

World Payments Report 2013

Table of Contents

3	Preface
Section 1: World Non-Cash Markets and Trends	
5	Key Findings
6	Growth of Non-Cash Payments Continues Unabated
6	Developing Markets Growth Continues to Outpace Developed Markets
8	China, Russia, Brazil, and South Korea Lead Global Growth Rates
8	Consumers Continue to Embrace Non-Cash Instruments, New Thresholds Achieved
10	Cards Take Market Share from All Instruments across All Regions
10	Checks Continue Downward Trend But Still Have Life Left in Them
10	Use of Other Non-Cash Payment Instruments and Cash On the Rise
10	Non-Cash Growth Trends Expected to Remain Robust in 2012 and Beyond
13	Emerging Middle East and Africa Market Would Benefit from More Standardization and Transparency
14	The Rise of E- and M-Payments
14	Convenience and Competitive Pricing from E-Merchants Spur E- and M-Payments Growth
16	Volumes, Especially of M-Payments, May Not Be As High As Industry Analysts Predict
16	Prepaid Cards Growing at Significantly Higher Rates than More Established Instruments
18	Less Regulated Areas Are Attracting Investments, But Are Creating Opacity in the Global Payments Market
19	Conclusion
Section 2: Managing Increasing Overlaps between KRILs Requires a Holistic Approach	
21	Key Findings
22	As Implementation of KRILs Progresses, New Initiatives Emerge
22	Financial Institutions Are Facing a Challenging Regulatory Environment in All Regions
24	Standardization, Transparency, and Innovation Are Key Drivers of New KRILs
26	Key Regulatory and Industry Initiatives (KRILs) in Payments, 2013
32	In the Interconnected World of Payments, it Is Best to Consider KRILs in a Holistic Way
32	Holistic Analysis of KRILs Using the 3C Model
33	PSPs Need to Be Engaged at an Early Stage in the Goal Setting and Design of Regulatory Initiatives
34	SEPA Update
34	SEPA Deadline Unlikely to Be Met in Full
34	Successful Adoption Depends on Corporate Buy-In and a Clear Picture of Country-Specific Information
36	SEPA Beyond 2014
Section 3: Payments Acquisition Has Emerged As a Key Area for Innovation	
39	Key Findings
40	Innovation Remains Critical for Success in Payments
40	Payments Acquisition Currently Represents the Greatest Potential for Payments Innovation
42	Innovation-Led Evolution of Acquisition Is More Evident In the C2B Space
42	B2B Acquisition Is Also Witnessing Innovation, though at a Slower Pace
43	The Emergence of Innovative Solutions Is Helping to Fragment the Payments Acquisition Value Chain
44	Fragmentation Has Generated Four 'Innovation Value Hotspots'
50	The Way Forward: Lessons for All Stakeholders
50	Analysis of Value Hotspots Reveals Key Innovation Design Principles for Acquisition Players
50	Banks, Corporates, and Consumers Have Key Decisions to Make
53	Closing Thoughts
55	Methodology
56	Glossary

Preface

Now in its ninth year, *World Payments Report* (WPR) from Capgemini and The Royal Bank of Scotland (RBS) is an anticipated and valuable resource for payments industry professionals to track the state and evolution of the global non-cash payments market.

Our estimates for 2012 indicate that non-cash transactions will maintain a steady upwards course, though down slightly on 2011 rates, with an increase of 8.5% to reach 333 billion transactions. These estimates are based on data and events recorded in 2011, a year in which non-cash payments volumes rose 8.8% globally despite a patchy recovery from the global economic downturn. During 2011 developing markets recorded healthy volume growth, the U.S. staged, and is continuing to stage, a recovery, but some countries within the Eurozone experienced falls in transactions.

In addition to analysis of global volume statistics, WPR presents deep examination of specific segments such as e- and m-payments. This analysis has uncovered a hidden, or unreported, non-cash payments market of significant size. There is a risk that the industry may over- or under-estimate transaction volumes, leading to payment services providers (PSPs) potentially creating strategies and investing in areas based on incomplete information. Also, this could make it difficult to gauge some areas including risk management and consumer protection.

The report continues to explore the impact of regulatory and industry initiatives on the global payments market. Since this analysis was introduced in WPR 2011, several initiatives have been delivered and others have emerged. The significant challenges posed by migrating to SEPA instruments mean the deadline of February 1, 2014 is unlikely to be fully met, although regulators insist there will be no extension to the deadline. Our analysis has found that successful adoption of SEPA will depend on corporate buy-in and better country-specific information and support services. This must occur if the more level playing field and payments innovation opportunities SEPA promises are to be fully realized.

In addition to our focus on growth and regulation, WPR 2013 examines a key area of innovation—payments acquisition. Consumer-to-business (C2B) and business-to-business (B2B) acquisition is evolving; C2B towards ‘any form’, ‘anywhere’, and ‘any time’ payments and B2B from bi-lateral to multi-lateral models. Both new and legacy PSPs recognize that not all players need to provide end-to-end services. Rather, they are focusing on four ‘Innovation Value Hotspots’ that offer the opportunity to select areas of focus.

Our research, which included a wide range of face-to-face interviews with payments executives globally, shows that payments innovation is fostered by cooperation, be it with clients, other banks, or newcomers to the industry. PSPs must collaborate with all industry stakeholders in order to accelerate innovation and deliver services that customers want.

We are confident this year’s report will provide readers with useful insights, and help them to plan their own developments going forward.



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1 World Non-Cash Markets and Trends

KEY FINDINGS

- **Volume growth in global non-cash payments transactions accelerated during 2011, with developing markets again fueling the rise.** Volumes grew 8.8% to reach 307 billion transactions in 2011. The Central Europe, Middle East, Africa (CEMEA) and Emerging Asia regions each grew by more than 20%, while Latin America also recorded above average growth of 14.4%. Mature markets of North America and Europe recorded mid-single digit growth rates but remain the largest non-cash payments markets, together accounting for about two-thirds of global non-cash transaction volumes.
- **It is expected that global non-cash payments volumes will have grown by 8.5% in 2012 to reach 333 billion transactions.** Growth is likely to have been driven by further economic recovery in North America, as well as the continued rapid rise of developing markets.
- **The use of cards (debit and credit) further accelerated during 2011, with debit card volumes rising 15.8% to a total of 124 billion transactions, and credit cards climbing 12.3% to a total of 57 billion.** These two payments instruments lead the non-cash arena, with debit cards the most popular non-cash payments instrument globally. The rate of growth of credit card transactions bounced back in 2011, helped by liquidity returning to the U.S. markets and overall improving sentiment. The growing popularity of e-commerce also helped push up figures.
- **Three forces are helping drive growth in mobile and electronic payments transactions—increased penetration of smart phones and internet usage, advances in technology, and innovative products and services.** Industry expectations are that m-payment transactions will grow 58.5% annually to 28.9 billion transactions in 2014; and e-payments, as demonstrated by trends in e-commerce, are expected to grow by 18.1% yearly in the same period to a total of 34.8 billion transactions. This growth is making the area an attractive one for banks and non-banks. However, based on our bottom-up analysis of leading e- and m-players, we believe that the industry may be somewhat over-optimistic about global m-payments volumes.
- **A hidden, or at least unreported, non-cash payments market is emerging as new regions become more active and non-banks take an increasing share of the market via instruments such as e- and m-payments, prepaid cards, and virtual currency.** Improved statistical data collection would help firms make more informed investment decisions in addition to helping combat future market risk.

Growth of Non-Cash Payments Continues Unabated

DEVELOPING MARKETS GROWTH CONTINUES TO OUTPACE DEVELOPED MARKETS

Global non-cash payments transactions grew 8.8% in 2011 to reach 307 billion transactions (see Figure 1.1); which is very close to the prediction of 306 billion made in WPR 2012.¹ Mature markets accounted for 77% of the total volumes but as we reported last year, growth rates are higher in the developing markets—18.7% versus 6.2% in the mature markets in 2011.

Much of the growth in the developing markets was driven by Emerging Asia,² and Central Europe, Middle East, Africa (CEMEA).³ These regions have a low share of the global total of non-cash transactions, but investments in payments services and infrastructure are helping them to grow significantly off a low base. Emerging Asia, with a 6.5% share of the global market, grew 22.1% during 2011 while CEMEA, with a slightly higher share of 6.9%, grew 21.9%. Within those regions China and Ukraine grew by more than 30% each in 2011, with cards the fastest growing non-cash instrument, as has been the case in most markets. In Latin America, which accounts for 9.5% of the global total, growth rates reached 14.4%. The strong performer in this region was Brazil, which contributed more than 70% to the total volume of non-cash transactions in the region during 2011, mainly due to increased use of payments cards. The use of debit cards in Brazil during 2011 rose by 23.1%, and the use of credit cards was up by 16.3% in the same period. Also, a large number of Brazilians, mostly those from lower income bands, have entered the banking system and are using various payment services on offer.

Non-cash payments growth in the Middle East and Africa (MEA) has been fueled by a mix of public and private initiatives, including investments in infrastructure and innovative solutions based on mobile technologies. The Central Bank of United Arab Emirates (UAE) is introducing a direct debit system from mid-August, 2013, which should give an

impetus to non-cash payments in the market.⁴ In 2011, the growth recorded in Saudi Arabia was 18%, boosted mainly by a sharp increase in the use of cards and credit transfers. At the other end of the region, in South Africa, growth was consistent with the global average, led by a strong rise in the use of cards and direct debits. Although there is still a lack of reliable data for several Middle Eastern and African markets, we have validated the non-cash payments growth for these markets with regional experts. As the region continues to grow, this lack of data must be addressed in order for the industry to better assess true market conditions and potential. For more details, please refer to our focus on Middle East and Africa on page 13.

Of the more developed economies, mature Asia-Pacific recorded the strongest growth; from a market share of 9.8%, transaction volumes grew by 11%. Within the region, South Korea stood out with growth of 12.2%. Again, cards fueled the increase here, aided by the tax breaks for their use introduced by the government in early 2000. Strong credit card growth helped Japan to an 11.6% increase in non-cash transactions. This was driven to a large degree by the growing popularity of e-wallets, which are based on credit cards, in the country.

WPR 2013 reveals a divergence in recovery in the other mature markets; North America's growth rate was among the highest in the mature markets, while Europe's was the lowest.⁵ However, it must be noted that despite these differences, the mature markets together, with an increase in transactions of 13 billion, still accounted for about half of the global net increase of 25 billion; their contribution remains significant. Developing markets may be growing at a faster rate, but still have a relatively smaller base, and hence it is unlikely that they will reach the volumes seen in mature markets anytime soon. Based on a hypothetical and perpetual 20% CAGR for developing markets and 5% for developed markets, it would take at least ten years for volumes in the developing markets to overtake those of the developed markets.

¹ *World Payments Report 2012*, Capgemini and RBS, 2012

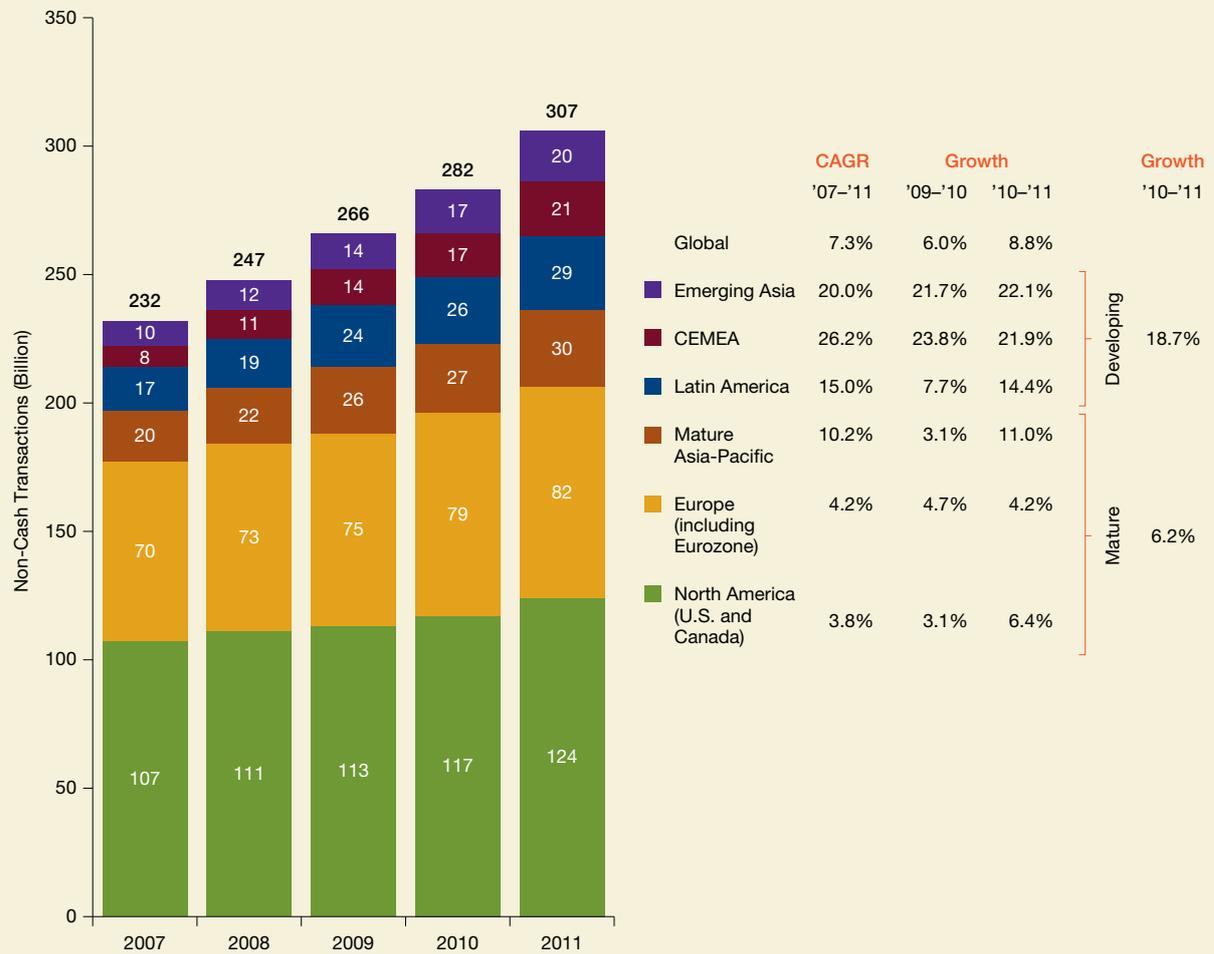
² As explained in *World Payments Report 2012*, each of the BRIC markets is at a very different stage of development with regards to non-cash payments, hence in *World Payments Report 2013*, we no longer refer to the BRIC bloc. Instead, we include Brazil in Latin America, India and China in Emerging Asia (which replaces the Rest of Asia bloc that we defined until WPR 2012), and Russia in CEMEA. Emerging Asia includes India, China, Hong Kong, and other Asian countries.

³ CEMEA includes Russia, Poland, Ukraine, Turkey, South Africa, Saudi Arabia, other Central European and Middle Eastern markets; Mature Asia-Pacific includes Australia, Japan, Singapore, and South Korea.

⁴ 'UAE Central Bank Postpones Direct Debit System', dubaichronicle.com, May 28, 2013

⁵ North America comprises the U.S. and Canada. Europe comprises the Eurozone, Denmark, Sweden, and the U.K. The Eurozone countries are: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Slovenia, and Spain.

Figure 1.1 Number of Worldwide Non-Cash Transactions by Region (Billion), 2007–11



Note: CEMEA (Central Europe, Middle East, Africa) now includes Russia and Poland; Mature Asia-Pacific includes Japan, Australia, South Korea, and Singapore; Latin America now includes Brazil as well as Mexico and other Latin American markets; Emerging Asia now includes India and China as well as Hong Kong and other Asian countries; Chart numbers and quoted percentages may not add up due to rounding; Some numbers may differ from data published in WPR 2012 due to previous year data updated at source; BRIC (Brazil, Russia, India, China) is no longer considered as a separate group in WPR 2013
Source: Capgemini Analysis, 2013; ECB Statistical Data Warehouse, 2011 figures released September 2012; Bank for International Settlements Red Book, 2011 figures released January 2013, Country's Central Bank Annual Reports, 2011

Figures for 2011 appear to confirm that the North American market, which has a global share of 40.4% of transactions, is emerging from the financial crisis. The number of non-cash transactions in the U.S. increased by 6.6% (to 114.2 billion) and by 4.3% (to 9.8 billion) in Canada.

The growth picture in Europe (which in 2011 had a 26.8% share of total global volumes) was much more varied. Growth occurred in non-Euro countries such as Poland, where volumes rose by 14.6%, the U.K., which recorded a rise of 7.6%, and Denmark, where volumes rose by 7.6%. Among the Eurozone countries, Finland grew by 10%. However Spain and Ireland recorded falls of 1% and 0.8% respectively. Both countries were hit hard and early by the economic downturn and experienced slowing growth of overall non-cash transactions, which was especially pronounced in direct debit and credit transfers. In total Europe grew by 4.2%, its performance buoyed by the faster growing markets such as Poland and the U.K.

CHINA, RUSSIA, BRAZIL, AND SOUTH KOREA LEAD GLOBAL GROWTH RATES

The economic growth that has been focused in rapidly emerging countries during the past few years is reflected in growth figures for non-cash transactions. Of these countries, China, Russia, Brazil, and South Korea were the stronger performers in non-cash transactions growth during 2011. Government support in the form of improved payments systems infrastructure has helped China record an impressive 32.7% jump in the number of non-cash transactions, reaching a total of 10 billion.⁶ Next was Russia which, aided by deregulation, recorded an 18.1% increase to 4 billion transactions. Russia has huge growth potential; there is a large unbanked population, a limited card payments infrastructure, and low card penetration rates, particularly outside the main cities such as Moscow and Saint Petersburg. Brazil was next in the growth stakes, where volumes climbed 12.6% to 22 billion transactions, driven primarily by cards and mobile payment innovation. This helped Brazil to maintain third place behind the U.S. and the Eurozone in terms of numbers of non-cash transactions during 2011. Brazil's growth also strengthened its position as the individual country with the second highest number of non-cash payments. The next fastest growth came from South Korea, which witnessed a 12.2% increase in the number of non-cash transactions, once again driven by growing card use.

CONSUMERS CONTINUE TO EMBRACE NON-CASH INSTRUMENTS, NEW THRESHOLDS ACHIEVED

The success of non-cash instruments depends to a large extent on consumer acceptance; figures for 2011 suggest that individuals in all but a couple of countries continue to increase their use of non-cash transactions.

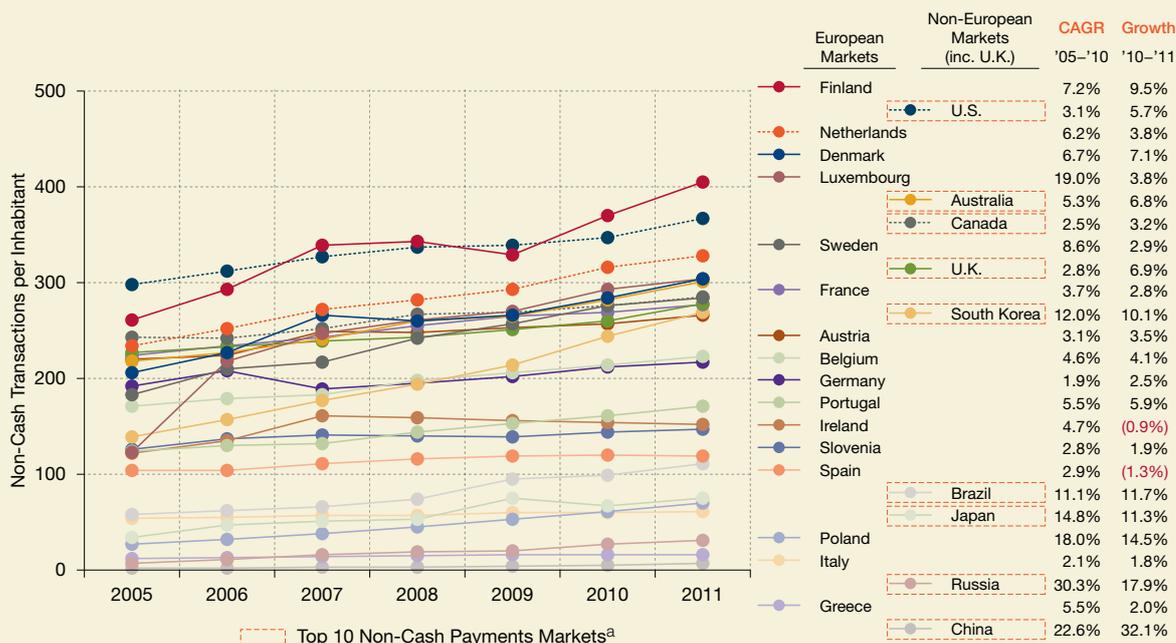
Finland recorded the highest number of non-cash transactions per individual at 405 during 2011, followed by the U.S. on 367. The case of Finland is the first time data shows a market exceeding 400 non-cash transactions per inhabitant, and marks an important threshold. Finland demonstrated that regardless of being a part of the Eurozone and facing challenges similar to the rest of the region, it is still possible to grow cashless payment usage. Finland's highly developed electronic payment infrastructure has encouraged engagement in e-commerce and e-invoicing schemes. A similarly strong infrastructure is present in Portugal, which recorded a 5.9% increase in non-cash transactions per inhabitant, to a total of 171, despite a decline in GDP. The number of non-cash transactions per individual declined in Spain by 1.3% and in Ireland by 0.9% (see Figure 1.2).

Beyond Europe, a similar picture emerges; leading developed economies tend to have higher rates of non-cash use among citizens. Of the top ten non-cash markets, the stronger economies have the characteristics of the first grouping above, with Russia just behind, together with some of the emerging markets. Brazil, which has been exhibiting consistently strong growth for more than a decade, is likely to join the first group in three to four years (see Figure 1.3).

Observing the levels of use of non-cash instruments per inhabitant is a good way of measuring the maturity of a market with regards to payments. With increasing maturity, payments markets become more resistant to economic downturns.

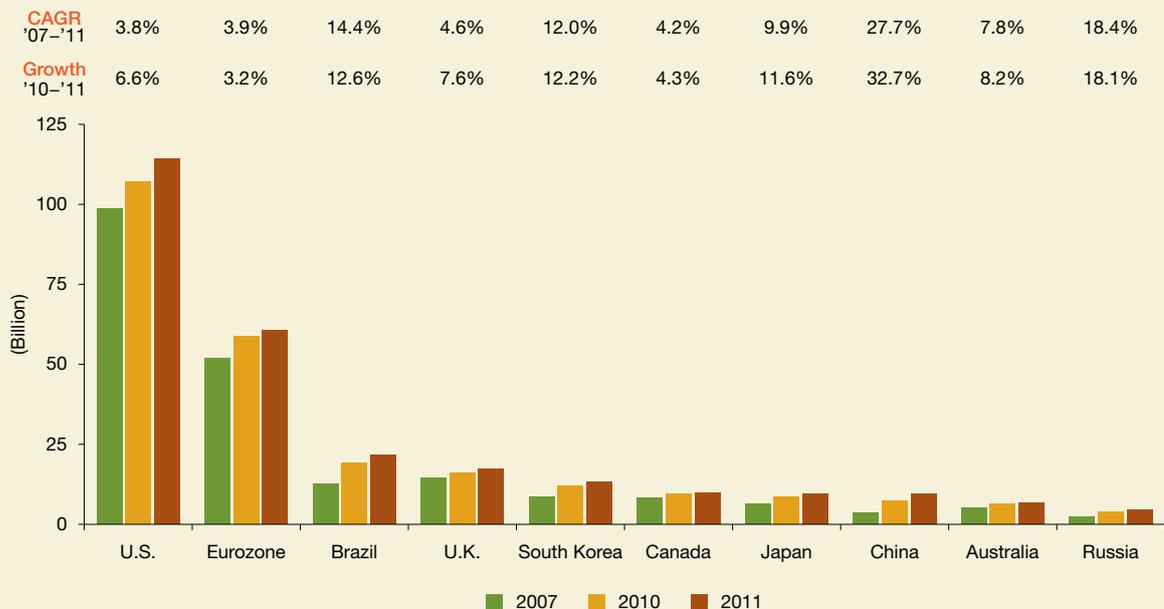
⁶ This number excludes ATM transactions.

Figure 1.2 Number of Non-Cash Transactions per Inhabitant in the Top 10 Non-Cash Payments Markets, 2005–2011



Note: Netherlands checks data not available from 2003 to 2011; Chart numbers and quoted percentages may not add up due to rounding; Some numbers may differ from data published in WPR 2012 due to previous year data updated at source
 a. The Eurozone has not been highlighted as a leading key market as most of its individual members have been displayed on the chart
 Source: Capgemini Analysis, 2013; ECB Statistical Data Warehouse, 2011 figures released September 2012; Bank for International Settlements Red Book, 2011 figures released January 2013, Country's Central Bank Annual Reports, 2011

Figure 1.3 Number of Non-Cash Transactions in Top 10 Non-Cash Markets (Billion), 2007, 2010-2011



Note: Chart numbers and quoted percentages may not add up due to rounding; Some numbers may differ from data published in WPR 2012 due to previous year data updated at source
 Source: Capgemini Analysis, 2013; ECB Statistical Data Warehouse, 2011 figures released September 2012; Bank for International Settlements Red Book, 2011 figures released January 2013; Country's Central Bank Annual Reports, 2011

CARDS TAKE MARKET SHARE FROM ALL INSTRUMENTS ACROSS ALL REGIONS

During 2011, cards continued to take market share from every other non-cash instrument, in every region studied. Credit card transaction volumes grew by 12.3% globally, while debit card volumes increased by 15.8%. North America is the most significant cards market, with 65% of non-cash transactions made via a payment card. Checks remain relatively popular in the region, at 18% (although in decline), while direct debits totaled 10% and credit transfers 7%. In Europe, cards accounted for 41% of non-cash transactions compared with direct debits at 26%, credit transfers at 27%, and checks at 5%. The amount of check use within Europe, however, varies significantly by country.

Direct debit usage appears to have stagnated or declined (in relative terms) in most mature markets, possibly because of an increased desire of users to have greater control over the timing of their payments (see Figure 1.4). Another factor is that some countries, such as Finland, have developed alternative options based on credit transfers that enable consumers to approve each payment instead of giving a permanent mandate for direct debits.

CHECKS CONTINUE DOWNWARD TREND BUT STILL HAVE LIFE LEFT IN THEM

Cards use also grew at the expense of checks in 2011, volumes of which fell 7% during the period; a faster fall than in previous years. However, despite the decline in numbers, check use is likely to continue through at least one more generation because they are viewed as the most convenient form of payment by some small and medium enterprises (SMEs), charities, and older generations. The decline in check use also may be arrested by innovations such as remote deposit capture, whereby a digital image of a check, rather than a physical check, can be transferred to a bank. Phasing out checks is challenging: businesses benefit from the use of checks as they contain useful data; consumers value checks as a free commodity; and charities and not-for-profit organizations are attracted to the better security control that dual signage offers. None of these groups will give up checks easily.

USE OF OTHER NON-CASH PAYMENT INSTRUMENTS AND CASH ON THE RISE

Of the other non-cash payments instruments, credit transfer volumes experienced the most rapid growth in Latin America of 10.3% where Automated Clearing House (ACH) systems are being established. Brazil, Argentina, Venezuela, and Colombia are all developing new or upgrading ACH systems. Direct debit transactions also grew fastest in this region, recording a 15.9% increase. The introduction of the Authorized Direct Debit (DDA) by Brazil's interbank clearing payment house, Câmara Interbancária de Pagamentos (CIP), enables customers to access and pay bills in an electronic format and has provided an impetus for direct debits in the market.⁷

While non-cash instruments are recording strong volume growth, the amount of cash in circulation also continues to grow rapidly. In the Eurozone from 2002 to 2011 the amount of cash in circulation per inhabitant nearly doubled, although the growth rate decreased slightly during 2011 to 6.8%, compared with 8.1% during 2002-2010.⁸ It is possible that more citizens in countries hit by the Eurozone sovereign debt crisis may have opted for cash in order to gain greater control over their outgoings. This is a similar phenomenon to that noted earlier with the declining use of direct debits.

NON-CASH GROWTH TRENDS EXPECTED TO REMAIN ROBUST IN 2012 AND BEYOND

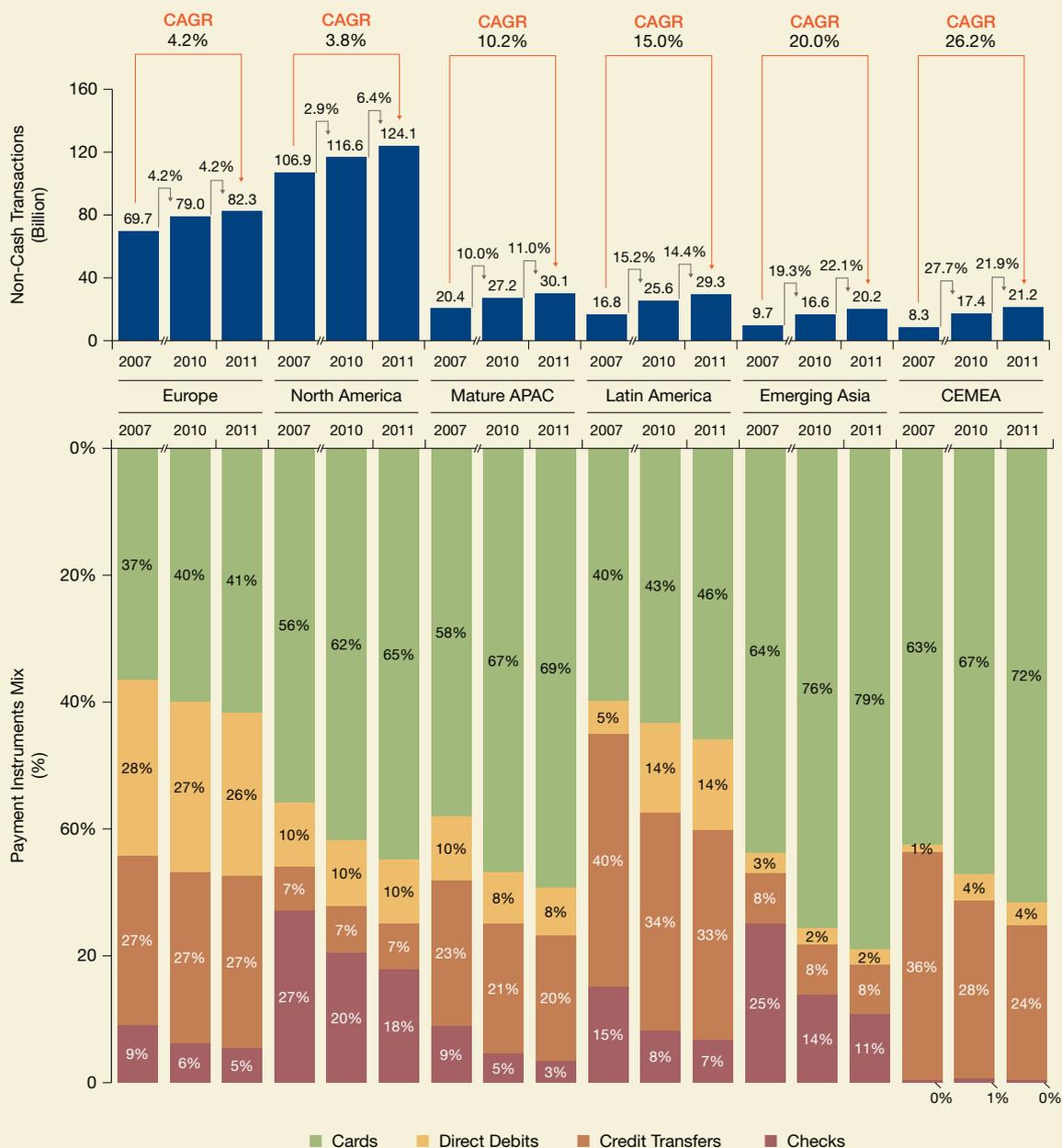
We estimate that non-cash payments will have continued their growth in most markets during 2012,⁹ primarily as a result of consumers moving away from cash (see Figure 1.5). Growth also will have been driven by further liquidity and credit easing in certain key markets such as North America, which aims to sustain the economy through an increase in private consumption. Initial estimates suggest the number of worldwide non-cash transactions will total 333 billion for 2012, a global growth rate of 8.5% (slightly below 2011 levels).

⁷ 'Payment, clearing and settlement systems in Brazil', CPSS *Red Book*, 2011

⁸ Capgemini Analysis, 2013

⁹ Very few markets have published their official 2012 non-cash payment statistics at the time of WPR 2013 going to press.

Figure 1.4 Comparison of Non-Cash Transactions (Billion) and Change in Payments' Mix (%), by Region, 2007, 2010–2011



Note: Singapore credit card transaction volume data and Japan data for direct debits not available for all years; Ukraine and South Africa credit card data not available for all years; Ukraine, Turkey, and Hong Kong direct debit data not available for all years; Ukraine and Hong Kong credit transfer and checks data not available for all these years; South Africa direct debit and credit transfer data available only for 2009, 2010, and 2011; Chart numbers and quoted percentages may not add up due to rounding; Some numbers may differ from data published in WPR 2012 due to previous year data updated at source
Source: Capgemini Analysis, 2013; ECB Statistical Data Warehouse, 2011 figures released September 2012; Bank for International Settlements Red Book, 2011 figures released January 2013; Country's Central Bank Annual Reports, 2011

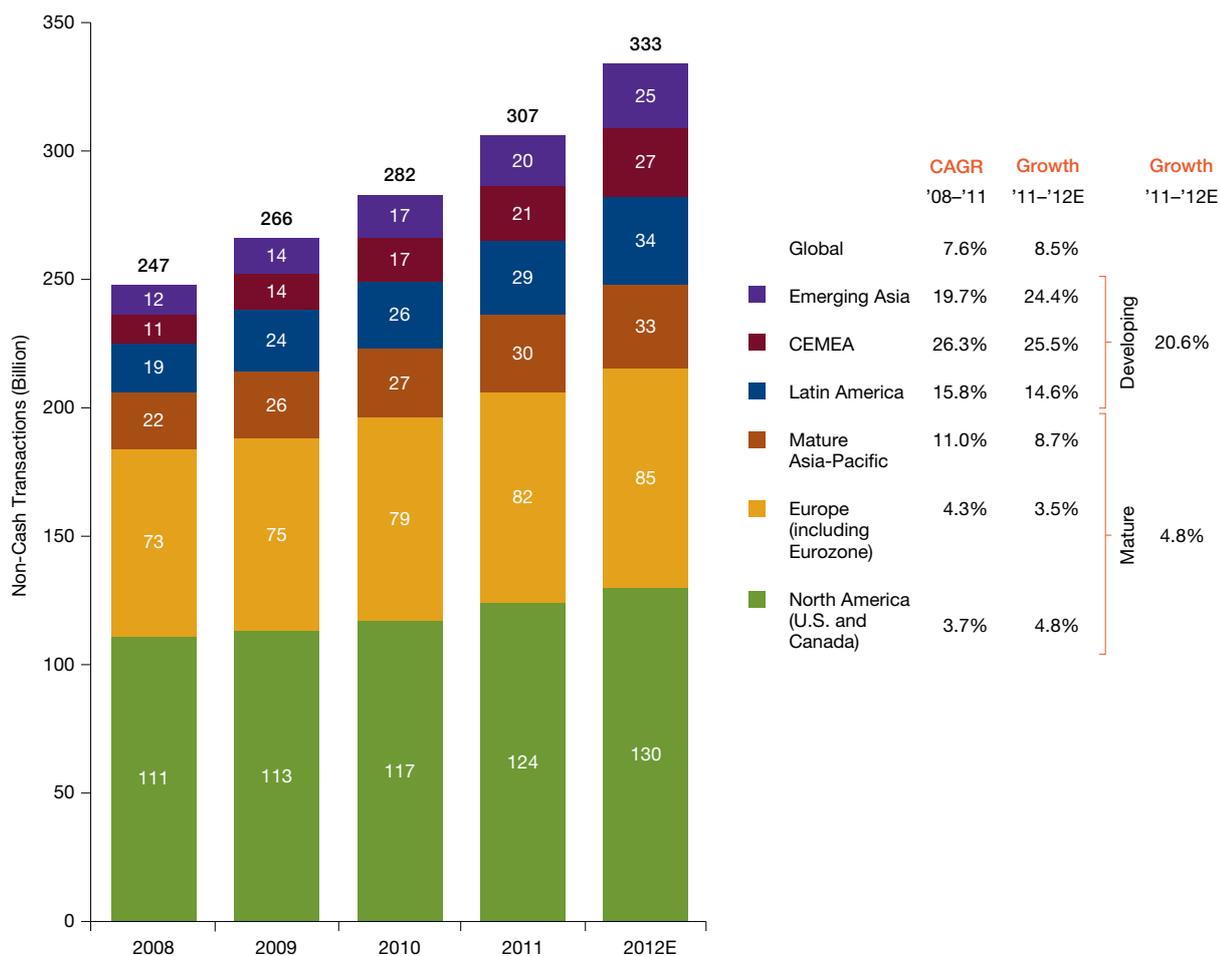
CEMEA at 25.5% and Emerging Asia at 24.4% are likely to have been the drivers of this increase, with Europe expected to have contributed only 3.5% growth, compared to a CAGR of 4.3% from 2008–2011. Growth is likely to be slowest in the Euro countries, although the U.K. should compensate to some degree. Non-cash growth in the U.K. is expected to be strong in 2012, driven by a rise in the use of debit cards and the Faster Payments Service.¹⁰ However, the slower growth in Europe could act as a drag on the global growth figure. Once again, the economic downturn is likely to stem growth in some markets, particularly Ireland and Italy.

Within the fastest growing markets, Ukraine, Russia, and Poland from CEMEA, and China from Emerging Asia are estimated to be the drivers of non-cash transactions. South Africa and Saudi

Arabia in the Middle East and Africa region are also likely to report strong growth. From a low volume base, transactions in these regions will be fueled by a combination of payments system innovation, increasingly sophisticated non-cash products, education of consumers, regional expansion, and improved service by domestic banks.

Annual growth in non-cash transactions in North America during 2012 is likely to remain solid at about 4.8%, above the post-crisis average growth rate of 3.7%. This growth is expected to be driven by the steady economic recovery, returning liquidity in credit markets, and an overall positive sentiment in the markets and among consumers. It is expected that here, the use of cards will remain strong, credit transfer and direct debit growth will stabilize, while the decline in use of checks will accelerate.

Figure 1.5 Number of Worldwide Non-Cash Transactions (Billion), by Region, 2008–2012E



Note: CEMEA (Central Europe, Middle East, Africa) now includes Russia and Poland; Mature Asia-Pacific includes Japan, Australia, South Korea, and Singapore; Latin America now includes Brazil as well as Mexico and Other Latin America; Emerging Asia now includes India and China as well as Hong Kong and Other Asian countries; Chart numbers and quoted percentages may not add up due to rounding; Some numbers may differ from data published in WPR 2012 due to previous year data updated at source; BRIC (Brazil, Russia, India, China) is no longer considered as a separate group in WPR 2013
Source: Capgemini Analysis, 2013; ECB Statistical Data Warehouse, 2011 figures released September 2012; Bank for International Settlements Red Book, 2011 figures released January 2013; Country's Central Bank Annual Reports, 2011

¹⁰ '2013 UK Payments Market', Payments Council, 2013

Emerging Middle East and Africa Market Would Benefit from More Standardization and Transparency

The Middle East and Africa (MEA) payments market is fragmented and diverse. Our research has found that currencies, regulatory frameworks and governance, infrastructure, economic situations, and use of non-cash instruments are specific to each market. For this reason, payments instruments, investments, and initiatives are rarely rolled out across multiple countries. WPR 2013 clusters the 75 countries¹¹ and territories within this region into six separate groups or countries: the Middle East, North Africa, the Central African Franc (CAF) countries, Kenya, Nigeria, and South Africa. In Africa, some countries are using cutting edge payments instruments. This will continue as GDP, intra-African trade, and the number of people within the middle class grows, making Africa one of the most attractive places in the world to invest in cashless payment services.

- **Mobile:** Although smart phone penetration in Africa remains lower than that in some developed markets, mobile phone ownership rates are high. Coupled with low penetration of formal financial services, this means that the MEA region represents significant revenue opportunities for m-payments. The mobile payment user base in the region is expected to rise from 53.3 million in 2009 to 154.3 million by 2015.¹² Mobile remittances and retail purchases through mobile phones are expected to form a major part of m-payment transactions. Examples include M-Pesa, the Kenyan mobile payments scheme, and Fawry, an Egyptian bill payment service that enables easy money transfer and utility bill payments over mobile phones. These have proved particularly popular for consumers living in rural regions of Africa. To illustrate, M-Pesa has more than 14 million subscribers¹³, or 60% of Kenya's population. In the business-to-business (B2B) space, companies such as brewer SABMiller have developed a mobile application to collect payments from small businesses across multiple countries. Short message service (SMS) or prepaid, as well as private mobile banking, are the most popular operating models for mobile payments solutions.
- **Cards:** In the regions that have growing wealthy and middle class populations (largely the Middle East, North Africa, and South Africa), cards are the basis for innovation and growth in non-cash payments (as they are elsewhere in the world). A number of card-based developments have taken place in the region during the past year. In 2012, MasterCard launched near field communication (NFC)-based contactless payments programs in the United Arab Emirates (UAE), Qatar, and Lebanon. First National Bank in South Africa has created wireless point of sale (POS) terminals, which have driven growth of non-cash payments in that country. However, cards still suffer from limited acceptance networks outside large cities or tourist areas.
- **Remittances:** The MEA region has an estimated 45 million immigrant workers, the majority of whom send money back to their families at home. This requirement has created a substantial remittance service industry, with many innovative

solutions based on non-cash transactions. In 2011, MEA countries sent over US\$66 billion, which represented about 20% of worldwide total remittance outflows. Remittances may grow further as intra-Africa trade increases. Also payments habits are gradually moving to digital channels as behavior is influenced by doing business with China, one of Africa's most significant foreign trading partners.

- **Credit transfers and direct debits:** The growth of credit transfers and direct debits in the region depends mainly on an individual country's investment in infrastructure. Progress made by the telecommunications industry, however, now enables an educated generation of corporate treasurers, supported by regional banks, to set up regional treasury centers to process their transactions. These centers are similar to those operating in other, more developed, countries and regions. Another example of progress in this area is Rapidtransfer, a pan-African, low-value payment service operated by Ecobank in West Africa.¹⁴

The future growth of non-cash payments transactions in the MEA region will rely strongly on the ability to set up transparent governance and proactive policies that encourage investment. This will help to promote the emergence of 'African champions' that can further fuel growth in non-cash transactions. Governments in countries including Kenya, Egypt, Nigeria, Namibia, South Africa, and UAE have supported the adoption of non-cash payments by implementing programs to improve technology and payment infrastructures. Nigeria's government is supporting a cashless policy that is part of a drive to develop and modernize the country's payment system. The Central Bank of Nigeria's Cashless Lagos Project has introduced a policy on cash-based transactions that stipulates a handling charge on daily cash withdrawals or deposits, aimed at reducing the amount of physical cash circulating in the economy and to encourage more electronic transactions.

But as mentioned earlier, each country in the region is pursuing its own agenda and such projects are not rolled out on a wider basis. By consolidating initiatives—be they public or private, telecom or bank-led, a move towards more global standards and operating models can be made. Private African and global banking networks, regional processors (such as GIM-UEMOA in the West African Economic and Monetary Union zone), as well as the migration to global standards such as XML and networks including SWIFT are creating a consolidation trend.

However, efforts are best backed by public or political initiatives; at present many are still too limited or lacking transparency. For example, a Middle East initiative to create a harmonized payment area remains in the design phase, many years after it was announced.

¹¹ CIA World Factbook definition of Middle East and Africa

¹² 'Global and Regional Mobile Payments Market Forecast', IE Market Research, September 2011

¹³ 'Where Are the Mobile Opportunities?', Citibank, June 2012

¹⁴ World Payments Report 2013 Executive Interview

The Rise of E- and M-Payments

CONVENIENCE AND COMPETITIVE PRICING FROM E-MERCHANTS SPUR E- AND M-PAYMENTS GROWTH

E- and m-payments¹⁵ remain a very attractive market for both banks and non-banks; the growth in these areas outlined in WPR 2012 continues, and considerable growth is expected over the coming years. A variety of reasons for this growth are outlined below. It should be noted that a clear definition of e-payments and m-payments, and an understanding of the relation between the two is crucial, but missing (in a consistent format), in the industry.

WPR 2013 makes an attempt to start closing the gaps as we define **e-payments** as digital payments that are made over the internet for e-commerce activities. The largest segment of e-payments is the consumer-to-business (C2B) payments, which are used mainly for goods purchased in online stores, and are being driven by the fast growing global e-commerce market.

Due to a lack of industry clarity around e-payments, WPR 2013 has analyzed the e-commerce market.¹⁶ This market is expected to grow by 18.1% from 2010 (when transactions numbered 17.9 billion, see Figure 1.6) per year until 2014 (with an estimated total of 34.8 billion and a value of \$1,792.4 billion). This growth could be compromised by concerns about online fraud and the high dropout rates of consumers buying online. These concerns are being addressed, however. The European Central Bank (ECB) has set minimum safety recommendations to improve online payment security, which will be implemented in 2015. Dropout rates—of up to 60%—among online buyers could be reduced with the development of more convenient payment methods by payment services providers (PSPs).¹⁷

Consumers are likely to increasingly opt for online stores that provide more convenience and a broader selection of products at prices regarded as competitive. Moreover, in order to drive sales, e-commerce businesses are increasingly offering personalized services and loyalty programs to frequent customers.

Asia-Pacific, led by China, is expected to drive global e-commerce sales in the near future; in 2012 the region experienced a rise of more than 30% in B2C e-commerce sales and similar growth is expected in 2013. China has the highest number of online shoppers and is expected to become the world's second largest B2C e-commerce market (behind the U.S.) in terms of value in 2013.¹⁸ Other key markets contributing to growth in the region include India and Indonesia, which are also very fast growing e-commerce markets.

We define **m-payments** as a form of payment where the mobile phone is used as a payment method—not just as an alternative channel to send the payment instruction—and the payment information flow takes place in real-time. Such payments occur primarily across four applications (ordered by estimated size of volumes):¹⁹

- Peer-to-peer (P2P): As domestic money transfers or international remittances.
- Consumer-to-business (C2B): As retail payments at stores, mobile online payments such as those made on eBay or to purchase ringtones. It should be noted that these payments are not made using the browser on the mobile, but by using the payment application built for the mobile.
- Business-to-business (B2B): To replace cash in the supply chain, in some regions such as Africa.
- Business/Government-to-Consumer (B2C/G2C): For salary disbursements and pensions—these payments are largely seen in African markets where infrastructure for other payment instruments is under-developed, and innovations such as mobile money help incoming payments reach beneficiaries.

As predicted in WPR 2012, the global m-payments market continues to grow rapidly, powered by innovation and demand. In line with industry estimates, the global m-payments value reached \$256 billion in 2012, and is expected to grow three-fold by 2014 to a total of \$796 billion. P2P m-payments in developing markets, and C2B m-payments in developed markets are the main drivers of growth.

¹⁵ Electronic payments or e-payments are defined as digital payments that are made over the internet for e-commerce activities. Mobile payments, or m-payments, are defined as a form of payment where the mobile phone is used as a payment mode—not just as an alternative channel to send the payment instruction—and the payment information flow takes place in real-time.

¹⁶ E-commerce includes retail and travel sales, digital downloads purchased via any digital channel, and sales from businesses that occur over primarily C2C platforms such as eBay.

¹⁷ 'ECB seeks to improve online payments security', Finextra.com, January 2013, <http://www.finextra.com/News/FullStory.aspx?newsitemid=24499>

¹⁸ 'Ecommerce Sales Topped \$1 Trillion for First Time in 2012', eMarketer.com, February 2013

¹⁹ The estimated sizes of the four applications are indicative.

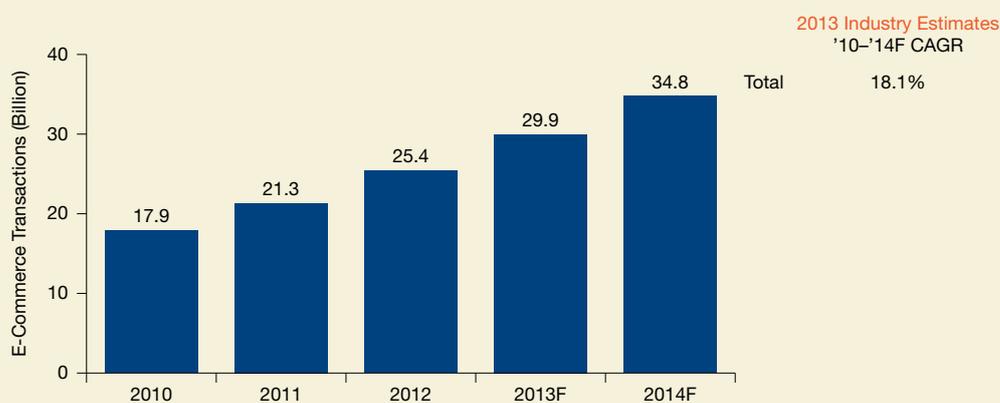
In addition to payments originated from mobile devices, mobile acceptance in developed markets is likely to grow. This will be driven by increased penetration of payment by smart phones and innovative offerings such as PayPal Here, iZettle, and Square, which are mobile card readers that act as alternatives to traditional point of sale devices.

The number of mobile payment users worldwide is expected to surpass 212 million in 2012, a 32% increase on 2011. With increased uptake of mobile payments in 2012, the industry has for the second consecutive year adjusted its forecasts, predicting 58.5% growth in mobile payments to 2014 (see Figure 1.7).

A boost to the sector could come from payments networks MasterCard and Visa, which have established partnerships with mobile operators for mobile payment solutions in emerging markets. For example, MasterCard has an extensive agreement with Telefonica to provide mobile payment services in Latin America, and Visa in 2011 acquired South Africa-based mobile financial services platform provider, Fundamo, in a move to increase its presence in MEA markets.

Of the combined e- and m-payments market, C2B e-payments represent the estimated single largest component in terms of transaction volumes. This is followed by P2P m-payments, which are extremely popular in emerging markets such as Africa. In the

Figure 1.6 Number of Global E-Commerce Transactions (Billion), 2010–2014F



Note: E-commerce includes retail sales, travel sales, digital downloads purchased via any digital channel and sales from businesses that occur over primarily C2C platforms such as eBay; Chart numbers and quoted percentages may not add up due to rounding
Source: Capgemini Analysis, 2013; <http://www.emarketer.com/Article/Ecommerce-Sales-Topped-1-Trillion-First-Time-2012/1009649>; "Edgar Dunn advanced payments", 2011; <http://www.finextra.com/News/FullStory.aspx?newsitemid=24499>; <http://mashable.com/2011/02/28/forrester-e-commerce/>; <http://econsultancy.com/in/blog/61696-personalisation-and-tablets-will-dominate-changes-to-ecommerce-in-2013>

Figure 1.7 Number of Global M-Payments Transactions (Billion), 2010–2014F



Note: Chart numbers and quoted percentages may not add up due to rounding
Source: Capgemini Analysis, 2013; Mobile Payments 2012, "Mobile payments set to reach £591 billion by 2015 – KPMG," Apr 5th 2012; "Global mobile transactions predicted to be US\$241 billion in 2011 growing to more than \$1 Trillion by 2015," June 2012; "Mobile Financial Services: A fading opportunity for mobile operators," The Delta Perspective, July 2012

future, these payments could grow in developed markets such as the U.K., based on the Faster Payments real-time payment infrastructure and a central database, which will link users' mobile phone numbers to their bank account numbers.²⁰ C2B m-payments are the estimated third-largest category in the combined market, but are expected to increase as NFC and proximity payments become more popular. C2B m-payments are popular in Japan, where mobile wallets are the standard m-payment instrument. Customers can use a phone instead of cash at a number of merchant POS terminals.

VOLUMES, ESPECIALLY OF M-PAYMENTS, MAY NOT BE AS HIGH AS INDUSTRY ANALYSTS PREDICT

As part of our research, we conducted a bottom-up analysis of the volume figures reported by some of the largest e- and m-payments players around the world. By comparing our analysis and estimates of global non-cash volumes with the figures emanating from industry analysts, we discovered significant gaps that demonstrate a need for more reliable data regarding this rapidly growing market. While in e-payments the major market players combined accounted for most of the volume figures estimated by the industry, this was not the case for m-payments.

In analyzing e-payments, we considered the market size of several leading players. The combined total number of transactions represented by these players was around 16% less than the corresponding industry estimate of 25.4 billion transactions in 2012. While some of this gap could be accounted for by volumes from smaller players or markets not covered in our analysis, the difference highlights that industry numbers are subject to varied interpretation.

A similar analysis of m-payments volumes leads to a volume gap of 50%. This can in part be explained by a more fragmented industry and broader market share for local or small players (for whom it is more difficult to collate reliable figures). However there is scope to question whether some analysts' estimations and predictions may be somewhat optimistic.

The analysis certainly raises questions about the market size estimates being made in the industry and highlights the need for improved, centralized data collection. Later in this chapter we see how less regulated markets are attracting investments and creating a large hidden market, emphasizing the need for improved data collection (please refer to page 18).

Prepaid Cards Growing at Significantly Higher Rates than More Established Instruments

The prepaid cards²¹ market is one of the fastest growing non-cash payments markets along with e- and m-payments, with most of the growth and adoption of these instruments coming from the U.S.

Global open-loop²² prepaid cards transaction volumes have grown by more than 20% during the past four years and are expected to reach 16.9 billion annually in 2014. This indicates enormous growth, especially considering that these numbers are in addition to all the other conventional non-cash payment instruments we have covered earlier. Much of the growth is concentrated in the U.S., where this form of payments thus far has been more successful than in any other major market. Along with e- and m-payments, prepaid cards are arguably the fastest growing non-cash

payments instrument in the world. Meeting growing consumer needs for an affordable and convenient payment option, prepaid cards increasingly are becoming a mainstream payment option.

Since 2009, prepaid card transaction volumes have grown at a significantly higher rate than those of debit cards. This is due to a number of factors, including the popularity of prepaid cards among unbanked consumers, and the perceived superior control over spending that prepaid cards represent when compared with debit cards. In a sense, prepaid cards act as an 'intermediate' instrument between cash and checks on the one hand, and digital payments on the other. Prepaid cards can help users make the switch to non-cash payments instruments.

²⁰ 'VocaLink to maintain UK database of mobile numbers for bank payments platform', 2012, <http://www.finextra.com/news/fullstory.aspx?newsitemid=23451>

²¹ A prepaid card is a payments card that is preloaded with a definite value that can be spent to make purchases.

²² Closed loop and restricted loop transaction volumes have not been included due the lack of data availability.

Retailers in the U.S. and the U.K. are promoting the use of prepaid cards, typically in the form of gift cards. The cash paid in advance for gift cards gives retailers an advanced cash flow and extra interest income. Often a part of the gift card value is not utilized or the card expires, resulting in extra income for the retailer. Prepaid cards also offer marketing opportunities via branding and personalization, which can lead to additional sales.

There are three main categories of prepaid cards:

- **Open loop:** Accepted and processed globally, with ATM withdrawal possible both domestically and internationally. The card value is attached to a database or pooled account at a bank. Most often used to provide financial assistance to unbanked individuals, examples include payroll cards, incentive or rebate cards from retailers, medical expenses cards, social security benefit cards, and travelers' cards (as a replacement for travelers' checks).
- **Restricted loop cards:** These are accepted by a wider range of merchants within a geographic area. Examples include shopping mall gift cards, incentive and rebate cards from retailers.
- **Closed loop:** Acceptance is limited to specific merchants or a location, without the ability to make cash withdrawals. Examples include transit cards and internet game player cards.

A new category—virtual cards—is also emerging. These can be bought, tracked, and redeemed either online or offline, potentially delivering cost and time advantages. Examples of such cards include the Visa prepaid virtual card and the PayPal Virtual Prepaid MasterCard.

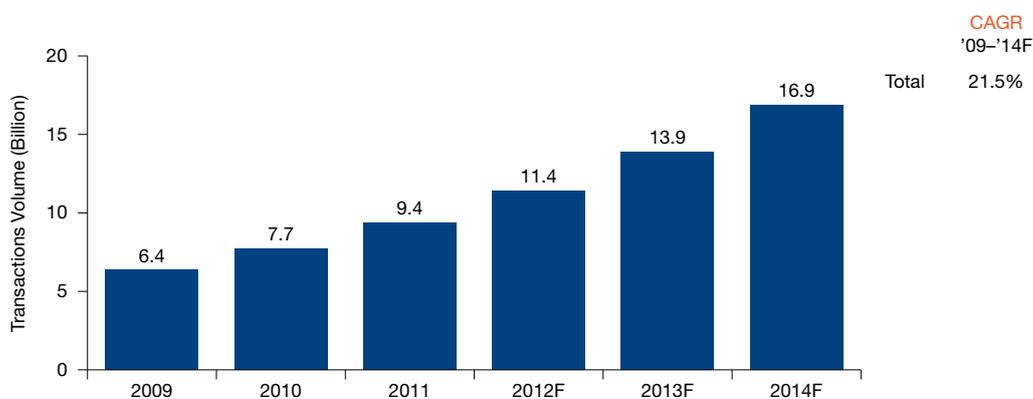
A low processing cost, immediate liquidity, flexibility, safety, and efficient risk management are the key factors in the rapid adoption of prepaid cards (see Figure 1.8). Their versatility enables different user groups: consumers,

corporates, financial institutions, and the public sector to find an application for their use. Financial institutions use prepaid cards to meet insurance claims, and in contactless multiservice, transportation, and cashless applications. In the public sector, prepaid cards are used in public benefit and welfare programs, emergency assistance and disaster relief, payroll and incentives, and travel and cash management. Corporates also use prepaid cards for payroll and for employee benefits and incentives, healthcare insurance, meal vouchers, expenses and business travel, and corporate procurement. Finally, consumer applications include travel, online purchasing, campus schemes, remittances, promotions, and rewards.

The number of unbanked consumers using prepaid cards is expected to grow as additional features such as savings options, direct deposit, and credit building tools are added. At present, unbanked consumers regard prepaid cards as a safer alternative to cash and checks, and as a tool to control spending.

The growing trend to impose legal limits on debit card interchange fees is likely to mean that prepaid cards will continue to grow at a faster rate than debit cards. However, several challenges must be addressed to make use of prepaid cards more prevalent. These can include a lack of disclosure of fees and terms of the cards before they are purchased. This is primarily due to a lack of industry standards for prepaid cards, which makes it difficult for customers to compare different prepaid cards. Other challenges include the insurance status of the prepaid card holders' fund, as this is not always made clear prior to purchase. There is also a risk of fraudulent use of prepaid cards for money laundering, which is of concern to financial institutions. However, certain actions such as proposed regulation regarding accurate fee disclosure, as well as a set of common industry standards, can alleviate some of these concerns and accelerate the uptake of prepaid cards.

Figure 1.8 Number of Global Open Loop Prepaid cards Transactions (Billion), 2009–2014F



Note: Data has been included on only open loop prepaid cards due to lack of data availability on other types of prepaid cards
Source: Capgemini Analysis, 2013; '2010 Federal Reserve Payments Study', Federal Reserve Bank Services; 'A Look at the Potential for Global Prepaid Growth by 2017', MasterCard Worldwide

Less Regulated Areas Are Attracting Investments, But Are Creating Opacity in the Global Payments Market

The payments industry is evolving; new, unconventional players such as Zapp, Google, and Square have entered the market, new instruments such as prepaid cards and e- and m-payments are being developed, and regions such as Africa are gaining momentum. These changes highlight the growing importance of accurate statistical data collection. Reporting standards for e- and m-payments suffer from a lack of clarity, challenging attempts to confidently estimate the true market size of these payment modes. There is a consequent risk that industry analysts may over- or under-estimate transaction volumes.

A lack of clarity also arises due to the increasing convergence between instruments. This convergence results in a partial overlap between e- and m-payments, and with traditional instruments such as cards, which are often needed when making an e- or m-payment.

In a May 2012 report,²³ the Bank for International Settlements (BIS) indicated that technical developments are blurring product categories in retail payments as access devices and channels are becoming interchangeable. This presents a challenge for central banks in monitoring and assessing new developments in retail payments and ensuring they create an environment in which innovation can flourish. The BIS says central banks must step up their efforts to collect statistical data, undertake analytical research, and to ensure the availability of appropriate skills in the industry. To date only some central banks such as the De Nederlandsche Bank in the Netherlands and Bank of England in the U.K. have made moves to address this issue, but globally much more needs to be done.

The introduction of a standard set of definitions and better tracking of this data by a central body will help address this risk. Central banks we spoke to confirmed that defining new, innovative products was an issue, and that standard sources do not give the most accurate data for these instruments. Access to improved data could even help the transaction banking community better understand the trends in the market, and make informed investment decisions.

In certain markets such as the MEA, the amount of statistical reporting of non-cash payments instruments is still not as high as in other parts of the world. This lack of reporting also results in a market that is not clearly visible to the industry.

A lack of accurate statistical data could result in an incorrect or incomplete representation of the true market for the new innovative instruments, leading to misunderstanding of the direction and growth of the market. Such a misunderstanding could hinder innovation efforts, and potentially contribute to future market risk.

²³ 'Innovations in Retail, Payments, Report of the Working Group on Innovations in Retail Payments', May 2012, Committee on Payment and Settlement Systems, Bank for International Settlements

Conclusion

Global non-cash payments transactions continued to accelerate during 2011 and early indicators suggest 2012 will be no different. A slowdown in non-cash transactions in many recession hit economies was in contrast to the world's growth economies, such as China. Several of the developed economies such as the U.S., as it emerges from the financial crisis, and the U.K. and others with strong payment industries are continuing to grow at a faster rate. Going forward, this growth will be further enabled by opportunities in new markets, such as Africa, and in new instruments, including prepaid cards, and e- and m-payments. Hence there is enormous opportunity for those players looking to make investments in the payments market, and provide innovative offerings. There are areas for growth in both emerging and mature markets, as well as in new instruments.

Growth levels in the non-cash payments market have been particularly high in areas where the regulatory challenge is not too onerous, or there is a comparative lack of regulation. The lack of regulation may have helped the growth of such instruments, but increasingly is likely to pose an issue with regards to quality of reported data and risk management. It will be interesting to see how the regulatory environment evolves for these new and innovative instruments.

We assess some of these regulations in Section 2, where we will profile the key regulatory and industry initiatives (KRIs) in the payments world, and put the case for taking a holistic approach. In Section 3, four innovation 'hotspots' in payments acquisition, which have the potential to alter PSPs' priorities and sourcing strategies, will be examined.



2 Managing Increasing Overlaps between KRILs Requires a Holistic Approach

KEY FINDINGS

- **New Key Regulatory and Industry Initiatives (KRILs) have emerged across the world during the past year, focused on increasing consumer convenience, improving payments security and transparency, strengthening fraud prevention, and stimulating innovation.** In North America, most new KRILs are focused on transparency and customer convenience. In APAC, on the other hand, regulators are more focused on standardization and on bringing new participants into the financial system. The KRIL agenda in Europe remains dominated by SEPA. While there has been some progress by banks and corporates, there is a long way to go before full migration to the new SEPA instruments (see page 34) is achieved. Europe's regulatory agenda is focused on increasing competition and improving transparency.
- **As the number of KRILs proliferates globally, there is an increase in the overlap between individual initiatives.** During implementation, firms should consider KRILs in clusters—based on our '3C model'—to better understand the impact they have on each other. The 3C model (see page 32) takes into account cascading effects across geographies, complementary reinforcement, and competing effects.
- **Payment services providers (PSPs) need to qualify and quantify the impact of each KRIL and be ready to meet the next wave of KRILs.** This is challenging; in order to treat KRILs holistically, some PSPs are building new or enhanced governance structures to do so as KRILs are increasingly replicated across the globe. By considering KRILs introduced in one market (e.g. FATCA), PSPs can better anticipate and prepare for similar initiatives in other countries. PSPs should not wait until a consultation process is announced but should maintain open dialog with regulators about how their services and their client proposition will be affected by regulators' objectives.
- **The significant challenges involved in migrating to SEPA instruments are making it highly unlikely the initiative will be fully implemented by the February 2014 deadline.** As of June 2013, SEPA Credit Transfers (SCTs) accounted for 47.0% of the total eligible credit transfers across the SEPA countries but SEPA Direct Debits (SDDs) comprised only 3.7% of total direct debit transactions.²⁴ PSPs that are not SEPA compliant by the deadline potentially face penalties while corporates may face significant business risks because payments may not be processed. While individual Member State options may hinder short-term harmonization, some countries, such as Belgium and Finland, have made significant strides in adopting SCT instruments. A process to share detailed and current information from successful initiatives should be put in place. Furthermore, contingency scenarios—in the case of non-compliance, need to be developed.
- **Long awaited changes to the top level of SEPA governance, particularly to the role and composition of the SEPA Council have not yet been agreed.** This is despite the June 2012 SEPA Council meeting having stressed the need to adopt a co-operative approach, to increase the legitimacy of the governing body, and to clarify the responsibilities of the governing council. At the same time, a number of key European legislative initiatives, including the 'PSD2' proposals, are being finalized,²⁵ covering issues such as access to accounts, internet security, and account switching and access.
- **Achievement of the core objectives of SEPA, enabling innovation and promoting competition, also depends on the progress that will be made on e- and m-payments.** In recent months, collective initiatives to promote such payments have slowed, which could jeopardize achievement of SEPA objectives. At the same time, legacy payment providers globally are facing increased competition from non-bank players especially in the less regulated field of e- and m-payments.

²⁴ SEPA Quantitative Indicators, European Central Bank (ECB) Website, Accessed in August 2013

²⁵ EC announced a revised proposal for PSD2 on 24th July 2013, however the proposal was yet to be reviewed by the European Parliament or the European Council at the time of WPR 2013 going to press.

As Implementation of KRIs Progresses, New Initiatives Emerge

FINANCIAL INSTITUTIONS ARE FACING A CHALLENGING REGULATORY ENVIRONMENT IN ALL REGIONS

The financial services industry continues to come under the regulatory microscope and since the publication of WPR 2012, new KRIs have emerged across the globe, in addition to existing initiatives (see Figure 2.1). KRIs are transforming the financial services landscape, with sometimes direct and at other times indirect impacts on payments. Financial institutions are facing a challenging regulatory environment, but in initiating programs and projects to comply with regulations there is scope for developing new opportunities in the payments space.

Among the many KRIs that emerged during 2012,²⁶ WPR 2013 explores two with significant global impact: ISO 20022 standards (#19)²⁷ are being rolled out from Europe into more countries, and direct access to clearing systems for large payers is being encouraged in some jurisdictions (#35). The standardization that will result from the implementation of ISO 20022 as a format for the breadth of financial services is likely to foster further innovation in payments. By becoming direct participants in clearing systems, there is a risk some PSPs will have to divert funds away from client-facing innovations.

European payments institutions are dealing with a high number of KRIs as harmonization efforts continue; four new initiatives of particular note were discussed during 2012 covering:

- European current account switching (#12).
- Internet payments security in Europe (#15).
- Data privacy and payments (#16).
- Payments governance (#17).

In May 2013, the European Commission (EC) published a proposal for a Directive to make bank accounts more accessible to all European citizens. The objective of the proposal is to allow consumers across the EU to access bank account services, to easily compare payment account fees, and to establish a simple procedure for consumers to switch their payment accounts across banks/PSPs.²⁸ The U.K. has developed a current account switching facility that is expected to become available in September 2013 (see page 28).

In North America, the implications of the comprehensive Dodd-Frank Act continue to be felt. In addition, the cards industry in the U.S. has started to adopt EMV (#14),²⁹ and regulations covering prepaid card products (#9) have emerged. In the Middle East a move to global standards is under way, evidenced by the mandatory use of International Bank Account Numbers (IBANs, #20) as well as the introduction of risk-compliant clearing and settlement in the United Arab Emirates (UAE, #21).

Alongside these new KRIs, the evolution of existing regulatory and industry initiatives continues. During the past year, the Basel Committee on Banking Supervision softened its stance on capital adequacy arrangements and moved the deadline for compliance with the 100% liquidity coverage ratio (LCR) from January 2015 to January 2019. While intraday liquidity regulation currently only defines frameworks for reporting, the industry anticipates that this regulation may be augmented to include risk mitigation measures. Banks should anticipate such a move and while they set up the required liquidity dashboards, they may also choose to revisit their clearing and correspondent strategies. Further, in April 2013, the Basel Committee on Banking Supervision, in consultation with the Committee on Payment and Settlement Systems, issued a new reporting framework to enable banking supervisors to better monitor a bank's management of intraday liquidity risk. This framework will also help supervisors to develop a better understanding of banks' payment and settlement behavior.

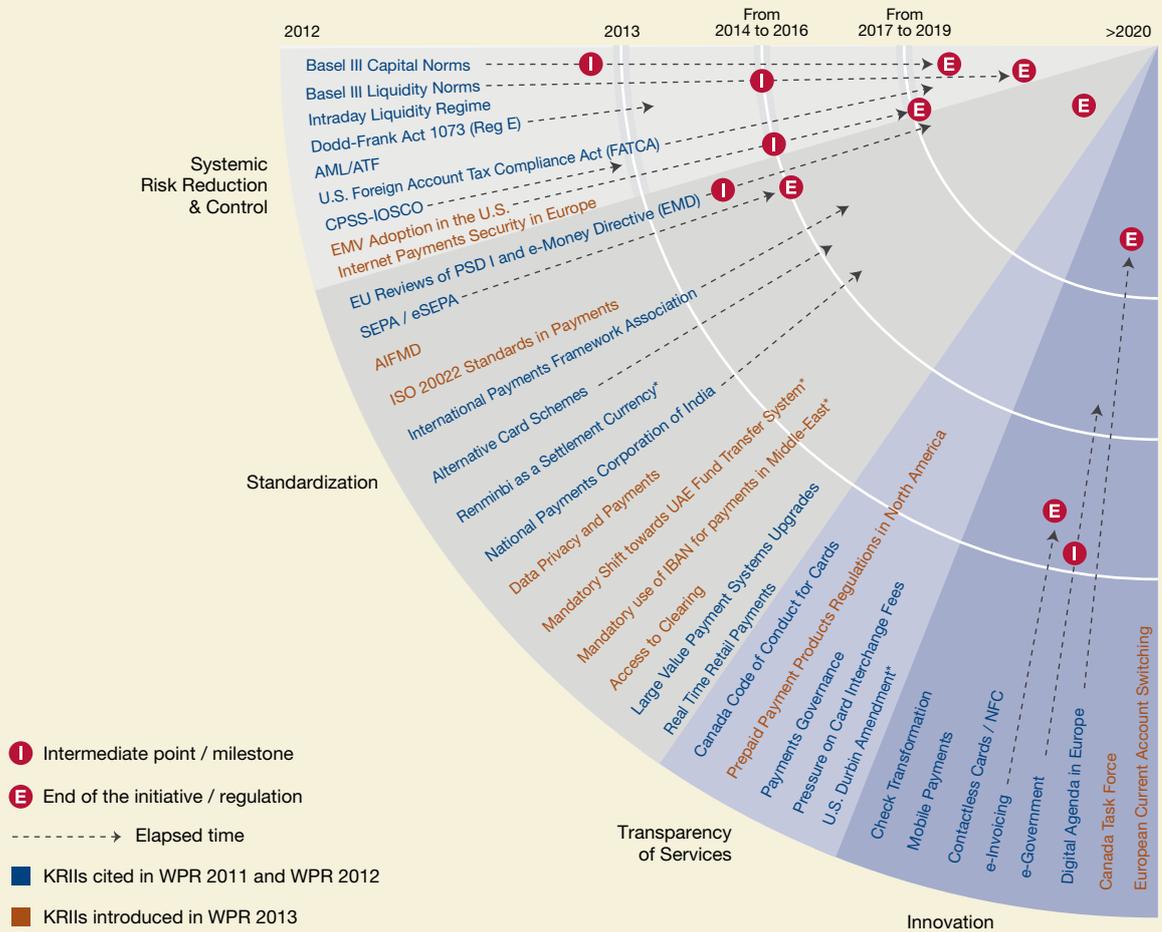
²⁶ WPR 2013 has identified the main KRIs that have emerged during 2012. Our list is extensive, but not exhaustive.

²⁷ Please refer to the KRI table beginning on page 26 for the serial numbers for each KRI.

²⁸ 'Bank accounts: Commission acts to make bank accounts cheaper, more transparent and accessible to all', European Commission, May 2013

²⁹ EMV standards require the use of a chip embedded in the card and a PIN for the cardholder. This approach is designed to combat fraud. An EMV transaction is defined as an EMV compliant card used at an EMV compliant terminal, processed with EMV technology.

Figure 2.1 Key Regulatory and Industry Initiatives (KRILs) Drive Four Key Industry Transformation Trends (ITTs), 2013



Note: AML/ATF – Anti-Money Laundering/Anti-Terrorism Financing; NFC – Near Field Communications; CPSS-IOSCO – Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of International Organization of Securities Commissions (IOSCO); PSD – Payment Services Directive; SEPA – Single Euro Payments Area, AIFMD – Alternative Investment Fund Manager’s Directive
*KRILs have already been implemented
Source: Capgemini Analysis, 2013; *World Payments Report*, 2011 and 2012

The global ‘heat map’ of KRIs (see Figure 2.2) provides a vivid picture of the challenges PSPs face in the post-financial crisis world. As the payments regulatory landscape in Africa is still emerging, we have not included any specific KRI for the region. However, the payments industry in the region is witnessing a mix of initiatives. For more details, please refer to our focus on Middle East and Africa on page 13.

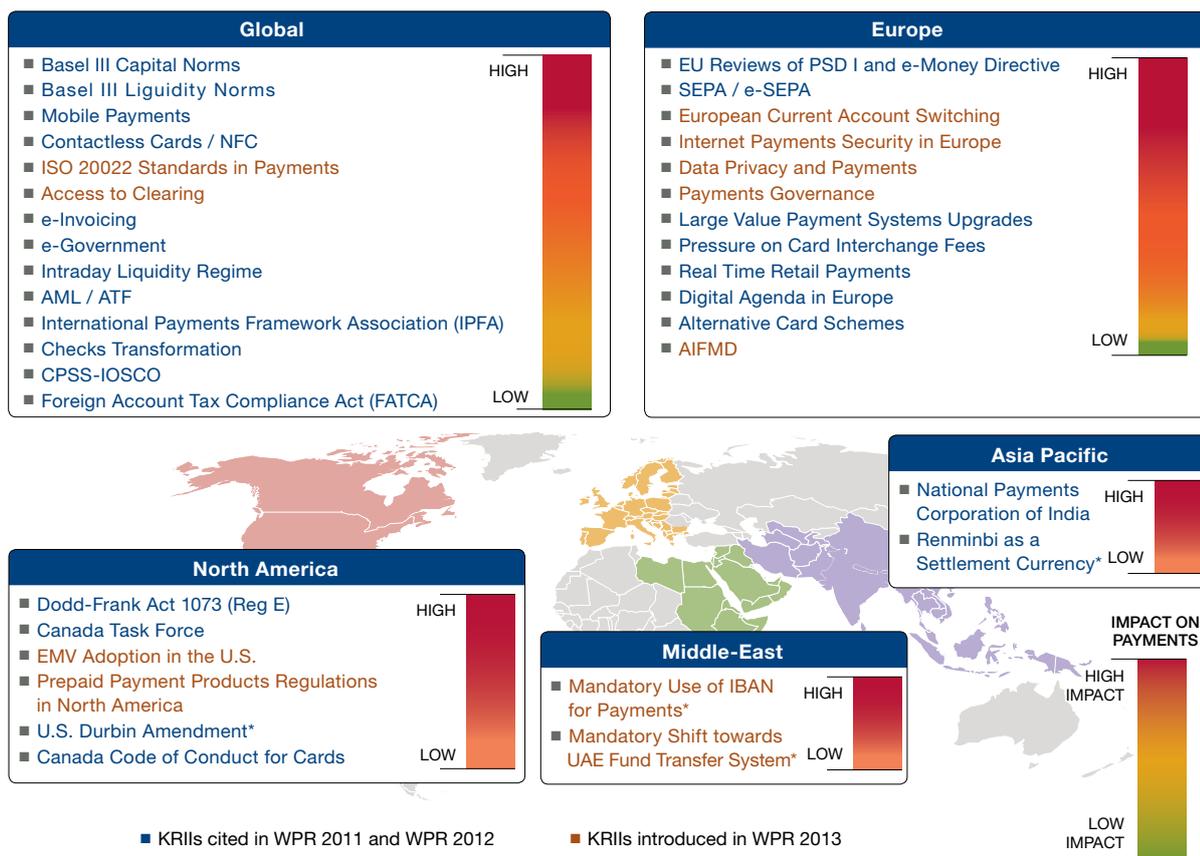
STANDARDIZATION, TRANSPARENCY, AND INNOVATION ARE KEY DRIVERS OF NEW KRIs

KRIs overlap to an extensive degree in some cases when categorized within the industry transformation trends (ITTs) of innovation, standardization, transparency of services, and systemic risk reduction and control. This emphasizes the point made earlier

that PSPs must understand the relationship between KRIs when implementing them. As can be seen by the clustering standardization, transparency, and innovation are key drivers of new KRIs and many initiatives fall into these categories (see Figure 2.3).

Of the new initiatives introduced since WPR 2012, European Current Account Switching straddles three ITTs: transparency of services, innovation, and standardization. In 2012, Visa and MasterCard announced they would accelerate migration to chip-based cards and EMV technology in the U.S., with a deadline target of 2015. Magnetic stripe cards will be replaced with the more secure chip and PIN authentication method; an initiative that can be categorized as systemic risk reduction and control, and also innovative because EMV will enable new services.

Figure 2.2 Heat Map of Key Regulatory and Industry Initiatives (KRIs), Global and Regional, 2013

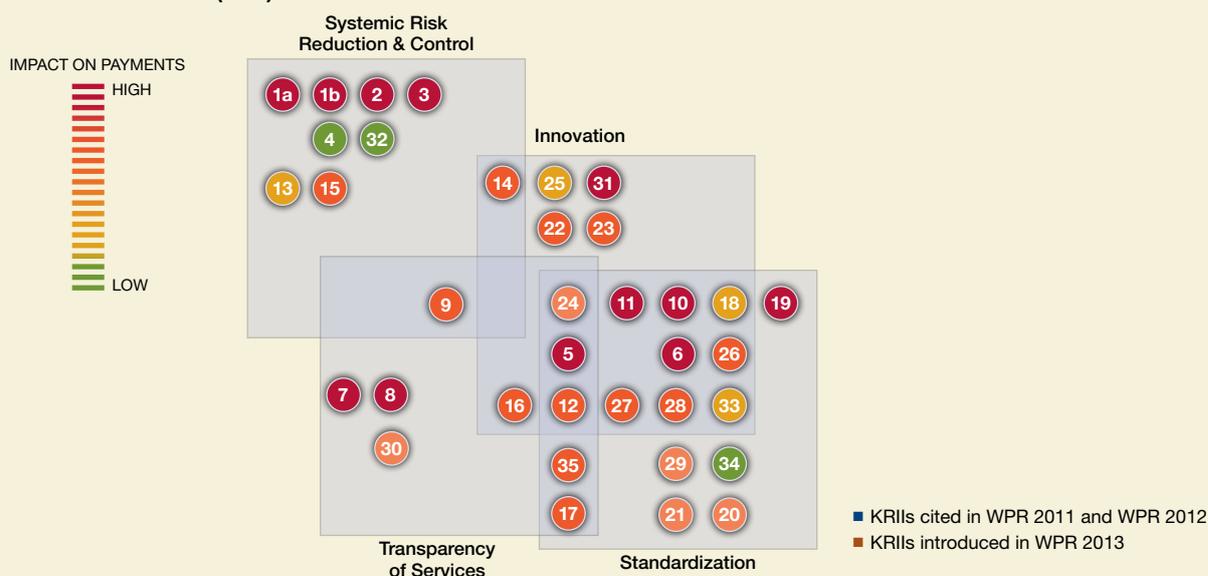


Note: AML/ATF – Anti-Money Laundering/Anti-Terrorism Financing; CPSS-IOSCO – Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO); NFC – Near-field communications; PSD – Payment Services Directive; SEPA – Single Euro Payments Area; AIFMD – Alternative Investment Fund Manager’s Directive

*KRIs have already been implemented

Source: Capgemini Analysis, 2013; *World Payments Report*, 2011 and 2012

Figure 2.3 Overlapping Impact of Key Regulatory and Industry Initiatives (KRILs) on Industry Transformation Trends (ITTs)



KRII

1a. Basel III Capital Norms	10. Large Value Payment Systems Upgrades	22. Mobile Payments
1b. Basel III Liquidity Norms	11. Real Time Retail Payments	23. Contactless Cards / NFC
2. Dodd-Frank Act 1073 (Reg E)	12. European Current Account Switching	24. Alternative Card Schemes
3. Intraday Liquidity Regime	13. AML/ATF	25. Checks Transformation
4. FATCA	14. EMV Adoption in the U.S.	26. e-Invoicing
5. EU Reviews of PSD I and e-Money Directive (EMD)	15. Internet Payments Security in Europe	27. e-Government
6. SEPA / e-SEPA	16. Data Privacy and Payments	28. Digital Agenda in Europe
7. U.S. Durbin Amendment*	17. Payments Governance	29. National Payments Corporation of India
8. Pressure on Card Interchange Fees	18. IPFA	30. Canada Code of Conduct for Cards
9. Prepaid Payment Products Regulations in North America	19. ISO 20022 Standards in Payments	31. Canada Task Force
	20. Mandatory Use of IBAN for Payments*	32. CPSS-IOSCO
	21. Mandatory Shift towards UAE Fund Transfer System (JAEFTS)*	33. Renminbi as a Settlement Currency*
		34. AIFMD
		35. Access to Clearing

Note: AML/ATF – Anti-Money Laundering/Anti-Terrorism Financing; CPSS-IOSCO – Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO); NFC – Near-field communications; PSD – Payment Services Directive; SEPA – Single Euro Payments Area; AIFMD – Alternative Investment Fund Manager’s Directive

*KRILs have already been implemented

Source: Capgemini Analysis, 2013; *World Payments Report*, 2011 and 2012

Key Regulatory and Industry Initiatives (KRIs) in Payments, 2013

Key #	Key Regulatory and Industry Initiatives (KRIs)	Brief Description / Update
KRIs added to WPR 2013 have been presented in brown text in the table below.		
1a	Basel III Capital Norms	In June 2011, the Basel Committee finalized new capital requirements under the Basel III rules. As of end-March 2013, adoption of Basel III capital norms has occurred in Australia, Canada, China, Hong Kong, India, Japan, Mexico, Singapore, Saudi Arabia, South Africa, and Switzerland. In July 2012, the EC published a proposed regulation and directive to implement Basel III, the Capital Requirements Directive IV (CRD IV). It will be phased in between 2013 and the beginning of 2019. The U.S. agencies intend to finalize the rules on Basel III after consideration of public comments and coordinate these with the Dodd-Frank Act, which embeds within it the essence of the liquidity and capital requirements of Basel III.
1b	Basel III Liquidity Norms	In January 2013, the Basel Committee made two major changes to the 2010 Basel III rules for the Liquidity Coverage Ratio (LCR); the range of assets accepted to satisfy capital requirements was expanded and the deadline for 100% LCR compliance was moved from January 1, 2015 to January 1, 2019. Now, banks need to meet only 60% of the LCR obligation by 2015, which will be gradually increased by 10% every year until full compliance is required in 2019.
2	Dodd-Frank Act 1073 (Reg E)	In May 2013, the Consumer Financial Protection Bureau (CFPB) published the final rule after amendments to Regulation E, which implements the Electronic Fund Transfer Act. Remittance transfers will be regulated by the new rule. The 2013 Final Rule requires PSPs to include disclaimers on the disclosure forms indicating that the recipient may receive less than the disclosed total due to certain recipient institution fees and taxes collected by a person other than the PSP. The new rule also streamlines error resolution procedures in situations where incorrect information provided by a sender results in an erroneous transfer. The 2013 Final Rule will become effective on October 28. The Dodd-Frank Act finds resonance with the EU Financial Transactions Tax and European Markets Infrastructure Regulation (EMIR).
3	Intraday Liquidity Regimes	Strengthening of intraday liquidity regimes continues on a global basis. In April 2013, the Basel Committee on Banking Supervision, in consultation with the Committee on Payment and Settlement Systems, issued a new reporting framework to enable banking supervisors to better monitor banks' management of intraday liquidity risk. This framework will also help supervisors to develop a better understanding of banks' payment and settlement behavior. Separately, the U.K.'s Financial Services Authority (FSA, since split into the Financial Conduct Authority, FCA and Prudential Regulation Authority, PRA) published more details on the adjustments made to the capital and liquidity regimes for U.K. banks and building societies ³⁰ . The FCA wants to recalibrate all individual firms' liquid assets buffer requirements, taking into account the economic costs and availability of the additional liquidity that is required. In the U.S., the Federal Reserve revised its Policy on Payment System Risk in March 2011 and has made no changes after that. Financial regulators and central bankers are likely to propose more regulations on intraday liquidity, including a requirement for bankers to record, forecast, and manage their liquidity positions.
4	U.S. Foreign Account Tax Compliance Act (FATCA)	On 17 January 2013, the U.S. Department of the Treasury and the Internal Revenue Service issued the final regulation for implementing FATCA. The regulations provide additional certainty for financial institutions and government counterparts by finalizing the step-by-step process for U.S. account identification, information reporting, and withholding requirements for foreign financial institutions, other foreign entities, and U.S. withholding agents. In their attempt to implement this KRII, banks will need to improve their infrastructure to better know their customers, which in turn may have an impact on payment product offerings and pricing. Further, it is likely that similar regulations will emerge in Europe. ³¹

³⁰ 'Removing the Simplified ILAS BIRPU firm automatic scalar increase and other changes to BIRPU 12', FCA, November 2012

³¹ 'FATCA Emerging as Global Standard', *The Wall Street Journal*, April 23, 2013

Key #	Key Regulatory and Industry Initiatives (KRILs)	Brief Description / Update
5	EU Reviews of Payment Services Directive (PSD) and e-Money Directive (EMD)	<p>Having missed the original deadline of November 1, 2012, EC published the proposal for a revised Payments Services Directive (PSD2) together with a Regulation on Multilateral Interchange Fees (MIFs) on 24th July 2013. With an objective of improving the effectiveness of the European payments market, the revised PSD aims to improve security of low cost internet payment services by extending its scope to cover payment initiation services as a new regulated activity. The proposal also increases consumer rights when sending transfers and money remittances outside Europe or paying in non-EU currencies.³² Meanwhile, the EMD has been implemented by all the EU Member States except Belgium and the EC has taken up the issue with the European Court of Justice.</p> <p>The PSD and EMD aim to provide easy, efficient, and secure payments and electronic money services, respectively. These directives share the common objective of increasing competition among market participants by opening up payment markets to new entrants. In January 2013, the European Forum on the Security of Retail Payments (SecuRe Pay) under the aegis of the ECB, developed recommendations to improve the security of payment account access services involving third parties. The objective of these recommendations is to protect the account owners by ensuring that third parties have requisite security and control measures and there is increased transparency for account owners and the account holding PSPs.</p>
6	SEPA/e-SEPA	<p>As of June 2013, SCTs represented 47.0% of the total credit transfers across the Euro area, with volumes amounting to Euro 284.3 million. At the same time, the percentage of direct debits made with SDDs was just 3.7% and the volumes amounted to Euro 22.7 million. As of April 2013, 4,516 PSPs across 32 countries were offering SCT facilities. The key deadline of February 1, 2014 for SEPA compliance for the Eurozone is fast approaching.</p>
7	U.S. Durbin Amendment	<p>The Durbin Amendment was implemented across the U.S. in October 2011. The implementation of EMV debit cards is posing a few challenges for banks as they comply with Durbin. However, an announcement by the Secure Remote Payment Council in March 2013 has defined the path for banks to stay compliant with the Amendment. Ten members of the Council's Chip and PIN Workgroup have agreed to adopt a common U.S. debit application identifier and work with Discover Financial Services to license the D-Payment Application Specification. This common application will enable merchants to choose from at least two unaffiliated networks to route debit card transactions (as required by the Durbin Amendment) and will ease the ability for issuers to switch or add new networks.</p>
8	Pressure on Card Interchange Fees	<p>A proposal for an EU regulation was issued by the EC in July 2013. This new regulation proposed to cap MIF at 0.2% for debit schemes and 0.3% for credit schemes, beginning with cross-border transactions and then rolled out to domestic transactions. In July 2013, the European Court of Justice held a hearing on the appeal made by MasterCard seeking to overturn an EU decision that the cross-border card fees breach antitrust rules. The court decision is likely to have a wide impact on global card payment systems and the financial industry.</p>
9	Prepaid Payment Products Regulations in North America	<p>In October 2012, the Canadian Department of Finance published a proposed set of regulations to enhance the consumer protection framework for payment network-branded prepaid cards. The proposed regulations will give consumers access to information required to make financial decisions before prepaid cards are issued. The core objective of these regulations is to increase transparency in prepaid payment products. In May 2012, the U.S. Consumer Financial Protection Bureau issued an <i>Advance Notice of Proposed Rulemaking</i> regarding prepaid cards. The aim is to evaluate several topics such as fees and disclosures, unauthorized transactions, and product features.</p>
10	Large Value Payment Systems Upgrades	<p>Target2 has continued to maintain its dominant place in large value payments in the Euro currency with a market share of 57% by volume and 92% by value. In 2012, Target2 settled 354,185 transactions (average) on a daily basis amounting to Euro 2.48 trillion. Further, the EuroSystem is working on permanent upgrades such as T2S which will be imposed on the market.</p> <p>Both Target2 and EURO1 (a privately owned service of EBA Clearing, used for processing interbank large-value Euro payments) are planning to use SWIFT ISO 20022-based MX standards for payments by late 2017.</p> <p>Further, the Liquidity Savings Mechanism (LSM), developed by the Bank of England, was launched in April 2013 to ensure CHAPS members are able to meet financial demands in a more cost-effective way. LSM will help to increase the robustness and efficiency of the system by enhancing the RTGS to eliminate settlement risk between CHAPS members. Simulation studies further suggest that in the long-term LSM will help to reduce the system-wide intraday liquidity requirements by around 30%.</p>

³² "New Rules on Payment Services for the Benefit of Consumers and Retailers", European Commission Press Release, July 24, 2013, http://europa.eu/rapid/press-release_IP-13-730_en.htm?locale=en

Key #	Key Regulatory and Industry Initiatives (KRIIs)	Brief Description / Update
11	Real Time Retail Payments	<p>The U.K., Poland, Singapore, Sweden, and Brazil have implemented quasi real time retail payments infrastructures in the form of automated clearing houses and this trend is expanding. The Australian Payments Clearing Association (APCA) is developing a proposal for a new real-time payments infrastructure which has been reviewed by the Reserve Bank of Australia (RBA) and received positive response from banks in Australia. APCA aims to have the new infrastructure in place by December 2016. The infrastructure—the Common Payments Network, or Community of Interest Network—will create a central clearing facility that will connect all financial institutions and provide a link to RBA’s settlement facilities to enable real-time transfers.</p>
12	European Current Account Switching	<p>In May 2013, the EC published a proposal for a Directive to help make bank accounts cheaper, more transparent, and accessible to all consumers. This proposal tackles three areas: comparability of payment account fees, payment account switching, and access to payment accounts. These moves are designed to enable consumers to make informed decisions about bank accounts and improve consumer convenience. In a separate, but related initiative, the U.K. will start providing an enhanced current account switching facility to consumers from September 2013. This service will enable bank customers to switch personal current accounts (PCAs) from one bank to another in a much easier and faster way. Meanwhile, the debate continues on the case for going beyond the current measures to support switching and ultimately require full portability of account numbers.</p>
13	Anti-Money Laundering (AML)/Anti-Terrorism Financing (ATF)	<p>The Financial Action Task Force (FATF) continues to review high-risk jurisdictions that pose a threat to the international financial system, and work with those jurisdictions to reach an acceptable level of compliance. The methodology for assessing technical compliance with the FATF recommendations and effectiveness of a country’s AML and ATF systems has been agreed. The Financial Crimes Enforcement Network (FinCEN) issued an advisory to inform banks and other financial institutions operating in the U.S. of risks in various jurisdictions due to strategic deficiencies in their AML/ATF regimes.</p> <p>In February 2013, the EC demonstrated its commitment to AML/ATF by introducing a proposal for an updated directive designed to prevent the use of the financial system for the purpose of money laundering and terrorist financing. Another proposal for an updated regulation on information accompanying transfers of funds was also introduced.</p>
14	EMV Adoption in the U.S.	<p>In the U.S., the adoption of EMV technology received a mixed response from many players, who felt a stronger business case was required. However with the passing of the first deadline of April 2013, when acquirers and acquirer processors were required to handle full chip data in authorization transactions, momentum improved. Visa announced in April 2013 that acquirer processors handling the majority of face-to-face sales volume in the U.S. had completed the mandated requirements, and the remaining processors to do so were working to complete the process.</p>
15	Internet Payments Security in Europe	<p>Under the guidance of the European Central Bank, the European Forum on the Security of Retail Payments (SecuRe Pay) has developed recommendations to improve the security of internet payments. It outlined 14 recommendations covering three main areas: general control and security environment, specific control and security measures for internet payments, and customer awareness, education, and communication. For example, standards for internet payments security include measures such as 3-D secure ready cards for strong customer authentication. The recommendations must be implemented by PSPs and governance authorities of payment schemes by February 1, 2015. The report specifies minimum requirements for internet payment services such as cards, credit transfers, e-mandates, and e-money. The report also lists points to be considered in the PSD review, including a structure to facilitate the exchange of information and cooperation between PSPs, supervisory authorities/overseers, and data protection authorities.</p>
16	Data Privacy and Payments	<p>In January 2012, the EC proposed a data protection reform package comprising three main components. First, it published <i>Safeguarding Privacy in a Connected World—a European Data Protection Framework for the 21st Century</i>, which envisages the introduction of a single set of rules on data protection for the whole EU. Second, a regulation on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation) was proposed. A directive was proposed on the protection of individuals with regard to the processing of personal data by competent authorities for the purposes of prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and the free movement of such data.</p>

Key #	Key Regulatory and Industry Initiatives (KRILs)	Brief Description / Update
17	Payments Governance	In July 2012, HM Treasury, the financial policy maker of the U.K., proposed a national Payments Strategy Board (PSB) for the improvement of national payments governance. In March 2013, the Treasury launched a paper favoring of a utility type regulator for the payments industry. The deadline for responding to the consultation was June 25, 2013 after which a new plan and selection of a new regulator for retail payments would begin. Enhanced payment governance is also being promoted in other countries including Canada, Australia, New Zealand, and within the EU. The objective is to take public interest into account and ensure cooperation between industry participants.
18	International Payments Framework Association (IPFA)	In 2012, the Brazilian Real, Canadian and Australian dollars, and South African Rand were made available for processing based on the IPFA standard. Further adoption of ISO 20022 standards and the IPFA rule set by the Southern African Development Community indicated the applicability of IPFA standards in a regional context as well. The discussions for adoption of IPFA in other regions are ongoing including in the East Africa Community and ASEAN. In 2013, IPFA will focus on four areas: the roll-out of transactions between members outside the U.S. and Europe; adoption of the International Payments Framework regionally; usage of the current rule set and message standards to address the Dodd-Frank regulatory requirements; and closer collaboration with other banking networks or organizations to explore areas of mutual benefits.
19	ISO 20022 Standards in Payments	ISO 20022 is a framework to develop message format standards for all domains of the financial industry (payments, cards, trade services, FX, and securities). The European Payments Council (EPC) adopted ISO 20022 message standards for SEPA instruments. Many of the central banks around the world have started defining strategies to migrate their RTGS platforms to ISO 20022 message formats and some have started to adopt ISO standards. For example, in December 2012, the Reserve Bank of India published ISO 20022 compliant message formats for a next generation RTGS system and asked all RTGS members to be ready to handle ISO 20022 message formats by March 31, 2013. At Sibos 2012, the ECB announced its strategy for migration of Target2 to ISO 20022. In November 2017, all existing payment message types will be replaced by MX (ISO format) equivalents. Further, after the migration deadline, Target2 will not offer any conversion feature and old MT and new MX standards will not coexist.
20	Mandatory Use of IBAN for Payments	Bahrain, Kuwait, Lebanon, Saudi Arabia, Turkey, and UAE have mandated the use of IBANs for payments/transfers to and from their countries. Therefore, customers need to quote an IBAN for all payments/transfers (regardless of currency) in these countries.
21	Mandatory Shift towards UAE Fund Transfer System (JAEFTS)	The UAE Central Bank's regulation mandating the use of JAEFTS came into effect in April 2012. The regulation requires that all inter-bank money transfers are routed through UAE's Central Bank system. To comply with the regulation, all banks in UAE have been mandated to use JAEFTS for all UAE Dirham (AED) transfers. The new system has key features such as real-time settlement of AED payments, transaction status for everyone, and surety of payment finality. This system will require banks in the UAE to switch from SWIFT financial messages to a file-based settlement system.
22	Mobile Payments	Governments in developing countries are pushing mobile payments to increase bank reach to rural areas. In Brazil, regulators plan to introduce regulations for mobile phone transactions, which aim to lower the cost of payment operations, raise competition among merchant service providers, and deepen banking penetration. In Africa, mobile money is gaining prominence via solutions such as M-Pesa. In March 2011, the Reserve Bank of India gave conditional approval to allow 100% foreign direct investments to develop and implement mobile wallets. Many technology players and leading global banks are collaborating to develop mobile wallets. The U.K.'s Payments Council also plans to launch a mobile payments service in the first half of 2014, enabling customers to make payments from their registered mobile phones without the need to disclose their bank sort code or account number.
23	Contactless Cards/NFC	While the global trend toward adoption of contactless cards has continued since WPR 2012, adoption has been slow mainly due to a lack of interest and awareness among customers. However, major developments have been seen in Europe particularly in the U.K., where large retail outlets and merchants have adopted contactless card readers. This is likely to boost contactless payments volumes in 2013. A contactless payment system also has been introduced in London buses and is expected to rollout to the underground transport system by the end of 2013. In November 2011, the Netherlands introduced OV Chipkaart (a contactless prepaid smart card system) for all public transport payments. Contactless payments are also expected to be integrated with mobile contactless payments in the near future.

Key #	Key Regulatory and Industry Initiatives (KRIIs)	Brief Description / Update
24	Alternative Card Schemes	<p>In March 2012, the National Payment Corporation of India (NPCI) formally launched RuPay (a domestic card payment network), which will compete with Visa and MasterCard. One of the objectives is to create a low-cost electronic payment scheme in India. RuPay will pose strong competition to existing schemes as it offers a 40% lower interchange rate. Also, there is no participation or quarterly minimum processing fee, enabling smaller commercial, rural, and co-operative banks to join the card payments system.</p> <p>In Europe, however after discussions with regulators, the Monnet Project was put on hold. The bank-sponsored project, which aimed to create a pan-European card scheme to compete with Visa and MasterCard, suffered from a lack of certainty in its business case. Also, The Euro Alliance of Payment Schemes (EAPS) is experiencing slower progress than initially expected. Another new scheme, PayFair, is surviving and aims to become a SEPA compliant payment scheme in Europe.</p>
25	Checks Transformation	Checks transformation continues in some jurisdictions. The usage of remote deposit capture in many countries enables customers to deposit checks without visiting a bank branch. Check volumes have continued to fall across the globe with the biggest decline registered in Mature Asia-Pacific (Japan, Singapore, Australia, and South Korea).
26	e-Invoicing	<p>Many countries have adopted or are adopting e-invoicing. In 2013, the U.S. Treasury mandated all its commercial vendors to submit their invoices using the Internet Payment Platform (IPP). Mandated use of e-invoicing are announced or planned in various Latin American countries including Chile, Costa Rica, Ecuador, Guatemala, and Uruguay. The public sector in these countries is pushing for e-invoicing systems.</p> <p>In the EU, an Invoicing Directive adopted in July 2010 was applied in Member States from January 1, 2013. The Directive aims to harmonize invoicing rules, allowing tax authorities to accept electronic invoices as if they were paper. In June 2013, after intensive stakeholder consultations, the EC proposed a directive on electronic invoicing in public procurement to accelerate the roll out and usage of e-invoicing platforms, based on common standards across EU.</p>
27	e-Government	The EC aims to support the provision of a new generation of e-government services for businesses and citizens with its eGovernment Action Plan 2011-2015. Under this plan, open, flexible, and collaborative seamless e-government services at local, regional, national, and European level will be implemented, empowering citizens and businesses. In India, the government is taking its e-government initiative a step ahead by providing all citizens with a unique identity card, which will be later used to distribute many government subsidies to citizens.
28	Digital Agenda in Europe (DAE)	Progress on the DAE has been made during the past couple of years; more than 45% of the 101 actions defined by the DAE have been completed. In February 2013, a proposal for a Directive to ensure a high common level of network and information security was presented to the European Parliament. The aim of this Directive is to improve security of the internet, private networks, and information systems to create a reliable environment for worldwide trade in services.
29	National Payments Corporation of India (NPCI)	In September 2012, the NPCI launched Inter-Bank Mobile Payment Service (IMPS) merchant payments, which allows mobile banking customers to make payments to merchants and enterprises. The system enables merchants to receive payments made by customers through various channels. NPCI is also developing a mobile payment central infrastructure based on unstructured supplementary service data (USSD), which will enable mobile banking services on basic mobile phones.
30	Canada Code of Conduct for Cards	In 2012, the Canadian Government proposed an addendum to the code of conduct for cards, expanding its scope to include mobile payments. The addendum states that all references to 'payment card' networks and network rules will include payment applications that consumers can access using their mobile devices and also provides clarifications of specific aspects of the code.
31	Canada Task Force	In 2012, the Canadian Government formed the Finance Canada Payments Consultative Committee (FinPay), which comprises representatives from the public and private sectors. The committee will meet regularly to discuss emerging payment issues, and will advise the Department of Finance on public policy aspects of payments issues. The aim is to improve the Government's payments policy making.

Key #	Key Regulatory and Industry Initiatives (KRILs)	Brief Description / Update
32	CPSS-IOSCO	In December 2012, the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) published the assessment methodology and disclosure framework for their Principles for Financial Market Infrastructures (PFMIs). The disclosure framework and the assessment methodology support consistent implementation and application of the PFMIs. They also facilitate greater transparency, objectivity, and comparability of assessments of observance of the PFMIs. Further in June 2013, the ECB published a draft regulation on oversight requirements for systemically important payment systems for public consultation. The objective of this regulation is to replace the <i>Core Principles for Systemically Important Payment Systems</i> with the PFMIs in the Euro area.
33	Renminbi (RMB) as a Settlement Currency	Chinese trade settled in Renminbi during July and August 2012 increased from 10.7% to 12.3% compared with the first half of the year. From Q1 2012, in terms of value of settlement, Europe has surpassed APAC, excluding Hong Kong and China. Within Europe, the U.K. leads the other countries.
34	AIFMD	The Alternative Investment Fund Manager's Directive (AIFMD), which came into effect in July 2013, provides a regulatory framework within which all alternatives managers will be required to operate and will shape the future of the asset management industry. The aims of the AIFMD are to: create a consistent, comprehensive, and effective regulatory and supervisory framework for AIFMs at the European level; provide robust and harmonized regulatory standards for all AIFMs within its scope; enhance the transparency of the activities of each AIFM, and the funds they manage, towards investors and public authorities.
35	Access to Clearing	A trend is being seen in some jurisdictions such as the U.K. towards the promotion of increased levels of direct participation in the payment systems (e.g. CHAPS in the U.K.). These moves are motivated by regulators' desires to reduce the levels of settlement risk in large-value payments systems and to stimulate additional competition.

In the Interconnected World of Payments, it Is Best to Consider KRIs in a Holistic Way

HOLISTIC ANALYSIS OF KRIs USING THE 3C MODEL

The interconnected nature of payments and business lines means KRIs should not be viewed individually—all stakeholders, including regulators and PSPs, should take a holistic view when developing strategies for designing and implementing KRIs. There are three main ways KRIs can have an impact on each other:

CASCADING EFFECTS OF GEOGRAPHICAL OVERLAPS

Many KRIs are a response to issues that are global in nature, but there are also some that while initiated in a particular country, have an impact on payments markets further afield. This can apply across three areas:

Customer information: FATCA, for example, compels foreign financial institutions to report customer information to the U.S. Internal Revenue Service (IRS) about foreign accounts held by U.S. taxpayers. Some regulations similar to FATCA, with an objective of preventing tax evasion, may be introduced in Europe;³³ hence banks should not limit themselves to prepare only for U.S. FATCA. Rather, banks should build a foundation on which they can implement any new country-specific FATCA. In April 2013, the U.K. signed an agreement with France, Germany, Italy, and Spain to develop and pilot a multilateral tax information exchange process. A pilot process will be developed by these five countries on similar lines to FATCA, to enable automatic exchange of financial information.³⁴

Real-time payments: Real-time payments for retail consumers originated in the U.K. and are now being replicated by other countries such as Australia and Singapore. A similar phenomenon is occurring with mobile payments where local regulators are encouraging banks to build the necessary infrastructure to support mobile payments (e.g. in Poland).

Business model: Regulations to govern the level of interchange fees started in Australia in 2006, with similar reforms being implemented in New Zealand shortly after, followed by Canada and more recently the U.S. and Europe.

COMPLEMENTARY REINFORCEMENT

The impact of complementary reinforcement can be seen in a number of areas: SEPA was enabled by the single legal framework of the PSD; data privacy regulations have consumer interests at their core as was the case in competition-based initiatives; there are similarities between AML/ATF, EU directives on money laundering, and FATCA.

In order to implement FATCA compliance, banks must hold a complete view of each customer, to help them identify suspicious fund transfers, thus complementing their work on AML/ATF and KYC initiatives. An executive from one of the leading European banks told us: “FATCA comes on top of KYC and our implementation is designed to enable any other FATCA”. Another representative from a major European bank said: “We are managing FATCA centrally with a single customer database, which is consistent with previous KYC plans and can also support any European FATCA.”

COMPETING EFFECTS

While there is complementary reinforcement at work in several KRIs, there is also conflict as various requirements appear to compete with each other. For example, KRIs are competing for bank funds at a time when investment budgets are tight. A bank compliance department will require funds to ensure systems and processes are in place to meet regulatory obligations. Another department at the same bank may require funds to pursue innovations that will tap the potential of particular KRIs, such as SEPA, for example. The trend towards real-time or immediate payments is also challenging for banks as they seek to comply with intraday liquidity requirements; most bank treasuries are designed to manage a single cut off time in the day.

³³ ‘FATCA Emerging as Global Standard’, *The Wall Street Journal*, April 23, 2013

³⁴ ‘New UK Multilateral Action to Combat Tax Evasion’, HM Treasury, April 9, 2013, <https://www.gov.uk/government/news/new-uk-multilateral-action-to-combat-tax-evasion>

The security measures required for internet payments, EMV, and data privacy may hamper the convenience offered by innovations such as mobile, contactless, and real-time payments; illustrating competing effects. Even the standardization mandated by ISO 20022 is likely to involve significant costs of change for banks and their corporate clients. Many payments executives acknowledge this competing effect. One executive, from a leading currency exchange service provider, said: “The high level of security affects the customer journey and also increases the processing time due to the increased number of security checks.”

Additionally, government efforts to encourage banks to offer accounts to unbanked citizens can conflict with e-government initiatives to promote the use of prepaid cards for the distribution of benefits. The promotion of prepaid cards, which enable anonymous payments, also competes with efforts on AML. However, complementary reinforcement occurs when governments introduce prepaid transit cards (such as London Transport’s Oyster Card).

PSPs NEED TO BE ENGAGED AT AN EARLY STAGE IN THE GOAL SETTING AND DESIGN OF REGULATORY INITIATIVES

The scoping and design phase of any KRII program is as critical as the implementation phase. Considering the relationships and overlaps between KRIs will help ensure optimal strategies for design and implementation will be achieved. The following are crucial for the effective design and implementation of KRIs:

DESIGN:

- Clients’ needs and end-to-end experience
- Engagement with regulators during brainstorming stages
- Informed and ongoing dialog with regulators while drafting the initial regulation

IMPLEMENTATION:

- Ongoing review from a client perspective to avoid unintended consequences
- Optimal governance structures
- Integrated global compliance
- Integrated approach to KRII implementation, starting at firm level
- Audit trail encompassing the full implementation process
- Treat compliance as much more than a box ticking exercise

Before implementing a KRII program, PSPs should become involved in the design phase—maintaining an ongoing dialog with regulators. This will act as an effective means of communicating how clients and business lines work and what their considerations are. Sometimes, first engagement with regulators during the consultation phase may be too late as by then the key vision and underlying structure are already decided.

SEPA DEADLINE UNLIKELY TO BE MET IN FULL

With the deadline of February 1, 2014 for migration from domestic payment schemes to SEPA instruments less than five months away, it is highly likely SEPA will not be fully implemented across the Eurozone on time. However, the EC still supports the original deadline. In issue 18 of the EPC newsletter (April 2013), Javier Santamaría, Chairman of the EPC, clarified that the Council has never indicated any change would be made to the deadline. The newsletter stated: "Consequently, there is only Plan A: get ready for SEPA in the Euro area by 1 February 2014".

The migration to SCTs has continued to be slow, particularly as it was assumed that finalization of the migration deadline would hasten adoption. Analysis shows that SCT adoption has increased by only 23.3 percentage points since December 2011 (when the SEPA deadline was finalized and the SCT adoption rate was 23.7%), to reach 47.0% in June 2013.³⁵

As of April 2013, 4,516 PSPs were offering SCT services across 32 countries. The absolute number of PSPs adhering to the SCT Scheme has declined slightly since publication of WPR 2012 (when 4,559 PSPs were operating) as some have merged or been acquired.³⁶ Those PSPs adhering to the Schemes handle nearly 95% of the payments volumes in Europe. Adoption rates vary from country to country, with Finland, Slovenia, Luxembourg, and Belgium the frontrunners. SCT migration rates are likely to increase only when users—consumers, businesses, and public authorities—begin to adopt these instruments. Migration also will be hastened if banks and public authorities work together to educate corporates and society in general more extensively about the need to migrate to SEPA and where possible, the benefits of SEPA.

The adoption of SDDs is much lower and is a major cause for concern. As of April 2013, 3,867 PSPs had signed for the SDD Core Scheme and 3,413 had agreed to adhere to the SDD business-to-business (B2B) Scheme.³⁷ As of June 2013, SDDs accounted for only 3.7% of the total volume of direct debits, up from 0.99% in July 2012. Complex technical, contractual, and procedural issues have slowed adoption but if corporates are to meet compliance deadlines they must finalize their migration projects now. If not, there is a significant business risk as they might not be able to process payments or collections. In addition, they risk missing out on the benefits of uniform SEPA payments across the Eurozone.

How much progress will be made on cards and at what pace, remains to be seen. The SEPA Cards Framework requires adoption of EMV standards and EMV transactions at POS terminals throughout the Eurozone. EMV transactions as a percentage of total POS transactions in the Eurozone have increased significantly since January 2008, reaching 77.8% of the total card transactions in December 2012. EMV compliant cards, POS terminals, and ATMs have become ubiquitous, suggesting further acceptance of the EMV standard. In June 2013, EPC together with the Cards Stakeholders Group published a new version of SEPA Cards Standardization for public consultation. This document contains the set of requirements (based on open international card standards) to ensure an interoperable and scalable card and terminal infrastructure across SEPA. There is still no incentive planned for its fast adoption.

SUCCESSFUL ADOPTION DEPENDS ON CORPORATE BUY-IN AND A CLEAR PICTURE OF COUNTRY-SPECIFIC INFORMATION

The successful adoption of SEPA depends on the level of involvement of public authorities, banks, and corporates. Analysis of successful SEPA migration in various countries reveals a number of key enablers that can drive adoption, which are listed in Figure 2.4.

Although all of the listed enablers are required to ensure smooth transitioning to SEPA, having a comprehensive source of information listing all the country specifics is arguably the most critical. Currently, there is no definitive comprehensive information on individual country differences. Such differences could include: the governing authority to rule on any confusion/clarification; the niche schemes for a particular country; and the key differences in formats. The payments market is still struggling with a lack of ownership and leadership in providing a single authoritative source. While pan-European banks are creating their own individual country guides, the lack of a single source of information is emerging as a key issue inhibiting the uptake of SEPA instruments.

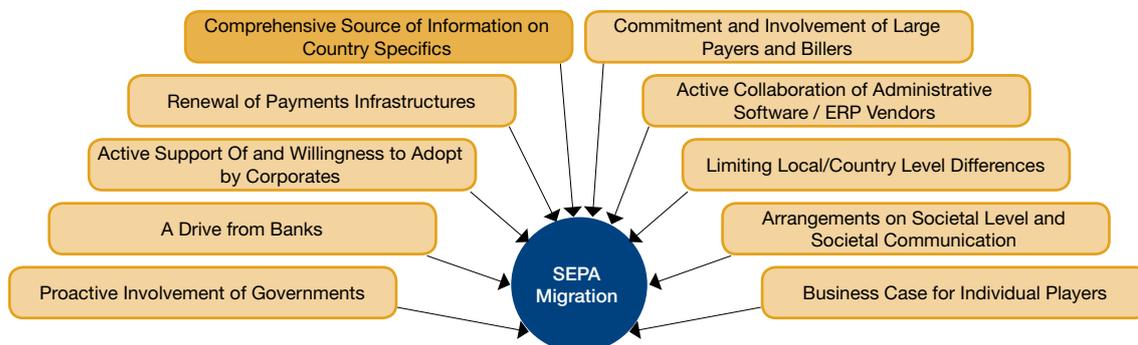
In 2007, a set of measures were proposed that should be taken to ensure a smooth migration to SEPA; in revisiting these measures it is apparent that the challenges being faced today may have some of their roots in a lack of progress on the key measures identified in 2007.³⁸ For example, it was suggested subsidies be provided for early movers in order to stimulate migration to SEPA. The idea of investment subsidies, provided to early adopters on the

³⁵ SEPA Quantitative Indicators, European Central Bank (ECB) Website, Accessed in August 2013, <http://www.ecb.int/paym/sepa/about/indicators/html/index.en.html>

³⁶ Ibid

³⁷ The SDD Core Scheme provides a set of interbank rules, practices, and standards that allow the banking industry to offer a direct debit product to customers. The SDD B2B Scheme pertains to similar rules, practices and standards for a direct debit product for business customers.

³⁸ 'SEPA: potential benefits at stake', Capgemini Consulting, 2007, http://ec.europa.eu/internal_market/payments/docs/sepa/sepa-capgemini_study-final_report_en.pdf

Figure 2.4 Key Enablers for Successful SEPA Migration

Source: Capgemini Analysis 2013; Executive Inputs 2013; SEPA migration, innovation and change, Benoît Cœuré, Member of the Executive Board of the ECB, November 2012; SEPA Migration Report, March 2013

demand side in order to compensate for the higher costs or risks incurred, is not a tool that has been pursued to date. Also, while rulebooks and implementation guides have been issued, no facilitation kits (i.e. a set of tools enabling companies to adopt SEPA with minimal investments) have been issued on a market-wide basis. The absence of a single set of standards for all elements of SEPA means there is still scope for customizing SEPA products and processes at the individual country level. There are Member State options that further complicate the picture across Europe, for example, leading to uncertainty about the effectiveness of conversion services. Progress has been made in other areas, however: regular progress reports on SEPA are being published and set deadlines for adoption have been agreed, which could have been a key success factor but does not appear to have worked.

Further, the migration to SEPA instruments has not been uniform across various countries in the Eurozone. For example, in Germany, the SCT adoption rate was 8.7% in quarter one 2013.³⁹ This was despite more than half of the DAX 30 listed large companies migrating to SEPA.⁴⁰ The reason for this lower adoption rate is that SMEs are yet to start the migration. Moreover there is a feeling that Germany's migration has been technical, focused on conversion to IBAN for domestic payments and the ISO 20022 XML format. German players are yet to take advantage of the theoretical benefits of SEPA. However, the legacy German payments instruments are similar to the

SEPA design and could be migrated to SEPA. Further, Germany has adopted the COR1 scheme, which is an expedited D-1 direct debit extension to the SDD scheme. Also, the country will retain its legacy instrument, Electronic Direct Debit (ELV) until February 1, 2016.

In Spain, on the other hand, 43.0% of its total credit transfers were SEPA compliant in the same quarter. Banks here are translating the legacy instruments to SEPA, which has led to higher SCT adoption, although corporates are still not ready. The authorities in Spain have made the direct debit optional COR-1 scheme mandatory and decided that no legacy instruments (except Direct Debit Discounting and Commercial Discounting, which will remain unchanged until February 1, 2016)⁴¹ will remain after February 1, 2014.⁴²

In quarter one, 2013 Italy's share of SEPA compliant credit transfers was 15.5%,⁴³ indicating a low level of adoption despite banks, big billers, and public administrators expecting to complete SEPA migration preparations before the deadline.⁴⁴ Italy will introduce four new text formats for credit transfers and direct debits in addition to existing PAIN 001 and PAIN 008.⁴⁵ Also, the direct debit legacy instrument, Ricevuta Bancaria (RIBA), will remain available as a payment product after February 1, 2014 and mandate management functionality will be introduced in the form of the SEPA Electronic Database Alignment (SEDA).

³⁹ Quarter one, 2013 figures in this section are all from the ECB's SEPA Quantitative Indicators referenced earlier.

⁴⁰ 'On your marks...go SEPA', ING, 2013, http://www.ingsepa.com/media/19267/sepa_special.pdf

⁴¹ 'RBS SEPA Country Expertise', RBS, April 2013, http://mib.rbs.com/products_and_services/international-banking/transaction-services/payables-receivables/single-euro-payments-area

⁴² ING, 2013, http://www.ingsepa.com/media/19267/sepa_special.pdf

⁴³ SEPA Quantitative Indicators, European Central Bank (ECB) Website, Accessed in August 2013

⁴⁴ ING, 2013, http://www.ingsepa.com/media/19267/sepa_special.pdf

⁴⁵ PAIN 001 and PAIN 008 are XML message format used for payments initiation.

Although the Dutch are often at the forefront when it comes to adopting new European initiatives, the migration to SEPA is not progressing quickly in the Netherlands—SCTs made up only 14.4% of the total credit transfers in quarter one, 2013. Despite the low adoption levels for SCT (and SDD) the Netherlands did not choose to implement any of the available Member State transition options. This leaves February 1, 2014 as a strict deadline in the Netherlands. The main reason for low adoption of SEPA instruments in the Netherlands is the lack of significant direct benefits for most stakeholders. The current Dutch payments system is highly efficient and is very low cost for end users. However, there are positive signs; big payers and billers such as government agencies and insurance companies are adopting SEPA instruments. The Netherlands is one of the few countries that have created an extensive National SEPA Migration Plan involving all stakeholders. This should lead the way to faster SEPA adoption.

There are a few countries, such as Finland, that have already achieved full migration to SCTs and will also complete conversion to ISO 20022 XML before the deadline. Finland plans to phase out its legacy direct debit scheme before February 1, 2014 and will introduce two additional optional schemes (AOS) to ease calculation of payment interests and reconciliation by beneficiaries.

The SEPA migration end-date of October 31, 2016 for corporates in non-Eurozone countries such as the U.K. has created a 'wait and see' approach for some. Many corporates in the U.K. regard SEPA as a continental European project and believe they do not need to make efforts to comply; this is a risky approach for corporates that conduct Euro payments business in Eurozone countries. Just like their counterparts in the Eurozone, U.K. corporates need to prepare for SEPA in order to reap the benefits it offers.⁴⁶ As an executive from a leading bank in the U.K. informed us: "Right now, some corporates view SEPA as a compliance exercise that they need to meet, and less of an opportunity. However, its true benefits, such as centralization of account receivables and straight-through reporting, will be realized later." Even banks outside the Eurozone are anticipating this and are offering products to support client readiness for SEPA.

SEPA BEYOND 2014

The Eurozone remained in a volatile state during 2012 and sovereign debt problems in Greece, Ireland, Portugal, and Cyprus, have continued into 2013. Fears of contagion throughout the Eurozone persisted as by the end of 2012 five of the 17 Eurozone countries had sought bailouts. The crisis inevitably has had an impact on SEPA progress, with some individual Member States likely to face difficulty in meeting the compliance deadline due to very low levels of SEPA migration. Without 100% compliance, the core objectives of SEPA—to promote innovation and increase competition—cannot be fully achieved (see Figure 2.5).

SEPA does not end with the end date for migration. A number of steps remain after 2014 to complete the SEPA picture. These include the migration end date for SCTs and SDDs in non-Euro Member States and the end of Member State options such as BBAN to IBAN conversion for consumers, country waivers to deliver in ISO 20022 XML, and a migration end date for niche products in individual countries and reachability for non-Euro Member States for SCTs and SDDs.

Still largely missing from the SEPA picture are internet and mobile payments. Although e- and m-payments are likely to grow at high rates in Europe, limited progress has been made on the required payments infrastructure for these payments types. This is partly due to the current primary focus on SCT and SDD migration, but also because of an uncertain regulatory environment.

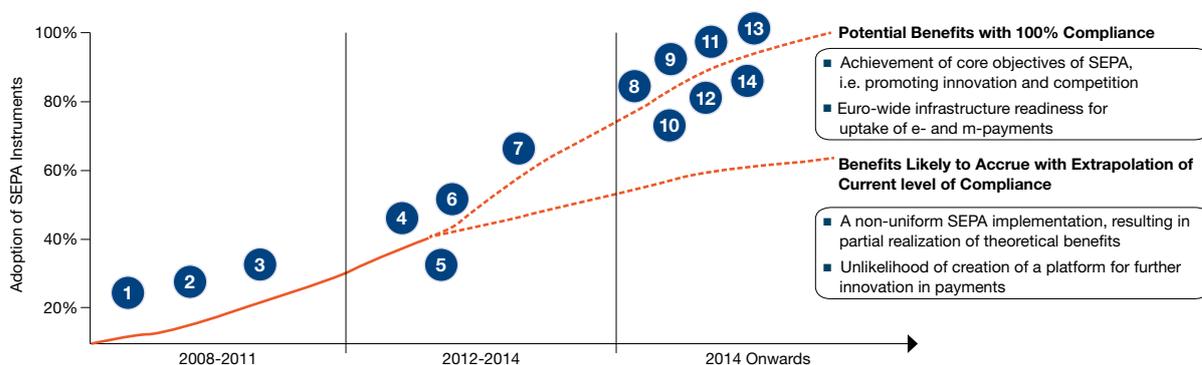
⁴⁶ ING, 2013, http://www.ingsepa.com/media/19267/sepa_special.pdf

Successful adoption of SEPA depends on addressing a number of barriers; this can be done most effectively by involving all stakeholders—regulators, public authorities, service providers, PSPs, and corporates. These barriers include a relative lack of payments sophistication among smaller businesses, and a lack of awareness of the magnitude of the impact of SEPA among both large and small corporates. The lack of enthusiasm for SEPA among many corporates is tied to a perceived lack of a business case, or indeed a budget. The consequences of non-compliance and the benefits of SEPA have not been consistently well-communicated to corporates, therefore earmarking funds for compliance may be difficult given budgetary constraints in the economic downturn. Moreover, many ERP and treasury management solutions are either not yet SEPA compliant, or corporates are using older versions of packages, and this presents another barrier to wider SEPA adoption. As this picture evolves, a need for contingency solutions for corporates, in the case of non-compliance is becoming apparent.

In the June 2012 SEPA Council meeting, enhanced accountability and legitimacy were identified as key aspects for a future SEPA governance model. It was proposed that the governance structure would distinguish between strategic work and work related to the definition of business rules, technical standards, and implementation specifications. There was a consensus on the responsibilities of the SEPA Council, which should include handling any legal issues that may hamper an integrated European retail payments market.

While to date SEPA largely has been a collective initiative, PSPs cannot expect the next phase of its development to be the same. In this next phase, PSPs need to focus on developing their own solutions, either collaboratively or in competition with each other. A combination of continuous dialog with regulators, collaboration and co-operation with all stakeholders, and individual innovative programs is needed to progress in the payments industry and meet KRIL obligations.

Figure 2.5 Progress and Projections of SEPA



The numbered circles represent milestones decided for successful SEPA implementation during the indicated time line.

- | | | | |
|--|---|--|---|
| 1 Launch of SCTs and SDDs | 4 Prohibition of MIF for SDD for cross border DDs | 8 Migration End Date for SCT and SDD (Non-Euro Members) | 12 Prohibition of MIF for SDD for National DDs |
| 2 Launch of SEPA Council | 5 BIC Not Required to be Provided for National Transactions | 9 BBAN to IBAN Free Conversion | 13 Reachability for Non-Euro Member States (SCT and SDD) |
| 3 LSEPA Migration Firm End-Dates Announced | 6 Migration End Date for SCT and SDD (Euro Members) | 10 Migration End Date for Niche Products | 14 Permission for Member States to Waive Message Format for PSUs of Bundled SCT and SDD |
| | 7 Reachability for Euro Member States (SCT and SDD) | 11 BIC Not Required to be Provided for Cross Border Transactions | |

Note: The graphic has used SCT adoption percentage as proxy for SEPA adoption.

Source: Capgemini Analysis 2013; Executive Inputs, 2013; The future of (mobile) payments, Deutsche Bank, December 2012; A Europe of Innovations: Only more competition in payment traffic will secure wealth and prosperity, europeanfinancialreview.com, June 2012



3 Payments Acquisition Has Emerged As a Key Area for Innovation

KEY FINDINGS

- **‘Payments acquisition’⁴⁷ has emerged as an extremely competitive element of the payments value chain. This is due to its proximity to clients and strategic value for PSPs, and demonstrates tangible opportunity to realize customer-centric innovation.** Consumer-to-business (C2B) acquisition is moving towards ‘any form’, ‘anywhere’, and ‘any time’ payments while business-to-business (B2B) acquisition is transforming from bi-lateral to multi-lateral models. The payments acquisition value chain is splitting—with transactional components becoming commoditized and customer-engagement components becoming differentiators.
- **New and legacy players are developing and delivering a multitude of innovative services—with four ‘Innovation Value Hotspots’ offering an opportunity to target their future investment areas:**
 - **Origination:** PSPs playing in this hotspot are embedding services into the daily lives of retail consumers⁴⁸ and corporates⁴⁹ in order to trigger commercial transactions from anywhere, regardless of location.
 - **Acceptance and Capture:** Players in this hotspot act as aggregators for payment instruments by offering a single solution enabling merchants or suppliers to accept any mode of payment.
 - **Security and Fraud:** Services are being developed to help PSPs to mitigate the rising risk and cost of security breaches and to implement best-in-class safeguards.
 - **Value-Added Services:** Data availability and analytics are offering an opportunity for the development of services that will enable new revenue streams to be exploited.
- **The changing landscape leads to some common lessons for all stakeholders including PSPs:**
 - The increasing fragmentation of the value chain is providing acquisition players with an opportunity to differentiate by meeting new and/or changing needs of both retail and business customers.⁵⁰
 - Banks need to continue to align their products with customer needs, possibly revisit their sourcing strategies, and continue to increase their market positioning from payments provider to a purchasing and selling facilitator.
 - While consumers need to balance security and convenience, corporates should focus on standards-driven collaboration with service providers.

⁴⁷ ‘Payments Acquisition’ refers to enabling sales/commerce by bringing buying and selling entities together in both C2B and B2B contexts, allowing the acceptance of any payment instrument based on customer choice, and facilitating sales agnostic to location, channel or currency. Please refer to page 40 for detailed definition.

⁴⁸ ‘Consumer’ refers to the retail customers who act as buyers for personal consumption and not on behalf of any business entity.

⁴⁹ ‘Corporate’ refers to the business customers who act as buyers for their business entities.

⁵⁰ Considering the definitions of consumer and corporate, ‘customer’ refers to both consumer (i.e. retail customer) and corporate (i.e. business customer).

INNOVATION REMAINS CRITICAL FOR SUCCESS IN PAYMENTS

WPR 2011 explored the future shape of the payments industry and demonstrated the importance of innovation for sustained success of banks and other PSPs. The report suggested that the industry is likely to move from an evolution phase to one of transformation in the near-term and in the long term to specialization.⁵¹

In exploring payment innovation, WPR 2012 defined it as the design, development, and implementation of new or altered products, services, processes, organizational structures, and business models. These create value for payment services providers (PSPs) and/or payment service users (PSUs). This extends the definition of innovation beyond the invention of something 'new' to the implementation of, or a change to, a product, service, or proposition that has a positive business impact.

WPR 2012 also recommended a path to successful innovation for PSPs, analyzing key success factors (KSFs) for customers, and PSPs' readiness to innovate, based on 'Innovation Bricks'. This year, *World Payments Report 2013* (WPR 2013) examines the payments industry at a deeper level to identify opportunities for customer-centric innovation.

PAYMENTS ACQUISITION CURRENTLY REPRESENTS THE GREATEST POTENTIAL FOR PAYMENTS INNOVATION

Three factors are driving change within the payments industry—client behavior, regulation, and technology. All three of these elements have an impact on the traditional stakeholders in the industry: financial institutions, networks and exchanges (such as ACHs), corporates, merchants, and processors.

Within this environment of change, three areas in which stakeholders can develop and offer services to differentiate themselves from competitors have opened up. These areas are: processing, exchanging, and servicing, the latter of which has attracted the greatest attention from banks and non-banks. Of the various activities that fall within servicing, acquisition offers the greatest innovation potential currently and is worthy of closer examination given the proliferation of instruments, locations, channels, and currencies that characterize the payments landscape.

We call this area 'payments acquisition', which refers to:

- Enabling sales/commerce (for goods and services)⁵² by bringing buying and selling entities together in both C2B and B2B contexts.
- Acceptance of any payment instrument based on customer choice, regardless of the form or product. These instruments include traditional credit, debit, and prepaid cards, bank transfers, direct debits, checks, m-payments, carrier billing (to a phone bill), and unconventional payment methods (such as virtual currency, vouchers, loyalty, cash-back points, or any other new instrument). This customer choice also includes using a combination of payments instruments such as credit card, voucher, and cash-back points.
- Facilitating sales independent of the location—for domestic or international customers via cross-border payments; channel—allowing 'anywhere sales' in the physical, e-commerce, and m-commerce contexts; and currency—based on customer choice, be it local currencies, virtual currencies, or FX transactions.

In the light of this definition, 'merchant acquiring', which involves C2B sales at physical locations using traditional cards, can be considered as an example of payments acquisition. While this changing landscape, with a wide range of payments instruments, offers choice and control for buyers, it poses a challenge for sellers (merchants/suppliers) regarding which instruments to accept and how to accept them.

When defining payments acquisition, note should be taken of the differences between C2B and B2B sales. Considering the flow of payments, for example, C2B payments are triggered by the buyer whereas in B2B, the seller triggers the flow by raising an invoice. The flow for credit and debit card transactions in C2B payments is similar because they rely on the same payment schemes. This is not the case in B2B, where debit transactions are usually simple payments through ACH or SWIFT networks, while credit transactions may involve banks or non-bank finance providers as credit providers. In regard to acquirer models, the B2B space is characterized by limited interoperability—bilateral agreements are the norm. In the C2B arena, on the other hand, two main models operate: four-corner and three-corner. These, and other differences, highlight the fact that any strategy for innovation in payments acquiring must take these nuances into account during the design and implementation of new products and services.

⁵¹ Please refer to pages 48 and 49 of WPR 2011 for detailed analysis on payment evolution.

⁵² Payments acquisition does not include unilateral transfer of money for non-commerce activities, e.g. government-to-consumers (G2C) and consumer-to-consumer/person-to-person (C2C/P2P) payments.

GLOBAL AND INDUSTRY-SPECIFIC CHANGES ARE DRIVING PAYMENTS ACQUISITION TOWARDS INNOVATION

A number of issues and initiatives, on a global market or payments acquisition industry level, are acting as a catalyst for innovation in payments acquisition. The core drivers are: the need to address new and changing customer demands, the convergence of channels, and the entry into the acquisition space of non-bank players.

The need to address new or changing buyer and seller demands, unfulfilled by traditional offerings.

Because payments acquisition is one of the closest areas to the customer within the spectrum of payments activities, particularly close attention should be paid to customer demands. Consumer and corporate expectations are changing: the immediate nature of online communications has generated a demand for the same immediacy in many other areas of life, including payments. This area enables stakeholders to offer improved customer-centric innovation—the second ‘wave’ of innovation that was identified in WPR 2012—that addresses customer needs not completely fulfilled by traditional payments products and services. “New propositions are focusing on demands that banks are not meeting. This gives advantages to new entrants who have the relationship with the consumer,” a payments executive from a leading processor in the U.K. told us. In the digital world, merchants must address the customer drop-out ratio by embedding payment into the sales and service applications.

Convergence of channels—physical, electronic, and mobile. In order to meet customers’ preferences, the majority of selling entities need to leverage all channels—physical, electronic, and mobile—for sales and distribution. For example, consumers may enter a physical store to shop and view products. While in the store they may check prices and offers on the store’s e-commerce site as well as on the sites of competitors. Having explored all the options, a payment transaction may be made using an m-payments channel. One of the most successful non-bank players identified this convergence as their key focus area and told us: “Where, how, and when the transactions occur is becoming increasingly blurred.”

A surge in e- and m-payments volumes has been recorded by *World Payments Report* during the past three years and there is no reason to believe this growth will not continue alongside that of e- and m-commerce. For stakeholders in the payments acquisition space, such growth represents substantial

opportunity as buyers and sellers increasingly turn towards e- and m-payments instruments and channels. This convergence is well advanced in C2B, and the B2B space is beginning to witness some progress as well.

This evolving convergence requires sellers and service providers to build an integrated strategy offering consistent customer experience across all sales channels. On the other hand, the rise of digital commerce and payments are enabling new economic models and reducing processing costs, which traditional commerce and payments could not have supported as easily.

Entry of non-bank players. The entry of non-bank players, most notably mobile network operators, into the payments space has been one of the most discussed developments in the industry in recent years. Payments acquisition is also witnessing increased activities by non-bank providers. Some new entrants have been arguably more successful than banks in developing customer-centric, value-added payments innovation in some parts of the value chain. Customer-centricity captures users’ imaginations and generates loyalty, ensuring a closer and longer-term relationship with customers.

In addition to these three core issues, other initiatives that are driving innovation in payments acquisition are worth noting. On a global level, some are common to both the C2B and B2B sectors, for example, improvements in technology for the capture, analysis, and monetization of data; the ‘war on cash’; and a need to reduce costs. At the industry level, common drivers across C2B and B2B include an increase in cross-border payments, the rising cost of fraud, demand for immediate payments, and downward pressure on margins and fees.

Other issues are specific to either C2B or B2B markets. In C2B, global market innovation drivers include an increased acceptance of and access to technology among consumers, and efforts to support the growth and transformation of sales and commerce. C2B industry drivers include the increased proliferation of payments instruments. In B2B, global drivers include innovations in electronic data capture and a demand for more control and visibility in commerce. B2B industry drivers include extended remittances and a demand for value-added services. These global and industry drivers are creating an environment in which innovation is flourishing in the acquisition part of the payments value chain.

INNOVATION-LED EVOLUTION OF ACQUISITION IS MORE EVIDENT IN THE C2B SPACE

In C2B, the traditional merchant acquiring model was limited to sales transactions in physical stores⁵³ using physical credit and debit cards. Transactions and funds would flow between four parties—the merchant, the acquirer (the merchant’s bank), the consumer, and the issuer (the consumer’s bank). This is the model followed by Visa and MasterCard. If the acquirer and issuer were the same entity, only three parties were involved, as in the traditional model of American Express and Discover. These fairly straightforward models have been transformed with the emergence of alternative payments instruments and changing customer behaviors.

Innovation is at the center of the future model for the payments acquisition industry: ‘any form’, ‘anywhere’, and ‘any time’. The scope of acquisition has expanded to include any payment instrument and location, based on customer choice. Payment schemes have proliferated to enable wider choice for customers and now include traditional cards (debit and credit), prepaid cards, bank transfers, direct debit, m-payments, carrier billing (to a phone bill), checks, and some unconventional payment methods such as loyalty points. However, use of these different payment instruments varies: as detailed in Section 1, check use is declining and the use of some other payments instruments might also fall with time. Cards are likely to continue their dominance over other non-cash payment instruments until the guarantees associated with alternatives are comparable.

In the evolving acquisition model, the merchant is dealing with a convergence of physical, electronic, and mobile sales channels and customers who may be local or international. Until recently, most acquirers were either banks or owned by banks; now the industry is experiencing the emergence of some payment instrument specific acquirers. In addition to these existing and new acquirers, a new category of acceptance providers has emerged. These acceptance providers integrate different payment instruments for merchants offering them with a single window to multiple acquirers. On the issuer side, banks have been joined by non-banks, usually referred to as service providers, such as Google Wallet or M-Pesa.

B2B ACQUISITION IS ALSO WITNESSING INNOVATION, THOUGH AT A SLOWER PACE

Traditionally, the vast majority of B2B sales have been direct transactions, with banks acting as account holders. Under this model the buyer and seller would agree commercial sales terms, physically exchange contracts and other documents, and provide payments instructions to their banks for settlement of the transaction. This meant both buyers and sellers used their banks as account holders, which processed transactions and corporate payments via interbank networks. It is important to note that in this model, banks did not have a great deal of insight or involvement in the commercial sale process, despite in some cases offering credit facilities to corporate customers.

However, in recent years new innovative players have emerged, acting as ‘quasi’ acquisition players. The traditional bilateral relationship and transaction flow is being replaced with a multi-lateral model as new players and services evolve. These new players are acting as intermediaries between buyers and sellers in B2B commerce providing e-procurement, e-invoicing, or payment processing services. However, the relationship between the buyer and seller is still intact, as information flows between the two. While some PSPs, including banks, have started to tap into this transaction information to develop value-added services, this information flow presents an opportunity for all service providers.

At the same time, a few hybrid players have entered the market, providing both invoice and payment processes, hence acting like traditional acquirers. These hybrid players also may offer additional facilities, such as credit services. Reverse factoring, which is the most common form of supply chain finance, is one of the leading examples of how hybrid players offer invoice, payments, and credit facilities to corporates. The reverse factoring is a financing solution initiated by the ordering party in order to help its suppliers to finance their receivables more easily and at a lower interest rate than they typically would be offered. A few players are taking this concept forward to offer additional services, for example, C2FO (formerly Pollenware) operates a collaborative marketplace to manage working capital. On the platform, Collaborative Cashflow Optimization, a company’s suppliers offer percentage discounts on shipments of product in exchange for early payment on those shipments. Other hybrid players include commercial card providers, which in addition to payments, offer credit and analytics services to card holders, and guaranteed immediate payment to suppliers.

⁵³ Online stores have existed for some time, but for purposes of contrast, we are limiting the “traditional focus” to physical stores.

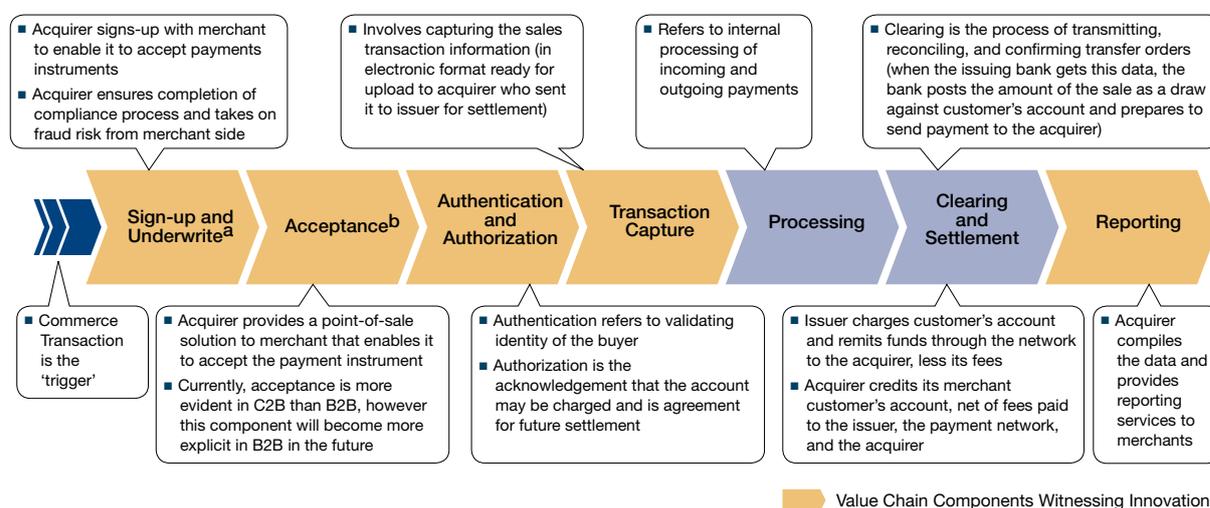
These changes indicate that the evolution of payments acquisition in B2B is under way, although it is not as prolific compared to the degree of innovation in the C2B space. The buying process for corporates is different from that of consumers—no impulsive or spontaneous shopping—and the payment process is not synchronous (order-take-pay). Hence, the payment offering is part of the sales value proposition and can directly influence sales. A representative of one of the leading automated clearing houses agreed and said: “The B2B sphere has been less innovative than C2B.” However, this evolution is likely to follow that of C2B and might witness a steep trajectory in the future. “Most of the new players are focusing on retail point-of-sale and are currently ignoring B2B. This is where the real mess is and also the lion’s share,” said an emerging non-bank player in the U.S.

THE EMERGENCE OF INNOVATIVE SOLUTIONS IS HELPING TO FRAGMENT THE PAYMENTS ACQUISITION VALUE CHAIN

Acquiring can be described as a value chain, triggered by a commerce transaction (see Figure 3.1). While most of the customer engagement elements of the value chain are witnessing innovation, processing and clearing and settlement are becoming more commoditized. This commoditization of the transactional pieces of the chain is similar to the disaggregation of the overall payments value chain and emergence of wholesale payments providers identified in WPR 2011.⁵⁴

Clearing and settlement continues to be the bedrock on which most client-facing innovations rely. In the competitive space, most leading banks are on the ‘payment hub’ journey to gain efficiency and prepare for scale. In the collaborative space, clearing and settlement mechanism players (including ACHs) are taking up a number of initiatives to enable real time payments and improve interoperability, thus driving the acceleration in innovation across other elements of value chain.

Figure 3.1 Payments Acquisition Value Chain



⁵⁴ Please refer to pages 48 and 49 of WPR 2011 for more detailed analysis.

In B2B, the financing and servicing value chains are merging with the payments acquisition value chain (see Figure 3.2). All three of these value chains, and their components, previously existed more independently of one another. For example, as acquisition players start offering invoice finance and client risk management, these parts of the financial and servicing value chains, respectively, are merging with the sign-up/underwrite and acceptance components of the acquisition value chain. Similarly, a number of acquisition players are offering cash management or pooling services, thus demonstrating blending with the reporting component. “The real value to clients, and banks, is the convergence of payments and financing opportunities,” said an executive from one of the leading U.K. banks.

In both the B2B and C2B arenas, innovative players are emerging to offer specialized services targeting fewer components, rather than the complete end-to-end value chain. This is leading to increased fragmentation of the acquisition value chain. In B2B these players include Odette, IATA and Coface, which play in the sign-up and underwriting space; Bottomline Technologies and SEPAmail in the acceptance space; SWIFT in transaction capture; and TradeCard and GTNexus in the reporting space. In C2B, new players include Amazon Coin and emerging wallet solutions such as Google Wallet (sign-up and underwriting); EBA’s MyBank, Adyen,

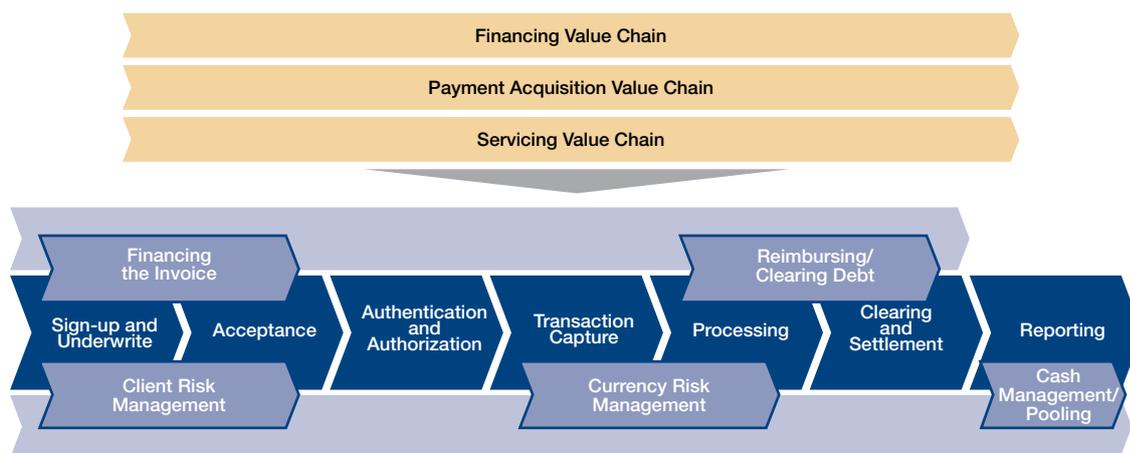
and WorldPay (acceptance); Cybersource (authentication); Chase Paymentech (transaction capture); and Cardlytics and EDO Interactive (reporting, from the perspective of analytics). This fragmentation demonstrates the importance of payments acquisition, as non-bank PSPs can focus on fewer components of the value chain by ‘piggy-backing’ on the existing infrastructures of banks and processors to complete the transactions.

FRAGMENTATION HAS GENERATED FOUR ‘INNOVATION VALUE HOTSPOTS’

Our analysis of innovative bank and non-bank PSPs and where they are focusing their efforts has identified four ‘Innovation Value Hotspots’ in the acquisition industry (see Figure 3.3). These hotspots are:

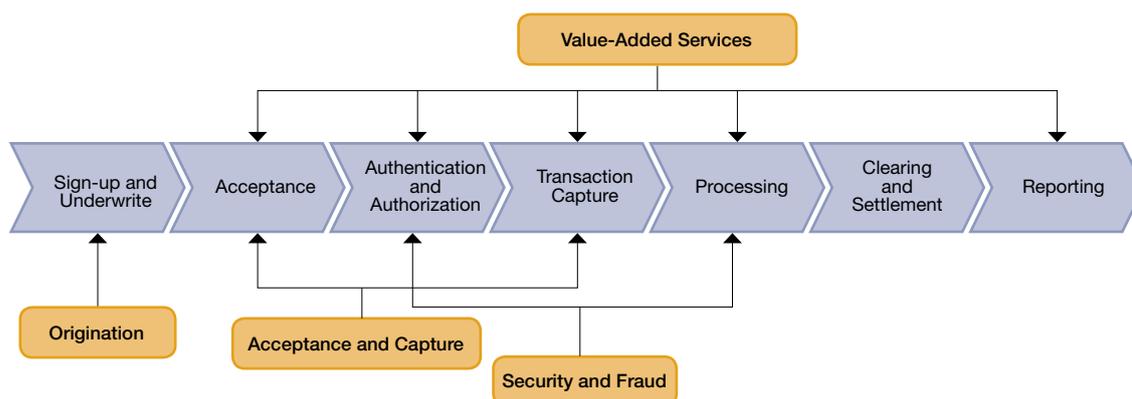
- Origination—mainly associated with sign-up and underwriting (including onboarding).
- Acceptance and Capture—mainly associated with acceptance and transaction capture (for further processing, with internal capabilities or third parties) components of the value chain.
- Security and Fraud—focused on authentication/ authorization and processing.
- Value-Added Services—associated across the value chain from acceptance through to reporting as firms may use data from most of the components of the value chain.

Figure 3.2 Merging of Value Chains in B2B Space



Source: Capgemini Analysis, 2013

Figure 3.3 'Innovation Value Hotspots' in Payments Acquisition



Source: Capgemini Analysis, 2013

ORIGINATION PLAYERS ARE EMBEDDING PROPOSITIONS TO TRIGGER COMMERCIAL TRANSACTIONS FROM ANYWHERE

The hotspot 'origination' refers to the signing up or enlisting of customers (retail or corporate) while they go about their daily life or business. The firms playing in this hotspot develop solutions that help to originate transactions, increasingly in a form agnostic

to the payment instrument or channel. Innovative players in the origination hotspot include iDeal, MyBank, Amex TV Commerce, PayPal Order Ahead, and a number of wallet solutions (more than 200) such as Google Wallet for C2B; and OB10 (e-invoicing network), Coface, ErsteConfirming (supply chain solution), and RBS Paymode-X (partnership for e-invoice settlement) for B2B.

Figure 3.4 Examples of 'Origination'

	PayPal Order Ahead with Jamba Juice	ErsteConfirming	
C2B – 'Origination' Hotspot	<p>About</p> <ul style="list-style-type: none"> Order Ahead application provides a customer with Jamba Juice menu, along with facility to order and pay. The order is filled so that customers can pick up as soon as they arrive at the store thus saving time wasted in queues Customers can pick up their orders simply by announcing that they are there to pick-up the Jamba Juice (in addition to providing their names, customers can also provide their order number or the QR code from the e-receipt) 	<p>About</p> <ul style="list-style-type: none"> ErsteConfirming is a cash-management and supply chain finance tool, aimed at corporate clients and their suppliers to assist with the handling of payments of checked and open invoices 	B2B – 'Origination' Hotspot
	<p>Innovation/Business Model</p> <ul style="list-style-type: none"> Order Ahead solution demonstrate blurring of 'how', 'where', and 'when' aspects of purchase The solution puts the point-of-sale into the hand of the consumer and integrates into their daily life While saving time for consumers, the solution improves return on assets for merchants (e.g. lower people cost and high sales per square meter) 	<p>Innovation/Business Model</p> <ul style="list-style-type: none"> While supplier benefits from better liquidity at potentially better financing costs, the buyer might receive improved prices, payment, and delivery terms from their suppliers 	

Source: Capgemini Analysis, 2013; Company Websites, 2013; World Payments Report Executive Interviews, 2013; ErsteConfirming: Improve cash-conversion cycles for your business and your suppliers, Erste Group, 2013

ACCEPTANCE AND CAPTURE IS ATTRACTING SIGNIFICANT INNOVATION BY BANKS AND NON-BANKS

Acceptance and capture players are focused on solutions that enable sellers (merchants or suppliers) to accept any mode of payment. These players act as aggregators to accept all of the different types of payment instruments, and are also creating opportunities to enable payments using means such as QR Code and biometrics. Thus, these offerings enable efficient communication of transactions between the selling entity (potentially running multiple standards) and a payment processor that expects standards. C2B innovative players in this hotspot include point-of-sale solutions from Square, iZettle, NCR Silver, and MPayMe; and online payment solutions from Ogone/Ingenico, and WorldPay. Chase Paymentech, Deutsche Bank Autobahn App Market, JustPushPay, SEPAmail, and Bottomline are innovative examples from B2B.

These players have increased competition in the traditional client base of acquirers (mainly banks). A number of these players, especially non-banks such as Square, have found success by analyzing the business models of traditional acquirers and addressing the needs of 'un-acquired' merchants. These are small and medium sized merchants not completely supported by the traditional offerings that are more suitable for large scale merchants. One payments executive, from a leading bank in France, told us: "There is a demand for cards payments acceptance coming from small and medium merchants that are not satisfied by reasons of costs charged by the few dominant players."

SPECIALIZED SECURITY INITIATIVES AND SERVICE PROVIDERS ARE EMERGING TO TACKLE SECURITY AND FRAUD

Ensuring security and tackling fraud remain key challenges in payments acquisition. The proliferation of origination channels and the risk of exposure (due to anywhere origination and acceptance) requires constant investment to ensure fraud can be detected and addressed. Firms engaged in this hotspot are specialists that provide security and fraud prevention services, and can take on the risk of fraud or a security breach by absolving merchants of the cost of compliance. These players often focus on new methodologies of authentication and usage of scoring and data analytics for fraud prevention. Among the security focused innovators in this hotspot are Experian, Chase Paymentech (Safetech solutions), and Visa (3DS) for C2B. Innovators in B2B include CyberSource, a Visa company (fraud management solution) and SWIFT (3SKey).

Figure 3.5 Examples of ‘Acceptance and Capture’

C2B – ‘Acceptance and Capture’ Hotspot	WorldPay	DB Autobahn App Market	B2B – ‘Acceptance and Capture’ Hotspot
	About	About	
	<ul style="list-style-type: none"> WorldPay is one of the leading payment processing companies and offers a broad range of payment services including online, mail order, face-to-face, and regular payment The company allows merchants to accept over 200 different types of payment methods, based on customer choice, using a single acceptance solution 	<ul style="list-style-type: none"> Autobahn App Market provides clients with access to a number of applications (~150) offered by various divisions of the bank Apart from a broad range of bank’s services, the market also offers a number of research, pricing, and analytics tools A single sign-on allows corporate clients to view and choose the apps that are relevant to them 	
	Innovation/Business Model	Innovation/Business Model	
	<ul style="list-style-type: none"> A single acceptance solution meets a key demand of customers—to pay using the instrument of choice, and merchants—to accept any instrument used by customers This continuous innovation allows the company to retain its dominant position in the market and remain among the top five players globally 	<ul style="list-style-type: none"> The interoperability of these applications ensures that clients can adapt the solution to their payment and technical environment The pricing varies based on the client segment and on type of application While the access is typically free of charge for top-tier clients, usage of some applications is fee-based 	

Source: Capgemini Analysis, 2013; World Payments Report Executive Interviews, 2013

Figure 3.6 Examples of ‘Security and Fraud’

C2B – ‘Security and Fraud’ Hotspot	SafetechSM Suite of Fraud and Security Solutions by Chase Paymentech	SWIFT 3SKey	B2B – ‘Security and Fraud’ Hotspot
	About	About	
	<ul style="list-style-type: none"> Fully integrated into the payment process, provides greater transaction security and visibility into fraud patterns Advanced technology, such as proxy piercing and geolocation, quickly identifies fraud trends and potentially fraudulent transactions Uses point-to-point encryption technology to secure card data from the merchant to the acquirer 	<ul style="list-style-type: none"> SWIFT 3SKey is a multi-bank and multi-channel personal digital identity solution developed in collaboration with the international banking community The solution enables strong authentication for both banks and corporates to make sure that the transactions are authentic, unaltered, and legally binding 	
	Innovation/Business Model	Innovation/Business Model	
	<ul style="list-style-type: none"> Stores customer payment data outside of merchant environment and potentially reduces Payment Card Industry (PCI) compliance scope, cost and complexity Provides ecommerce and bill payment merchants the confidence to accept more orders Provides flexible pricing structures to meet the needs of merchants, large and small 	<ul style="list-style-type: none"> A single industry-accepted token reduces corporates’ costs and complexity in managing multiple tokens and security solutions from different banks Banks save costs of building and maintaining their own security infrastructure Banks pay a one-time service fee for subscription and token supply, along with a yearly recurring fee (charges for corporates may vary per bank) 	

Source: Capgemini Analysis, 2013; Company Websites, 2013; World Payments Report Executive Interviews, 2013; 3SKey – Service Description, SWIFT Website, accessed on June 27, 2013 https://www2.swift.com/uhbonline/books/public/en_uk/3skey_serv_description_20100917/index.htm

'BIG DATA' AND ADVANCES IN DATA PROCESSING ARE CREATING VALUE-ADDED SERVICES OPPORTUNITIES

Innovative firms playing in this hotspot analyze information—be it from the transaction, relationship, or merchant levels or a combination of these—and enable providers to offer value-added services to their clients including targeted marketing, offers/coupons customization, and loyalty management. In addition to the new entrants, some banks have also started to offer analytics-based, value-added services and are expecting to eventually charge for these. However, many customers regard that such services should be free of charge. A new business model may potentially emerge in which banks charge for these value-added services and payments become a commodity that is either free or is offered at a low cost. These solutions can include dashboards, which calculate return on investment by providing data such as the number of redeemed offers, associated costs, and revenue generated. Innovators include Cardlytics, EDO Interactive, and Barclaycard (targeted daily deals offering), for C2B; and TradeCard GTNexus, RBS SmartCollect, and Global Payment Information Exchange (GPIE) for B2B.

These Innovation Value Hotspots enable players to make revenues from discrete parts of the value chain. However, few players are offering solutions for a combination of these hotspots, such as blending value-added services with acceptance and capture solutions. One provider that does this is Cielo (a leading acquirer in Latin America). It integrated Facebook into its point-of-sale terminals, introducing increasingly common features on the web—check-ins and recommendations among friends—and giving the merchant the possibility of offering awards at the time of payment (also benefiting merchants through social media marketing and increased sales).

In addition to the definition and examples above, we will now analyze the drivers, keys to success and challenges for each (see Figure 3.8).

Figure 3.7 Examples of 'Value-Added Services'

C2B – 'Value-Added Services' Hotspot	EDO Interactive	RBS SmartCollect	B2B – 'Value-Added Services' Hotspot
	About	About	
	<ul style="list-style-type: none"> ■ EDO Interactive allows merchants and banks to personalize offers and deals for their customers ■ With their credit and debit card linked platform, the firm provides insights into consumer spending behavior ■ This targeted customer relationship management helps local retailers and banks to prepare their marketing plans 	<ul style="list-style-type: none"> ■ SmartCollect provides end-to-end reconciliation of incoming payments based on virtual accounts ■ The solution streamlines automated receivables reconciliation and improves cash allocations, possibly reducing daily-sales-outstanding (DSO), working capital requirements, and funding costs 	
	Innovation/Business Model	Innovation/Business Model	
	<ul style="list-style-type: none"> ■ The solution helps merchants and banks to offer more targeted offers, tailored to the shopping habits of both existing and new customers ■ Banks benefit by delivering better cross-channel marketing ■ The firm offers a performance-based fee model for merchants, for example, the number of newly acquired customers 	<ul style="list-style-type: none"> ■ Corporates to able to identify payers and business revenue streams automatically, the solution can save costs by reducing the number of bank operating accounts ■ The automatic reconciliation also helps to improve credit control, thus reducing credit risk, and reporting quality 	

Source: Capgemini Analysis, 2013; Company Websites, 2013; World Payments Report Executive Interviews, 2013

Figure 3.8 Drivers, Keys to Success, and Challenges for Four 'Innovation Value Hotspots'
(All are common to C2B and B2B unless noted otherwise)

Hotspot	Drivers	Keys to Success	Challenges
Origination	<ul style="list-style-type: none"> ▪ Proximity and visibility to customers ▪ Fulfilling new customer demands ▪ Attracting younger consumers (C2B) 	<ul style="list-style-type: none"> ▪ Understanding retail issues (C2B) ▪ Providing value to merchants (bringing new clients) and consumers (anywhere payments) (C2B) ▪ Improving ease of commerce ▪ Ease of onboarding ▪ Understanding the supply chain (B2B) ▪ Real-time settlement of transactions ▪ Providing security 	<ul style="list-style-type: none"> ▪ Reaching a critical mass of users ▪ Building trust with customers
Acceptance and Capture	<ul style="list-style-type: none"> ▪ Demand from merchants and consumers to accept any type of payment instruments (C2B) ▪ Inefficiencies in existing acceptance services ▪ Address customers' challenges ▪ Provide alternatives for cash and checks 	<ul style="list-style-type: none"> ▪ Providing ease of use for customers ▪ Aligning with new and emerging payment types ▪ Integrating with websites ▪ Flexibility ▪ Meeting performance standards ▪ Improving speed of transactions ▪ Reducing cost of accepting multiple payment types 	<ul style="list-style-type: none"> ▪ Mitigating the risk of fraud ▪ Reputational risk ▪ Legacy platform constraints ▪ Addressing lack of heterogeneity in m-commerce (e.g. cannot do 3DS on mobile)
Security and Fraud	<ul style="list-style-type: none"> ▪ High cost of in-house fraud and security management ▪ Security and compliance requirements (e.g. PCI-DSS) ▪ Reducing cost of fraud 	<ul style="list-style-type: none"> ▪ Building client trust ▪ Data (marketing and security) ▪ Necessary volumes ▪ Providing real-time capability ▪ Algorithmic rules (predictive and self-improving) ▪ Staying ahead of criminals 	<ul style="list-style-type: none"> ▪ Optimal pricing (becoming more competitive) ▪ Continuous investment in technology ▪ Adhering to compliance requirements
Value-Added Services	<ul style="list-style-type: none"> ▪ Automation of reporting and reconciliation allowing straight-through processing (B2B) ▪ Capture new revenue streams ▪ Offer differentiation 	<ul style="list-style-type: none"> ▪ Sufficient data to generate insights ▪ Personalized marketing offers based on consumer buying behavior (C2B) ▪ Acquire new consumers, reward good consumers, re-active lapsed consumers (C2B) ▪ Onboard fee-paying customers ▪ Benchmarking 	<ul style="list-style-type: none"> ▪ Data privacy ▪ Data availability, enrichment, and correlation ▪ Determining optimal data storage strategies ▪ Reputational risk (in case of incorrect analysis)

The Way Forward: Lessons for All Stakeholders

ANALYSIS OF VALUE HOTSPOTS REVEALS KEY INNOVATION DESIGN PRINCIPLES FOR ACQUISITION PLAYERS

Across the C2B and B2B spaces, the analysis of the four innovation hotspots reveal a number of design principles PSPs are recommended to take into account if they are to successfully innovate in payments acquisition.

There are a number of key principles which are common to both C2B and B2B:

- Anticipate and address new/changing customer needs and preferences.
- Capture a critical mass of users by offering value to customers and merchants.
- Determine if the strategy is to cherry-pick the Innovation Value Hotspots in which to play and improve footprint or to focus on end-to-end services.
- Have a clear strategy for innovation—while some firms prefer first mover advantage, others are fast followers.
- Adapt firm to innovation strategy and compensate any weaknesses with organizational changes (for example, a fast follower may have an outside team managing digital innovation).
- Deliver predictability and stability in payments.
- Decide an optimal pricing strategy, such as performance-linked pricing for merchants.

PSPs looking to innovate in C2B acquisition need to focus on the following design principles:

- Embed offerings into consumers’ daily lives.
- Enable business growth for merchants by encouraging more end-client spending through offers, loyalty, or other services.
- Look at commerce as a whole, rather than focusing only on the payments part of it.

In B2B, our analysis has identified the following key principles:

- Follow the transaction flow.
- Ensure interoperability between multiple banks of buyers and suppliers.
- Optimize the entire financial supply chain.
- Improve understanding of supply chain and trade finance.
- Prepare for information provisioning.

BANKS, CORPORATES, AND CONSUMERS HAVE KEY DECISIONS TO MAKE

As seen above, many aspects of the payments industry are undergoing significant change and evolution—especially in acquisition. The issues these changes present must be addressed by all stakeholders—banks, corporates, and consumers—if they are to take advantage of the opportunities innovations promise (see Figure 3.9).

Figure 3.9 Key Lessons for Banks, Corporates, and Consumers

Banks	Corporates	Consumers
<ul style="list-style-type: none"> ▪ Continue to align the product portfolio with customer needs. ▪ Look into emerging opportunities to compensate for downward pressure on margins and fees. ▪ Move away from silo approaches. ▪ Focus on the end objective of regulations (which is often innovation) rather than just implementing them as compliance activities. 	<ul style="list-style-type: none"> ▪ Focus on trusted players. ▪ Build in-house expertise to minimize disruption. ▪ Leverage trusted partners of banks for trade. ▪ Design innovative solutions via partnerships between all types of PSPs. ▪ Avoid proprietary formats and push for globalization of standard formats. 	<ul style="list-style-type: none"> ▪ Balance convenience and security (while convenience is the most important criteria⁵⁵ for most consumers, they need to examine the security or stability of service providers). ▪ Consider the basics of finance by examining the risks of using any payment instrument or service provider. ▪ Consider paying for innovation and sharing payments/spending data, as PSPs are looking to offer free payment services⁵⁶ while charging for value-adds.

⁵⁵ Based on a Capgemini survey of 19 C2B payment service providers conducted in June, 2013.

⁵⁶ Based on a Capgemini survey among 19 C2B PSPs conducted in June, 2013. Over half of the PSPs surveyed think consumers are willing to pay for innovative offerings and exchange data about their payments and spending patterns in return for free payment services.

In addition to the above, banks need to re-assess their current state and strengths across the components of the acquisition value chain. A current state assessment can be done from the perspective of cost and business opportunities. Banks can then decide if they want to play end-to-end or explore the possibility of engaging only in fewer components of the value chain. Based on the sourcing strategy, banks can then decide if they want to outsource a few non-differentiating functions of their business.

While banks understand the need to innovate, they cannot easily discontinue existing products used by clients and thus have no choice but to face increasing complexity. However, considering the success of a number of non-bank players in customer-facing offerings, banks may explore new revenue opportunities by acting as the back-end 'partner'. Some banks have started to take this path, however the speed of processing, clearing and settlement will be critical in underpinning these partnerships. For example, RBS FXmicropay, a foreign exchange

management product, enables merchants to price goods and services in the currency of consumer choice and links directly into existing retail sales systems. Banks can also partner with other banks to jointly invest in or reuse best practices and technologies from each other.

Taking a broad view, a partnership approach includes cooperation and collaboration with third parties—banks and non-banks—that traditionally may have been viewed as competitors. Also, in order to accelerate innovation, cooperation is needed among all industry stakeholders to define common standards with clients and external parties. The trajectory of change in the payments acquisition space is too steep for PSPs to stand still; strategies must be revisited and reformed in order to stay in the game and to benefit from the changes innovation will deliver.



Closing Thoughts

Cards continue to take market share from other payments instruments and e- and m-payments channels are continuing to build volumes. PSPs must recognize, however, that with the development of new payments instruments and the entry of new non-bank, less regulated participants, markets such as e- and m-payments and prepaid cards, and regions such as MEA, are becoming less transparent. This opacity is raising the very real risk that strategies may be formulated and investments made on the basis of unreliable or incorrect data. It would be in the interests of PSPs to encourage a move towards centralized data collection, bringing statistics from these new channels and players into the mainstream and common definitions—as proposed in this report.

Despite unprecedented upheaval in the payments industry, generated by regulatory change, advances in technology, and economic volatility, PSPs continue to innovate. It would be easy, perhaps, for some players to focus only on regulatory compliance and cost reduction. But the entry into the payments value chain of new and innovative PSPs presents significant competition to traditional players. If they do not innovate, they could be left behind and miss the opportunities that innovation promises to deliver. SEPA is a case in point: with a deadline of February 1, 2014, some PSPs and indeed countries, risk non-compliance as migration programs have stalled. The potential cost savings and new market opportunities promised by eSEPA will not be available to those PSPs that have missed the deadline.

Three factors are driving change within the payments industry and accelerating the growth of non-cash payments: client behavior, regulation, and technology. PSPs can hasten this evolution by continuing to develop products and services that meet consumer and corporate demands. Decisions have to be made: can a PSP differentiate itself by providing end-to-end payments services or does it need to select certain areas on which to focus? Also, PSPs should consider how they can develop products and services; do they go it alone or enter into partnership with other entities? The evolving payments landscape will generate partnerships between banks, and between banks and non-banks. The aim always should be to serve clients and achieve best practice in payments. This may mean cooperation and collaboration with organizations that have been viewed previously as competitors. It will also mean cooperation on developing common standards for all stakeholders in the payments value chain.

As the C2B sector evolves towards ‘any form’, ‘anywhere’, and ‘any time’ payments and B2B from bi-lateral to multi-lateral models, payments acquisition is becoming an area of intense innovative activity. Already we have identified success stories in four specific areas of payments acquisition. These success stories will proliferate in the years to come. Who they will be comes down to the choices PSPs make in the short term.



Methodology

NON-CASH PAYMENTS

This year's *World Payments Report* offers insights on the payments markets in the following geographical areas:

- North America: Canada, and the U.S.;
- Europe:
 - The thirteen countries that were members of the Eurozone in 2007: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Slovenia, and Spain. (Cyprus and Malta, which joined in 2008, Slovakia in 2009, and Estonia in 2011 are not the part of WPR 2013 non-cash transaction analysis.)
 - Three non-Eurozone countries: Denmark, Sweden, and the U.K.
- Mature Asia-Pacific: Australia, Japan, Singapore, and South Korea.
- Emerging Asia: China, Hong Kong, India, and other Asian markets.
- Latin America: Brazil, Mexico, and other Latin American markets.
- Central Europe, Middle-East, Africa (CEMEA) includes Poland, Russia, Saudi Arabia, South Africa, Turkey, and Ukraine, and other Central European and Middle Eastern markets.

Data for Australia, Brazil, Canada, China, Hong Kong, India, Japan, Mexico, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Turkey, and the U.S. were taken from the latest Bank for International Settlements (BIS) payment statistics *Red Book* (2011 data released January 2013). Data for Europe and Poland was taken from the European Central Bank (ECB) *Statistical Data Warehouse* (2011 data released January 2013). For the remaining countries, data was taken from central bank publications and websites. Macroeconomic indicators (gross domestic product and population) were collected from the World Bank.

Total non-cash transactions are the sum of check, debit card, credit card, credit transfer, and direct debit transactions. Due to the numerous revisions in official data made by the sources, along with changes in reporting methodology by various countries, data for previous years may diverge from data initially reported in the WPR 2012. Wherever data was unavailable or substantially different, data was estimated on a linear basis. China 2010 and 2011 debit card and direct debit data has been estimated (official data had yet to be published by China's central bank). There were no major changes in methodology, and for all other countries, we used the latest data published, even if restated for previous years.

Because of a lack of reliable historical data trends, data for some countries has been estimated and grouped under the appropriate regional heading: other Asian countries, other Latin America countries, or other CEMEA countries.

For worldwide macro descriptive graphs (number of transactions per region), six regions were defined: Europe without Russia and Poland, North America, Mature Asia-Pacific (Japan, Australia, South Korea, Singapore), Emerging Asia (China, Hong Kong, India, other Asian markets), Latin America, and CEMEA, grouped by geographic, economic, and non-cash payment market maturity criteria. BRIC (Brazil, Russia, India, and China) is no longer considered as a separate group in WPR 2013.

2012 NON-CASH TRANSACTIONS ESTIMATIONS

The non-cash payments estimations for 2012 were calculated using our forecast model, which has been further enhanced since WPR 2012 as part of our ongoing improvement efforts to size up-to-date trends for our readers, despite the delays in publication of official data. The model is bottom-up, and takes into account factors such as historical growth rates of non-cash instruments at a country-level, the local regulatory environment, and certain macroeconomic factors that can affect the growth of non-cash payments in a region. Also, while most markets have not published actual 2012 numbers at the time of going to print, we have carried out 'sense-checks' with available 2012 numbers that were released in Q2 2013 in order to further validate our estimates.

E-PAYMENTS AND M-PAYMENTS

Industry estimates for the overall size of the e-commerce and m-payments markets are derived from various industry and analyst reports. For estimating transactional data for non-banks and alternative players in e-payments and m-payments, we have analyzed transactional data from leading market players such as PayPal, Amazon, and Vodafone M-Pesa.

PREPAID CARDS

Industry estimates for the overall size of the global open loop prepaid cards market is derived from various industry and analyst reports.

Glossary

3DS

3DS or 3D Secure is an XML-based protocol designed to be an additional security layer for online credit and debit card transactions

ACH

Automated Clearing House

AIFMD

Alternative Investment Fund Managers' Directive

AML / ATF

Anti-Money Laundering / Anti-Terrorist Financing

ATM

Automated Teller Machine

B2B / B2C

Business-to-Business / Business-to-Consumer

BIS

Bank for International Settlements

BRIC

Refers collectively to the countries of Brazil, Russia, India and China

CAGR

Compound Annual Growth Rate

C2B / C2P

Consumer-to-Business / Consumer-to-Public Sector

CEMEA

Central Europe, Middle-East, Africa

CFPB

Consumer Financial Protection Bureau

CHAPS

Clearing House Automated Payments System (U.K.)

CPSS

Committee on Payment and Settlement Systems

CT

Credit transfer

DD / DDA

Direct Debit / Authorization DD

EC

European Commission

ECB

European Central Bank

e-Government

The use of Information and Communication Technology by governments to inform and render services to citizens and businesses

e-Invoicing

The transmission and storage of invoices, without the delivery of paper documents, by electronic means

e-Mandate

The process of issuing an e-mandate will allow Debtors and Creditors to exchange mandates in a fully electronic way

EMD

e-Money Directive (EU)

EMV standard

EuropayMasterCardVisa, a global standard for cards, POS and ATM terminals in relation to credit and debit card payments

e-Payments

On-line payments for e-commerce transactions

EPC

European Payments Council

e-Procurement

Use of electronic communications and transaction processing by government institutions and other public sector organizations when buying supplies and services or tendering public works.

e-SEPA

Services that make use of advanced information and communication technology when offering pre-payment, payment and/or post-payment services within the SEPA framework

EU

European Union

Eurozone

The Eurozone comprises the Member States of the EU that have adopted the euro as their national currency. Eurozone data in the first Section of this report covers the thirteen countries that were members in 2007—Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and Slovenia. Since then, Cyprus, Malta, and Slovakia and Estonia have also joined, bringing the number of Eurozone members to 17 as of 2012

FATCA

U.S. Foreign Account Tax Compliance Act, a U.S. government move to improve tax compliance involving foreign financial assets and offshore accounts

FATF

Financial Action Task Force, an inter-governmental body whose objective is the development and promotion of policies to combat money laundering and terrorist financing

FI

Financial Institution

FinCEN

Financial Crimes Enforcement Network

FMI

Financial Market Infrastructures

FSA Financial Services Authority (U.K.)	LSM Liquidity Savings Mechanism developed by Bank of England for CHAPS members (see CHAPS)	QR Code QR-Code is a two-dimensional barcode (datamatrix) that is designed to have its contents decoded at a high speed
FCA Financial Conduct Authority (U.K.)	Mandate In payments, the “mandate” is the authorization required	Red Book An official publication of the Bank for International Settlements (BIS)
GDP Gross Domestic Product	MIF Multilateral Interchange Fee	RTGS Real-Time Gross Settlement
IBAN International Bank Account Number	NACHA National Automated Clearing House (U.S.)	SCT SEPA Credit Transfer
IOSCO International Organization of Securities Commissions	NFC Near-Field Communications (short-range wireless technology) used for contactless payments	SDD SEPA Direct Debit
Interchange Fee The fee paid by the acquirer to the issuer mainly to reimburse for payment guarantees, fraud management, and issuer processing costs	Non-Cash Payments Payments made with instruments other than notes and coins, i.e., using credit transfers, direct debits, credit or debit cards or checks	SEDA SEPA Electronic Database Alignment
IPFA International Payments Framework Association	NPCI National Payments Corporation of India	SEPA The Single Euro Payments Area is a domain in which the EU31 are standardizing all euro payments and collections so they can be treated as domestic transactions
IPP Internet Payment Platform (e-invoicing processing solution for U.S. Treasury bureaus)	P2P Person-to-Person	SMS Short Message Service (more commonly known as text messaging)
ISO 20022 Abbreviated term referring to the ISO message scheme used by SEPA instruments	PI Payment Institution	STP Straight-Through Processing
ITTs Industry Transformation Trends	POS Point-of-Sale	SWIFT Society for Worldwide Interbank Financial Telecommunication
KRIIs Key Regulatory and Industry Initiatives	PRA Prudential Regulation Authority	
KSF Key Success Factor	PSD Payment Services Directive	
Legacy payments Term used to describe domestic payment instruments that pre-date SEPA	PSP / PSU Payment Service Provider / Payment Service User	

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