

A Special Report for Sibos 2013



Putting Growth Back on The Banking Agenda

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Foreword

The turmoil that disrupted financial markets in 2008 forced banks around the globe to shift their focus from long-term growth to short-term survival. Reducing costs and minimizing balance-sheet risk took center stage, as bankers struggled to restore profitability in a rapidly changing environment. Today, after five years of retrenchment, it is time for banks to return to the pursuit of long-term growth.

This special report was produced jointly by McKinsey and SWIFT for Sibos 2013 in Dubai. It explores growth opportunities in two primary areas: markets and products. The first article, *Emerging Payments Opportunities in Africa and the Middle East*, examines the significant potential for growth in this region's many diverse markets. With the world's fastest-growing work force and its middle class expanding apace, Africa offers major opportunities to serve small and mid-size businesses, as well as legions of underbanked consumers. In Middle Eastern markets, the opportunities for growth are wide-ranging, with remittances and trade finance predominating.

Focusing on the products arena, *The Dynamics of New Trade Flows* looks at how economic trends are altering global trade flows and the implications for capturing growth in trade finance. Indeed, the growth rate of international trade now exceeds that of global GDP. Rapid expansion in Chinese-African trade corridors, for example, is creating new demand for trade finance products and services. As mainstream trade corridors evolve and new ones form, they offer fresh opportunities to create the partnerships and market-focused products that trade finance demands.

Externally, as always, banks need to be especially mindful of infrastructure development and planning in the markets where they operate. In both the payments and securities markets, infrastructures are in a state of flux. The

need to reduce costs, comply with increasing regulatory requirements and minimize risk is leading to widespread changes. At the same time, providers are innovating, adopting new technologies and considering new forms of governance and competitive dynamics. *Reinventing Market Infrastructures* explores how these factors are reshaping the infrastructure landscape across the globe.

Returning to the fast track for long-term growth demands much more than finding and evaluating market and product opportunities. Banks must also possess the resources and will to vigorously pursue those opportunities. With this in mind, *Corporate and Investment Banking Needs New Paths to Sustain Growth* discusses the importance of internal perspective and the need to transform legacy business models and institutional capabilities in corporate and investment banking to better align with the realities of today's banking environment. The article presents four approaches to developing a sustainable long-term growth strategy, suggesting that various blends of these approaches may be needed to pursue diverse market opportunities.

The environment facing the financial services industry remains unsettled. However, extended reliance on short-term tactics inevitably leads to diminishing returns. Restoring growth should become a priority for banks that are not already in a growth mode. On a still more positive note, promising opportunities in payments and securities are emerging globally on numerous fronts and await those prepared to respond with foresight, innovation and determination.

We hope you find these articles informative and thought-provoking, and welcome your feedback at paymentspractice@mckinsey.com.

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Emerging Payments Opportunities in the Middle East and Africa

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Transaction-focused banks can tap into growth by helping develop international payments instruments and collection and payments infrastructures, and by taking advantage of new technologies to serve the unbanked and small and medium-sized enterprises (SMEs).

The Middle East and Africa (MEA)¹ are beginning to attract the long-deserved attention of transaction bankers. While payments in this region are still largely cash-based, growing consumer demand and increasing trade flows are creating meaningful opportunities for transaction-service providers. Indeed, Africa now has the world's fastest-growing work force, one that is expected to overtake those of China and India by 2040; furthermore, by 2020, Africa's middle class will comprise 128 million households, more than half of its population. Meanwhile, the Middle East, in particular the Gulf Cooperation Council² region (GCC), continues to be a remittance and trade finance hub, representing 8 to 10 percent of trade flows worldwide.

Combined payments and trade finance revenues in the region now exceed \$50 billion, representing about 45 percent of total bank revenues. This is approximately equal to India's total payments revenues and exceeds the combined payments revenues of Central and Eastern Europe. Domestic payments and transaction accounts generate about 70 percent of revenues, while cards produce about 10 percent and trade finance and cross-border payments about 20 percent (Exhibit 1, page 6). Africa and the Middle East are also significant contributors to global trade flows, generating trade fi-

¹ Excluding Iran, Israel and Turkey.

² Includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

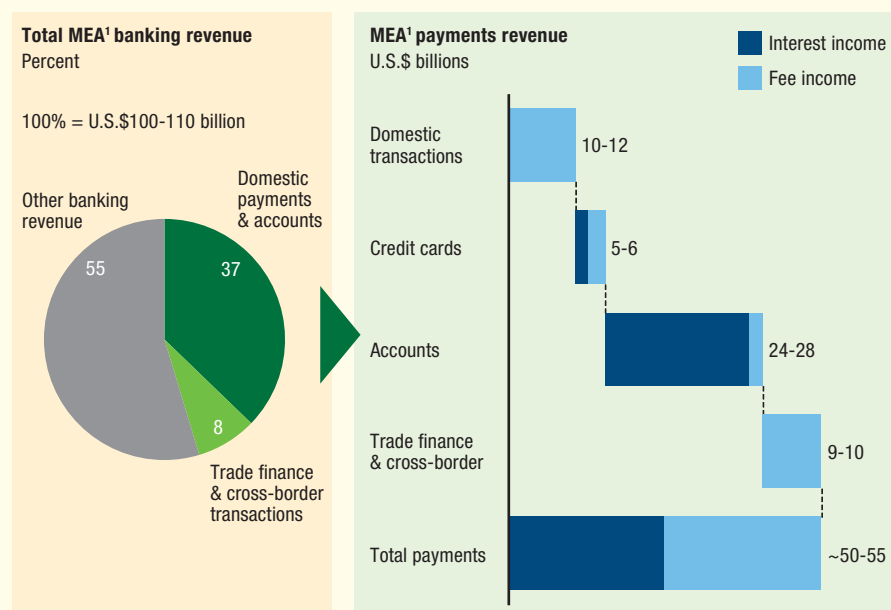
nance-related revenues of over \$6 billion—more than 10 percent of the world total. The region also generates \$3.5 billion in cross-border payments revenues, about 14 percent of the global total. Add to this the growing interest of leading financial institutions in regional corporate banking and it becomes clear why Africa and the Middle East are experiencing an important transformation in transaction banking.

Given changing market dynamics in the region, there are substantial opportunities for transaction-focused bankers and vendors. They can tap into growth not only by supporting the rapid development of market infrastructures, but also by leveraging new technologies to serve both unbanked consumers and SMEs. These opportunities have already captured the attention of many non-bank innovators, which are rapidly entering these markets—new players include mobile-service providers such as MTN Group in South Africa and

Exhibit 1

Payments, accounts and trade generate over \$50 billion, or about 45%, of total banking revenues in the MEA region

2011 banking and payments revenues



Uganda or Tigo Pesa in Ghana and Tanzania; payments-gateway providers such as JamboPay in Kenya; and specialist processors such as Net1 and WIZZIT Payments. Success in this promising but complex region will come only through a solid understanding of its diverse market behaviors, infrastructure needs, competitive landscapes, compliance requirements and rapidly developing economic structures.

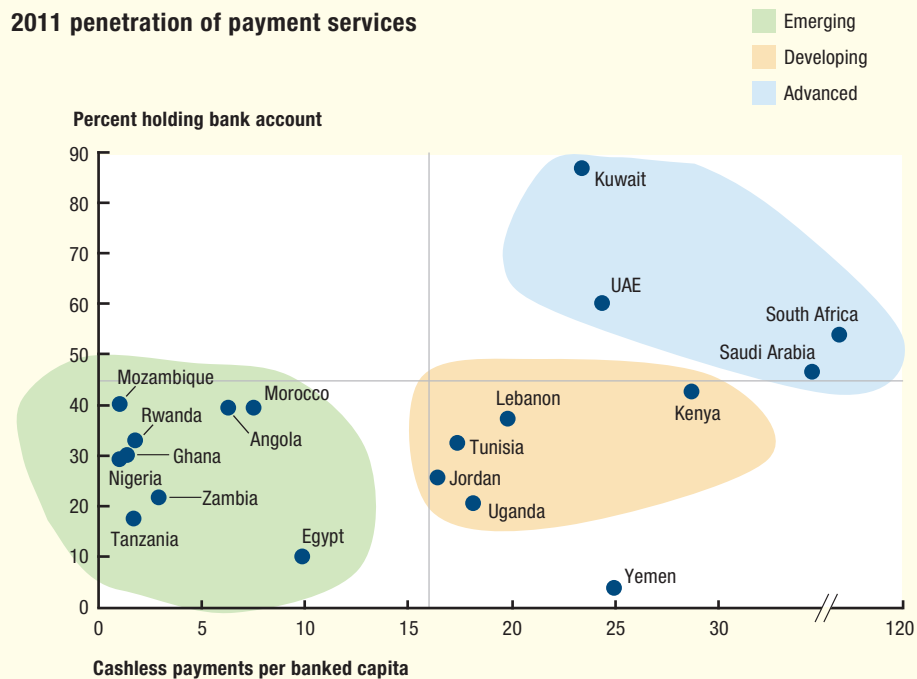
Differences in customer behavior

MEA markets remain heavily cash-driven; 99 percent of all transactions are still cash-based. However, major differences exist throughout the region. Generally, national markets fit into one of three categories: advanced, developing and emerging (Exhibit 2).

Exhibit 2

MEA markets can be broadly classified as advanced, developing and emerging

2011 penetration of payment services



Source: World Bank; McKinsey Global Payments Map

On the one hand the region has very advanced markets, such as South Africa and the GCC countries, all of which possess well-developed banking and payments systems and exhibit payments behavior similar to that of European nations such as Turkey and Poland. Use of electronic payments is relatively high, services for trade and cross-border cash management are well developed, and payments infrastructures are well established.

Nonetheless, there are often disparities between sophisticated banking customers and a sizable population of underbanked consumers and small businesses. Consequently, significant needs remain, especially in the areas of payments collections and disbursement, remittance processing and working-capital management for SMEs. Payments revenues in advanced countries range from between \$200 and \$600 per capita, within range of those in the European Union.

Although they still lack more formal banking landscapes, the developing markets handle far more noncash payments. This is driven mainly by new payments products being introduced to replace cash.

On the other hand, many payments markets in the region are only just emerging, with quite low formal banking levels and virtually all payments still made in cash, with electronic payments chiefly limited to larger corporations and multinationals. However, there are encouraging signs in large countries such as Nigeria, Angola and Ghana, with concerted efforts to drive efficient noncash payments.

The developing markets are even more interesting. Although they still lack more formal banking landscapes, they handle far more noncash payments. This is driven mainly by new payments products being introduced to replace cash. These might be cards, as in Tunisia and Lebanon, or, increasingly, mobile payments. In fact, mobile payments are why Kenya, which has the same bank penetration as Morocco and Angola, has three to four times more non-cash payments; the same comparison holds between Uganda and Nigeria. In Kenya, mobile payments are a particularly strong performer, generating more transactions than all other noncash payments forms combined.

Differences in revenue models

To date, Africa and the Middle East generate 4.5 billion noncash transactions annually, mostly via cards and direct debits/credits. These transactions and the resulting \$50 billion in revenues they produce are concentrated in a few

major markets, the three largest being Nigeria, Saudi Arabia and South Africa. Their combined revenues represent more than half of the region's total, but with varying sources of revenue (Exhibit 3).

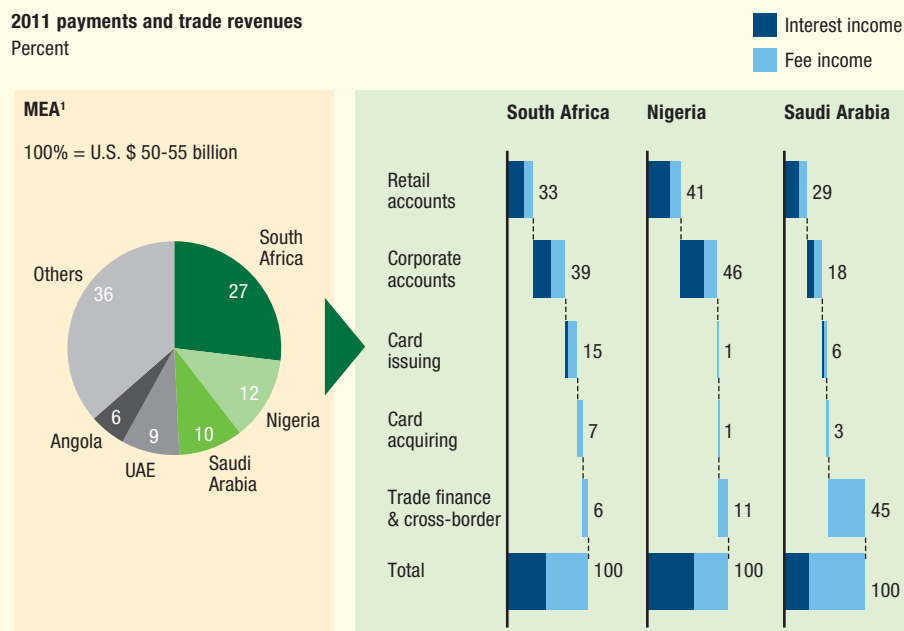
South Africa, which accounts for one-fourth of MEA revenues, draws most revenues from transactional accounts, but unlike other MEA markets also sees substantial card-related results. South Africa generates only 6 percent of its revenues from trade and cross-border payments. Nigeria, by contrast, generates \$6.5 billion in payment revenues, largely from interest on current accounts, which are mostly corporate. Saudi Arabia, meanwhile, generates about 45 percent of its transaction revenue from trade and cross-border payments, and only 18 percent from corporate accounts.

Given the substantial differences between earning models, success in transaction banking will depend on bankers' ability to address local needs and cultures with customized approaches.

Exhibit 3

Three MEA markets generate most of the region's revenues, but sources differ significantly

2011 payments and trade revenues
Percent



¹ MEA excluding Iran, Israel and Turkey

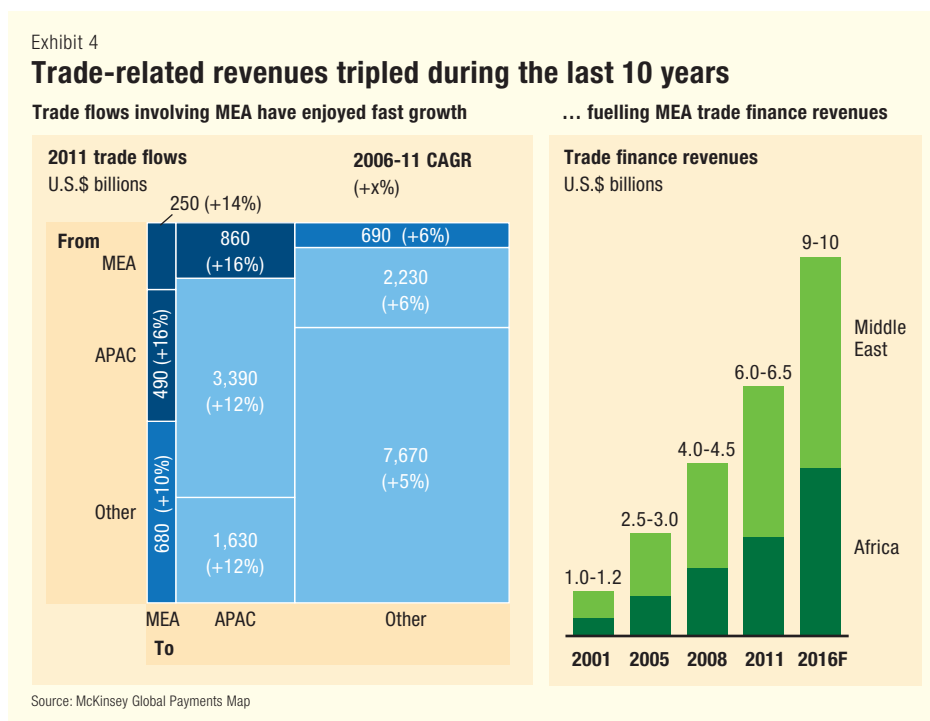
Source: McKinsey Global Payments Map

Opportunities borne of challenges

To find success in the MEA region transaction bankers must overcome certain hurdles—however, those challenges harbor the seeds of opportunity. Three opportunities are particularly promising: leveraging growing international connectivity to bolster trade and remittances; using new technologies to serve unbanked consumers and businesses; and developing infrastructure capable of leapfrogging legacy systems.

Leveraging growing international connectivity

The MEA region has displayed strong growth as an international banking and finance hub. Not only have trade-related revenues grown significantly, but so too has the number of major companies that are active in the region, from Mobile Telephone Networks in telecommunications and General Electric in industrial goods to Procter & Gamble, Coca-Cola, SABMiller, Massmart and Walmart in consumer goods and retail. In fact, well over 40 *Fortune 500* companies now have operations in Africa and the Middle East. This ultimately increases international work force mobility, not only to traditional GCC destinations, but also within the African continent.



For transaction bankers, opportunities are emerging in regional trade finance, cash management and remittances.

Regional trade finance. In regional trade finance, MEA flows are among the fastest growing worldwide, driven by Asia's increasing demand for natural resources and the Middle East's hunger for Asian finished goods (Exhibit 4). Organizing services for trade and cross-border payments for MEA companies was traditionally based on north-south trade flows, with American and European banks leading the market. However, strong growth in south-south trade means that success now requires more comprehensive solutions.

Export and import patterns vary substantially by market, suggesting a need for corridor-specific commodity approaches. Oil and gas exports dominate in GCC countries and Nigeria, for example, while countries like Ethiopia and Kenya trade mostly food and manufactured goods. Imports are similarly diverse. Structured trade finance solutions can do much to overcome such commodity trade differences, especially in the region's lower- and middle-income countries.

While trade in the region has grown strongly, few trade financing tools are widely available. This suggests that the majority of trade transactions in lower- and middle-income countries are still cash-based, requiring importers to pay cash to suppliers in advance. Importers therefore finance their trades with short-term loans from local banks, frequently incurring interest rates of 15 percent or more. This leads to strong credit arbitrage across trade corridors. Banks that offer supply-chain financing and have footprints that extend across trade corridors can benefit from intermediating these trade flows.

Islamic structured trade finance. Opportunities in this arena are also on the rise. As with other forms of Islamic financing, Sharia principles prohibit interest from being paid. In 2012, the International Islamic Trade Finance Corporation increased its Islamic trade finance approvals by 47 percent overall, and by 33 percent in the MEA region. Its disbursements grew by more than 40 per-

While trade in the region has grown strongly, few trade financing tools are widely available. This suggests that the majority of trade transactions in lower- and middle-income countries are still cash-based, requiring importers to pay cash to suppliers in advance.

cent, demonstrating significant demand for Islamic trade finance, especially in the government and SME segments.

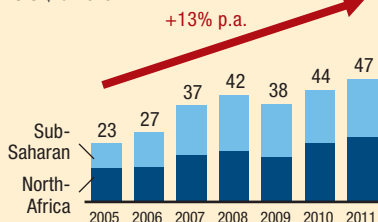
International corporate cash management. More companies are establishing operations in multiple MEA countries, but in doing so they encounter a wide variety of payments alternatives, systems and also providers. McKinsey sees two types of banks being well positioned to seize this opportunity.

First, global players like Citi or Standard Chartered are often better positioned to support international companies, not only within the MEA region, but also globally. By contrast, regional institutions with established regional networks, such as Ecobank and Standard Bank, are making strong inroads in transaction banking. These regional leaders can also provide market access for international banks eager to better serve their clients in these markets. Examples include the Standard Bank-ICBC partnership and the Ecobank-Nedbank alliance. To succeed, these banks will need not only a network, but also a regional transaction platform, high operating speed and low error rates, well-trained product specialists and a knowledgeable sales force.

Exhibit 5

Remittances are an important and growing revenue source in MEA markets

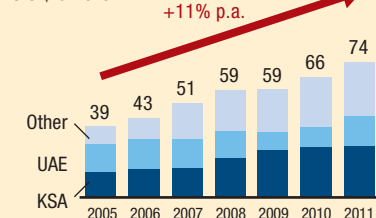
Remittances to Africa U.S.\$ billions



Top 5 sending:
France, Saudi Arabia (KSA), U.S., UK, Spain

Top 5 receiving:
Egypt, Morocco, Algeria, Nigeria, Sudan

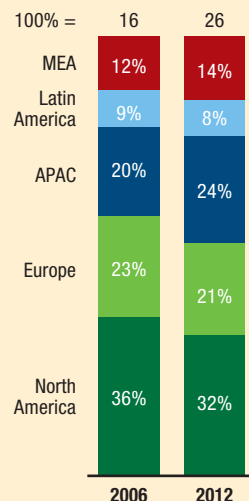
Remittances from GCC U.S.\$ billions



Top 5 receiving globally: India, Egypt, Pakistan, Philippines, Bangladesh

Top 5 receiving in Africa: Egypt, Morocco, Tunisia, Nigeria, Ethiopia

Global remittance revenues U.S.\$ billions



Source: World Bank; World Bank Bilateral Migration Matrix 2010; McKinsey Remittance Revenue Pools

Worker remittances. The GCC is the world's second-largest originator of remittance payments, providing more than \$70 billion annually, flowing not just to such nations as India and the Philippines, but to the entire MEA region (Exhibit 5). Africa's growing migrant-worker populations sent nearly \$50 billion via formal remittances in 2011. Money-transfer specialists such as Western Union and local exchange houses captured most of the resulting revenue, which exceeded \$4 billion.

Growth in remittance volumes and accompanying revenue streams have now caught the attention of mainstream banks, which are increasingly active in this arena, leveraging mobile phone and other technologies to serve underbanked populations. One example of this is the National Commercial Bank in Saudi Arabia, which introduced QuickPay in partnership with MoneyGram to offer remittance customers access to banking services via multiple channels, including ATM, online and telephone.

Using new technologies to reach underserved segments

While digital service providers in developed markets cater to customer demands with the likes of coupons, games and 24-hour access, in less developed markets providers

respond to more basic consumer needs. It is no coincidence that most successful mobile-money products resulted from workers' genuine need to securely remit payments to distant places where payments infrastructures were underdeveloped—still a common situation in many African countries. Similarly, we believe that new technologies and processes will create additional opportunities throughout the MEA region.

Some local merchants who lack point-of-sale terminals and accounting systems now use tablet computers to accept payments, effectively leapfrogging legacy POS technologies.

Developing new service models for unbanked consumers. About half of Africa's urban adults use the Internet regularly, often in Internet cafes. High mobile penetration and increasing availability of smart mobile devices are also creating payments opportunities that go beyond delivering basic services. Customers of South Africa's First National Bank, for example, can now send some payments electronically. And some local merchants who lack point-of-sale (POS) terminals and accounting systems now use tablet com-

puters to accept payments, effectively leapfrogging legacy POS technologies. About 10 percent of urban Africans currently use mobile money, but another 30 percent say they are willing to use it. In Kenya, 68 percent of adults already use mobile-money payments. Similar market characteristics exist in many parts of the Middle East.

Acquiring 20 percent of unbanked MEA domestic flows would produce \$10 billion to \$12 billion in additional payments revenues. These include not only person-to-person payments but also government disbursement and digital payroll solutions, such as the prepaid cards emerging in the United Arab Emirates. Cashless payments have a critical role in establishing financial records for unbanked users and also educate them about financial services, facilitating their advance toward full banking relationships. Some regulators are helping to drive such new initiatives (e.g., the Central Bank of Nigeria's Cashless Lagos initiative).

Winning in the SME arena. The region's SMEs present yet another important opportunity. The Middle East has between 9 and 11 million micro, small and medium-sized enterprises. SMEs produce 40 percent of Africa's GDP and provide half of its jobs—yet one of every two SMEs there still cannot obtain adequate official funding. In a recent survey by the World Bank, 93 percent of respondents said the biggest obstacle to obtaining funding was the lack of transparency. Engaging SMEs in electronic payments not only brings in new business, but also helps to create this needed transparency.

For regional business banks, better serving these SMEs could create more than \$40 billion in new revenue. Beyond offering funding, developing alternative ways to collect payments for businesses and better ways to organize trade could improve SMEs' working-capital performance while providing attractive margins for banks. Some are introducing products (e.g., South Africa's Nedbank's PocketPOS) that enable merchants with smartphones to accept card payments, thereby lowering the card-acceptance threshold. Nonbank providers are also finding opportunities, as illustrated by MasterCard's launch of its Internet Gateway Service in Nigeria. The service handles invoice processing, batch payments and recurring transactions, in addition to card payments.

SMEs produce 40 percent of Africa's GDP and provide half of its jobs—yet one of every two SMEs there still cannot obtain adequate official funding.

Developing infrastructure

Payments infrastructures in the MEA region remain under development. Many countries still lack central clearing, standardization and secure international links. Key elements of payments acceptance—including POS devices, clearing networks and even basic cash-handling options like ATMs—need further development in many places. However, some innovative approaches are emerging to address these shortfalls.

Leapfrogging solutions. In Europe and the United States, banks have historically controlled major payments infrastructures; it is only recently that they have begun considering the commercial and independent roles of infrastructures. By contrast, commercial nonbank vendors in MEA have begun to fill certain infrastructure gaps. Examples include privately owned card processors and acquirers such as Network International and Emerging Markets Payments Holdings, and privately operated clearinghouses and card switches, including Unified Payment Services in Nigeria and Loita Capital Partners, which owns clearing and switching operations in Kenya, Zambia and Zimbabwe.

Although 60 percent of Africa's banked adults are cardholders, usage remains low because merchant acceptance has lagged.

Some MEA countries made leaps by investing directly in regional payments systems before even introducing them at the national level. Examples include the West African Clearing House, which was established in 1996 to autonomously handle cross-border transactions for the Economic Community of West African States. It now also handles 95 percent of Ghana's domestic payments. The East African Payment System and Arab Committee on Payment & Settlement Systems are apparently considering similar initiatives.

Capturing acceptance and collections. Although 60 percent of Africa's banked adults are cardholders, usage remains low because merchant acceptance has lagged. Building acceptance of cards and other digital payments forms would likely have a powerful impact. Increasing merchant trust and education, simplifying on-boarding and creating affordable product offerings will help advance electronic payments, especially outside of urban areas.

Beyond cards, few efficient means for collecting consumer payments have been introduced in the region to date. Markets that did develop these capa-

bilities, as Saudi Arabia has done with SADAD, suggest that offering these services may well trigger significant growth. Providing convenient bill-payment options would enable banks to enjoy a growing revenue base and, importantly, provide a meaningful incentive for consumers to pay via established financial systems.

* * *

Demographics, infrastructure needs and market expectations in the Middle East and Africa hold the promise of meaningful and sustainable growth. Building the region's per-capita payments revenues to just 40 percent of South Africa's current levels would generate an additional transaction-based revenue pool of \$60 billion to \$70 billion—a goal that could be achieved within a decade. This will create compelling earnings opportunities for all categories of transaction-service providers.

Global transaction banks are well placed to serve multinational companies entering the region and to capture associated global trade opportunities. Large regional banks can target multinationals firms as they expand across the region, and even partner with Asian and European banks to pursue growing international commerce and trade. Global and large regional transaction banks might also compete with local banks in the SME arena and pursue intra-regional remittance opportunities. Meanwhile, domestic banks will find compelling opportunities in serving domestic businesses, the underbanked, card acquirers and SME payments. Domestic banks could also expand their footprints, or form alliances with regional players to better serve regionally expanding domestic firms. Nonbank vendors and specialized processors stand to gain substantially from supporting banks, and could also pursue new markets in areas like infrastructure development and collections. And card issuers will have opportunities to partner with local and regional banks in a region that is rapidly developing its card payments appetite and infrastructure. Corporate clients on their end will find the changes in the industry beneficial thanks to growing sophistication of solutions, increasing local service levels solutions and heightened regional competition.

Now is the time for banks to establish a foothold in the region. Early movers can build solid foundations while helping define the region's business models

Demographics, infrastructure
needs and market expectations in
the Middle East and Africa hold
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and operating frameworks. Choosing the wrong model could delay growth and ultimately lead to a less profitable industry. Banks should therefore work with regulators from the outset to establish revenue models that can sustain growth and provide accessibility and fair returns to users.

These markets also demand innovative approaches that will blend existing and new technologies to address the unique needs of the region's diverse cultures. It has yet to be defined how banks will bring payments in the MEA region to the next level—but those that move wisely during these early stages should find themselves well positioned to capitalize on sizable opportunities in payments and transaction banking.

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The Dynamics of New Trade Flows

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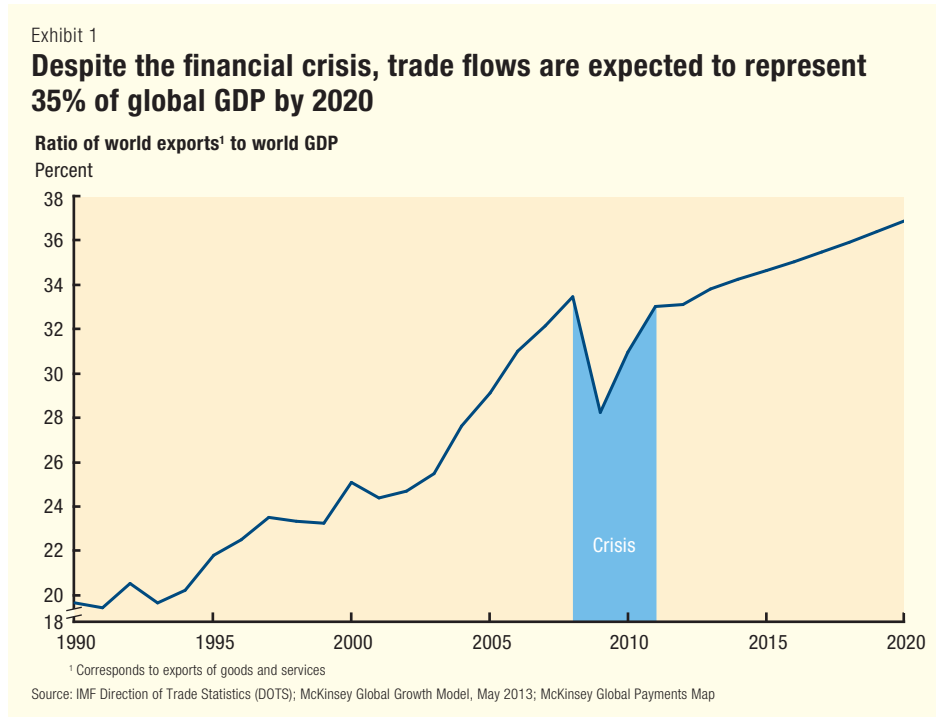
Tommaso Natale

Global trends show that international trade is growing faster than global GDP, and that over the medium term growth in trade flows should outpace growth in GDP by 20 percent. Trade flows are also becoming increasingly complex. From aerospace and automotive manufacturing to home electronics, the products available to consumers and businesses represent a broad array of suppliers in distant locations. Asia is the undisputed center of global trade growth, driving expansion in Africa and other emerging markets. To capture value in this increasingly complex arena, banks must take a granular approach: determine where to play, whom to serve and how to achieve the reach and flexibility necessary to strengthen customer relationships.

Not even the largest global bank can aspire to connect, with the required depth, all the new, geographically dispersed trading markets, most of which have been peripheral to until recently. New approaches to partnerships (including deeper organizational and technological integration among partners) are one of the main avenues to explore in the effort to remain relevant in the trade finance landscape.

Cross-border trade is bigger, freer and more complex

In most markets across the globe, commercial activity is increasingly dependent on international transactional services. In 2012, exports represented 32



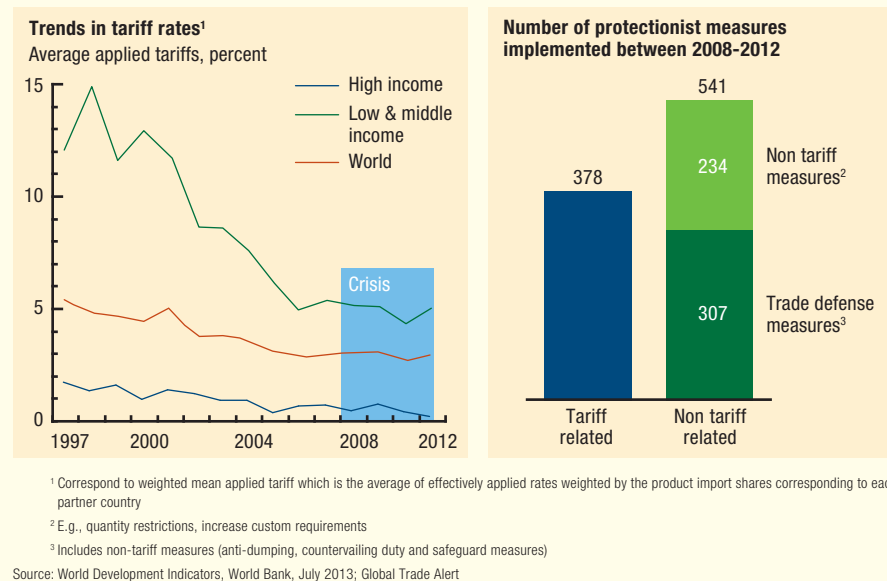
percent of world GDP, up from 20 percent in 1990. We expect that the share of exports relative to GDP will continue to rise, reaching 35 percent by 2020¹ (Exhibit 1). The long-term growth in international trade can be attributed to a variety of factors, including growth of the middle class in emerging markets (especially in Asia) and trade liberalization.

Tariffs have declined steadily, as the number of intraregional and cross-regional free trade agreements increased from 45 in the 1980s to more than 240 in the 2000s. The short-term trends, however, give some reason for vigilance, as protectionist measures have increased since 2009. Tariffs actually increased both in developed countries (in 2009) and in emerging markets (in 2012), and national governments have leveraged non-tariff measures even more extensively to protect domestic markets (Exhibit 2). The most frequent measures are trade remedy actions, in particular the initiation of anti-dumping investigations and the imposition of increasingly stringent customs procedures. Argentina, for example, now requires that mining imports be reported

¹ Projection is based on McKinsey's Global Growth Model.

Exhibit 2

Since the crisis, tariff rates have risen, while even more non-tariff measures have been implemented



120 days in advance. It is not unusual for protectionist gestures to increase in times of crisis; similar moves in the late 1990s and early 2000s were, in fact, more pronounced. Overall, there are strong indications that the long-term trend of liberalization will resume. However, trade finance organizations should remain alert to the risks of protectionist intervention and the potential impact on operational costs and customer demands.

More complex and diversified

Another critical factor behind international trade growth is the increasing fragmentation of the value chain, as companies seek to reduce costs and boost the quality of intermediate goods. Multiple examples from aeronautics, telecommunications, consumer packaged goods and other industries illustrate the increasing reliance on parts and components from specialized external providers spread across diverse geographies. Boeing is a good illustration of the trend: in the late 1960s when it launched its 737 plane, only 10 percent of production was outsourced; today almost 80 percent of production for Boeing's 787 Dreamliner is outsourced to specialized providers. This increasing interdependence makes any impulse toward more protection-

ism problematic, as it ultimately hits domestic players that rely on foreign partners at various steps of their value chain.

Documentary business at the crossroads

While the long-term trend shows a steady increase in the share of global trade handled through open accounts, McKinsey's Global Payments Map shows that following the 2008 crisis the documentary business jumped from 19 percent of cross-border trade volumes in 2008 to 25 percent in 2011, accounting for \$5.4 trillion in 2011. SWIFT message data confirm this trend, which follows primarily from a decline in trust and confidence among trading partners, both in emerging and developed countries. The latter traditionally have accounted for a low proportion of documentary services, but the banking crisis in Europe has spurred demand for documentary services in trade with Southern European countries. However, the boom in documentary services is likely to prove temporary, and early figures from 2012 suggest that the long-term rise of open account transactions will continue to put pressure on the documentary business.

Trade services, including documentary credit, remain an extremely attractive business for banks, but they are increasingly complex and costly, due in part to tighter regulatory controls, particularly Basel III and know-your-customer (KYC) requirements. It is important for banks, collectively, to provide trade platforms that simplify corporate processes, reduce costs and enable clients to conduct business anywhere.

The shift to Asia

According to HSBC Global Research, in each of the past five years growth in Asia has added more to global GDP than the G3 (the European Union, Japan and the United States). Furthermore, 2013 is the year of the "big cross-over," when emerging markets will generate more than half of global GDP, calculated on the basis of purchasing-power parity.

Asia will soon be the largest trade region

Growth within Asia is also accelerating trade on a worldwide basis, with intra-Asia trade already contributing more to global trade growth than intra-Europe trade (Exhibit 3). If growth continues at the same pace, Asia should surpass Europe as the largest regional trading area by 2016, with obvious implications for the structure of the trade finance industry. Research by Greenwich shows that nearly 75 percent of Asian corporates' trade finance spending is

Exhibit 3

Trade flows are concentrated in some specific “corridors”

Total cross border trade,¹ flows growth (2007-12)
\$ billions

Trade > 20% of total/growth Trade > 1% of total/growth
Trade > 10% of total/growth Trade < 1% of total/growth
Trade > 5% of total/growth

Trade flows from		Trade flows to							
		Africa	Oceania	Asia	Europe	Latin America	Middle East	North America	World
Africa	2012	56	8	214	232	21	24	83	638
	Growth	29	6	140	65	7	10	(9)	249
Oceania	2012	5	19	229	25	5	10	17	309
	Growth	2	6	131	3	2	4	3	150
Asia	2012	160	162	2,963	903	296	321	983	5,788
	Growth	94	76	1,248	215	161	177	217	2,188
Europe	2012	193	60	856	4,557	173	315	522	6,676
	Growth	81	23	410	851	80	96	76	1,617
Latin America	2012	23	6	253	159	213	21	502	1,177
	Growth	11	4	169	44	87	11	135	460
Middle East	2012	53	10	780	204	14	129	140	1,330
	Growth	28	5	454	61	8	70	54	680
North America	2012	38	39	476	304	383	92	587	1,919
	Growth	18	13	160	38	151	46	67	494
World	2012	527	304	5,772	6,384	1,105	911	2,835	17,837
	Growth	264	133	2,712	1,277	496	413	543	5,839

¹ Sum of import and export trade flows in goods, services excluded

Source: IMF DOTS; McKinsey Global Payments Map

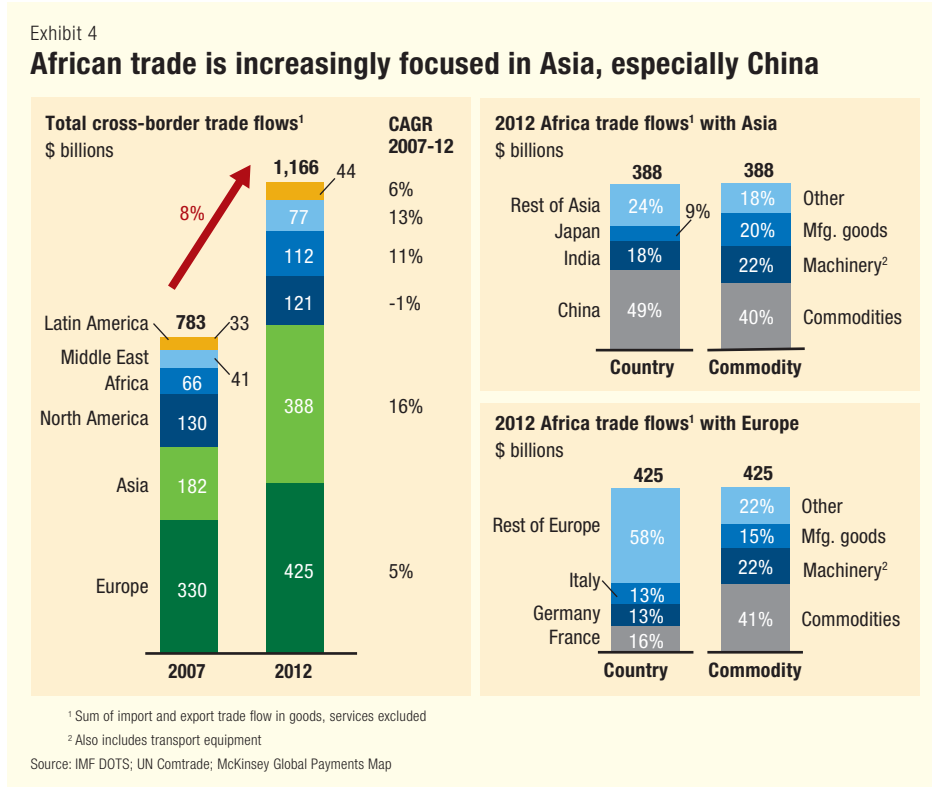
devoted to domestic and intra-Asia trade flows. In addition, ongoing integration among countries in the Association of South East Asian Nations should increase trade within Asia.

Asia drives growth of new corridors

In cross-regional trade, the emphasis is increasingly on corridors linking Asia with fast-growing markets in Latin America, Africa and the Middle East. Trade among emerging markets grew by an impressive 14 percent between 2007 and 2012. In the same period, trade among developed countries² grew by a meager 1 percent.

Asia's impact on growth in Africa is particularly striking. Africa's trade with Asia grew twice as fast as that with Europe in absolute terms between 2007

² Including North America and Western Europe, Australia, Hong Kong, New Zealand, Japan, Singapore and South Korea.



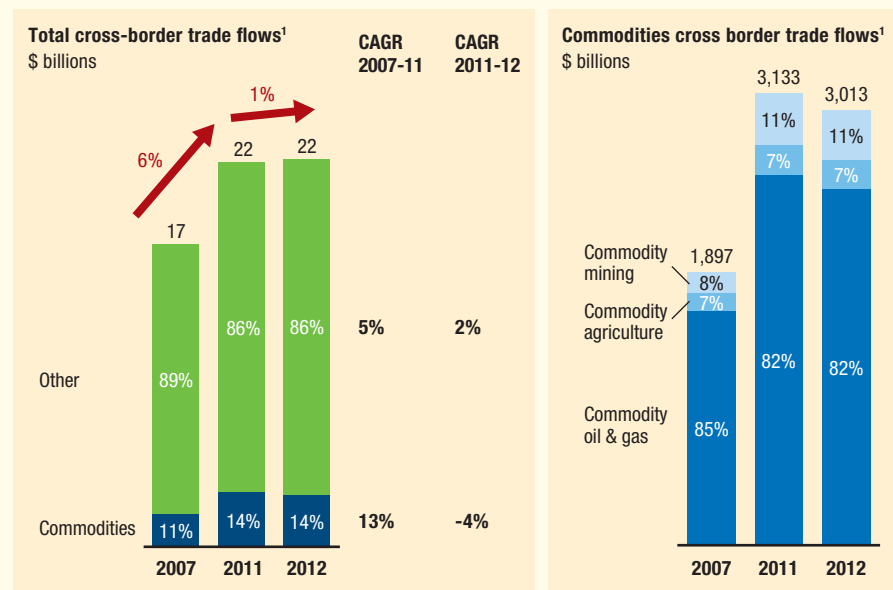
and 2012 (Exhibit 4), and Asia is on track to replace Europe as Africa's main trading partner by 2017. China alone accounts for 16 percent of all African trade, compared with 9 percent for the United States and 6 percent for France, Africa's second- and third-largest trading partners.

High-growth markets exposed to commodities risk

Commodities have been crucial to trade growth worldwide, accounting for more than one-quarter of absolute trade growth from 2007 to 2011 (Exhibit 5). However, the 4-percent decline in global commodities trade poses a threat, particularly for emerging markets, where raw materials and intermediate products, such as mineral fuels, account for approximately 35 percent of exports. The relative importance of commodities for African exports is even higher (approximately 55 percent) compared to emerging Asia (approximately 20 percent). Though heavily exposed to commodities volatility, Africa has been remarkably resilient, maintaining 22 percent annual growth in exports to Asia (2007-12). The key question is whether Africa will transition from a

Exhibit 5

Global growth in trade is driven by commodities, especially in mineral fuels



¹ Average of import and export trade flows

Source: IMF DOTS; UNCTAD; UN Comtrade; McKinsey Global Payments Map

largely commodities market to a strong internal economy, as has happened in Asia, with steady growth in manufacturing.

Client needs diverge across developed and emerging markets

Trade services support international commerce in three main ways: risk mitigation, financing and coordinating the transfer of documents with the movement of goods. The specific reasons for which a company turns to a bank for support in cross-border trade vary according to diverse factors.

Pricing, quality and reach (a combination of international network and local presence) are the top factors influencing a corporate treasurer's choice of trade services provider. Greenwich research shows that U.S. and Asian companies tend to view pricing as the most important of several decision factors. In Europe, it is the second key factor, after quality and capability.

The motivations for using trade services also vary between developed and emerging markets. According to Greenwich, both in Europe and the United

States, the two primary reasons to use trade services are risk mitigation and trade counterparty requests (61 percent and 79 percent in Europe and 37 percent and 68 percent in North America, respectively). In emerging markets, corporates view trade services primarily as a way of financing transactions. Greenwich reports that 25 percent of trade services fees paid by corporates in Asia are directly related to financing needs, while this share is only 13 percent in Europe and 8 percent in North America.

Organizational structure is another factor in corporate buying decisions. In Europe and North America, decisions tend to be made centrally. For large corporates headquartered in Asia, buying decisions are more often the responsibility of local offices. (Fifty-eight percent of corporates surveyed by Greenwich in Europe make decisions at the headquarters level versus 17 percent at the local or regional level,³ compared with 52 percent versus 31 percent in the United States and 34 percent versus 62 percent in Asia.)

With the increasing fragmentation of the value chain, banks will need to learn how to best address the growing needs of small and medium-sized enterprises (SMEs), which on a global basis are increasingly active in cross-border trade. Companies in this fast-growing client segment often have less sophisticated needs and tend to rely on existing cash management banking relationships. Along with risk mitigation, the priority for SMEs is typically to optimize working capital, but existing solutions often fall short of expectations, with banks not being able to fully answer SME financing needs, leading to a substantial financing gap, especially in emerging markets.

Intensify the impact of limited resources

Trade services are crucial to large corporates and a growing number of SMEs, and any bank that cannot support its clients' increasingly diverse and geographically extensive trading demands places these relationships at risk. However, it is important to recognize that not even the largest bank can afford to maintain a presence across all geographies with the same depth. We believe that each bank must adopt a granular approach, focusing its strengths on core markets and expanding its geographical and client reach through innovative partnerships. Banks should also revamp the documentary business, ideally as part of a long-term vision for supply chain finance.

³ Headquarters-based decisions and regionally or locally made decisions do not total 100 percent as some are taken jointly.

1. Target segments where the bank can outperform the competition

Whether they segment their client base by company size, industry sector, type of needs or the geographical endpoints of clients' trade relationships, banks must choose carefully which segments to compete in and which strengths to leverage. The increasing complexity in both trading flows and corporate needs makes it ever harder to be truly distinctive across the board.

2. Take a CFO perspective

Corporates and banks see things differently. While many bankers still caution that Basel III will discourage or even reduce international trade by prompting banks to raise fees or exit the business, current research by Greenwich shows that corporate treasurers are generally less pessimistic about the potential impact of Basel III on trade finance pricing. For a bank to become the leading provider to a particular segment, it must cultivate a CFO perspective across the entire organization, including product management and technology as well as frontline sales and relationship management. Bankers should focus on key challenges from the client's point of view: reducing days sales outstanding, minimizing the cash buffer, and leveraging strong and granular credit rating capabilities to secure the best financing terms.

Bankers should focus on key challenges from the client's point of view: reducing days sales outstanding, minimizing the cash buffer, and leveraging strong and granular credit rating capabilities to secure the best financing terms.

3. Optimize network coverage through innovative partnerships

No organization can sustain a significant presence across the diversity of endpoints now handling substantial trade volumes. Global banks' large but often thin networks were typically designed to cater to the needs of large corporate clients based in Europe or the United States and are costly to maintain. Regional and domestic banks typically enjoy strong relationships with SMEs, but they need access to an increasing number of foreign markets and want to defend against global players reaching down-market. Correspondent banking and "white label" arrangements already address these gaps to some extent, but they usually provide only limited functionality within local markets and often do not cover new corridors adequately.

Global partnerships can enable an individual bank to comprehensively serve the geographic and functional needs of its clients in a cost-effective way. Technologically innovative alliances can extend access to underserved markets with new ways of doing business. The airline industry's multicarrier alliances have improved scheduling options and reduced operating expenses; automotive manufacturers have invested in shared manufacturing facilities to reach scale and improve profitability in a given market. In trade services, multiplayer alliances that integrate operations and technology architecture would allow banks (and nonbank providers) to combine geographical breadth and local depth while delivering high quality and rich functionality to diverse endpoints, many of which are in currently underserved markets.

4. Digitize the traditional documentary workflow

Documentary credit continues to serve as a vital source of risk mitigation and access to financing for trading partners of all sizes. However, banks should optimize the costs and timeliness of documentary services in order to provide a sustainable alternative to open account transactions, which increasingly are corporates' preferred avenue. Many trade banks have simplified processes, removing manual steps and digitizing paper documents, but these improvements still fall short of straight-through processing. An illustration of industry-wide innovation for supporting open account transactions is the Bank Payment Obligation (BPO) offered jointly by SWIFT and The International Chamber of Commerce (ICC). The BPO is an irrevocable interbank promise executed upon the electronic matching of invoice, shipping and other data. The ISO 20022 format used in the BPO allows for straight-through processing between trading parties and their respective banks, thereby eliminating the burden of manual processing and reducing costs for banks and corporates alike.

5. Supply-chain finance is a way to go down-market

By serving companies along the entire supply chain, banks can support the 75 to 85 percent of trade flows transacted through open accounts. While banks differ in how they define *supply-chain finance* (SCF), the fundamental driver is the need to optimize working capital, and the opportunity is significant. The Asian Development Bank estimates that the trade finance gap in developing Asia amounts to \$425 billion, mostly hampering SMEs' ability to grow. Might SCF succeed where banks' traditional trade finance and lending products are failing?

SCF can also address pressures mounting due to Basel III, which may further limit SME access to trade finance. It should also enable banks to leverage their existing relationships with large importers to provide SMEs the benefit of credit arbitrage. In order to meet the working capital needs of SMEs, banks would need to balance the demand for affordability and user-friendliness on the front end with complex and expensive technology infrastructure on the back end, all while maintaining flexibility to cater to diverse and evolving needs.

* * *

Careful analysis of trade data reveals a complex market with ample opportunities for national, regional and global players. If banks and other trade service providers are to reap sustained benefits from the impressive expansion of international trade, they must first understand the geographic linkages, industry trends and evolving risk dynamics shaping the trade landscape. By adopting a granular approach, banks can concentrate their strengths for optimal effect. In most, if not all, cases, this will require new thinking about partnerships and alliances, in order to establish the balance of global reach and local depth necessary to meet client needs and support continued trade growth.

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Reinventing Market Infrastructures

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To function effectively, the payments and securities businesses need market infrastructures that operate efficiently, meet regulatory requirements, and minimize systemic and operational risk. In the wake of the global financial crisis, governments, central banks and regulators have been developing new regulations to prevent future crises. Exactly how these regulations will play out is uncertain, but they are sure to change the way business is done and likely to lead to higher transaction processing costs for financial institutions – and their clients.

Infrastructures must meet rising demands from other stakeholders as well. Consumers and businesses want transactions to be processed faster, even in real time, and through alternative channels, all without compromising security or risk management. Governments want markets for goods and services to be more secure and less dependent on physical cash, which can be hidden inside the economy at the expense of forfeited GDP and lost tax revenues. Regulators want more transparency into transactions as well as adequate collateral to prevent future crises and present greater barriers to fraud and other abuse.

Other factors are also contributing to change and uncertainty over market infrastructures. Technological advances such as cloud computing and increasing communications capacity are creating opportunities to innovate and improve efficiency. Regulation can do the same by pushing markets to innovate around new constraints – or it can have the opposite effect by limiting degrees of freedom and absorbing significant resources.

Stakeholders navigating through these changes should bear in mind that different countries have different priorities that reflect their exposure to the economic crisis and their level of development. Some countries are focusing primarily on risk and costs, others on innovation, while many emerging economies are engaged in building market infrastructures from scratch.

Finally, which forms of ownership, governance and competitive dynamics are most suitable for market infrastructures is still open to debate. Consolidated utilities could be efficient scale operators, are easy to regulate and may help reduce risk. On the other hand, competing for-profit infrastructures could offer a better environment for innovation and price competition. Balancing incentives and maintaining a level playing field remain difficult, and the reality of legacy systems slows things down. As yet there is no clear view on where market infrastructures are heading; for instance, the centralizing of securities settlement under the European Central Bank under TARGET2-Securities (T2S) was supposed to reduce the number of central securities depositories (CSDs) in the European Union, yet new entrants have continued to emerge.

Infrastructures in flux

After the financial crisis in 2008, many countries reacted by introducing new regulations designed to provide greater stability and control for securities and payments markets. This was particularly true in the U.S. and Western Europe, whose financial sectors had been hit hard. Regulators tried to drive as much risk out of market infrastructures as possible. In payments markets in particular, they were at pains to build stronger regulations to protect consumers from potential transgressions on the part of bankers and their payments infrastructure networks, especially in the card space. Network providers mainly focused on offering stakeholders capabilities to reduce costs while maintaining necessary consumer protections.

However, some countries, such as Canada and Australia, were much better at weathering the economic storms, and consequently their regulatory groups and market participants have been pushing for market infrastructures to innovate and build less costly and more efficient networks. Providers have been encouraged to find new ways to move

Some countries, such as Canada and Australia, were much better at weathering the storms, and consequently their regulatory groups and market participants have been pushing for innovation and more efficient networks.

transactions from paper to electronic and to design infrastructures that support market growth and expanding network capabilities. Although not the first countries to migrate to real-time or faster payments environments, they were able to put more thought into their use of data to provide richer capabilities within networks. This is especially important in markets such as business-to-business payments, where data is essential to seamless processing.

Meanwhile, many emerging markets have been able to watch what was happening in developed markets and use technology to make a leap forward in their infrastructure capabilities. While cash still dominates their payments structures, they are building capabilities around mobile payments and other new technologies and often leapfrogging developed markets in the process. Migrating payments infrastructures from cash to electronics could have a profound impact on their GDP and taxes (see sidebar, page 34).

Many emerging markets have been able to watch what was happening in developed markets and use technology to make a leap forward in their infrastructure capabilities.

Although circumstances vary from country to country, all market infrastructures are under pressure to provide greater levels of safety and to innovate. When new regulation is introduced to reduce risk, increase market transparency and improve customer protection, there is a natural tendency for market infrastructure providers and other stakeholders to be concerned with the impact on their cost structure, but they should also be thinking about how they might be able to use the new regulation to drive innovation, such as solutions that increase collateral efficiency or improve the risk management algorithms in central counterparties (CCPs).

Regulatory change: Hindrance or help to innovation?

Like it or not, increased regulatory requirements are here to stay and sure to make operations more complex. Many new regulations have been passed in the U.S. and Europe (the 2009 Credit CARD Act, Dodd–Frank’s requirement for the Consumer Financial Protection Bureau, EMIR) or are under way (the MiFID II review) to improve the safety and soundness of the payments and securities markets following the financial crisis. As these regulatory changes have been introduced, banks and securities dealers in particular have been deeply concerned about the impact on their profitability, which in turn has indirectly affected the infrastructure providers that act as their suppliers.

The flight from cash

Cash remains the primary payments instrument in many emerging countries. As recently as 2008, it was used in 99 percent of all transactions in India, 98 percent in China and 96 percent in Russia. This reliance on cash makes it harder to build strong market economies and exposes countries to a loss of tax revenue from the informal and black economies. For banks and merchants, managing cash costs considerably more than processing electronic transactions. For the wider economy, cash in transit or sitting on the shelf is losing the interest it would attract on deposit.

Many emerging economies are building electronic and digital payments capabilities in the effort to shift away from cash. In Saudi Arabia, which had 92 percent of payments in cash in 2008, the central bank has been developing electronic payments programs for several years. It has built a real-time gross settlement capability, established SADAD, an electronic billing and payments system, and floated the idea of introducing an automated clearing house network to drive low-value payments electronically. Meanwhile Kenya is making great strides in removing cash through M-Pesa, which makes payments via mobile phone SMS messages.

Taking five countries with more than 90 percent of their payments in cash as examples, Exhibit A shows the expected increases in GDP and tax revenues from a migration to

electronic and digital infrastructures. Our estimates indicate that in most markets a half percentage point uplift in GDP would generate sufficient tax revenues to cover the necessary investment in electronic payments infrastructures within the first year.¹ For instance, in Russia the potential GDP gain from infrastructure migration could yield tax revenues of \$2.3 billion.

Although these benefits are compelling, there are barriers to capturing them. The low penetration of personal bank accounts in some countries has made it harder to drive electronic transactions, for instance. People in many markets have traditionally been distrustful of banks, and at the same time banks have failed to develop adequate value propositions for large parts of the population. This barrier to electronic transactions has been partly overcome through mobile solutions such as M-Pesa and Tigo Pesa, since mobile telephony is ubiquitous. Another barrier is the presence of strong informal economies in some countries that operate through cash. In addition, many employers in emerging markets have a long history of making payroll payments to employees in cash, especially among smaller businesses and domestic workers.

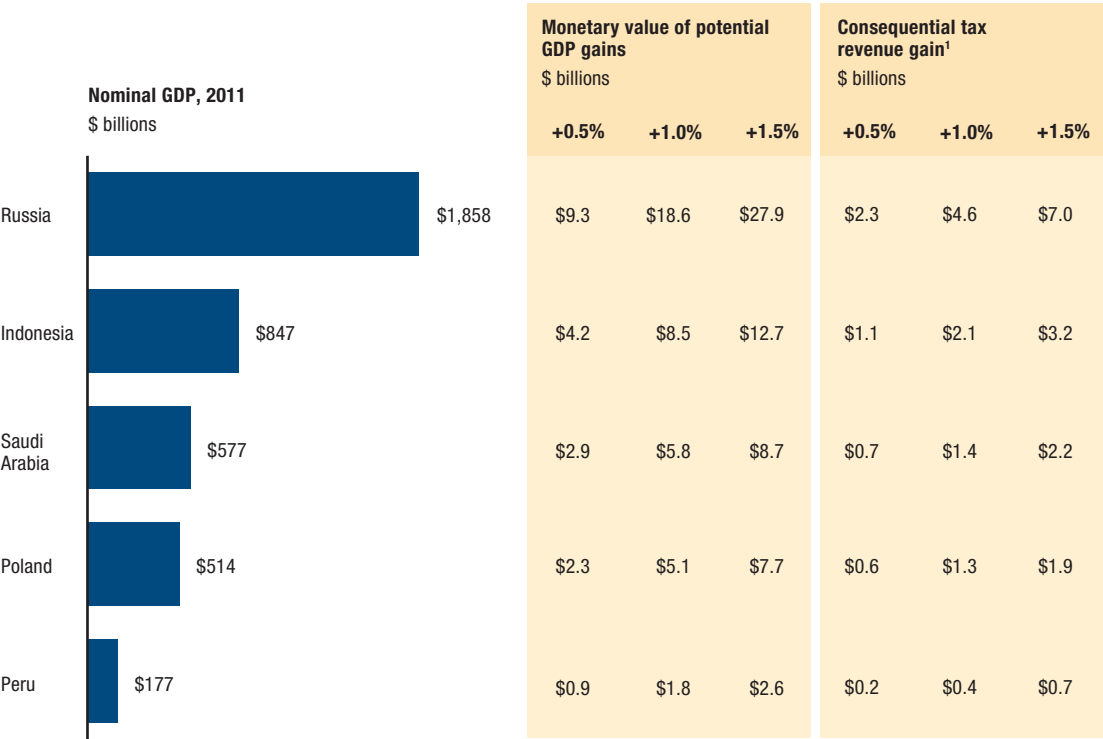
In developed markets, meanwhile, some central banks and regulators have established national councils to help drive the process of innovation in payments and create stronger in-

¹ This assumes a conservative marginal tax rate of 25 percent and an infrastructure build cost of \$250 million to \$500 million across the entire industry

frastructure. The Canadian Payments Association has created rules to reduce the cost of check processing and has been active in building frameworks for digital and electronic payments across multiple channels. Its efforts have encouraged the acceptance of electronic platforms as a means to drive out cost and improve the efficiency of the payments market.

Some governments in Europe are helping to promote electronic payments through electronic invoicing. For instance, by requiring its contractors to invoice electronically, the Swedish government is eliminating costs in its accounts-payables function, reinforcing the importance of electronic payments in an efficient economy, and setting an example for the private sector.

Exhibit A
Moving payments from cash to electronic and digital infrastructures could boost GDP and tax revenues



¹ Assuming a marginal tax rate of 25%
Source: World Bank; McKinsey analysis

For instance, the Basel III/CRD IV global capital regulation puts significant pressure on return on equity, leading banks to seek to reduce their operational cost base as a lever to improve profitability in the near term. At the same time, changes in consumer banking laws affecting debit-card fees in the U.S. have had a lasting impact on banks' revenues, forcing them to find other markets or businesses to compensate.

In addition to meeting ever-increasing capital requirements of Basel III and more conservative local regulations, banks need more collateral for secured funding (e.g., repos, securitization, covered bonds, securities lending) for OTC derivatives that are cleared bilaterally or through CCPs. They also need to support their clients by providing netting solutions, mobilizing collateral and increasing the efficiency of collateral transfers.

As this suggests, once market infrastructure providers and their stakeholders get accustomed to regulatory changes, innovation often follows. Organizations recognize the need to minimize the costs associated with complying with the increased regulatory burden, and seek to benefit by offering new services. In turn, market infrastructure providers develop innovative new products to help their clients reduce regulatory-related costs such as the cost of collateral. Among the many factors that spark innovation, regulatory change has been one of the most important over the past few years.

In response to the increase in the number of OTC transactions passing through CCPs, for instance, some providers are offering solutions that increase collateral efficiency and transparency and improve risk control (see sidebar next page). When trades are conducted through a CCP, a member posts initial collateral to the CCP and provides daily margins. Using a CCP is more efficient than collateralizing each trade individually because of CCP-netting and the offsetting of margin requirements across trades. However, as CCPs grow larger and more complex, they and their stakeholders have recognized that managing all this collateral can be burdensome and difficult. As a result, tri-party collateral capabilities have been introduced in which collateral managers, such as large banks or international central securities

Once market infrastructure providers and their stakeholders get accustomed to regulatory changes, innovation often follows. Organizations recognize the need to minimize the costs associated with complying with the increased regulatory burden, and seek to benefit by offering new services.

depositories (ICSDs), assist CCPs in managing the collateral and provide detailed reporting structures to help trading parties understand when there may be issues regarding their collateral.

As new concepts for tri-party collateral management have been introduced, software and infrastructure providers have started to build new software capabilities to help the CCPs and banks that own the collateral. SWIFT and Clearstream, for example, have built on existing capabilities to introduce new offerings to help banks manage their tri-party collateral holdings more effectively.

In the securities market, the introduction of T2S in Europe, which centralizes securities settlement under the European Central Bank, is putting pressure on

The rise of counterparty clearing houses

From a regulatory perspective, Dodd–Frank’s Title VII and the European Union’s Emerging Markets Infrastructure Regulation (EMIR) will require changes in the way that certain types of bank-traded derivatives are handled in the future. Both regulations call for increased use of counterparty clearing houses. During the financial crisis, CCPs were able to weather the storm despite the turmoil in surrounding markets. Their distinctive risk and collateral management helped to prevent losses among counterparties. They help to reduce risk for market participants by acting as counterparts to each trading member and by compelling participants to collateralize their exposure adequately.

As regulators push for more derivative trades to go through CCPs, the future of these institutions, and in particular their safety and soundness, is coming under scrutiny. Many regulators, particularly in Europe, have expressed a desire to have a

number of CCPs in the derivatives market, believing this is the best way to reduce risk across the globe and prevent a single failure from bringing down the entire market. However, from a purely economic standpoint, the larger the CCP, the more efficiently it can handle collateral for its members (in particular through the netting of exposures and cross-asset-class margining), thus reducing the cost of collateralization overall. Some smaller players have started to combine – for instance, SIX x-clear recently acquired Oslo Clearing – which suggests they see scale as key in remaining competitive.

On the other hand, if too much concentration takes place, there could be a risk that super-sized CCPs will develop, increasing systemic risk and requiring more vigilant monitoring. Regulators have struggled with institutions that are “too big to fail” and were hoping to prevent the emergence of massive entities that control large portions of financial markets.

CSDs to transform themselves and find ways to make up for the loss of settlement fees by offering value-added services in securities processing. CSDs are losing an important source of revenues at the very time they need to invest in connecting themselves to the new T2S infrastructure.

Meanwhile, securities exchanges, clearing houses and CSDs are facing increasing competition. The introduction of best-execution rules in the US and Europe has triggered fierce competition on the trading layer, with falling pricing and eroding market shares for incumbent exchanges. One example in post-trading is the emergence of new market entrants such as Bank of New York Mellon and the London Stock Exchange Group, which are setting up CSD infrastructures to connect to T2S and seeking opportunities to expand their services in the traditional space of securities depositories, putting CSDs under further pressure. EU regulation is going a step further by requiring CCPs and CSDs to be open to competing infrastructure.

In general, as infrastructure providers come to accept the changes brought by regulation, they build new products and services for their customers. However, many of these customers, especially banks, continue to believe that regulation creates an excessive burden that damages their profitability and hinders their ability to sell products and services to their own customers.

The impact of new technologies

New technologies are emerging either as the result of regulatory drives to improve payments and securities markets or through an evolving process of technological development and innovation. Australia and Canada have pushed for more automation in their payments infrastructures, for instance, whereas other countries have introduced real-time payments capabilities without any prompting from regulators.

Real-time payments

For most immediate payments, especially between individuals, cash is still the dominant mechanism. However, cash can present problems with transaction security and incur higher carrying costs. After years of talk, real-time payments capability has become a reality in some markets, providing opportunities for consumers to use new payments channels such as smartphones, and enabling governments to reduce their cash usage. In the past few years, Poland, Mexico, the United Kingdom and Sweden have all developed real-time payments infrastructures.

Bankgirot, Sweden's bank-owned proprietary clearing system, has developed a real-time payments capability that is available 24 hours a day, 365 days a year and includes a mobile payments facility known as Swish. Customers can use their mobile phone to make real-time payments from their bank account to a recipient's bank account. Payments for goods or services that would previously have been made in cash can now be moved from one bank account to another in seconds.

Similarly, the United Kingdom has seen huge growth in real-time payments. From a total of 10 billion automated clearing house and ATM transactions processed per year, 10 percent go through the real-time Faster Payments Service.

Real-time payments capabilities like these help financial institutions balance the eternal equation of risk versus operational cost. Payments risk is reduced through the immediacy of the transactions, and fraudulent transactions can be quickly detected and blocked. Transactions are routed through appropriate sanction-scanning engines to prevent money laundering and other criminal activities.

The shift to cloud computing

A major trend affecting payments and securities infrastructures is the migration of IT platforms. Most infrastructures still rely on traditional mainframe technology platforms, which require extensive customization whenever infrastructure changes are needed. To be successful in the markets, both financial institutions and the infrastructures they use need to be capable of quickly developing and deploying new solutions.

The switch to cloud technology is complex and fraught with anxiety. Safeguarding data security and privacy is a major concern. Attacks on cloud platforms like those used by Google and Facebook have left financial institutions, central banks and regulatory authorities worried about the possibility of cyber-crime and fraud. The recent IOSCO report on cyber-security in stock exchanges noted that most attacks so far have been disruptive in nature, with cyber-criminals attacking servers through denial of service and malware. Large clouds could be vulnerable to environmental security risks of this kind, and market infrastructure providers will need to ensure they have proper controls in place to detect and prevent attacks.

Seeking more robust security capabilities as well as an environment that supports greater agility, some companies are building private cloud architectures.

These allow institutions to implement new systems and technologies far more rapidly than is possible with mainframe platforms. They can also deliver IT expenditure savings of as much as 20 percent (Exhibit 1).

Cloud technology can offer market infrastructure providers another option for balancing costs against risks, enabling them to react to regulatory, customer and market changes more rapidly and at lower cost than they could in a mainframe environment. Although no market infrastructure providers have made the move to cloud technology so far, many observers believe they will do so in the next five years.

Governance and competitive dynamics

There has been much discussion about governance and competitive models for market infrastructures. Should these organizations be built as utilities to facilitate transactions between counterparties, or as profit-making concerns with shareholders who are looking for revenue growth regardless of underlying market dynamics? Should they be part of a country's central bank or a separate entity? The answer to these questions will depend on the country, the maturity of the market, the organization, and the central bank's view.

However, a common theme will be the trade-off between providing markets with reduced transactional and operational risk and low-cost operations on the one hand and stimulating innovation on the other.

According to classical economic theory, a single utility offers advantages as it best exploits economies of scale and can be easily regulated. Anti-trust authorities have become wary of these utilities, however, as they can stifle competition on price and innovation. Many countries therefore emphasize the need for more competition among market infrastructure providers. For instance, the European Central Bank has suggested that the euro zone should have several CCPs for counterparties to choose from. But would more competition in the market necessarily be a good thing? What if a competitor were to change the rules that allow for lower margin requirements on certain types of securities, for instance? It might attract more business and gain market

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share, but what would happen if the gamble created increased risk when markets faltered?

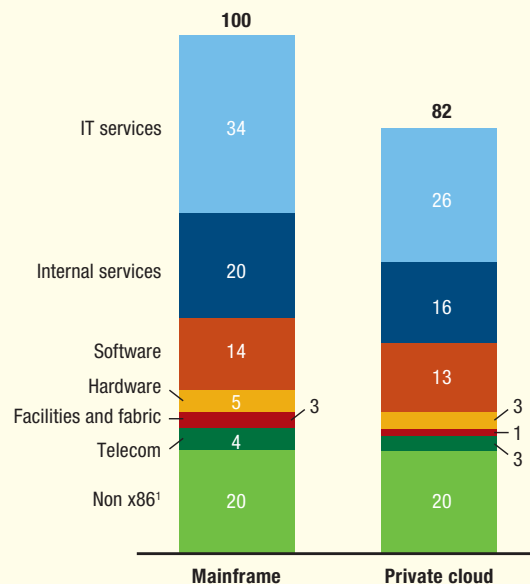
In order for competition to operate properly, regulators need to ensure there is a level playing field. One way to do this is to build stronger standards and common practices and enforce the same rules for all competitors in the market. If all players have to adhere to the same standards and practices, it is more difficult for one player to lower margin limits and create an unfair advantage. Competitors can then use innovation and service quality as differentiating factors to gain market share.

Payments markets are also experiencing a shift. As banks try to drive costs out of their own payments infrastructures, they are looking for ways to bypass market infrastructures and move to more direct bilateral clearing arrangements. This “back to the future” movement is highly problematic in that it tends to create a significant competitive advantage for the largest players, preventing smaller banks from benefiting from a level playing field.

Exhibit 1

Potential IT savings from a migration to private cloud technology

Total annual IT spend
Percent



¹ Refers to servers that do not use Intel chipsets (e.g. Sun, IBM, etc)

Source: McKinsey analysis

Uncertainty over mobile payments offers an interesting example of how innovation can struggle in the absence of standards and market infrastructures to support it. While there is momentum around innovation in mobile payments, no solutions are close to reaching industrial scale. As individual players explore the competitive advantage that proprietary solutions appear to offer, consumer research shows that users are confused and disappointed to be confronted with a wide array of solutions with limited usability. A combination of voluntary industry initiatives to establish standards, shared interfaces, and perhaps shared infrastructures and regulatory standard setting could offer a way out of the current impasse.

The future of market infrastructures

What does the future hold for market infrastructures? Will there be more competition or less? How should infrastructures change to meet rising market demands and keep costs low? Who will govern and own them?

We expect competition to increase. There is often a strong case for a market infrastructure to serve a particular market exclusively as a utility in the early stages. Consider the logic of the single national ATM and debit-card utility network when they first emerged in many European countries 30 or 40 years ago. Scale curves were steep in those days, and massive well-coordinated marketing campaigns were needed to bring merchants and cardholders on board. Thirty years later, that initial rationale has disappeared and pitfalls of the legacy set-up have emerged in the form of a lack of innovation and anti-trust challenges. Some countries have responded by shifting their debit-card model to a network with competing providers, including for-profit players.

As technology becomes cheaper and more flexible, the argument for competing models becomes more compelling. While CSDs, as the ultimate utilities, seem to be largely shielded from competition, the Code of Conduct and MiFID have introduced windows for competition in Europe, and some players have started to take advantage of them. Where CCPs are concerned, the next frontier is in OTC clearing, a business that was competitive from the start. From a systemic risk perspective it makes sense not to create single

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utilities for CCP services, as long as linkages between multiple providers do not increase systemic risk even more.

A major concern among stakeholders and users of market infrastructure is not just the costs of regulation but also how these costs are transferred to the market through higher fees. Regulators sometimes have little regard for the cost impact of their actions on the market, but market infrastructure providers are fully aware of these costs and their possible impact on users. Competition among providers can help to manage the price of services, while technological advances and market innovation can help to improve pricing economics and reduce costs to the market as a whole.

There are no simple answers to questions about future ownership and governance structures for market infrastructures. The outcome will be determined case by case. If authorities and market participants feel comfortable with the level of competition protecting their interests, they will be relaxed about ownership and governance structures. If not, utility structures and heavy intervention by public authorities will prevail. For critical infrastructure on the securities side, such as CSDs and CCPs, we expect the regulatory and supervisory framework to tighten in response to concerns about systemic risk. How far these entities continue in private ownership will depend on whether private owners behave prudently and whether major failures that could trigger broader state intervention in the industry can be avoided.

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European Corporate and Investment Banking: New Paths to Sustain Growth

Olivier Plantefevre
Vincent Pobelle

Corporate and investment banking has endured significant structural change during the last five years. The major transformations already occurring at many banks may be just the beginning of a journey toward sustaining long-term growth and profitability. The environment that followed the 2008 financial crisis presented banks worldwide with liquidity challenges that were further intensified by euro zone stress, recent recessive trends and increasing regulatory pressures.

To ensure short-term survival, many European banks took drastic tactical measures, such as deleveraging, business reorientation, and aggressive cost reduction. While those efforts have been effective, it is unlikely that banks can sustain them over the long term—especially in light of renewed competition from U.S. and Asian banks.

McKinsey expects to see sustainable growth in corporate and investment banking occurring along four major axes:

- **Reengineering.** Banks will need to maximize productivity in their corporate banking and capital markets operations despite often-limited investment capabilities. For example, they could revise sales productivity programs to better reflect new market conditions, client needs and technological changes.
- **Reassessing.** Optimizing current capabilities will require action on multiple fronts, most importantly a systematic implementation of scarce-resource

management, which involves senior management's reassessment of established monitoring practices.

- **Reintermediating.** To continue creating value for clients and investors, most European banks will need to transition from originate-to-hold to originate-to-distribute business models. Doing this may require revisiting processes and governance to more closely align client needs with bank capabilities.
- **Refocusing.** Becoming more client- and investor-centric will be essential as clients and investors increasingly demand high-quality service they can trust.

Market differences in competitive level, regulatory constraint, client expectations and other areas will ultimately result in diverse business models. But we see most corporate and investment bankers pursuing transition in two stages. Because desynchronization between revenue and cost cycles is critical, most will initially move conservatively to avoid transformation in a period of potentially significant revenue declines. Once revenues stabilize, transformation can occur at a more normal pace.

Several factors will determine transformation success. Among them will be the strategic alignment of staffing, systems and process upgrades while maintaining a high caliber of client service.

Adoption of short-term tactics prompted by crisis

Corporate and investment banks (CIBs) have faced major challenges and uncertainties since 2008. After the Lehman Brothers' bankruptcy in the United States, Europe's banks began facing major regional challenges, including a volatile liquidity crisis that jeopardized origination stability. Compounded by euro zone sovereign stresses, the crisis significantly transformed the funding profiles of many banks. As interbank markets evaporated the European Central Bank provided some €1 trillion in liquidity injections to restore the funding profiles of European banks.

Recessive trends in Europe are also causing origination-volume declines, thereby reducing demand for bank services, particularly in corporate banking and structured finance. Meanwhile, new players, including Asian and Japanese banks, are leveraging low-cost funding and risk appetite in loan origination.

Increased regulatory constraints on capital and liquidity should help relieve the crisis. However, they also require banks to revise their business models even as they try to preserve current operations and franchises. The liquidity coverage ratio (LCR), for instance, is limiting CIB models in asset-liability management (ALM), as well as in profitability. Dollar- and yen-funded banks, meanwhile, are enjoying a competitive advantage.

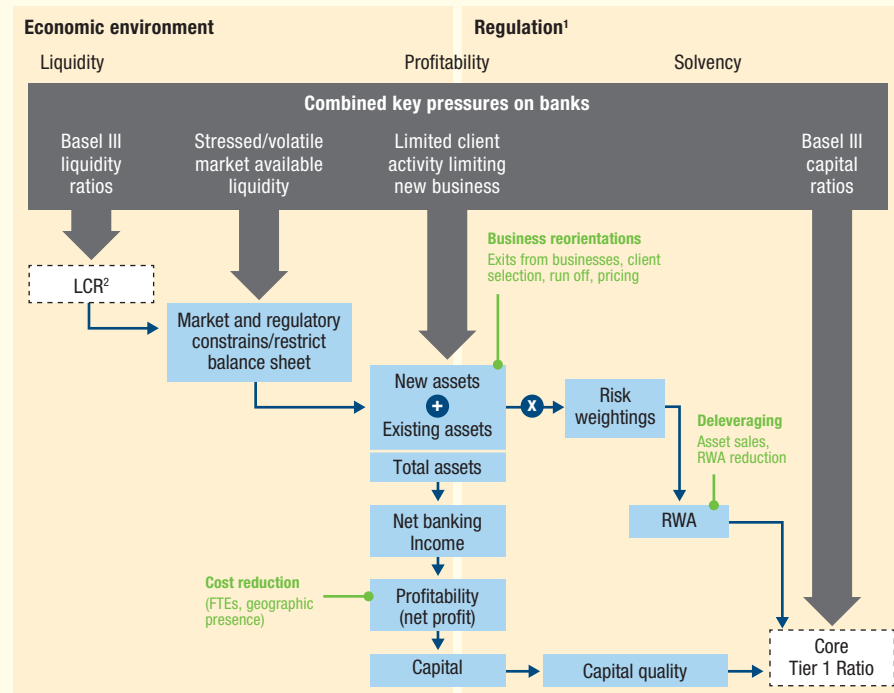
These combined trends make it unprofitable to maintain traditional business models that were developed when abundant liquidity and more limited regulatory constraints prevailed.

To survive environmental change, corporate and investment bankers have adopted three radical short-term tactics (Exhibit 1):

Exhibit 1

European banks respond tactically to economic and regulatory challenges

2012 CIB vision; retail effects not detailed



¹ UK ICB impact not detailed

² NSFR impact not detailed (i.e., reducing GAPs on every maturities for 2017, but largely anticipated)

Source: McKinsey analysis

- **Deleveraging.** Many banks slowed originations and disposed of high-risk assets. Most reduced their use of risk-weighted asset (RWA) capital. This led to market restructurings and to reduced trade financing demand.
- **Business reorientation.** To reshape their business profiles and focus on simple flow products, many banks closed their structured capital desks, reduced or refocused their international reach and curtailed their services. Some withdrew partly or entirely from major business segments such as fixed income and equity.
- **Cost reduction.** Banks initiated aggressive cost-reduction campaigns. In Europe, these focused on capital markets operations and support functions. In just 30 months, tens of thousands of positions were eliminated. These actions helped to address serious profitability issues while demonstrating to the financial community and regulators that banks indeed comprehend their new environment.

Between 2009 and 2011, most CIBs implemented comparable measures, adapting them to fit local market constraints and context.

The hunt for sustainable business models

The measures discussed above are helping CIB banks to survive the shock of bankruptcies, bailouts and takeovers. However, banks have yet to convince the financial community that their latest business models are sustainable. To date, most still operate much as before. They retain their CIB divisions to assure ongoing access to equity and credit markets, and to help offset their declining retail revenues.

A business model has yet to emerge that is convincingly sustainable in the current environment. Barring a positive environmental change, investors therefore question the viability of CIBs. Current price-earnings ratios for European banks are reflecting this concern (Exhibit 2).

We believe that achieving sustainable long-term growth in a world where the rules of the game have changed significantly must come from a strategically balanced blend of the following approaches:

- **Reengineering.** Banks must radically improve their productivity while preserving their ability to generate a profit. And they must do this in an increasingly difficult environment—one in which clients are demanding simpler products, regulators are exerting tighter control, governments are imposing new taxes and financial constraints are limiting their ability to invest.

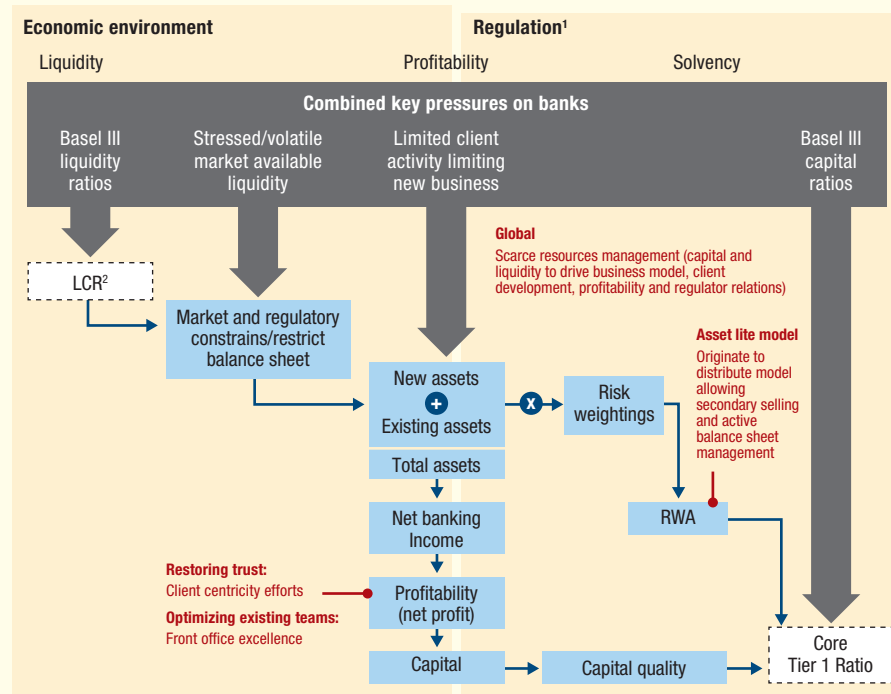
Many banks are realigning their productivity goals to attain optimal performance in the current setting, both in corporate banking and in capital markets. There is also a broad trend to develop front-office-effectiveness programs. These include reengineering sales operations using various management levers, such as process simplification, streamlining, reorganization, new pricing, better client-portfolio management, closer managerial scrutiny and better-calibrated compensation plans.

These efforts clearly represent a core adaptation by banks to the new environment, in which more revenues must be generated within a stable setting. In some cases, banks are realizing productivity increases of up to 30 percent, along with accompanying revenue growth, as a result of dedicating more time to client service.

Exhibit 2

European banks' challenges long-term models and growth prospects

2012 CIB vision; retail effects not detailed



¹ UK ICB impact not detailed

² NSFR impact not detailed (i.e., reducing GAPs on every maturities for 2017, but largely anticipated)

Source: McKinsey analysis

- **Reassessing.** Bank resources will likely remain structurally curtailed for some time, thus requiring significant management efforts to preserve growth opportunities. To ensure adequate value creation, CIB models should be built on a capital- and liquidity-management core that is efficient and dynamic. Monitoring and managing scarce resources will be central to this effort because capital and liquidity access, volumes and costs continue to fluctuate (Exhibit 3).

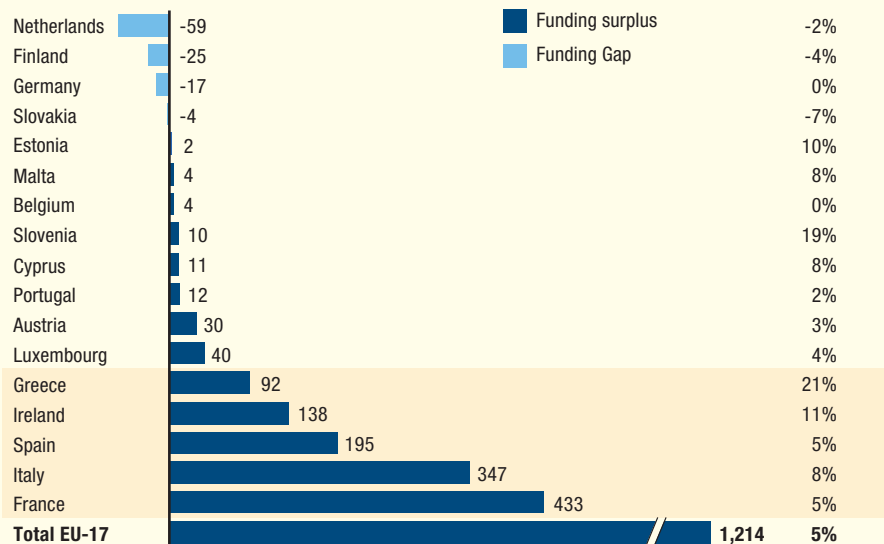
To provide management with the insight needed to make sound strategic decisions, assessing and tracking value creation should be done on a business-by-business basis. This enables accurate understanding of each business's ability to use scarce resources in building value for clients, shareholders and the economy in general. Banks can also leverage in response to regulatory change, for example, when adapting to tighter con-

Exhibit 3

Regulatory funding gaps in Europe put banks under pressure to maintain their development

Regulatory funding gap¹ status quo (2012)
€ billions

Percent
of overall
balance sheet



¹ Approximation of Basel III outflow factors and ECB balance sheet statistics; rough approximation assuming a 5% buffer on NSFR requirements – no full balance sheet NSFR simulation

Source: ECB; European Covered Bond Council; McKinsey analysis

straints on international liquidity transfers. Greater transparency of bank resource needs and usage can also make return forecasts more reliable. McKinsey experience suggests that these efforts demand a rigorous approach to be successful.

ALM should also be upgraded and made more strategic. In fact, many banks recently upgraded their ALM departments. Now these departments need to shift from being largely supportive to having more active roles in decision-making. This could require restructuring their missions, teams, processes and systems to make strategic planning more efficient and effective.

Growth in originations will be subject to Basel III constraints. The combination of capital-driven ratios (core Tier 1 and leverage), liquidity ratios (LCR and the net stable funding ratio) and leverage ratios are critical business model components. They will motivate lenders to focus on regulation-friendly originations as a means of supporting long-term growth and value creation. Among these are high-quality loan collateralizations, integration of LCR costs through transfer prices and extra revenue and liquidity originations through transaction banking or global cross-subsidization. Inevitably, these changes will have some client impact as banks attempt to explain their evolving business models.

Development philosophies regarding capital liquidity and allocations are becoming more focused on scarce-resource management. Some business lines cannot be developed on bank balance sheets and therefore require a new intermediation mechanism to transfer some of the risk to third-party investors. This will require improving intraday treasury monitoring and upgrading bank IT systems to provide the visibility needed for better arbitrage and funding.

- **Reintermediating.** To preserve and reinforce value creation and intermediation between clients and investors, banks need to align the parameters of their originate-to-distribute models with investor and client needs. This should enable European bankers to gradually improve their positions in the credit value chain. Historically, banks created value by accumulating the attractive credit assets they had originated and properly priced based on their strong client relationships and risk assessment skills.

Under current balance-sheet constraints, such credit portfolio management is no longer sustainable, so banks must sell portions of their assets to secondary investors. They may, however, retain related fee revenues

while transferring spreads and associated risk (Exhibit 4). McKinsey finds this approach can help banks manage growth more effectively under tight business constraints. For instance, it can help to free up capacity for more growth, or allow a bank to reorient its services despite limited resources.

McKinsey interviews with insurers, pension fund managers and other investors suggest that loan-based products can be compelling from risk-return and duration perspectives. Indeed, recent market changes demonstrate the high volatility of several asset classes in which banks traditionally have invested, including equity, government and commodities. These market changes also reinforce the attractiveness of bank-originated credit products that are often perceived as corporate bond-like offerings.

Selling balance-sheet assets to investors eventually requires further business model modifications. Therefore, banks should closely examine their entire balance-sheet value chains, including origination structures and

Exhibit 4

European banks can take measures to make their assets more compelling to investors

	Possible evolutions	Consequences
Rethink origination process	Review proper sector / asset prioritization Upgrade correlative initial client pitch and include distribution Adapt overall bank positioning to ensure relevant origination	This strategy would then give banks margin to maneuver for distribution
Adapt and enhance technical and legal documentation	Adapt to type of investor (bank vs institutional) and standardize legal documentation for later distribution Stabilize applicable governing law, bankruptcy law Converge towards "US standards"	Such upgrades should facilitate loans structuring in ad hoc investment vehicles and reinforce investors' trust in EU legal environment (especially of non-banks as debt investors)
Improved pricing	Rethink loan pricing structure to match market expectations	This would allow larger negotiation space with investors
Drastically improve data quality	Revamp and standardize loans "hard coding" in banks' systems	This would facilitate discussions and on potential transactions
Innovate on client servicing and monitoring	Conceive robust client servicing model for offloaded loans Maintain cross-sell and create trust for investors in keeping an interest in loans Structure and anticipate potential conflict of interests	This will contribute to propose a long term stable business model for investors

Source: Investor interviews; market and press research; McKinsey analysis

pricing, value measurement, balance-sheet and revenue management, secondary sales vehicles and sales commission adjustments. The revival of investor involvement in credit implies the end of two securitization excesses seen in the United States during the 2000s: Under the fire-and-forget-it model banks were not held responsible for assets they originated and sold. Moreover, overdeveloped and opaque product structures and packaging limited investors' ability to fully comprehend them. Bankers should now strive to align their own interests with those of their corporate clients and investors.

Several new operating models are emerging. One, for instance, aims to preserve RWA minimums after syndication and post-secondary sales to better align investor interests, which can be achieved by retaining some portion of originated assets on the bank's own books. Another approach focuses on preserving commercial relationships with corporate clients by demonstrating long-term commitment to their financing needs. This requires upgrades in several areas. Upgrades include efficient engineering of credit portfolios, redesign of value-creation indicators and incentives, and a significant improvement of systems and processes. Such a strong focus on core bank values is clearly a vital growth lever—one that can also benefit the larger economy by reopening credit production.

- **Refocusing.** Success in the new environment will require a return to client-centric values. Today's corporate clients have a growing need for advice and commitment from financial service providers, and they are becoming more demanding. This creates opportunities for bankers to differentiate themselves in the marketplace. The current environment has restricted credit access for many clients. For these, providing commitment and support beyond fundamental obligations is key. Moreover, large corporations are becoming more knowledgeable and demanding more of banks, thereby increasing pressure on traditional business models. SME clients also remain fragile and dependent on funding access.

Given the state of corporate and investment banking today, various approaches could emerge. New players, for example, could enter the marketplace with more compelling value propositions with respect to volume, cost and service. And companies might view these as acceptable banking alternatives. Unconventional players are already operating in the form of *shadow banks* and government-driven support funds that target specific business sectors.

To serve clients on a higher level means bankers must become client-centric. This is especially true for proximity products, such as transaction banking. Being more client-centric has two important advantages: it allows banks to focus less on sales and more on being trusted advisors, and it provides more opportunities to leverage client proximity.

Financial regulation in the sales and retailing arena is expanding toward corporate and investment banking, where regulators may well require new quality standards (Exhibit 5). This, however, would involve revising bank operating models to provide greater expertise, longer-term commitments and upgraded coverage. (Improving coverage could be challenging in an environment in which banks already need to do more with less.) Leveraging client proximity could help to counter some adverse trends, such as online and other corporate-banking alternatives.

Exhibit 5

Corporate regulations are becoming more like their retail counterparts

Developments

UK/FCA: 'Retailization'

The FCA does "not believe there is a clear divide between 'retail' and 'wholesale' markets," and says their approach "will recognize that activities in retail and wholesale markets are connected and that risks caused by poor conduct can be transmitted between them."

NL/AFM: First analysis

AFM has launched a project around the theme: "suitable service for non-retail clients", which could develop into 'Klantbelang Centraal' equivalent for non retail

First step is a Risk analysis of the market (planned for 2013). This analysis will assess for various segments (housing cooperatives, health care, SMEs, etc) whether they encounter any problems. It will also assess the current legal framework, and the potential role the AFM could play

MiFID II: Implementation in 2015

MiFID II is expected to come into force in 2015

Examples of expected changes:

- Limitation of execution only products to non-complex financial products
- Authorisation for national regulators and ESMA to (temporarily) ban products and services that compromise investor protection or the stability of the market

Competitors: Moving ahead of regulator

Despite limited regulatory push towards client centricity in the wholesale market thus far, we see more players paying more attention to consumer protection at corporate level

Source: FSA.gov.uk; AFM.nl; McKinsey analysis

This new client-centric mode should help to rebuild overall confidence in banking, assure investors of asset-origination quality, boost client satisfaction and generally help to preserve established bank franchises across client segments.

Strategic vision and execution excellence

Changes in the banking environment will likely not affect all European CIBs banks equally. Growth opportunities and the business models needed to capture them will necessarily differ. Therefore, instead of a one-size-fits-all model, various trends will likely emerge as bank priorities and objectives differ according to market, shareholder structure and the competitive landscape.

New players and technologies might place strong pressure on some areas of commercial and investment banking. Nonbank players are already developing alternatives to traditional intermediation, such as shadow banking and resource pooling in unregulated structures. Even traditional Internet players are developing compelling low-cost payment options. And some newcomers are developing low-cost CIB banks in specific business lines. To compete effectively against players that have different cost structures, it will be necessary for banks to maintain their business-model changes. Hence, the roles of cost, excellence and continuous innovation will be critical.

Business-model evolution will have progressive effects. Most corporate and investment bankers in Europe cannot transform their models rapidly due to existing constraints, such as competitive margin pressures, still nascent investor appetites and insufficient returns. Few will fully transition to originate-to-distribute models because it would be perceived as a radical move that is inconsistent with European market constraints. Corporate funding in the United States, for instance, is 80 percent debt-capital markets and 20 percent highly priced loans, whereas in Europe it historically has been about 80 percent credit (deliberately priced low for subsequent cross-selling) and 20 percent debt-capital markets. Such global market structures probably should be maintained over the long term, but banks will need to learn how to maintain their positioning. Some recent estimates say that up to 20 percent of new production may be sold to secondary investors. This represents highly consolidated volumes with still-limited sums, which retain most of the originate-and-hold attributes.

A dual horizons approach

European CIBs face crucial challenges in balancing the long-term vision that investors require with the short-term understanding clients and team man-

agers demand. Desynchronizing the revenue and cost cycles will be key. Most CIBs experienced greater volatility in revenues than in costs, which are more resilient given their typical structure. This difference is vital to ensuring that long-term transformation plans accommodate immediate profitability needs. Early-mover banks are already struggling with this. Introducing new credit-origination standards, emphasizing investor coverage and acquiring new portfolio management skills requires talent recruitment and development—tasks that significantly increase costs and investment.

A three-to-five-year strategic outlook is essential in planning a business-model transition, which typically must include guidance to businesses and shareholders. Indeed, in many cases such a major transition could even affect the entire industry. For instance:

- In a new portfolio paradigm, European CIBs will no longer find growth through funding and structured products.
- A split between retail and wholesale banking could have a serious impact, as noted by Erkki Liikanen, Governor of the Bank of Finland.
- Consolidation based on business lines and geographies may result in mergers, acquisitions and the formation of new alliances.

Short-term actions are essential to grow and develop key programs and business lines that will capitalize on new opportunities, such as trade finance. In the longer term, however, balance-sheet constraints suggest that growing profitably will need to prevail over volume and marketshare objectives.

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