological consulting firms, business process outsourcing businesses and start-ups. There is also interest from venture capital to further invest in the lucrative payments industry.

Large global and pan-European market infrastructures are emerging as commercial organisations with a strong focus on value creation for their shareholders. Consolidation and globalisation are the major trends for clearing and settlement mechanisms and transaction processors alike. Commercial payment institutions are seeking an entry into processor and payment service provider markets. The transaction banking world is becoming even more interconnected in its infrastructures and more dependent on electronic information processing.

At the same time, the transaction banking sector across Europe is faced with increased strategic and planning uncertainty. SEPA is a major source of this uncertainty. The uptake of the SEPA Credit Transfer and SEPA Direct Debit instruments is still slow and uneven between countries. No end date has been set and neither is it clear when and how the regulatory process will mandate an end date.
There is a growing feeling among participants that the dual period (SEPA and legacy running in parallel) will be longer than originally anticipated. This means that banks will have to support multiple options and payment instruments for longer than expected and therefore that the associated costs will be higher.

Uncertainty about end dates, coupled with increased competition to entice and retain customers, is hampering decisions by individual banks or banking communities within SEPA, to migrate away from legacy systems and phase out legacy business practices.

**Struggling to keep pace**

Being ‘in control’ is critical to effective market infrastructure management. Sound risk management, operational excellence and good cost management are a necessity. Moreover, in order to guard against the market uncertainty, banks want to have strong control over factors such as: a possible extension of services, the geographical scope and the ability to respond to changes in regulation or in corporate strategy. Market infrastructure must provide a significant degree of flexibility, both at the domestic and cross-border level.

Many individual banks and banking communities are exploring whether they can effectively deal with these new and evolving threats whilst lowering their total cost of ownership for market. Outsourcing their market infrastructure and closing down their domestic infrastructure allows them to focus on their business and operational priorities. Commercial market infrastructures are competing to respond to their needs through their business process outsourcing offerings.

However, outsourcing market infrastructures can undermine the basic control mechanisms that have governed this industry over the last decades.

Historically, ownership of market infrastructures has been an important part of maintaining appropriate control. Community-specific market infrastructures were historically set up aiming to:

- Be reliable and cost conscious.
- Strive for innovations that allowed their shareholder banks to improve their straight-through processing and lower the operational costs of these banks.
- Cater for the needs of the local market and regulatory context.

They were never intended to make a profit as a commercial organisation. The customer/supplier relationship was never the main driver in the governance model and they were not organised to deal with multiple regulatory bodies in a global context.

**Time for a new approach**

A successful long-term partnership between transaction banks and market infrastructures depends on a clear agreement on three sets of key operating principles. These will allow banks and the wider stakeholders to gain confidence in the way the commercial third-party market infrastructure is operated and maintained and will provide clear guidance for the market infrastructure:

1. General operating principles – applicable to all the standard services that the market infrastructure provides to all its customers.
2. Service-specific operating principles – applicable to all the customers of a specific value-added service that a market infrastructure provides.
3. Community-specific operating principles – applicable to all members of a specific customer community that participate in a market infrastructure. Often this set of operating principles would allow the market infrastructure to cater for specific domestic needs.

In each of these sets of operating principles the categories highlighted in Figure 5 require clarification:
In the table below we provide some examples of general operating principles that a reliable commercial third-party market infrastructure would adhere to:

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>• The market infrastructure does not own scheme rules, which typically remain under the governance and control of the customers or a standardising body.</td>
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<tr>
<td></td>
<td>• The market infrastructure transparently consults its customer communities on new product and service developments and regularly publishes its roadmap.</td>
</tr>
<tr>
<td>Scope</td>
<td>• The market infrastructure commits to process all approved and mandatory European Payments Council (EPC) schemes.</td>
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<tr>
<td></td>
<td>• The market infrastructure is committed to the principles contained in the EPC’s CSM Reach declaration.</td>
</tr>
<tr>
<td>Financial</td>
<td>• Billing is done in accordance with agreed transaction prices and fee schedules. Detailed information is provided through the customer portal.</td>
</tr>
<tr>
<td></td>
<td>• Base rates are agreed for an x year period, but yearly index in accordance with the market evolution of energy and labour costs.</td>
</tr>
<tr>
<td>Risk</td>
<td>• The ongoing operations are monitored for anomalous behaviour and potential issues to protect customers from operational incidents.</td>
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<tr>
<td></td>
<td>• An SAS70 type II report is provided annually by the market infrastructure as a result of an independent and transparent assessment of the internal control and risk management processes.</td>
</tr>
<tr>
<td>Compliance</td>
<td>• The market infrastructure commits to having its services assessed against the BIS Core principles for Systemically Important Payment Systems whenever required or requested by the central bank oversight.</td>
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<tr>
<td></td>
<td>• The infrastructure is committed to provide safe and secure processing, which is demonstrated through adherence to the recognised Information Security Standards – ISO27001.</td>
</tr>
<tr>
<td>Operations and service</td>
<td>• ITIL standards are applied to the provision of the required services.</td>
</tr>
<tr>
<td></td>
<td>• The infrastructure is committed to providing high levels of intra-day service availability, sufficient to meet the customer needs.</td>
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Risk and regulation
Putting payment systems on the risk radar

Transaction banking carries relatively low business risk but complex operational risks, and in the current environment any major operational failures could have disproportionate and contagious consequences. Even so, research suggests that payment systems are still a long way from the centre of most banks’ risk radars. It is therefore vital to achieve greater transparency, relevance and business integration of transaction banking risk management within the organisation, along with the positioning, prioritising and resources to make this possible.
What keeps (or perhaps should keep) the CEO awake at night?
In theory, the people best placed to answer this question are the CEOs and management teams that have already established excellent risk management systems and employed the most talented risk managers, and that receive relevant and comprehensive management information from those people and systems. If there are any CEOs lucky enough to be in this situation, then they are more likely to be losing sleep over missed business opportunities than the prospect of unforeseen risks.

Unfortunately for the rest, ignorance is not bliss. An operational failure that damages reputation might end in no more than embarrassment; but inadequate stress testing of liquidity models or a failure to comply with sanctions lists or anti-money laundering obligations could lead to insolvency and a potential jail sentence. The latest Banking Banana Skins survey, published in 2010 by the Centre for the Study of Financial Innovation (CSFI) in association with PricewaterhouseCoopers, lays bare this heightened awareness; the survey showed the overall perceived level of risk in the banking industry to be at an all-time high.

The world is changing
The world has become more complex and unstable in recent years: more interconnected in its infrastructures and more dependent on electronic information processing. New threats are emerging and old threats are becoming more significant. The Banking Banana Skins survey and other analysis by PricewaterhouseCoopers demonstrate that the banking industry is currently facing a very broad range of risks.

An analysis of the characteristics of the global financial crisis in 2008 (see Figure 6) highlights the importance of effective risk management – and the consequences of getting it wrong. This is underlined by the way in which national governments have had to undertake co-ordinated recapitalisation of banks around the world, in addition to the substantial market support which has been provided by central banks since the beginning of the crisis.

Co-ordinated stress testing of liquidity structures has provided comfort that banks will be resilient in the face of individual or multiple bank failures, but the breakdown of market infrastructures or critical national infrastructures can equally have a systemic effect on both the financial and the real economy.

All the same, perceptions of risk tend to be heavily influenced by fashion and context. With wall-to-wall media coverage of financial sector events, it is no surprise that liquidity concerns topped the 2008 Banana Skins index. By 2010, these concerns had been displaced by anxieties over political interference due to the headlong rush of commentators, policy makers and regulators to intervene and prevent a similar crisis in the future.

The importance of the financial system demands that it be improved, but its interconnectedness suggests caution and consideration before decisive intervention.

Payment systems risk low on the list!
A central theme of the transaction banking compass is that many banking groups are overlooking or underestimating the value and risk of their transaction banking businesses.

Overlooked transaction banking opportunities do not only comprise operational benefits, such as potential economies of scale and efficiency gains. They also include hidden earning streams that can be leveraged to create significant new value for shareholders.

Figure 6: Crisis characteristics

- Asset price deterioration
- Asset price volatility
- Bank insolvency
- Increased public ownership
- Increased retail deposit guarantees
- Record stock market falls
- Emergency funding liquidity injections
- Public ownership of toxic assets
- Emergency bank takeovers
- Real economy solvency issues
- Economic recession

Source: PwC
By the same token, however, transaction banking may pose underestimated risks. This does not just relate to operational issues that could generate substantial customer complaints; it also represents a full range of potential risks that require effective risk management. The values involved are very high indeed.

The 2010 Banking Banana Skins survey illustrates the degree to which this risk has been underestimated. Despite the potential significance of transaction banking risks to other items tested, respondents put payments systems at number 26 on their list of the most pressing risks (see Figure 7). This puts transaction banking risk almost at the bottom of the pile, a position it has consistently occupied since the inception of the survey more than ten years ago.

This might imply that payment risks are well understood, systems are effectively managed and that sufficient resiliency arrangements are in place. However, an alternative interpretation might be that the scope and scale of transaction banking risks are not well understood at the appropriate level of the organisation.

Many people are working hard to ensure that the first interpretation is correct. For others, the more concerning interpretation is also the subject of much debate and requires urgent action.

How do you know which one is right for you?
If your organisation has externalised its risk architecture, distinguishes performance from results indicators and has a risk scorecard that is aligned to your strategic objectives, then the chances are that you are on the right track. Unfortunately, this is rarely the case in our experience.

In many organisations, the risk management process is often a parallel activity or ‘box ticking’ exercise and the level of inherent and accepted risk is simply not clear to management. Risk management activity in these types of organisation is often misunderstood for risk management effectiveness. It doesn’t matter how many risks you have identified if risk drivers are not understood, nor does it matter if you are within your risk appetites if the incidence of an event threatens your business existence.

Gauging transaction banking risk
Financial businesses face many different types of risk, ranging from pure business risks to pure operational risks. While the recent financial crisis is characterised by business risks such as excessive risk appetite and weak funding models, a transaction banking crisis would more probably be characterised by operational failures, counterparty defaults or a significant service interruption. Even if some of the consequences or outcomes are similar, the nature of a transaction crisis would be substantially different.

Transactions are the lifeblood of a bank and its customers: obtaining liquidity at the beginning of the business day, servicing customers during the day, clearing and settling inter-bank obligations and unwinding assets at the end of the business day. Transaction banking is also a high-volume business, and one that touches more customers more frequently than any other banking activity. Customers typically have little tolerance for transaction errors and this means that accuracy, reliability and certainty of processing are vital: all day, every day.

Figure 7: The biggest risks currently facing banks

Source: PwC/CSFI Banking Banana Skins 2010
For example, a typical large national transaction processor may transfer anything between £0.75–1.5 trillion in low-value commercial payments and £15–25 trillion in high-value payments in any one year. The typical relationship between the volume and value of transactions processed is shown in Figure 8.

On a peak day this means that the exposure from a market-leading clearing bank could be in the region of £1.75–3 billion in relation to low-value clearings and £100 billion in relation to high-value clearings. The scale and complexity of this exposure makes it clear that transaction banks require specialised risk management processes. It is also vital for both operations and risk management teams to have a deep understanding of the operational risks inherent in the business.

After the horse has bolted

Transaction banking activities tend to suffer lengthy periods of under-investment, which are only punctuated by forced and costly spending when problems erupt or regulators intervene. Caught between the two stools of neglect and panic, managers often struggle to carve out a role for transaction banking in enterprise strategy or long-term investment planning.

At the heart of this issue is an inability to correctly identify either the value or the probability of risk within a transaction banking business. It is notoriously difficult to get whole organisations engaged with infrastructure business cases, which often struggle to compete with seemingly more attractive investments in new business propositions. It is this lack of engagement that explains why transaction banking activities are frequently fragmented across a banking group, regarded as a utility instead of a business, and under-represented within organisations’ leadership structures.

The need for better recognition and specialised risk management points to several requirements:

1. Positioning transaction banking properly within the bank, with responsibility for its own performance and return on risk-weighted assets.
2. Delivering excellent, reliable performance, based on insightful management information and effective risk management.
3. Having risk managers who are both experienced in and aware of the underlying business.
4. Focusing key risk indicators on key risk performance indicators, thereby helping operations staff to do their business as opposed to focusing on key risk results indicators that only serve to highlight their issues and shortfalls.
5. Creating and nurturing a learning environment that promotes transparency and rewards better risk management performance.

Figure 9: Key payment risk trends and implications

<table>
<thead>
<tr>
<th>Inbound</th>
<th>Transaction</th>
<th>Transaction Institution</th>
<th>Settlement agent</th>
<th>Scheme Mechanism Finance</th>
<th>Scheme Mechanism</th>
<th>Oversight, Regulation, Legislation, Public Policy, Government, Legal system, Media, Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td>Product Channel Support</td>
<td>Governance, Strategy, Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>Transaction</td>
<td>Inside</td>
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<td></td>
<td></td>
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<tr>
<td>Consumer</td>
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<tr>
<td>Governmental</td>
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<tr>
<td>Physical</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Electronic</td>
<td></td>
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</tr>
</tbody>
</table>

Source: PwC
**Taking transaction banking risk seriously**

Transaction banking businesses are subject to a number of ongoing risk trends, in addition to being affected by the current credit crisis. Some key ongoing risk trends are highlighted in Figure 9, along with their non-exclusive positioning in a typical transaction banking value chain.

The potential relationships between these trends and the most highly ranked risks identified by the Banking Banana Skins surveys should be of particular concern to senior management. In the current climate, an operational incident which prevented a high value payment from settling could have serious and disproportionate consequences. Similarly, the relationship between payment scheme rules and insolvency law is much more likely to come under stress when very substantial payments are involved.

Risk is an unavoidable element of any business; the difference between success and failure lies in the ability to identify and manage it. This means having effective risk management systems, run by experienced people able to recognise the full range of potential risks and respond accordingly. Accountability for risk cannot be outsourced, even if the responsibility for risk management is. For payment institutions this is codified under Article 18(2) of the Payment Services Directive, which states that ‘payment institutions remain fully liable for any acts of their employees, or any agent, branch or entity to which activities are outsourced.’

Risk should also be managed where it can best be controlled. The relationships between different risks therefore need to be well understood, with interdependencies clearly identified and control responsibilities agreed in advance. Without this clarity, incidents in one part of the supply chain can easily result in avoidable problems elsewhere. This is where the experience and talent management of an organisation can really tell.

**Where do we go from here?**

The typical progression of a crisis can be broken down into a number of discrete phases, and although the degree of detail ascribed to each phase can vary, the following three consistently emerge:

1. The Management Phase.
2. The Recovery Phase.
3. The Prevention Phase.

The global economic crisis is currently in the Recovery Phase, but attention is now beginning to shift to the Prevention Phase. In this instance, the implications of Prevention Phase activities have the potential to be both challenging and far reaching. It is safe to assume that more regulation will be the dominant outcome, and that much greater transparency and rigour will be required than has hitherto been the case. The stakes are now higher than ever before and will only increase in the short-term.

For the Chief Risk Officer of a transaction bank this means several things:

1. Managing those risks and compliance requirements that directly relate to the current crisis and its recovery.
2. Establishing an appropriate risk management framework (see Figure 10).
3. Distinguishing which risks are internal to the business and which are external. In each case it must be clear whether the risk is to be managed within transaction banking or elsewhere.
4. Enabling experienced people to make effective use of their knowledge: ensuring early recognition of areas where a risk is becoming an issue.
5. Monitoring and influencing the changes to risk management required by the political, regulatory and market responses to the current crisis.

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**Figure 10: Integrated risk management framework**

<table>
<thead>
<tr>
<th>Key risk categories</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change risk</td>
<td>Financial risk</td>
<td>Operating risk</td>
<td>Legal risk</td>
<td>Asset risk</td>
<td>Scheme risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operational risk</td>
<td>Market risk</td>
<td>Management risk</td>
<td>Reputation risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Source: PwC*
The PSD has changed the rules of the game

Banks shouldn’t fight the tide of change

The Payment Services Directive\(^1\) (PSD) was enacted into legislation in November 2009 and has changed the nature of payment processing in Europe forever. The PSD establishes a ‘level playing field’ across 31 countries, makes it significantly easier for non-credit institutions to offer payment services and further shifts the balance of liability in favour of consumers. It also fundamentally changes the way in which payment services are delivered: radically affecting technical architectures, operating models, product design and business processes. Leading organisations have already established a range of strategies to anticipate and leverage these changes. Clear blue water is emerging, particularly since the financial implications can vary by up to 100 times between organisations.

The political commitment to the Single Market, the potential to create more economic value and the need to address perceived market imperfections have all driven the demand for new legislation. Price variations in different national markets, complex and expensive cross-border payment processing and outmoded service levels have all combined to create an unstoppable political and customer demand for change. The European payment market is widely regarded as oversupplied, uncompetitive and imbalanced. The PSD is intended to change this.

The PSD builds on a number of previous interventions designed to improve the functioning of the payments market in Europe (see Figure 11). Changes come in waves that are as regular and persistent as they are consistent in intent: price transparency, consumer protection and more effective competition are all common themes.

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Legislation to equalise domestic and cross-border pricing, to promote international account numbering conventions and to require more structured and reliable transmission of remitter information are all part of the programme. Reduced clearing cycles, removal of float and value-dating requirements are also part of the story. So too is the challenge to multilateral interchange fees and the establishment of tourist tests. Banks, therefore, urgently need to revitalise their product development capabilities, establish revenue growth strategies and innovate if they are to continue to enjoy traditional success.

The European Commission is not alone in creating these changes, and in addition to the ebb and flow of the customer lobby:

- The European Central Bank is acting as a catalyst for change to euro payment processing: promoting smoothness, safety and greater efficiency in payment instruments and systems.
- The European banking industry through the European Payments Council is implementing the standards, schemes and foundations of a new Single Euro Payments Area (SEPA).

These changes affect strategies, planning assumptions and business cases in every bank that does business in Europe:

- CEOs should consider the implications for the strategic market landscape.
- COOs should consider the implications for operating models.
- CMOs should consider the implications for business models and products.
- CROs should consider the implications for operational risk profiles.
- CFOs should consider the implications for funding, capital and liquidity management profiles.

It also affects their counterparts in business, whether domestic or international.

**A complex and difficult piece of legislation**

The passage of the PSD was far from smooth and remains contentious in many key respects. With many areas of national derogation available to each member state, the consequent legislative environment now requires a detailed understanding of how it has been implemented into the legal framework of every country within Europe, as well as the European Economic Area (EEA). This potentially detracts from the Single Market vision, risks creating market uncertainty and therefore threatens the related SEPA timetable.

In a domestic payment context, national variations in European payments legislation are analogous to having different legal rules applying to otherwise identical payments, depending on where they are geographically conducted. This is untenable from a customer perspective, as well as onerous from a provider perspective. It is therefore also at odds with the vision and operation of a level playing field.

Payment service providers (PSPs) with international operations within Europe thus need to assess the implications of the PSD on their regional propositions, operating models and supervisory arrangements. This will be a critical consideration for the entry strategies of new entrants to the market and for the existing providers of payment services that will be caught within the scope of the new payment institution (PI) provisions.

The good news from a policy maker’s perspective is that a large number of Payment Institutions have been licensed, which should increase choice, competition and market disruption.

**Speaking a new payments language**

Before the PSD, the concept of payments was often regarded as primarily a banking activity. However, this was an oversimplification and ignored important sectors of the payments market such as money remitters, payment factories or non-bank financial institutions. As a result, it created artificial barriers to entry to the market and with the creation of the PSD no longer applies.

The PSD is founded on the premise that the payments business is not the exclusive preserve of banks, that the regulatory requirements for payments should be independent of banking regulation and that all providers of payments services should be regulated. It therefore introduces important new terms to the market (see Figure 12):

- Payment service providers – a higher standard of authorisation.
- Payment institutions – a lower standard of authorisation.
- Payment service users (PSUs) – the customers.

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*Figure 12: Value chain constituents*

Source: PwC
The scope of the PSD is different from SEPA

The scope of the PSD is as far-reaching as it is broad in its scope and it applies to all specified payment services conducted within the EU, irrespective of their currency.

The legal relationship between the EU and the EEA means that the provisions of the PSD also extend to the EEA countries.

The scope of SEPA is related to, but different from, the scope of the PSD in two important respects:

1. Agreements within the European Payments Council (EPC) mean that with the exception of pricing requirements, the Swiss banking community has also agreed to abide by the provisions of the PSD to allow their inclusion and participation in the SEPA.

2. The scope of SEPA only applies to payments undertaken in euros.

The PSD covers many different electronic payment instruments (see Table 1), each with distinct operating characteristics and different propositions. While the Directive seeks to cater for specific differences in instrument, it inevitably consists of compromises and contains ambiguities as a result.

PSPs and PIs therefore need to take great care as a result. Terms and conditions, definitions, operational activities and business process all need to be analysed and assessed to ensure that the implications are completely addressed and fully understood.

In understanding the optional nature of SEPA, the outcome of the current consultation regarding the establishment of a mandatory ‘end date’ to migrate national euro electronic payment schemes to EPC SEPA schemes is important. Market forces combined with an end date will make the optional nature of SEPA a question of when to change and not if to change.

Whilst the benefit of a certain end date is clear, the politics to arriving at one is less so. Key stakeholders are still grappling with the concept of efficient inter-bank payments in a free market, and some market practitioners are using this uncertainty to retain the status quo for as long as possible.

Don’t put it off

The PSD involves a substantial number of issues that need to be assessed and addressed by PSPs (see Figure 14). Whereas almost all of the PSD requirements should already have been addressed, one critical requirement has been deferred to 2012: the requirement to reduce the clearing cycle to D+1. It would be a mistake to put this on the backburner. Decisions are needed now.

Table 1: PSD impact scope

<table>
<thead>
<tr>
<th>Impacted services</th>
<th>Impacted products and channels (illustrative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Services enabling cash to be placed on a payment account as well as all the operations required for operating a payment account.</td>
<td>Instruments</td>
</tr>
<tr>
<td>2. Services enabling cash withdrawals from a payment account as well as all the operations required for operating a payment account.</td>
<td>• Payment accounts</td>
</tr>
<tr>
<td>3. Execution of payment transactions, including transfers of funds on a payment account with the user’s payment service provider or with another payment service provider:</td>
<td>• ATM disbursements, payments and deposits</td>
</tr>
<tr>
<td>• Execution of direct debits, including one-off direct debits.</td>
<td>• Credit transfers and direct debits</td>
</tr>
<tr>
<td>• Execution of payment transactions through a payment card or a similar device.</td>
<td>• Debit cards</td>
</tr>
<tr>
<td>• Execution of credit transfers, including standing orders.</td>
<td>• Credit cards</td>
</tr>
<tr>
<td>4. Execution of payment transactions, where the funds are covered by a credit line for a payment service user:</td>
<td>• Electronic purses/Contactless cards</td>
</tr>
<tr>
<td>• Execution of direct debits, including one-off direct debits.</td>
<td>• Mixed deposits</td>
</tr>
<tr>
<td>• Execution of payment transactions through a payment card or a similar device.</td>
<td>• Cash deposits onto payment accounts</td>
</tr>
<tr>
<td>• Execution of credit transfers, including standing orders.</td>
<td>• Remittance</td>
</tr>
<tr>
<td>5. Issuing and/or acquiring payment instruments.</td>
<td>Channels</td>
</tr>
<tr>
<td>6. Money remittance</td>
<td>• Branch</td>
</tr>
<tr>
<td>7. Execution of payment transactions where the consent of the payer to execute a payment transaction is given by means of any telecommunication, digital or IT device and the payment is made to the telecommunication, IT system or network operator, acting only as an intermediary between the payment service user and the supplier of the goods and services.</td>
<td>• Agency</td>
</tr>
<tr>
<td></td>
<td>• Telephone</td>
</tr>
<tr>
<td></td>
<td>• Internet</td>
</tr>
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<td></td>
<td>• Mobile</td>
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<tr>
<td></td>
<td>• ATM</td>
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<tr>
<td></td>
<td>• POS</td>
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</tbody>
</table>

Source: PwC
In practical terms, the requirement for 2012 means completion of change activities in Q4 of 2011 and business cases agreed in 2010. This means feasibility study, strategy and business case development now.

The shift to D+1 and the ‘real-time’ requirements that pervade the PSD require a fundamental rethink of payment architectures and operating models. Combined with technology trends, customer demand and market expectations, banks now need to provide real-time servicing models and 24/7 support models. Banks can no longer cope with payment processing downtime ‘behind the scenes’: incidents and problems have an immediacy and visibility that they have never had before.

Compliance is not enough. While a compliance approach may have got banks over the line in 2009, the strategic implications are both significant and potentially dangerous. It is therefore essential that banks move quickly to meet the next wave of change.

Figure 13: Key decision points when considering SEPA and PSD

SEPA is discretionary for some

Payment Services Directive is mandatory for all

In practical terms, the requirement for 2012 means completion of change activities in Q4 of 2011 and business cases agreed in 2010. This means feasibility study, strategy and business case development now.

The shift to D+1 and the ‘real-time’ requirements that pervade the PSD require a fundamental rethink of payment architectures and operating models. Combined with technology trends, customer demand and market expectations, banks now need to provide real-time servicing models and 24/7 support models. Banks can no longer cope with payment processing downtime ‘behind the scenes’: incidents and problems have an immediacy and visibility that they have never had before.

Compliance is not enough. While a compliance approach may have got banks over the line in 2009, the strategic implications are both significant and potentially dangerous. It is therefore essential that banks move quickly to meet the next wave of change.

Figure 14: PSP considerations

- Transactions caught by the legislation
- Internal definition of a payment account
- Internal definition of a business day
- Approach to one-leg transactions
- Impacted terms and conditions
- Decision regarding single contracts
- Approach to corporate opt-out clauses
- Treatment of FX and interest rates
- Scope of business services impacted
- Impact on payment operations
- Risk/control reduced clearing cycles
- Application of full amount principle
- Value dating and fund availability
- Blocking of payment cards
- Cash on payment account
- Approach to corporate opt-out clauses
- Refunds for unauthorised transactions
- Evidence and accounting
- Non-execution processes
- Defective execution processes

Source: PwC
The Faster Payments Service (FPS) is an innovatory milestone that has stirred the world of payments, set a new benchmark for mass payments and indisputably changed the expectations of the global marketplace. Yet despite the positive customer demand for the service, the number of direct bank participants remains relatively low. As the FPS moved from infancy to maturity, many challenges have been encountered and overcome. Now the service has reached a critical stage in its development. This requires what some may perceive as a leap of faith to unlock the potential of the FPS and make the most of investment, drive new sources of revenue and promote the transition of the transaction banking platforms into the 21st century.

**Tomorrow happened yesterday**

Described as ‘faster than cash’, ‘natural evolution’ and an ‘inevitable end-state of all electronic payments’, the FPS uses real-time technology and operations to generate instantaneous online payment. It has attracted the attention of market makers, regulators and payment services providers globally.

FPS’ unique features include 24/7 operations, real-time settlement risk management, customer self-service with immediate delivery/confirmation and multichannel capabilities. The latest statistics demonstrate that the FPS has continued to grow steadily since its inception in May 2008. By July 2010, it had successfully processed over 450 million transactions stemming primarily from the internet and telephone banking channels.

These figures will grow substantially over time and, with a fair wind, may exceed 2.5 billion transactions by 2018, according to a survey we carried out in 2009. Volume will come from a variety of sources, both retail and corporate. The market is also likely to see significant migration from other instruments, as the capabilities of the FPS are brought to bear and undergo further innovation. With the UK payment industry’s commitment to displace cash and to discontinue cheques, the Faster Payments Service would be a viable alternative.

The technological, operational and risk management implications of providing payments in near real-time fundamentally change the user experience, as well as the inherent operational risk profile. As a result, the banks taking part in our survey are approaching Faster Payments with different levels of confidence. Some institutions are addressing the need to reinvent their business and operating models to benefit fully from the scheme’s capabilities, while others are adopting a more cautious approach.

Unwillingness to operate a real-time payments service can often stem from the changes required to the underlying systems and investments needed in the infrastructure and risk mitigation initiatives. If an incident occurs and relates to Faster Payments, it is now immediately visible to the market in a way that was not necessarily the case with Bacs. Banks with outdated operational processes and technology platforms will be deprived of their traditional competitive advantages of reach and clearing. They may find that the recent financial crisis heralds enduring problems in the years to come, further exacerbated by the competitive pressures in pursuing the Faster Payments implementation. Therefore, an unintended benefit of Faster Payments has been to propel the banks into the digital era and provide the incentive for them to upgrade their transaction banking platforms. No bank need fear Faster Payments if it is operating with effective risk and control processes.

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1. ‘Real-time payments — a platform for innovation’, Vocalink – 04.07.
Most banks in our survey highlighted the increased automation of the FPS above other payments methods and reduced operational costs as being a net benefit, related to the simplicity of streamlined lean processing. The FPS will enable payments to be offered at lower cost, with half of those surveyed indicating that the service has resulted in less re-work, reconciliation and enrichment with fewer exceptions.

**Universality and limit increase are a vital milestone going forward**

The lack of adequate infrastructure to support a real-time service has hampered progress. The assumption that the scheme could be launched and be unequivocally successful based on the existing membership appears overstated. While the proportion of addressable sort codes within the existing scheme participants is high, the gap between that level and universality introduces difficulty in promoting the service. Even in some ‘compliant’ banks, sort codes are not reachable. Customers wish to make fast payments easily and without issue, but instead they can be confronted by frustrating delays. A payment will only be real-time if the beneficiary account can be reached. At present a significant number cannot be. As a result, some banks are reluctant to fully market the service as it is still such an uncertain proposition.

The current limit of £10,000 on Single Immediate Payments (SIP) should eventually be removed in a strategic move to stimulate the use of the service for high-value transactions. There is some debate as to what new level it should be raised to or whether, indeed, a limit should be prescribed by the scheme at all.

**Untapped revenue potential**

Despite the low-profile launch and lack of full recognition of Faster Payments as a proposition and as a brand in the retail market, its revenue potential should not be underestimated. Faster Payments could deliver new revenue streams, with potential revenues identified in the business-to-consumer segment reaching £2.9 billion by 2018 and £1.9 billion in the business-to-business market. There is no doubt that Faster Payments will also displace revenues from other sources of income, such as CHAPS.

We understand pricing sensitivities for banks, but do not agree that retail customers will not pay for payments: receipt fees, credit card surcharging, service charges for mobile payments and the experience of other industries all indicate a willingness to pay. The key things are that where customers do pay, they pay for perceived value, and that prices are fair.

What is important now is that the scope for commercialising future extensions to the service – driven by limit increases or better service – are not missed.

**Fortune favours the brave**

Figure 15 outlines the wealth of customer value propositions depicted over the next eight years rated by complexity to deliver and revenue opportunity.

There are ample opportunities for the brave to choose from in order to create a compelling customer value proposition. These include but are not limited to:

- Providing the service through new channels, such as mobile.
- Numerous opportunities within the corporate sector.
- Making higher-value urgent payments – for example, using the relaxation of the £10,000 limit to introduce tiered charging for higher values.

Banks taking part in our survey pointed to what they see as the greater potential for revenues from corporate over retail customers. Charging for payments is the norm in this sector, and revenues can be achieved in the short- to medium-term without significant additional infrastructure expenditure beyond the already delivered features of the FPS.

**Mobile FPS in the ‘premier league’ of payments**

Mobile FPS has the potential to become one of the most popular payment methods, with payments made possible within any bank and any mobile in the near future. All the banks surveyed accept that the mobile will be the technology of the future and cannot be ignored. One of the major UK banks has developed a smart phone mobile FPS proposition which is leading the way in this area.

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**Figure 15: Faster Payments Service proposition matrix**

![Figure 15: Faster Payments Service proposition matrix](image-url)

*Source: ‘Tomorrow happened yesterday’, Vocalink in association with PwC*
Key considerations
As FPS matures, the business case for its future development becomes more evident, encouraging banks to explore ways to take advantage. It will be important to remove some of the barriers to progress by updating business and operating models. Many banks will also be looking to upgrade their supporting infrastructure and revamp their product portfolio through effective sales and marketing efforts to realise the full benefits of FPS.

Banks need to be courageous and, in some cases, they will have to ‘think the unthinkable’:

- Have the threats been fully catered for in the strategic payments planning process, with appropriate assumptions made and necessary actions agreed?
- What is the expected share of the projected 2.5 billion transactions and how will this be achieved? Are the product areas innovatively generating new propositions and products that are sufficiently customer centric? Does the organisation have the necessary skills and experience to think like new entrants?
- Is there a migration strategy for the outmoded instruments and how will the cost base be reshaped? What is the organisation’s real-time strategy and how will customer experience be aligned with new operational processes? Have all of the potential implications from an operations, human resources and risk perspective been thought through? How will margins be protected?
- Have all of the direct and indirect threats and risks in relation to the service been analysed and understood? How do the implications differ from previous experience and what needs to be done differently? Are the required controls sufficiently effective and resilient?
- Is there a good story to tell around the mobile phone? Has product development truly walked in the shoes of the customer? Is the nature and role of the mobile with our customers fully understood? How will the strategy meet the emerging needs of the younger marketplace?
- Are the new services priced for value? Is there confidence that new services will add value and enable differentiation of the offering between payment service providers? How will they compete?

Future prospects
The next three years will be crucial for the development of the FPS, ushering in further increases in limits, widening of the reach of the service to effective ‘universality’ and the implementation of a mobile FPS. These developments will take place against the backdrop of declining cheque usage and migration to other instruments, including the FPS. It is time to take the lead.
Getting to grips with the new OTC regime

Banks are facing sweeping changes to Over-the-Counter (OTC) trading including centralised clearing and the funding of risk. Companies will need to prepare for more complex, more regulated and potentially costlier market operations.

The financial crisis has been the catalyst for change across the financial services industry and one of the most affected areas has been OTC derivatives. In September 2009, the G20 concluded that ‘all standardised OTC derivatives contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by the end of 2012’. The G20 went on to say that ‘non-centrally cleared contracts should be subject to higher capital requirements’. Regulators around the world have taken up the challenge and are developing frameworks to implement these objectives.

Why OTC derivatives?
The size and growth of the OTC derivatives market was attracting regulatory scrutiny and industry concern before the financial crisis. The failure of Lehman Brothers served to focus attention, though OTC derivatives were not at the heart of the problems that affected the markets at the time.

The concerns of the authorities were driven by the size of the OTC markets and the lack of transparency over exposures between counterparties. Figure 16 illustrates this latter point. In this example Seller A sells Credit Default Swaps (CDS) on the bonds and loans of Corporation X. However, the bilateral clearing arrangements between parties mean there is no transparency of the credit risks run by buyers of these CDS products to the total risks run by the seller. In the event that Corporation X defaults, the stress on the CDS seller may cause that entity to default in turn, leading to contagion in the market.

Regulators in Europe and the US have announced a series of measures to combat the problem. At the centre of these measures is the introduction of central clearing for OTC products and other initiatives to encourage product standardisation. Overall, the aim is to reduce systemic risk and increase market transparency.

What will this mean in practical terms?
Rather than settlement taking place between the two parties that made the initial trade on a bilateral basis, central counterparty clearing houses (CCP) will in future intermediate the clearing and settlement process, becoming the buyer to every seller and seller to every buyer. The effect of this will be:

- Increased standardisation of OTC products.
- An increase in market transparency, particularly in respect of positions and prices.
- Increased levels of automation and straight-through processing.
- Mutualisation of risk across the market.

![Figure 16: Lack of transparency over exposures](source: PwC)
The most significant change to the OTC derivatives markets will be driven by the way CCPs cover their risk exposures through initial and variation margins. The initial margin is paid at the point the clearing house takes on the position. A variation margin is typically paid on a daily basis and reflects the mark-to-market change in value of the position. As a result, market participants will need to deposit significant amounts of cash and securities as collateral with the clearing house. Thus market participants will be required to fund their risk.

**Portability of client money**

To clear trades through a CCP, market participants will need to gain access to the CCP providing the clearing service. For markets that already use the CCP model, such as listed futures and options, a clearing broker provides access to the CCP for its clients.

A similar model will be employed for OTC products. The CCP will require any broker holding a position to post a margin to support that position and in turn the brokers will require their clients to post a margin in the same way. The clients will therefore be dependent upon their clearing broker to clear their trades, which will be fine until a clearing broker defaults, as happened in the case of Lehman. In the event that a clearing broker defaults, all client positions either have to be transferred to another solvent broker or will be liquidated by the clearing house.

If client’s positions are held in a co-mingled account with broker’s own positions, in the event of a default, those positions cannot be easily identified and transferred to an alternative clearing broker. The solution is to segregate client positions, cash and collateral so that the beneficial owner can be readily identified. There are, however, a number of issues to consider:

- Netting of positions will be difficult and hence margin requirements will increase as margin will need to be posted on a gross basis, which will increase client trading costs.
- It will be possible to transfer positions with margin thus avoiding the situation where clients have to pay margin twice.
- Processes operated by clearing houses and clearing brokers will need to be consistent with client money rules and designated client money accounts.
- Systems and operational changes will be required to ensure compliance with new processes and regulatory requirements.

This will not only result in operational changes, but also a shift in the way certain parties, particularly corporate treasury, manage risk.

**Next steps**

Pending a clear articulation of requirements from the regulators, the industry is already taking steps to meet the G20’s objective of centralised clearing for OTC products. Over the last year, CCPs have launched services for clearing CDS products, and new services aimed at clearing other OTC products are planned. Interest Rate Swaps are cleared through LCH’s SwapClear service and enhancements to this service are planned.

In response to these changes firms should consider the following:

- Identify the impact on their business strategy and determine what role they need to play going forward.
- Define the scope of their response in terms of service levels and coverage.
- Understand the impact across the firm from operations and technology to financial requirements.
- Plan in an environment of uncertainty with multiple competing service providers and a changing regulatory landscape, taking pragmatic measures to plan for what is known whilst remaining agile to future changes.

One thing is certain, the impact of centralised clearing for OTC products will be significant and the issue has generated some passionate debate at all levels. Market participants will need not just to address the financial impact of these changes, but also to consider the optimal operational model for their business.
Many banks are in the process of building client-clearing propositions to enable them to provide clearing services to their sell-side customers. However, the margin requirements imposed by the central clearing model present a problem for many sell-side firms. There are restrictions on the collateral accepted by CCPs and the variation margin must be paid in cash. This suggests that custodians can play a role in providing:

- Collateral conversion services in the form of stock lending arrangements.
- Repo services to allow for the provision of liquidity.
- Securities pledge accounts that would provide support for lending arrangements.

It is also possible that custodians may seek to provide OTC derivatives clearing services to their asset manager customers.
The voice of the customer
Custody has traditionally been a stable transactional business, where size matters and consistent, if unspectacular, revenues keep the machine moving. While custodians were not immune from the volatility that hit the market in the wake of the financial crisis, they have, on balance, survived better than most. Falling asset values and reduced securities lending activity limited revenues in 2009, but with the return to more normal market conditions custodians have been looking at opportunities to expand their businesses and operations. Decisions taken now will shape the asset servicing market and decide the winners and losers over the next 10–20 years.

In general, the volatility that marked the financial crisis provided a positive boost for the custodians’ business model. Limited proprietary risk-taking and healthy balance sheets meant that they were regarded as a safe harbour in the storm. Also, the risk of insolvency among the broker dealers resulted in a number of funds moving their custodial relationships to direct relationships with the larger players. As a result, the custodians have been extremely busy with new accounts, large amounts of liquidity and new assets to manage.

This all sounds positive, but revenues were adversely affected by:

- The value of assets decreasing rapidly.
- A reduction in active trading and securities lending.
- A large volume of redemptions by investors as they seek safer assets during the downturn.

The custodian business model is heavily dependent on safekeeping fees as a percentage of assets under custody (AUC) and also transaction fees on asset movements and settlements. In 2009, this resulted in a reduction in revenues during a period of increased internal activity to support the funds through recovery of the markets in the latter half of last year. During 2010, it has had a positive impact on revenues. This serves to illustrate the fact that a business reliant on providing traditional custody services is far from being master of its own destiny.
In addition (see Figure 17), the end customers – the funds – are having their own fees challenged by investors as performance falls, which will in turn impact on their own focus on the costs of their service providers – the custodians.

**Meeting the challenge**

Given the business dynamics of the custody industry, a focus on sustainable revenues and managing the cost base is vital for success. Indeed it is no surprise that almost 60% of the global assets under custody are managed by just four service providers and their lead over the competition is so significant that they are unlikely to be challenged in the short to medium-term. In an industry where services offered in the major markets are highly commoditised and margins are thin, scale is of vital importance. The largest custodians have sought to cement their positions in these markets through acquisition. For example, we have seen BNYM buy PNC Global Investment Services, and BHF Asset Services and State Street buy Intesa Sanpaolo Securities Services. Their challenge will now be to exploit these acquisitions to the full to make the most of synergy benefits and take advantage of increased scale.

**From factory to information services**

The lack of due diligence on funds combined with ongoing concerns about the quality of disclosure of information to investors will inevitably result in new regulatory requirements. A key tenet of recent regulation is market disclosure as a mechanism for allowing the market to self-regulate (Basel Pillar III). While there are question marks over whether the market is able to self-regulate, the discovery of Ponzi schemes at Madoff investments and Stanford Investments is heightening the focus in this area.

Following this through the value chain of securities industry service providers, the custodians have seen increased demand from customers for improved information. The fund management and hedge fund communities continue to demand timelier, more accurate and higher quality data, to assist them in executing their investment strategies. As a result, custodians are entering a world where regulators and customers will demand that they are more than transactional factories, but can also deliver as an information business.

The demand for increased transparency extends to the need for custodians to demonstrate their operational effectiveness and provide proof that operational risks are being controlled, all of which is likely to require custodians to provide SAS 70 reports.

**Next steps**

The changes in the market have thrown open a vast number of opportunities for custodians but are also placing a lot of pressure on investment and resources, particularly where significant post-acquisition integration projects are concerned. The business and operating models are also facing pressure in terms of customer and regulatory-driven demands for improved information and service flexibility. So what are the opportunities open to custodians at this junction in the crossroads and where the investment should be focused.

The four potential strategic options are set out in Table 2.

**The consolidator** – Despite consolidation to date, there are continued opportunities to build scale and add more transaction volume to the factory to reduce unit costs. This can take the form of a reinvigoration of the ‘lift out’ product for fund back offices or buying custodians in existing markets to create savings through synergies. Alternatively, there are ‘fill in’ opportunities where custodians can see opportunities to acquire or build in profitable parts of the network where they are currently using other providers, which will meet the demand from global investors for a global custody service provider. This consolidation strategy essentially focuses on cost and so is likely to be accompanied by a continuing focus on the efficiency of the operating model, increasing the manufacturing capability to reduce unit costs and taking advantage of opportunities to source functions from a variety of lower cost locations.
The service provider – During the liquidity crisis funds have turned to the custodians as a port in the storm. However, there is a window of opportunity to maintain and grow these direct relationships if they can meet the service levels that are required. Feedback from the market suggests that this is unlikely, with continued question marks over servicing capability, lack of innovation and flexibility. The question remains over whether a large transactional business built on reducing costs and standardisation can realistically make this change to its core culture. While feedback to date suggests service and innovation is not an option in the short-term, the fact that this is not perceived as a strength in the industry suggests there is an opportunity here, given demands from customers, investors and regulators.

The product innovator – The financial services industry has expanded and innovated rapidly over the past 20 years and the market infrastructure has not caught up. Custodians play a key role in this infrastructure with the core competencies and resources to deliver solutions to the gaps that have appeared: from derivatives to data. Some derivatives markets are extremely large and the underlying products are widely used by traditional fund managers as well as the hedge fund industry. With the impending changes in regulation governing clearing for OTC derivative products this presents a significant opportunity to build third-party clearing services for these markets. That said, however, this promises to be a hugely competitive marketplace with many banks looking at providing similar services.

The market builder – The BRIC economies (Brazil, Russia, India and China) and the petro-economies of OPEC were impacted by the global recession like all countries, though now show signs of having recovered. The inevitable trend from the mature economies of the West to new economies with limited and unsophisticated infrastructure is clear. Custodians have specialised in building core transactional infrastructures, founded on connectivity and messaging that are both robust and always available. Given these core competencies, there are opportunities in a number of markets to work with local governments and service providers on developing their infrastructures. The benefits lie beyond the project-based fees, and in the longer term relationships as well as the ability to gain some form of role/ownership in all or key parts of the value chain. Outside the BRIC economies, markets generally remain under-developed, and hence partnering with a local organisation familiar with local regulation, tax rules, exchange controls and settlement requirements is likely to be necessary.

Capitalising
Custodians are facing tougher client demands but also have an opportunity to build on the new relationships forged during the financial crisis. Smart firms are already taking a fresh look at where they are now, where they want to be and how they are going to get there.

Table 2: Strategic options

<table>
<thead>
<tr>
<th>Strategic play</th>
<th>Focus</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>The consolidator</td>
<td>Acquisition and well-executed integration</td>
<td>Smaller competitors in niche markets or products</td>
</tr>
<tr>
<td></td>
<td>Low-cost operating model with distributed sourcing of functions</td>
<td>Reinvigorating the ‘lift out’ product for fund back offices</td>
</tr>
<tr>
<td>The service provider</td>
<td>Investment in service culture and information – quality, accuracy and speed</td>
<td>Direct custodian of choice for larger hedge funds</td>
</tr>
<tr>
<td>The product innovator</td>
<td>Research and development, re-evaluating core competencies vs. infrastructure requirements in the industry</td>
<td>Standardising and processing various derivatives</td>
</tr>
<tr>
<td></td>
<td>Building or partnering to develop infrastructure needs around central counterparties, messaging standards</td>
<td>Using skills and technology in new growth markets to build local infrastructure, e.g. emerging market CSDs</td>
</tr>
<tr>
<td>The market builder</td>
<td>Macro view on market opportunities and building contacts within growth markets</td>
<td>Target growth markets where using other custodians for local market access and either acquire or build own capability</td>
</tr>
</tbody>
</table>

Source: PwC
New generation SCF: Realising the potential of supply chain finance

At a time of rapidly expanding global trade, supply chain finance (SCF) could provide a valuable source of revenue for transaction banks. Yet take-up of existing SCF programmes has largely failed to meet expectations. Simplifying complexity, more effective risk management and providing greater benefits for different stakeholders within the sales chain as part of a new generation of SCF programmes would help to improve value and marketability.

While offering the end-to-end services needed to foster and facilitate international trade is recognised as a key growth area for transaction banks, only just over a third of this trade is currently intermediated by banks. Although around a half of global trade is from mature to mature markets, the growth rate of trade with and between emerging markets is much higher and offers the most untapped potential (see Figure 18).

The market for trade risk mitigation products (already running at more than $100 billion a year) could be especially promising. Trade with and within emerging markets is a key driver of the increasing demand for such products. Proposed reductions in the associated capital requirements under Basel III could also improve the returns on such products, though the most common bank risk mitigation product, letters of credit, may have to be fully capitalised.

Figure 18: International trade flows

Note: *China export data not available for 2008, UNCTAD 2006 figures have been used

Source: WTO, UNCTAD Statistics Handbook
on the balance sheet. One of the key challenges for banks is to identify trade-related products that meet customer needs, but also remain profitable under the BASEL III changes. The most attractive potential rewards lie in providing end-to-end SCF. To settle transactions, companies can choose between open account transactions (which are cheaper, but riskier, and generally require the company to prepare the most documentation) and letters of credit (more expensive, particularly when liquidity is scarce, though the documentation is prepared/reviewed by banks). Prior to the credit crunch there had been a shift towards open account transactions, which do not need to be transacted through a bank. However, as country and credit risk increased during the credit crisis, the pricing of trade risk mitigation products soared. As a result, many exporters were priced out of the market and had to rely on alternative sources of financing and risk mitigation. Regional development agencies and export credit agencies (ECA) also offer trade financing and risk mitigation (insurance) products (see Figure 19), particularly where liquidity constraints limit the capacity of banks to meet the demand for trade finance.

In an effort to recapture market share, banks are using TSU (Trade Services Utility, developed by SWIFT), which allows more transparent and risk-mitigated open account transactions. However, the current generation of SCF products have struggled to meet evolving market demands and banks may therefore need to rethink their product offering to gain more of the open account market share. They will also need to ensure that they are not disintermediated by clients and service providers seeking the most effective end-to-end supply chain solutions.

So what are the problems with current SCF offerings?

**Promoting SCF**

SCF programmes offer buyers an opportunity to increase days payable outstanding (DPO) and decrease procurement cost and risk, while at the same time decreasing supplier days sales outstanding (DSO) and reducing capital cost and risk. Despite these benefits, adoption has been slow.

The sales process can be convoluted. While banks generally seek to sell SCF solutions to their client’s treasury function, the treasury must in turn secure buy-in from purchasing, IT and payables, none of which have as much to gain from the programme. Indeed, there may even be a conflict as suppliers may raise prices if their payment terms are extended. Purchasing must also get its supplier to convince its finance team that the arrangement makes sense. The underlying difficulty is that those selling the SCF solution may have little knowledge of and leverage with stakeholders outside of treasury.

One way to simplify and strengthen the sales channel is dealing directly with purchasing. Purchasing can be engaged by receiving a share of the discount paid by suppliers as a result of lower direct pricing. In turn financially healthier suppliers are better able to invest in new technology and lower supply chain risk.

**More relevant to today’s trading patterns**

Limitations in SCF products are also impeding their marketability at present. Buyer-sponsored SCF programmes are generally confined to investment grade companies, which eliminates the ability to sell a ‘credit’ product. They tend to focus on larger suppliers that usually have more capital options and often pose less financial risk to the buyer, thereby reducing the benefit from credit arbitrage and liquidity stabilisation. They are also typically limited to confirmed transactions, which limits programme breadth and the products offered.

Banks could do more to broaden SCF and manage the underlying risks. A deeper understanding of the various stakeholders within a supply chain will be critical if banks are to make more of the opportunities opened up by SCF.

Most supply chains begin with large companies that sell commodities to smaller processors, which fabricate goods for larger manufacturers, which in turn sell products through smaller distributors to larger retailers and on to the consumer (see Figure 20). As we set out here, a number of factors related to credit risk can disrupt production, increase costs and prices and lower consumer satisfaction.
For commodities companies, the high cost of credit, billing, collection, cash application and bad debt associated with selling to smaller processors increases prices and lowers sales volumes. The risk of bad debt limits supplier credit lines and further constrains sales.

For processors, high capital costs and lack of credit increases prices and creates liquidity challenges that can disrupt shipment to manufacturers. Insufficient credit lines from commodity suppliers can decrease the economies of scale in production runs, which in turn increases unit costs and can cause production disruption. Insufficient capital availability limits investment in the new technology that could otherwise lower cost and improve quality.

For manufacturers, higher commodity and processing costs, as well as production disruption, supplier risk mitigation costs and quality problems, raise prices and lower sales volumes. The high cost of credit, billing, collection, cash application and bad debt associated with selling to smaller distributors further increases costs. The risk of bad debt can also limit distributor credit lines and further constrain sales.

For distributors, high capital costs increase pricing and lower sales volumes. Insufficient manufacturer credit lines, combined with constrained operating capital, often mean that retailer payment terms cannot be met and the resulting sales are lost.

Greater co-operation between companies with complementary skills would therefore help buyer-sponsored SCF programmes to reach their full potential.

**Partnership with factoring**
Factoring can be broken into two broad categories:

- **Service**: These factors primarily provide credit, billing, collection and cash management services for larger companies selling to smaller companies.
- **Finance**: These factors primarily provide receivable financing to smaller companies selling to larger companies.

Service factoring companies have extensive credit records in certain industries and economies of scale, allowing them to reduce the cost and risk for larger companies selling to smaller companies. Finance factoring companies are experienced in transactional risk mitigation, allowing them to accelerate payment flows from larger companies selling to smaller companies.

**Adding capital markets expertise**
The ability to bifurcate, layer and syndicate credit risk through securitisation would enable SCF programmes to expand beyond the credit appetite of one financial institution and build out beyond investment grade buyers.

**Adding consultants**
For consultants, adding supply chain expertise provides a better understanding of constituent companies and the various departments therein to increase the overall value proposition of SCF and sponsor deeper engagement. Expertise in project management, anti-money laundering (AML)/know your customer (KYC) streamlining, SMB on-boarding and web-based training/sales accelerates and broadens adoption.

**Adding specialised payments capability**
Use of the technology to analyse and manage payment flows across differing regions and currencies can facilitate creative solutions that eliminate credit risk by bypassing weaker companies in the chain. It can also consolidate and streamline payment flows to reduce receivable and payable processing costs.
**Reaping the rewards**

Broadening the scope of SCF will provide important benefits for buyers, suppliers, banks and their partners.

The first advantage is cost. Automotive manufacturers have been able to reduce steel costs by around 5% through direct payment to the steel mills on behalf of their suppliers. The challenge was forcing standard payment systems to split off the steel component from the piece-price, as well as using the payables department to manage the risk of a steel mill being owed more than the supplier or the supplier becoming insolvent. Future SCF programmes will leverage payment and credit systems of financial institutions and their partners to extend this payment parsing solution to entire supply chains, thus eliminating the credit problem and the costs therein.

This approach can also reduce capital requirements. First generation SCF programmes reduce capital costs and increase liquidity, but are generally limited to confirmed receivables from certain investment grade buyers. Future SCF programmes will leverage factoring and capital markets expertise to include non-confirmed transactions and non-investment grade buyers, enabling vendor-managed inventory (VMI) financing and programmes for a broader range of buyers. Robots will pull data from buyer payable and inventory systems, combine it with data feeds from logistic systems to feed risk engines that validate and reconcile transactions to mitigate risk, and enable the efficient acceleration of a wide variety of payment flows.

The new generation SCF can also improve financials. In addition to VMI, future programmes will enhance balance sheet management through the piece-price amortisation of technology unique to the production of cars, aircraft and other capital-intensive products.

A possible solution lies in a combination of payment parsing, transactional risk management and capital markets expertise, as outlined in Figure 21.

### Positioning for the future today

SCF offers significant and still largely untapped potential for transaction banks. The keys to realising the potential will be gaining a better understanding of the extended supply chain through analysis of functions outside of treasury and the interrelationships between them and their trading partners. This includes discerning their ‘pain points’ and looking at how these can be relieved.

Forward-thinking banks will be looking at how to leverage procurement, sales, logistics and finance experts to gain a holistic view of the supply chain to better understand how to serve clients within it.

It will also be important to gain a better understanding of the various financial service providers within supply chains and how they interrelate. A deeper understanding of both forms of factoring can be particularly useful to develop perspectives on what is possible.

Banks can then design solutions that incorporate their strengths and those of selected partners to solve industry problems in unique ways. It is often helpful to work with third parties in this process to develop broader perspectives and marketplace intelligence outside of current business lines. To deliver the solutions, banks may need to bring in further support, either through a partnering or acquisition strategy. Interaction and feedback from the various stakeholders in the chain can help to enhance solutions and develop strategies for continuous improvement.

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**Figure 21: Improving financials through SCF**

- **OEM**
  - Amortises tooling in the piece price
  - WIP and gap financing available when needed

- **Bank**
  - Administrator
    - Payment splitting
    - Yield curve management
    - Amortisation tracking
    - Volume forecasting
    - Reserve topping
    - Reporting

- **Tool builder**
  - Tool payment
    - (less discounts for WIP financing & early payment)

- **Tool**
  - Lessor
    - Work-in-process financing
    - Bulk steel procurement
    - Management tools
    - Gap financing
    - Certification

- **Component supplier**
  - Steel payment
    - (for parts)

- **Steel supplier**
  - Steel payment
    - (for parts)

- **Bank splits payment stream, sending the tooling portion to the tool lessor, the processing portion to the component supplier and the steel portion to the steel supplier**

*Source: PwC*
Corporate treasurers have faced an array of tough challenges arising from the financial crisis, including the impact on funding, liquidity management and financial counterparty risk, as well as the ever-greater complexity of international business. Banks that are able to match their goals with their treasury clients’ key performance objectives will enable treasurers to add more value within their businesses and will benefit from closer and more valuable relationships with their clients.

While clearly challenging, the financial crisis has provided an opportunity for treasurers to demonstrate their value within the business and make a stronger case for investment. Areas where they believe they could add further value include:

- Working capital management.
- Capital structuring.
- Customer financing.
- IT integration.
- Improved risk management.

Treasurers are also looking to add value and manage risk more effectively by integrating their activities more closely with the finance function and the wider business. Successful banks are alive to the changing thinking and priorities of their corporate treasurer customers.

Treasurers push for closer integration into the business which creates valuable opportunities for banks to differentiate themselves in a fragmented, heavily supplied and increasingly regulated market. Yet treasury relationships often suffer from limited performance measures. Where they do exist, they tend to be poorly aligned with customer needs and their value drivers.

Our latest survey of treasury trends finds that funding is now at the top of the treasury agenda (Figure 22). During the credit crunch, funding became more difficult for most businesses, and impossible for some. Many treasurers were surprised by the extent to which the market fell and by how dramatically and rapidly the banks’ position on cash and funding changed as a result of the squeeze on the banks’ own liquidity. These tougher banking attitudes and responses – real or perceived – caught treasury functions off-guard after years of relatively easy fundraising.

From a treasurer’s perspective, banks appeared to be less helpful during this time – taking more time to make decisions, applying increased scrutiny, putting additional pressure on margins and attempting to accelerate repricing. Some treasurers were disappointed by this apparent shift in relationship banking, while others felt they were being bullied or ignored. As a result, treasurers have woken up to the importance of bank relationships and realised that some of the ties were less solid and enduring than they thought.

Corporates are keen to sustain a long-term portfolio-style relationship with their bank, though 60% believe their banks would prefer an individually profitable transactional approach. It may be possible to have both to some extent, but this will require more transparency and detailed monitoring (including balanced scorecards) on both sides to ensure the relationship stays mutually beneficial, and hence robust, in the long-term.

The requirement for long-term banking relationships is most noticeable in request for proposal (RFP) for cash management services. Typically, before the crisis, pricing and quality of the relationship were the most important elements during an RFP process (52% of the responses before the crisis, only 35% after). Today, no RFP will go out in the market without requiring strong credit line support. As a result, the best cash management banks could miss out if they cannot also support the financing needs of the client. This supports the observation that pricing and terms of funding continue to be important, but secondary considerations when compared with access to funding.

As funding from banks was squeezed, treasurers were reminded that having large amounts of debt from one source and with one maturity may be more efficient to manage and negotiate but can result in concentration risk. Many companies are now diversifying risk across counterparties, markets and maturities to reduce their reliance on funding from their existing banking relationships. This is expected to continue post crisis even though access to credit is gradually improving.

Companies are now more conscious of their exposure to counterparty risk – not just the threat of bankruptcy but the possibility that funding and support may be withdrawn. Prior to the credit crunch, the thought of one of its banks going bankrupt was unthinkable for most treasurers. This notion has been disproved following the crisis. As a result, treasuries are augmenting credit ratings with earlier signs of counterparty risk such as credit default swaps (CDS). The flipside of this has been the need for the company to offer stronger assurances over security and exposure before obtaining credit.

Many companies now hold surplus cash to help ease funding risks. It was noted that during the last recession, those holding excess cash fared better emerging from the crisis. However holding a large amount of cash gives rise to the problem of where to put it at a time when counterparty exposure has come to the fore.

Treasurers’ approach to financial risk management, particularly foreign exchange (FX) risk and commodity risk, have had to evolve to cope with the extreme market conditions and the fluctuations in their underlying business exposures. Managing foreign-exchange exposure has become more challenging, due to the volatility not just of exotic currencies, but also of the previously more stable US dollar and euro. This increased volatility is forcing many treasuries to explore more active and/or longer term hedging strategies as the previous standardised approaches are increasingly seen as not being up to dealing with the volatile markets during the crisis.

Treasurers will increasingly be adding value by combining their in-depth knowledge of market forces with an active partnership with the business, thereby determining the optimal hedging strategy and timing.

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**Measuring bank performance**

The crisis has stressed one thing perhaps more than any other: the importance of good banking relationships. Nearly 80% of participants in our survey now believe that bank relationship management is a high priority compared to only 56% prior to the crisis. Companies are now looking for increased transparency from their banks about their global relationships and the profit they generate. Many may adopt the approach of ‘trust but verify’, calculating their own understanding of the split of their banking business to ensure the ‘core’ bank relationships remain satisfied. This adds weight to the balanced scorecards (quantitative and qualitative) that allow companies to gauge how much profit is being generated for each bank through the overall relationship.

Despite the widespread use of enterprise resource planning and electronic banking platforms designed to capture detailed information in a structured manner, many treasurers struggle to demonstrate how they add value. Pressures brought about by the credit crunch and the increasing complexity of business may actually have helped treasurers to address the historical challenge of demonstrating value to the business. Nearly 70% of participants in our survey believe that the crisis has highlighted to the business the value created by treasury, while 80% have highlighted to the business the challenge of demonstrating value to treasurers to address the historical lack of business may actually have helped treasurers to address the historical lack of value demonstration.

Process efficiency continues to be a key priority for treasurers seeking to add value, many of whom do not feel they are obtaining the full anticipated benefit of their investments in technology. Frequently facing a portfolio of systems with multiple manual interfaces, treasurers still very often rely on spreadsheets for their final analyses and most are dissatisfied with their cash-flow forecasting.

Centralising operations is a high priority, along with automating treasury processes. In terms of performance measurement, working capital, cash management and payments-related activities are top of the list. Technology and processes in the form of in-house banks, payment factories and SWIFT connectivity are seen as promising new areas, which should allow increased control, visibility and forecasting of cash. After achieving process efficiency, the next step on the value chain for treasurers is to actively manage treasury risk. The impact of hedging activities on the profit and loss statement, average rates achieved, hedging results versus peers and achieved hedging levels versus established benchmarks can all be quantified, allowing the treasurer to demonstrate added value. Other less popular metrics include real-time mark-to-market valuation of financial instruments, cost/benefit analysis and the efficiency of hedging in reducing earnings volatility. Balance-sheet and cash-flow volatility, along with other criteria like risk-adjusted return analysis, are less important performance measurement metrics.

At the top of treasurers’ value spectrum comes the provision of strategic support. Identifying and measuring the value contribution is much more challenging in this area, but treasurers are increasingly involved with funding integration and standardisation, geographical expansion and capital structuring. In general, treasurers want to be more proactive in their relationships with the organisation’s businesses and gain a better understanding of their needs. Banks will need to keep pace with these evolving objectives.

**Figure 23: Components of a full treasury service**

<table>
<thead>
<tr>
<th>Value add</th>
<th>Treasurer value attributes</th>
<th>Bank value attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process efficiency</td>
<td>High degrees of automation and system integration – real-time execution and reporting</td>
<td></td>
</tr>
<tr>
<td>Active management</td>
<td>Forecasting and risk management – strong working capital and cash management – integrated business support</td>
<td></td>
</tr>
<tr>
<td>Dynamic vision</td>
<td>Strong analytics and dynamic provision of information – seamless product integration – integrated business support</td>
<td></td>
</tr>
<tr>
<td>Strategic support</td>
<td>Holistic view – active planning for business support and innovation around planning, funding and business optimisation</td>
<td></td>
</tr>
<tr>
<td>Advisory partnership</td>
<td>Customised approach – deep business, regulatory and jurisdiction knowledge – seamless relationship integration</td>
<td></td>
</tr>
<tr>
<td>Operational excellence</td>
<td>Low cost, high quality and seamless system integration</td>
<td></td>
</tr>
</tbody>
</table>

Source: PwC

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3. Based on findings and trends identified in: European Treasury Survey – Measuring Value from Treasury, PricewaterhouseCoopers – 06.

4. ‘The world has changed – The Treasurers agenda’, PricewaterhouseCoopers, April 2008 and recent PricewaterhouseCoopers client work.
As treasurers seek to increase the ways in which they add value, they face a number of hurdles (see Figure 24). Their frequent dislocation from the business, combined with a lack of understanding on the part of the board and senior management, impacts investment levels. The need to implement new technology and meet the requirements of regulators, management and auditors, places pressure on resources, particularly people. Skill shortages in areas such as project management and communications skills are another regularly identified issue.

Banks are well placed to help treasurers address these skill gaps, and to help corporate customers better understand what treasury can achieve beyond its traditional remit. There is an opportunity to educate treasurers in generating and measuring value, and in presenting this to management and the wider business.

A high standard of management reporting and key performance indicators (KPIs) is important for resolving communication, expectation and performance gaps. Management reporting should be aligned with underlying drivers of value, but many treasurers are using KPIs that — while easy to measure — are not necessarily the most appropriate for the business. There is an opportunity for banks to help treasurers to develop systems that can quantify the impact of their activities and demonstrate the value contribution to internal stakeholders.

**Better match**

Banks appear to be confident that they are serving corporate treasurers in a client-centric way. Even so, the evidence suggests that there is an opportunity to strengthen customer support and improve banks’ alignment with their needs. At present, there is not always close alignment between the balanced scorecard a corporate treasurer might use and that of the head of treasury or cash management in a bank. Banks need to ensure that these scorecards are aligned (see Figure 25) and that they understand the issues on treasurers’ minds. Only then can the banks behave as the strategic partner they aspire to be, and take the right steps to help customers to succeed. Aligning itself to a treasurer’s scorecard also allows a bank’s own performance to be more easily measured against key customer value drivers, and consequently to strengthen the customer relationship.

For banks, aligning their product and service performance against a corporate treasurer’s scorecard would increase their focus on financial criteria such as:

- The return on monetary assets.
- Idle cash at operating companies as a percentage of sales.
- Movements in foreign currency net assets and earning.
- Hedge cover periods.

Once a bank better understands its clients’ needs, it might decide to set its own scorecard objectives differently. This would allow a bank to segment its clients in a more balanced way, optimising the value of its customer relationships. Banks typically segment their corporate customers by geography, turnover and industry, even though this approach is credit-based. It neither differentiates a bank in terms of the way it looks at its customer, nor does it allow optimal alignment of treasury and transaction banking products.

A more effective method of segmentation would be to focus on a corporate client’s capabilities and needs, using a three-dimensional model that assesses:

- The degree of financial sophistication (i.e. the ability to use advanced financial techniques like off-balance-sheet funding, or advanced cash forecasting).
- The operational sophistication of the corporate (e.g. nature of business, structure of treasury, deployment of technology).
- The corporate’s credit dependency (how reliant the customer is on the bank’s balance sheet for its working capital and funding needs). This approach can not only help banks to align themselves with customer needs, but can also help banks to better structure and manage the different elements of their own service model.

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**Figure 24: Barriers to driving treasury efficiency**

<table>
<thead>
<tr>
<th>Percentage of responses</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited resources (people)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requirements or regulatory constraints</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology / IT infrastructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decentralised nature of the underlying business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of understanding of what treasury really does outside of treasury</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient information on underlying / inherent financial risks / exposures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restrictive management mandate and / or support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited resources (budget)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-house skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor management reporting or poor KPIs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Out of the storm

Corporate treasurers have faced a whirlwind of challenges in the wake of the financial and economic crisis. Banks are well placed to help overcome these challenges. Just as treasurers are striving to deliver greater value to their own internal customers, banks need to align themselves more closely with corporate treasurer clients to deliver lasting value. As treasurers struggle to adapt to far-reaching changes in their operating environment, banks too, need to change their approach. Those banks able to develop close partnerships with treasury customers based on mutual understanding could create considerable long-term value for both parties.

Figure 25: Understanding and aligning bank services to the corporate treasurer scorecard

Performance dimensions

VALUE
- Management information
- Stakeholder management
- Tax and treasury strategy

ENABLERS
- People
- Technology

EFFICIENCY
- Value for money
- Standardisation
- Automation

FINANCE FUNCTION

CONTROL
- Transparency
- Risk management
- Governance

Treasury scorecard

Financials
- Sensitivity of P&L/balance sheet to rate movements
- Average FX rate vs budget/market
- Trading P&L (if permitted)
- Cost of debt
- Risk management impact on weighted average cost of capital/hedging costs
- ROMA (return on monetary assets)
- Idle cash at operating companies (OpCos) as % of sales
- Hedge cover period

Process
- Number of bank relationships
- Bank charges per transaction/flow
- Unit transaction processing cost (total)
- Cost of treasury systems
- Internal vs external transactions (netting)
- Number of settlement errors
- % of cash under Group Treasury control
- Compliance with policy/limits

Customers
- OpCo satisfaction (service level agreement rating survey)
- Number of visits to OpCos
- % of time spent on advisory services to OpCos
- Range of quality finance products on offer
- Average FX rate achieved vs budget
- Optimised dividend planning

People
- Attrition rate/retention rate
- 360-degree appraisal results
- Employee survey results (Treasury only)
- Training/development hours per full time employee
- Employee costs/unit measure
- % target skill set

Source: PwC
E-invoicing offers many potential benefits to users and the economy at large, but adoption in Europe has been generally slow owing to a variety of technical and behavioural obstacles. However, a growing range of initiatives are underway to break down those barriers and encourage the e-invoicing market to develop. Banks are uniquely placed to shape and profit from the development of e-invoicing, but they need to avoid being left behind by competitors and new entrants. Now is the time for the business bankers inside banks to act, to make the case and to achieve change.

Even among an informed banking audience, any mention of e-invoicing is likely to prompt some questions. What exactly does ‘e-invoicing’ actually mean? Can it be anything more than a niche service? Why should the wider banking industry care? To answer these questions, it is helpful to begin with a review of e-invoicing development in Europe to date.

As IT adoption has spread and internet usage has proliferated in recent years, European consumer and enterprise behaviour has changed rapidly. One key feature has been the ability of even small businesses to develop customer relationships over greater distances and across international borders. Another is that products and services are increasingly delivered in real time and with less reliance on manual processes. In this environment, it is not surprising that businesses are constantly seeking to improve their efficiency, and the European Association of Corporate Treasurers (EACT) has been stressing the potential benefits of e-invoicing for several years. In simple terms, e-invoicing represents the replacement of manual paper-based billing processes with electronic ones. At the same time, this digitisation is the perfect opportunity to further enhance the billing processes. Because invoices are a crucial link between the physical and financial aspects of business, and must meet both operational and legal requirements, e-invoicing adoption can also be an important step towards the development of entirely virtual supply chains.

In 2001 the European Commission issued a Directive in response to this demand. This aimed to kick-start the development of a European market for e-invoicing and took account of VAT requirements in particular. The driver for this effort was an expectation that wider e-invoicing adoption would generate a number of important benefits including:

- More integrated supply chains.
- More efficient use of working capital.
- Fewer failed transactions.
- More rapid trade flows.
- Improved customer care.
- Better risk management.
- More effective cross-selling.

Overall, it was hoped that the adoption of e-invoicing would achieve billions of euros in efficiency gains. The quantum of potential savings is a matter of debate, but the latest report from the Euro Banking Association (EBA) and Innopay reports estimates ranging from €135 billion (from a University of Hanover study) to €243 billion (from the EACT) per annum across the EU.

Whatever the expected benefits, the 2001 Directive proved to be something of a slow start. European e-invoicing adoption levels remained low for a long time, this digitisation is the perfect opportunity to further enhance the billing processes. Because invoices are a crucial link between the physical and financial aspects of business, and must meet both operational and legal requirements, e-invoicing adoption can also be an important step towards the development of entirely virtual supply chains.

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Whatever the expected benefits, the 2001 Directive proved to be something of a slow start. European e-invoicing adoption levels remained low for a long
time; according to the EBA’s estimates, only 2.4% of European invoices were genuinely dematerialised in 2007. Forecasts for 2010 amount to 7%, which is more than double compared to 2007. What’s more, these figures hide some wide variations. While the Nordic states and Switzerland are believed to be among the leading adopters of e-invoicing, in the more populous states e-invoicing platforms are more fragmented and adoption is consequently lower (see Figure 26).

There also tends to be greater adoption among large companies than among small and medium-sized enterprises (SMEs), as demonstrated by data from Switzerland analysed by the EBA and Innopay (see Figure 27).

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**Figure 26: European e-invoicing penetration rates**

![Map showing European e-invoicing penetration rates]

*Source: 'E-invoicing 2010', Euro Banking Association (EBA) and Innopay*

**Figure 27: Invoicing between economic segments, based on Swiss figures**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Large companies (&gt;250 employees)</td>
<td>12%</td>
<td>43%</td>
</tr>
<tr>
<td>Medium sized companies (10-249 employees)</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Small companies (1-9 employees)</td>
<td>8%</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Source: 'E-invoicing 2010', Euro Banking Association (EBA) and Innopay*
Obstacles
So what have been the barriers to e-invoicing adoption so far? If the service genuinely offers so many potential benefits, why has it not been a greater success? The answers to these questions can be grouped under the headings of technical obstacles and behavioural resistance. Together, they have stood in the way of a critical mass of initial e-invoicing take-up.

Technical obstacles to e-invoicing adoption in Europe are due in large part to differing practices among EU member states. The most notable involve lack of cross-border agreement on VAT rules, uncertainty about the legal validity of electronic documents, differing standards for the recognition of electronic signatures, the variety of Electronic Data Interchange (EDI) standards in use, and the lack of standardised invoice formats.

Archiving is another tricky area; some states require hard copies of invoices to be maintained for years, even if the original was electronic. Until recently, many European SMEs were also relatively poorly served by IT infrastructure and did not have access to broadband. In short, many potential users are unsure about the validity, security or practicality of e-invoicing, and country-specific practices are restricting the development of cross-border activity.

There has also been behavioural resistance to e-invoicing. This is less about legal or technological barriers and more about sentiment. Wider adoption of e-invoicing among SMEs will require financial investment, management impetus and open thinking by suppliers and customers alike. This level of confidence naturally takes time to build, especially when potential users are a large and fragmented group, technology is unfamiliar and there is a proliferation of service platforms.

Large private sector companies are currently making good use of B2C e-invoicing, especially for bill presentation. However, the companies best placed to build confidence in e-invoicing – the banks themselves – have often hesitated to make what look like risky, unilateral investments, given the need for multilateral action to break down barriers to e-invoicing adoption.

The link between risk and reward has also sometimes been less than clear. However, this has now changed. Put into the context of a transaction banking business which is able to link cash management, technology and infrastructure more easily and effectively than before, a clear business case begins to emerge.

Overcoming barriers
Considering the factors that have held back e-invoicing to date, is there any real prospect of the concept taking off in the near future? In fact, there are several initiatives underway at European level to break down technical obstacles and drive adoption forward.

- The most recent and significant breakthrough is the adoption of the new European Commission Invoicing Directive. Leaving it up to the business to determine how to guarantee authenticity of origin and integrity of content basically means the technology-neutrality of the new VAT rules for e-Invoicing and e-Archiving. The foundation of this new Directive is a PwC Study ‘A Study on the Invoicing Directive (2001/115/EC) now incorporated into the VAT Directive (2006/112/EC)’. The introduction of equal treatment of paper and electronic invoices is seen as a key step in the removal of the legal barriers to the adoption for e-invoicing in Europe.

- The principle of equal treatment is also supported by the European Commission Expert Group on e-Invoicing, where it is one of the corner stones of the European Electronic Invoicing Framework (EEIF). The promotion of a common invoice standard is another important element to make e-invoicing a success in Europe.

- The European Committee for Standardisation (CEN) is responsible for the development of technical standards which promote free trade and interoperability, and has set up a series of workshops to identify the biggest barriers to e-invoicing adoption, such as the proliferation of standards in European member states.

- As well as acting as a policy maker, the European Commission has taken a direct role in pushing forward e-invoicing adoption, via its own pilot project for e-invoicing and e-procurement. It is also overseeing a large-scale pilot project which interconnects several member states’ e-procurement systems. These pilots are intended not only to broaden e-invoicing adoption, but also to raise awareness among potential users.

There are also other changes afoot in the European payments environment which should help to overcome behavioural resistance by stimulating demand for e-invoicing.

- Most notable is the implementation of the Single Euro Payments Area (SEPA) and the prospect of a common set of payment instruments across the Eurozone. Facilitating e-invoicing was one of the key rationales for SEPA, and a much broader adoption of the virtual supply chain would be an encouraging sign that national payments infrastructures were finally being displaced by pan-European ones.
• Initiatives from various associations of European banks aimed at improving the speed and ease of use of electronic payments – such as Faster Payments in the UK – should also stimulate long-term demand for e-invoicing.

• Further stimulus is likely to come from simple environmental factors, such as the ever-increasing spread of broadband and adoption of online banking among European consumers and businesses.

Opportunity knocks
Whatever the public sector impetus, broadening e-invoicing adoption in Europe will require serious effort from the private sector. Banks have a vital role to play, and there are unprecedented opportunities to seize. Of all private sector institutions, they are probably the best placed to shape the development of e-invoicing, and consequently to profit from it.

Banks’ larger and blue chip corporate customers present an immediate opportunity. Many already use e-invoicing, either ‘biller direct’ as practised by many public utility companies, or ‘buyer direct’ as when retail groups require suppliers to deliver e-invoices on their own systems. Large companies with retail customer bases that have not yet adopted e-invoicing might welcome a single bank service that could integrate e-invoicing with cash management and treasury services.

The relatively low adoption of e-invoicing by SMEs represents a larger but less easily accessible opportunity. Banks naturally have close financial connections with large numbers of businesses and consumers, especially in concentrated banking markets such as the UK or the Netherlands. Consequently, they are well placed to reach out to potential new adopters. In the SME market banks could act as invoicing consolidators, connecting and distributing e-invoices on behalf of a range of billers and buyers. The banks would no doubt face competition from IT providers and others, but their ability to integrate e-invoicing with payments and cash management should give them a golden opportunity to build large proprietary platforms.

Crucial to the success of any such scheme is interoperability. A degree of interoperability has already been achieved by various banks and bank collective schemes, but this varies between countries and is often limited to providing interfaces between relatively small numbers of platforms. Nonetheless, banks’ customer relationships, capital resources and experience of payment networks should leave them well placed to achieve true interoperability. This could take place via proprietary systems that connect closed-end e-invoicing networks, or by communicating with other consolidating hubs in ‘clearing house’ or ‘roaming’ mechanisms. The first e-invoicing interoperability platforms are born where existing inter-banking networks open up to e-invoicing service providers. An important element here will be the long-awaited ISO 20022 invoice standard, the so-called ‘Financial Invoice’.

Now is the time to act
E-invoicing in Europe has developed slowly so far, and barriers to wider adoption remain real. Nonetheless, there is growing public sector impetus behind e-invoicing and clear scope for the private sector – and banks in particular – to benefit from its future development. Conversely, banks distracted by higher priority or ‘mandatory’ tasks run the risk of missing out on future revenue streams and losing out to close competitors, to new entrants such as payment institutions or to different sectors.

Since many banks are likely to be compelled to invest in meeting new technical standards, they should at least consider how to turn the investment to their advantage. Many may wish to consider what they can do to capture a scale position in the nascent e-invoicing market, instead of risk being left behind by early adopters, or leapfrogged by other service providers such as retail payment networks or telecommunications companies.

Forward-thinking banks are reviewing their strategies for e-invoicing. Even if the choice is to wait it out for now, this should be a conscious decision reached after full consideration of the potential risks and benefits. As in other areas of transaction banking, a coherent strategy will require clear vision, financial investment and support at the highest level. The future demands informed consideration and a clear path.
How retailers can get paid faster

Now is the time for retailers to define a sustainable payment strategy that guarantees cost containment while coping with new regulations, market trends and technical evolutions.

The advent of the Single Euro Payments Area (SEPA) is set to transform payment services for retailers. The domestic debit card used to be king in the European retail industry, but SEPA is bringing about a natural push towards international schemes. Retail payment systems are undergoing a quiet revolution with new market players, new payment means and new technologies. This tends to erode the margins of the retail industry, as they increase the total cost of getting paid without resulting in additional sales. Leading retail organisations are now adopting new payment strategies that allow them to deal effectively with the new challenges brought forward by these changes.

Deciding what payment options to make available to customers is not an easy task for retail organisations. Yet very few have a solid methodology that allows them to deal effectively with this question. Organisations that want to benefit from payment market developments to support their growth while containing their costs should think this through. There are three main considerations:

• Cost of payment instruments.
• Customer preferences.
• Payment market evolutions.

Leading retail organisations are striving to find the balance between these three dimensions when deciding what payment options to offer.
**Cost benefit**

A fully loaded cost per transaction will help to determine the most cost-effective options and how this is likely to evolve in the near future. Such analysis should take into account the direct costs associated with the acceptance of a payment instrument as well as the indirect costs. Direct cost elements include:

- Cost of services provided by third parties (e.g. transport costs, insurance, subscriptions and telecommunication costs).
- Amortisation of investments made by the retailer in required payment infrastructure (e.g. payment terminals, integration between terminals and cash registers, etc).

To influence these costs, it is important to break them down (e.g. which part of the subscription fees goes to which stakeholders, how do the transfers such as interchange fees work, etc.) Adding further indirect cost elements will allow for more informed decisions about payment transaction-related costs:

- Impact on the activities in the stores (e.g. delay at the cash register).
- Credit risk incurred by the retailer (is the payment guaranteed at the time the customer leaves the store with the goods)?
- Impact on the cash flow of the retailer (e.g. delay between transaction and availability of money on the bank account of the retailer).

**Customer preference**

The average number of transactions with a particular instrument per month is a good indicator of customer preference. Part of the transactions in the stores are paid with cash. On the acceptance of cash, the retailer has limited choices, as this instrument has the status of legal tender. The retailer can only work on ‘cash conversion’. Card transactions predominate in most European retail outlets. The domestic debit card is the payment instrument of choice in most countries. Much of the effort in a payment optimisation project should therefore focus on the debit card family of payment instruments and the war on cash.

The desire to offer a wide choice of payment instruments to the customer is strongly related to the concept, market positioning and branding of the retailer. It is important to understand what type of customers the retailer wants to attract in terms of their digital skills, age, education, lifestyle, etc.

**Evolution in supply**

The supply side of the payment services market has been relatively stable over the last two decades. However, new developments are underway. These include:

- New technologies such as contactless chip cards are emerging.
- Better-performing mobile networks are becoming available and forming the basis for new payment instructions.

These developments make it more difficult for the retailer and the demand side of the payment services market in general to determine their strategy. To do this properly, the retailer should at least forecast:

- Which new payment instruments will emerge in the market.
- How fast they will mature.
- How widely they will be available to the retailer’s customers.
- Whether their customers will aspire to use them.

The retailer is not necessarily a passive player in the market and can play its part in promoting the best solution.
**The right choice**

Combining analysis of supply developments and the retailer’s strategic objectives can help to form the basis of an appropriate payment strategy and target operating model, drawing in particular on estimated numbers of transactions per payment instrument in the coming years and their cost impact (see Figure 28).

Haven chosen the payment options, other elements of the payment model can be determined. These elements include:

- Make or buy decisions on the operational services.
- Buy or rent decisions on the infrastructure components.
- Sourcing decisions, including the choices on service bundling and service integration.
- Required service levels.
- The governance model.
- Technological choices (especially in terms of standards).

During the development of the target operating model, leading retail organisations have been assessing the options for each element of the processing chain (from payment instruments to commercial acquiring activities and everything in between) and can then select the best solution (see Figure 29).

We used approximated direct cost information for a large retail organisation in the Belgium market. We assumed that the local domestic debit card Bancontact (BC)/Mistercash (MC) would disappear by 2015, in line with the worst case scenario considered by the retail federation. However, the Belgium banking community is still considering making BC/MC SEPA compliant. We expect more clarity on the future of BC/MC shortly.

---

**Figure 28: Matching cost beneficial payment instruments with the preference of the customers**

![Chart showing the matching of payment instruments with customer preferences](chart)

Number of transactions per month \( m \)

Average cost per transaction

<table>
<thead>
<tr>
<th>Payment Instruments</th>
<th>2009</th>
<th>2015 (Illustrative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visa, Electron, V Pay, Maestro</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Euro</td>
<td>3.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Payfair</td>
<td>3.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Proton</td>
<td>2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>PingPong</td>
<td>2.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Visa, Mastercard</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>American Express</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Bancontact Mister Cash</td>
<td>0.5</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: PwC

**Figure 29: The target operating model**

![Diagram showing the target operating model](diagram)

- **Payment instruments**: Which instruments?
- **Terminals**: Rent or buy? Standards? (network and application) Linked to your WAN or not?
- **Networks**: Separated from acquiring?
- **Acceptors**: One in total or per instrument?
- **Acquirers**: Part of wider cash management?
- **Commercial acquirers**: How to avoid vendor lock-in? Best of breed or one stop shopping? Governance model?

Source: PwC
Contacts

To discuss any of the issues raised in more detail, please speak to your usual PwC contact or one of the people listed below:

Transaction Banking Practice Lead (Europe)
Julian Wakeham
+44 20 7804 5717
julian.m.wakeham@uk.pwc.com

Transaction Banking Practice Lead (US)
Patrick Giacomini
+1 646 471 4399
patrick.a.giacomini@us.pwc.com

Transaction Banking Practice Lead (Asia)
Shane Knowler
+852 2289 2703
shane.knowler@hk.pwc.com