McKinsey&Company

Global payments 2018: A dynamic industry continues to break new ground

Global Banking October 2018

Authored by:
Sukriti Bansal
Philip Bruno
Olivier Denecker
Madhav Goparaju
Marc Niederkorn

Introduction

The prominence of payments in the global financial services system has undeniably risen over the 12 years that McKinsey has formally tracked the sector's dynamics. Even against this backdrop, however, 2017's results are striking.

The 11 percent growth generated by payments—which topped $1.9 trillion in global revenue—is the largest annual increase we have measured in the past five years. The milestone of a $2 trillion global industry is set to be surpassed two years sooner than expected, and a $3 trillion threshold looms just beyond our five-year projection horizon.

Although the Asia-Pacific region—and China in particular—has unsurprisingly been the growth engine, there is no shortage of avenues, both geographic and channel-based, for firms of all countries and categories to pursue. In fact, the heady growth belies an industry in the midst of significant disruption, in which new and redesigned business models pose competitive threats. Even established firms in this robust sector may need to consider near-term transformation to ensure their position in the value chain.

Per-transaction revenue metrics are under intense pressure; fortunately, transaction growth fundamentals are healthy, creating opportunities to redesign back-office processes to continue to deliver impressive margins at scale despite shifting dynamics. This report builds upon a data-driven assessment with insights on the steps needed to engage profitably in the emerging payments landscape.

Following section 1's quantitative analysis of the $1.9 trillion global payments market—exploring the factors behind recent double-digit growth as well as the five-year outlook—section 2 details opportunities in the lucrative but complex cross-border payments market. At times overlooked because of its relatively minor share of stated revenue, cross-border operations carry disproportionate weight due to their significant margins and connection to lucrative broader corporate banking relationships.

The importance of ecommerce and the shift toward digital payments methods has been well documented. Section 3 considers the real-time implications of this transition and suggests avenues for engagement, notably the growing omnichannel imperative.

In section 4, we address payments in the global transaction banking business, a large and growing sector that faces a unique set of challenges. The imperative here is for incumbent firms to proactively update strategies to better align with market realities, and, ideally, to find common ground for collaboration with fintechs to produce even more powerful offerings.

The insights in this report are based on the 2017 version of McKinsey's Global Payments Map, which has been the industry's premier source of information on worldwide payments transactions and revenues for two decades. The map gathers and analyzes data from more than 40 countries.

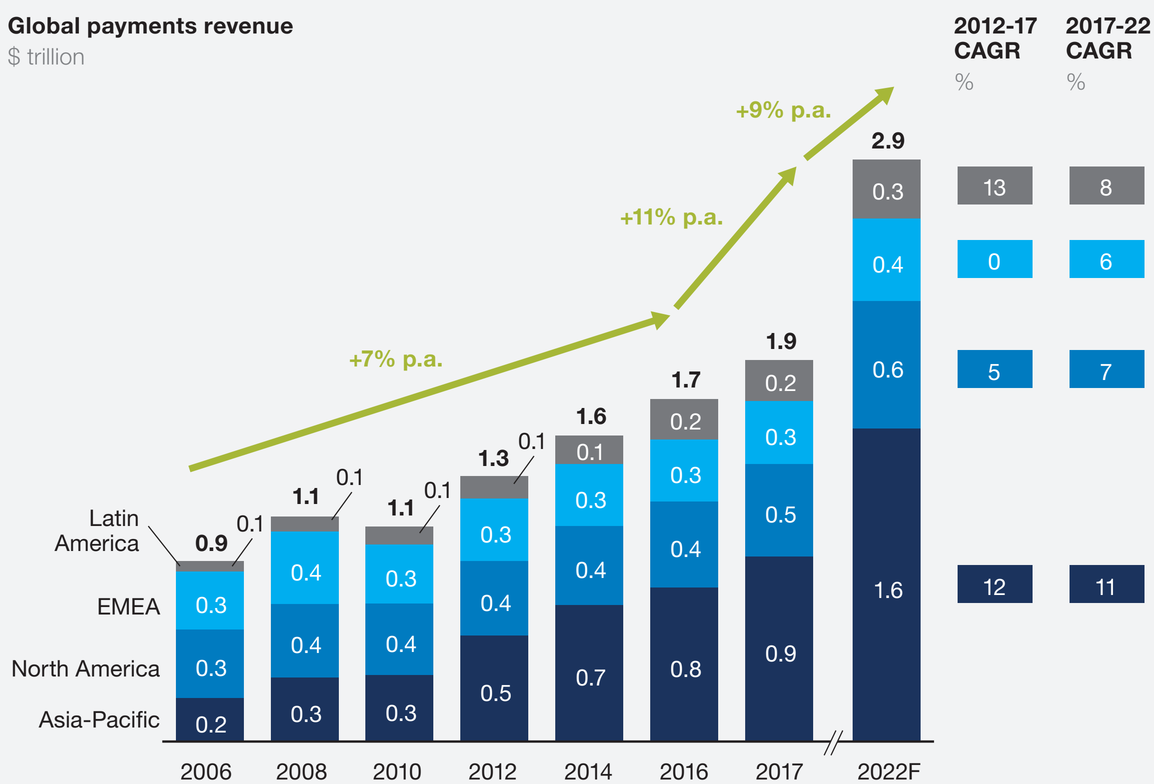
Expansive growth, targeted opportunities

Global payments revenues swelled to $1.9 trillion in 2017, the best single year of growth in the last five years (Exhibit 1). In last year's report we forecast that payments would become a $2 trillion business by 2020. Indeed, 2017's market performance was so robust—its 11 percent growth rate fueled by continuing strength in the Asia-Pacific corridor—that global revenues are poised to surpass that $2 trillion threshold in 2018, and to approach $3 trillion within five years.

This rapid growth makes payments an expanding and increasingly important component of the broader banking industry. After an extended period in which payments generated roughly 30 percent of overall banking revenues, this metric has turned sharply upward. Payments' continued prominence in banking revenues might come as a surprise, given the continued pressure on payments fees—increasing competition and regulatory pressure—and ongoing low-interest-rate environments in many developed economies. On the other hand, the trend makes sense, given healthy underlying fundamentals, including electronic transaction and digital commerce growth, and increasing

Exhibit 1

Global payments revenues grew 11 percent in 2017, the highest rate in the last 5 years.



Source: McKinsey Global Payments Map

cross-border activity. The growth of the payments component also points to the imperative for financial institutions to develop and continually refresh sound payments strategies in order to remain competitive a market being reshaped by technology, new competition, and customer demands.

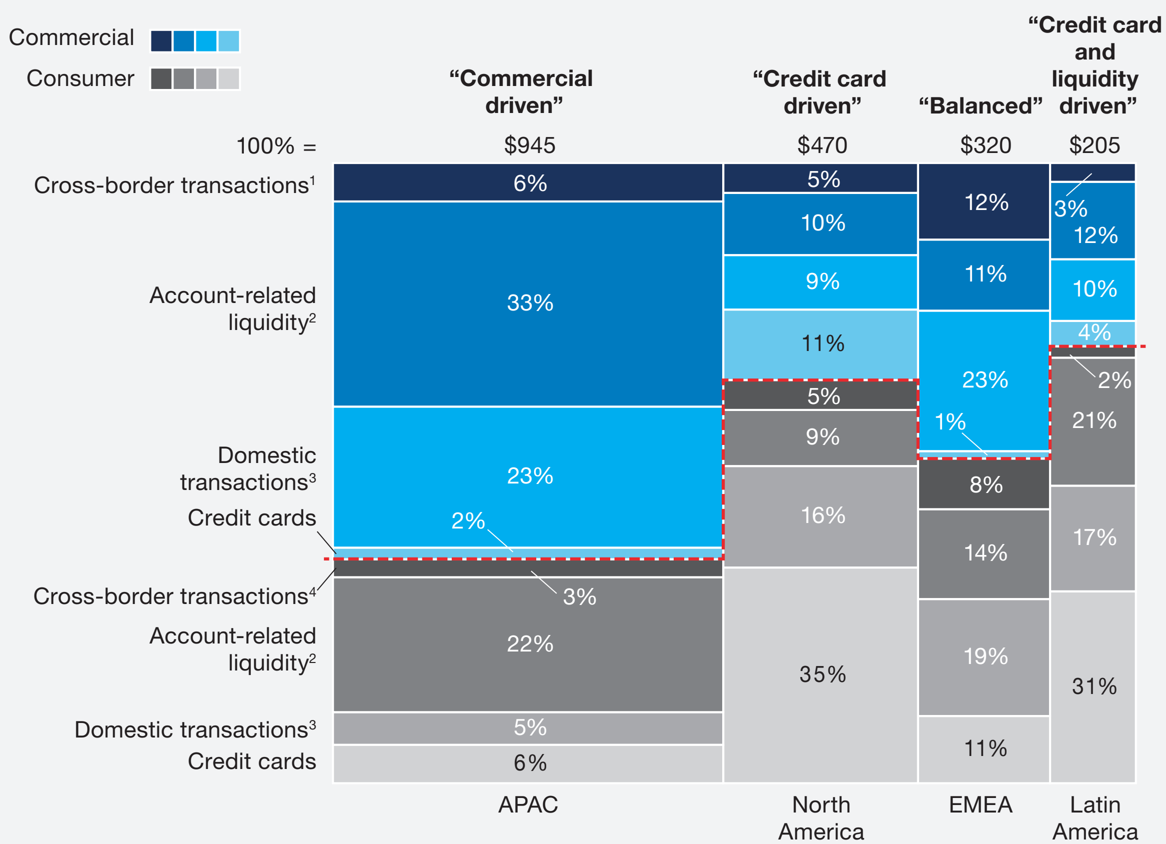
Not surprisingly, global payments revenue growth is dominated by the Asia-Pacific region, as has been the case for several years. At more than $900 billion, the region now accounts for nearly half of global payments revenue—compared to less than a quarter just six years earlier—as well as four-fifths of recent growth (Exhibit 2).

Exhibit 2

Asia-Pacific dominates the global payments revenue pool.

Payments revenue, 2017

$ billion



[1] Trade finance and cross-border payments services (B2B, B2C).
[2] Net interest income on current accounts and overdrafts.
[3] Fee revenue on domestic payments transactions and account maintenance (excluding credit cards).
[4] Remittance services and C2B cross-border payments services.
Source: McKinsey Global Payments Map

Remarkably, double-digit growth has continued even as the base of business has grown. The 20 percent growth rate for 2017, driven largely by liquidity factors, was Asia-Pacific's strongest ever. Although our forecast calls for inevitable moderation, revenues in the region should continue to grow at low double-digit rates over the next five years, still considerably faster than any other region.

Latin America's payments sector has been the fastest-growing among the major regions in the recent past (albeit off the smallest revenue pool); but growth rates flat-lined abruptly in 2017. We expect the region to return to average annual growth of 8 percent over the next five years, second only to Asia-Pacific. While several Latin American countries continued to deliver double-digit growth in 2017, Brazil's payments sector—the region's dominant revenue engine—was hampered by regulatory action targeting credit card rates (Latin America is reliant on interest for two-thirds of its card revenues). Credit card APRs in Brazil fell by more than 60 percentage points as a result of actions restricting the duration of high-cost revolving credit lines. The plan is expected to reduce delinquency rates but will also reduce average APRs, which remain among the world's highest. Latin America's underlying fundamentals remain solid, particularly for domestic payments.

EMEA revenues were similarly near flat, continuing a trend that has persisted for the past decade. The developing nations of Eastern Europe and Africa have generated high single-digit growth, offsetting nominal declines in Western Europe. Fee revenues have been the primary factor in the growth that has occurred, while a persistent environment of low interest rates—reaching negative levels in some cases—acts as a drag on growth. A return to a stable rate environment combined with continued transaction growth will result in revenue growth in the mid-single digits for Western Europe until 2022, while Eastern Europe and Africa are likely to continue at their present pace. At the same time, individual firms in the European payments arena, such as Adyen and Wirecard, are finding growth areas that lead to substantial valuations.

On the surface, cross-border payments might appear to comprise a low single-digit share of global payments revenues. However, once liquidity factors such as net interest margins are excluded—as many institutions do in analyzing their own payments P&Ls—this growing category of transactions account for a larger slice of the pie (roughly one-quarter) despite increasing competition from new entrants and solutions. Cross-border transactions also continue to generate unusually high margins for payments products and serve as a foundation for a broader array of client services. We detail cross-border payments dynamics in the next chapter, including the prospect of possible revenue margin pressure and recent innovations enabling more customer-friendly solutions.

After a period of tepid results, following the financial crisis, North America's overall payments revenue growth returned to a healthy 7 percent in 2017, and is poised to continue at a similar pace over a five-year horizon. Credit cards comprise more than half of North American payments revenues, far more than any other geography, and will continue to grow faster than other products. More surprising is that the temporary slowdown in credit card usage following the financial crisis imposed a drag on North American revenue growth was only recently lifted.

The jump in global revenues in 2017 is a direct reflection of an improved global economic scenario, reinforcing the close link between growth in GDP and payments revenue. According to World Bank data, in 2017 global nominal GDP grew at 6 percent year-over-year, compared to 1.5 percent in 2016. During the same periods, payments revenue increased in similar proportions, from 7 percent in 2016 to 11 percent in 2017.

Comparing payments revenues across regions, we observe that payments revenue per unit of GDP (a measure of the cost of payments for consumers and businesses) in Asia-Pacific and Latin America is 50 to 60 percent higher than for Europe and North America. In addition, the share of electronic payments transactions in Asia-Pacific and Latin America is 60 to 65 percent lower than in Europe and North America. In other words, payments are significantly costlier for the economy in Asia-Pacific and Latin America, because the cost of processing cash and check payments is higher, as are the fees paid by consumers and businesses.

Transaction dynamics remain strong

Although the strong recent growth in global payments revenue has been broad-based and diverse, an increasing share is related to transactions. This as a positive development for banks and payments providers, as transaction revenues are more predictable and sustainable, and more readily controlled by financial services firms. Transaction-based revenue now accounts for 40 percent of global payments revenue, up from 37 percent in 2012. We expect this share to grow to 46 percent by 2022, even in an improving rate scenario.

More specifically, while the overall number of transactions continues to increase, the true revenue driver is the electronification of transactions—namely away from cash—which more than offsets the downward pressure on fees (Exhibit 3, page 6). Over the past five years, the share of the world's transactions carried out in cash has fallen from 89 to 77 percent. At the same time, the share of combined debit and credit card use has nearly doubled, from 5 to 9 percent. The decline of cash usage globally is expected to be even more pronounced over the next five years, due to an increasing range of payments options, the push toward real-time payments, the growth of digital commerce, and continued regulatory focus on payments electronification.

Given that the Asia-Pacific region accounts for over 60 percent of the world's population, it is not surprising that it is responsible for two-thirds of global transactions. The fact that Asia-Pacific still lags behind other regions in overall electronification at only 21 percent (despite more than doubling since 2012) illustrates the region's ongoing growth potential. The move away from cash, as witnessed in markets such as China, will serve as the single-largest cause of global electronification. The share of electronification in China has increased more than ten-fold over the last five years, from 4 percent in 2012 to 34 percent in 2017.

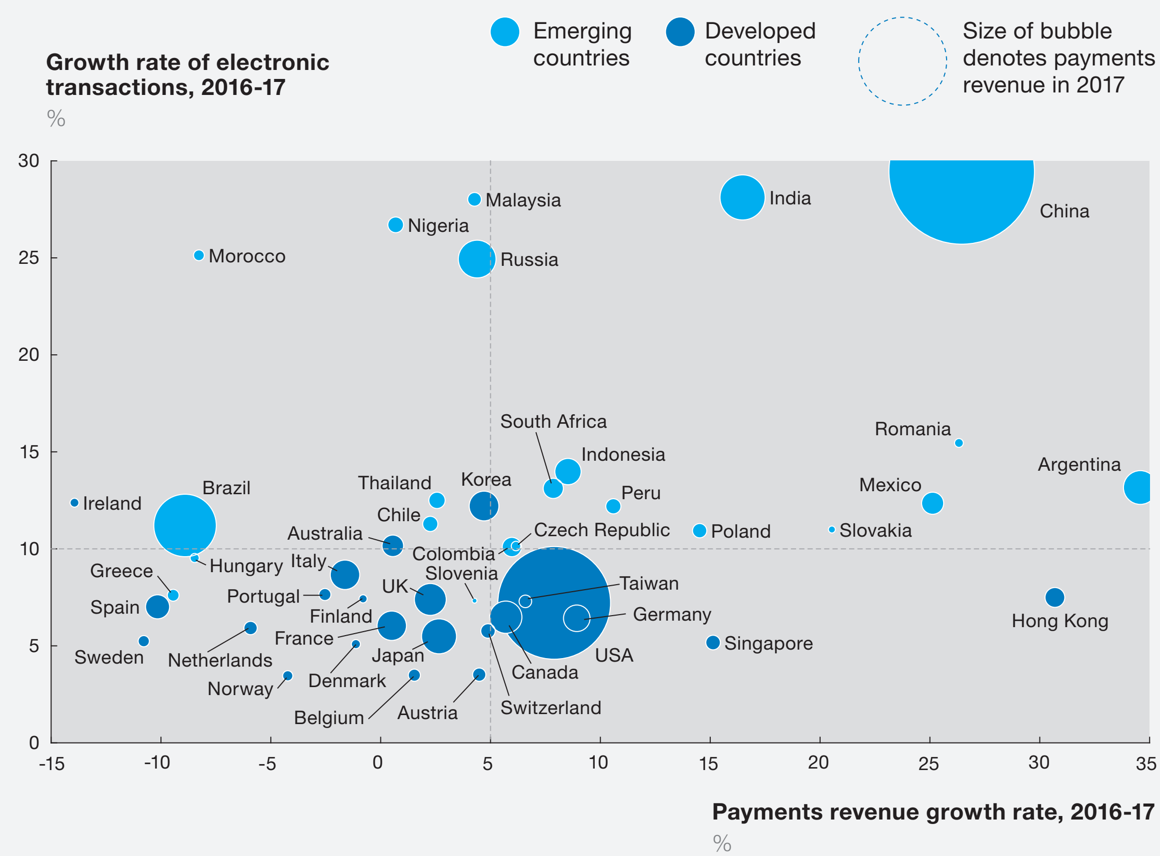
Meanwhile, North America has become the first region to execute more than half of its transactions electronically. At 450 electronic transactions annually per capita, it far and away leads other regions on this dimension. Meanwhile, individual European countries such as Sweden and Norway are executing no more than 20 percent of their transactions in cash, while generating 520 noncash transactions per capita per year.

The shifting digital landscape

The growing popularity of alternative payments solutions, and digital commerce in general, further contributes to the electronification trend. Global digital commerce[1] volume exceeded $3

Exhibit 3

Countries with high revenue growth are also characterized by rapid electronic transaction growth.



Source: McKinsey Global Payments Map

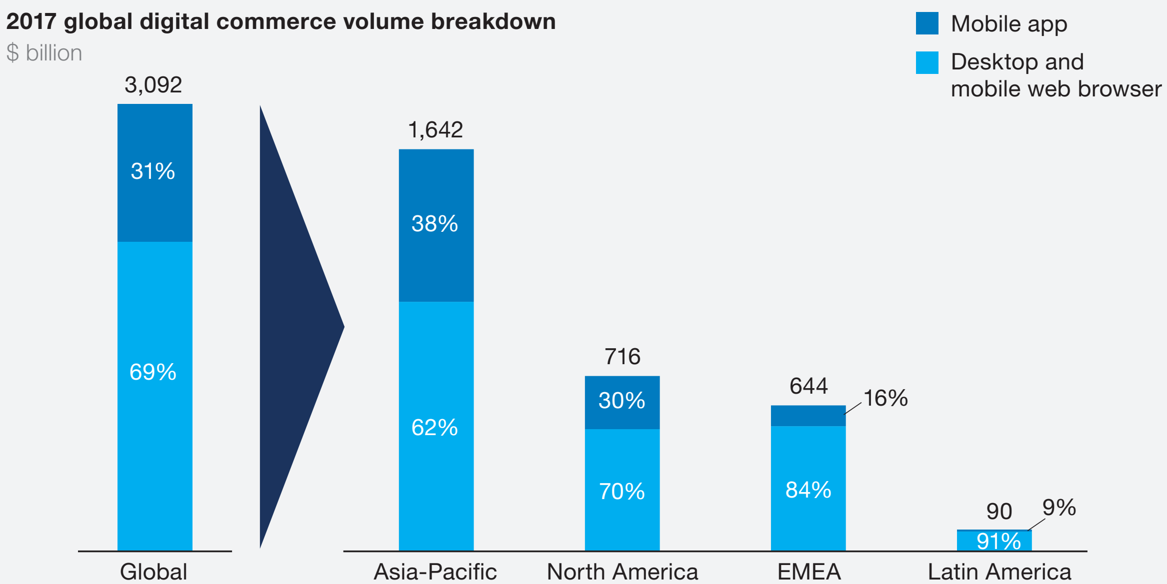
trillion in 2017, and will more than double by 2022. Asia-Pacific already comprises over half of this $3 trillion and, due to the fast-growing Chinese market, will increase its share to nearly 70 percent by 2022. Mobile commerce, including in-app payments and mobile browser payments, is the dominant factor driving strong digital commerce growth, due to rising smartphone adoption, an increasing shift towards online shopping, and improvements in network bandwidth. Mobile commerce accounts for 48 percent of digital commerce sales globally as of 2017, and is forecasted to reach 70 percent by 2022 (tripling to $4.6 trillion).

---

[1] *Digital commerce* defined as all consumer remote point-of-sale transactions through online or mobile channels, including retail ecommerce and digital travel, but excluding in-store digital wallets.

Exhibit 4

Mobile apps accounted for more than 30 percent of global digital commerce volume in 2017.



Source: GCI Analytics

Consumers and merchants alike are increasingly embracing app-based commerce and in-app payments, with retailers ramping up investments in mobile apps with innovative use cases to provide omnichannel shopping experiences for customers. Globally, mobile apps accounted for more than 30 percent of total digital commerce volume in 2017, and are expected to continue strong growth across all regions (Exhibit 4). Digital wallets are estimated to have added approximately 40 billion to global payments revenues in 2017.

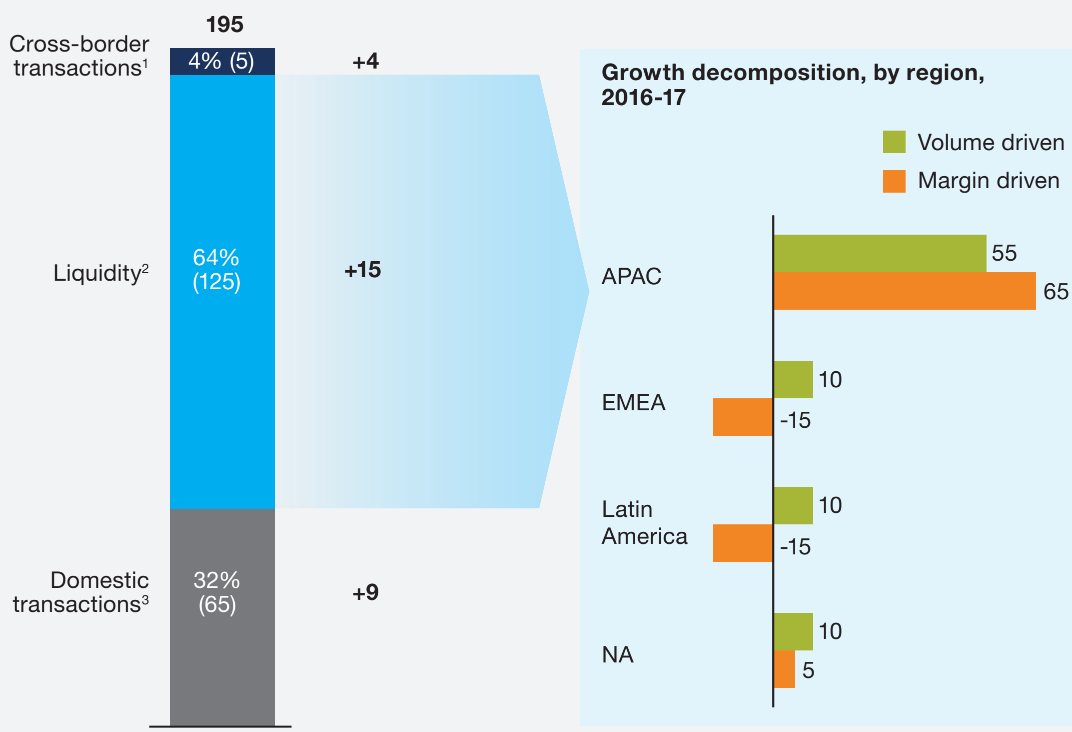
The outlook for in-store commerce varies significantly by country and region: In countries with NFC infrastructure, tap-and-pay will drive growth; in the United States, in-store app use will grow as consumer use of order-ahead increases; and in emerging markets, the introduction of new payments solutions will influence how people pay. In the United States, in-person use of digital wallets will increase at a 45 percent CAGR to reach nearly $400 billion in annual flows by 2022. Although most of this growth is expected to be on "pass-thru" wallets like Apple Pay, private-label wallets such as Starbucks and Walmart Pay—both of which have enjoyed impressive early adoption—will also continue to increase in popularity. Even with these gains, however, digital wallets will comprise less than 10 percent of US consumer in-person POS payments in 2022. Lack of ubiquitous merchant acceptance will remain a barrier, along with the continued percentage of consumers who do not know how to use their mobile phone to pay at the point of sale.

Exhibit 5

Growth in liquidity revenues accounted for nearly two-thirds of global revenue growth in 2017, but with regional nuances.

Payments revenue growth decomposition, 2016-17
$ billion[4]

2016-17 year-on-year growth rate



[1] Trade finance, remittance and cross-border payments services.
[2] Net interest income on current accounts, overdrafts, and credit cards.
[3] Fee revenue on domestic payments transactions and account maintenance.
[4] At fixed 2017 USD exchange rates.
Source: McKinsey Global Payments Map

In the UK, a total of 38 million contactless transactions were conducted using a mobile device in 2016 (representing roughly $358 million in spending). While this is significant in absolute value, it accounts for only 1.2 percent of in-store payments, indicating a huge opportunity for growth. China leads on this front with 40 percent of in-person spending already on mobile digital wallets. However, unlike the US, almost all of this is on closed-loop systems like WeChat Pay and Alipay. China's ratio is projected to continue to increase to nearly 60 percent by 2022. Within the same region, Japan remains a largely untapped market. Research has found that close to 70 percent of Japanese consumers across all age groups still prefer to use cash when making in-store purchases, mainly due to security concerns with mobile payments. It is interesting to note, however, that despite the preference for cash, prepaid card solutions like SUICA have found high adoption in Japan. In the third section of this report, we look in more depth at the digital landscape.

Liquidity factors vary by region

Strong transaction fundamentals notwithstanding, global liquidity income (inclusive of current accounts, transactional savings accounts, overdrafts, and credit-card lending net interest income) contributed the majority of 2017 growth, and continues to represent roughly half of total payments-related revenue (Exhibit 5). This growth (15 percent in 2017, compared to an average of 6 to 7 percent from 2012 to 2017) is the result of both balance growth and interest margin expansion. Both current account deposits (8 percent) and average balances for payments-related lending products like overdrafts and credit cards (4 percent) registered growth in 2017.

The interest-margin story is more nuanced and regional in nature. Global lending margins contracted, in part due to the regulatory actions in Brazil noted earlier. However, margins on current account balances expanded globally, and since these are ten times the size of credit balances, the combined effect was favorable. Nonetheless, following Europe's liquidity revenue decline, Asia-Pacific accounts for 95 percent of global liquidity revenue growth owing to the region's disproportionately large current account balances and higher interest rate environment. At the same time, North America and Latin America (excepting Brazil) saw 2017 upticks in net interest income.

Continued growth opportunities

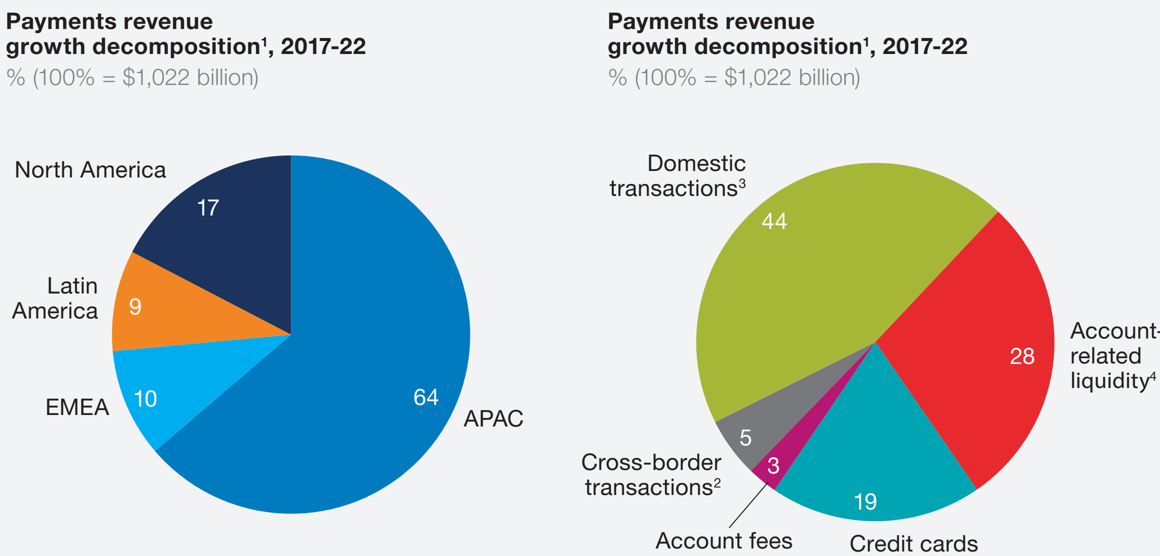
Projected global average annual payments revenue growth of 9 percent through 2022 translates to roughly $1 trillion of net new revenue available to financial institutions and other financial services firms. Although nearly two-thirds of new revenue will be created in Asia-Pacific, roughly $200 billion of new opportunities in both Latin America and EMEA will emerge (Exhibit 6, page 10). Roughly half of this new global revenue will stem from transaction growth (both domestic and cross-border) and related fees, opening opportunities for a larger group of firms in the increasingly open banking landscape. Such revenue streams are both more sustainable and predictable than those driven by interest rates and account liquidity, categories which presently comprise approximately 50 percent of the revenue pool.

As of 2016, commercial payments revenues surpassed consumer revenues. More specifically, the prominence of business-to-business payments continues to grow. In the third section of this report we explore how global transaction banking incumbents can maintain their leadership role in an increasingly digital environment.

China will continue to serve as the driving force for revenue growth (albeit at a slower pace than in recent years) for Asia-Pacific as well as the world. At current fee levels, China alone will generate half a trillion dollars in net new annual payments revenue by 2022—as much as all non-Asia-Pacific countries combined. While China will still account for four-fifths of new Asia-Pacific revenue, countries such as India and Indonesia will contribute a greater share of growth as well, driven by both account-related liquidity and fees from electronic transactions. Another encouraging sign is that the composition of Asia-Pacific's new revenue is shifting toward more sustainable transaction sources and away from liquidity-driven ones. By 2022 Asia-Pacific will join EMEA and North America in generating the majority of its payments revenue through fees.

Exhibit 6

APAC and domestic transaction revenues will drive revenue growth.



[1] At fixed 2017 USD exchange rates.
[2] Trade finance and cross-border payments services, including remittance services.
[3] Fee revenue on domestic payments transactions.
[4] Net interest income on current accounts and overdrafts.
Source: McKinsey Global Payments Map

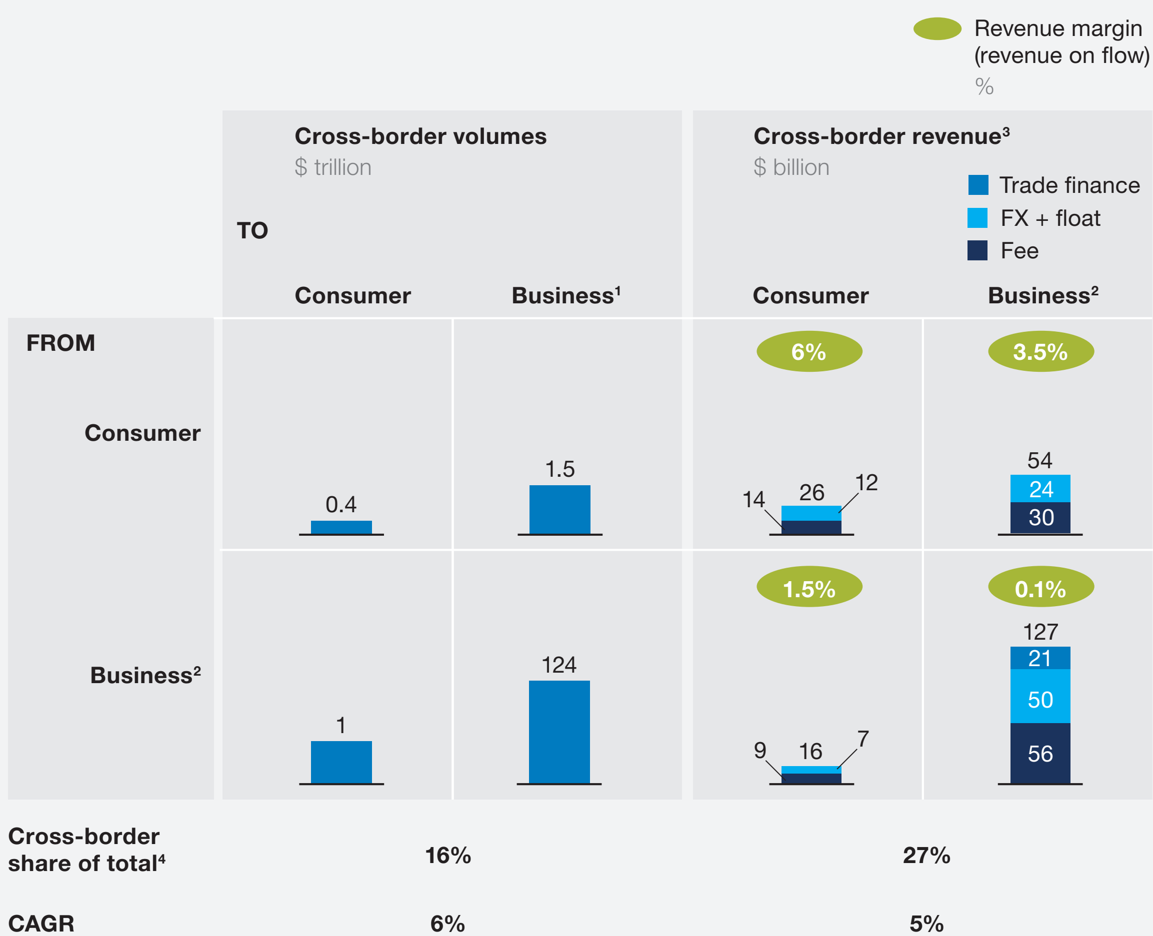
The $2.9 trillion of global payments revenue anticipated in 2022 by McKinsey's Global Payments Map represents a significant share of overall banking revenues. Naturally, growth will be unevenly distributed by country, by instrument, and by segment (retail versus corporate, as well as the subgroups within both). In EMEA, for instance, payments will continue to represent a stable one-quarter of banking revenues. The rapidly growing payments market in China and other Asian economies, meanwhile, will push payments to over half of Asia-Pacific banking revenues—a level already reached in recent years in Latin America.

Cross-border payments: Growth despite pressures

Cross-border commerce has continued on a healthy growth trajectory. Despite price pressures from increasing competition, cross-border payments of all types remain far more economically attractive for providers than their domestic equivalents. International cross-border payments revenues exceed $200 billion globally (Exhibit 7), split roughly evenly between transaction fees and foreign exchange (FX); estimated revenue per transaction remains healthy at nearly $45 per transaction (e.g., 600 vs. 6 basis points for a person-to-person payment; 11 vs. 5 for a business-to-business payment).

Exhibit 7

Cross-border payments activity is concentrated in B2B.



[1] Includes payments initiated by treasury for intercorporate and intracorporate lending, investment, liquidity flows, etc.
[2] Excluding FI to FI flows and related revenues.
[3] Includes transaction fees, FX fees and float income and documentary business fees.
[4] Total transactional revenue from payments excluding interest income, annual and maintenance fees.
Source: McKinsey Payments Practice

Different avenues exist to capture the benefits of the growth of the cross-border transaction market. On one hand, major opportunities persist for improving the traditional correspondent banking model, whether on customer service, efficiency, or infrastructure performance. On the other hand, since cross-border volume growth has not been evenly distributed by geography or by segment, focusing on high-growth areas compatible with an institution's business profile will maximize return on investment.

High-growth areas

While transaction growth in traditional cross-border payments segments such as the cash-to-cash remittance business between individuals (growing at 2 percent) and corporate cross-border transaction flows to both consumers and businesses (nearly flat) is struggling to compensate for intensifying price pressure, other areas such as cross-border consumer-to-business (C2B) payments are growing at nearly 20 percent due to rising global consumption and increasing expenditures on items like tourism and investments by a rapidly expanding global affluent class.

Even the slower growth categories contain pockets of opportunity, such as higher-ticket account-based remittances (for affluent consumers and small and medium size enterprises) and cross-border disbursements to micro-enterprises (driven by the growing prominence of online marketplaces). The market for trade and treasury B2B payments is being reshaped by global transaction banks and their partners through initiatives such as SWIFT's gpi, while others, such as Banking Circle, are targeting an increasingly promising opportunity serving payments service providers (PSPs). Options like Earthport and Inpay combine local clearing solutions with cross-border batch processing, providing straightforward and low-cost access to multiple countries without the need to maintain numerous account endpoints for low-value payments. Likewise, C2B, business-to-consumer (B2C), and consumer-to-consumer (C2C) payments represent fertile ground for nonbank cross-border innovation in areas such as tuition, real estate transactions, royalty/insurance payments, and wages to on-demand workers (Exhibit 8).

Improving the correspondent movement

Cross-border payments, which have lagged behind domestic payments in terms of efficiency, transparency, and innovation, have recently begun to show progress. Introduced by SWIFT in 2017, gpi allows for faster transactions (nearly half are credited to end beneficiaries in less than 30 minutes, according to SWIFT), increased transparency on payments delivery status, and improved fee clarity compared to traditional correspondent payments. A late 2018 release will add features such as the ability to stop payment at any point in the payments chain (in case of fraud or error) as well as live transaction tracking. While gpi stands to help banks address many pain points associated with cross-border payments, it still operates within the established correspondent banking frame and requires adjustments of processes and systems, which create hurdles for some players in the industry.

Three areas of accelerated cross-border payments stand out:

Cross-border e-commerce: A growth champion

Retail cross-border ecommerce sales totaled $300 billion in 2015 and are poised to exceed $900 billion by 2020, representing a 25 percent annual growth rate. Currently, one-fifth of these transactions involve high-ticket orders (over $200), although this ratio is trending downward as casual online purchases (e.g., $5 staples) become more commonplace. This means transaction counts are poised to grow at rates even greater than 25 percent.

Much of the C2B cross-border market is characterized by complexity—for example, a lack of familiar local payments options on international websites—as well as limited infrastructure and lack of transparency on foreign exchange fees. Non-traditional firms offer digital solutions that provide a seamless experience, putting pressure on incumbents to improve. For example, Uber and Lyft let business travelers use charge codes for expense reimbursement rather than card settlement.

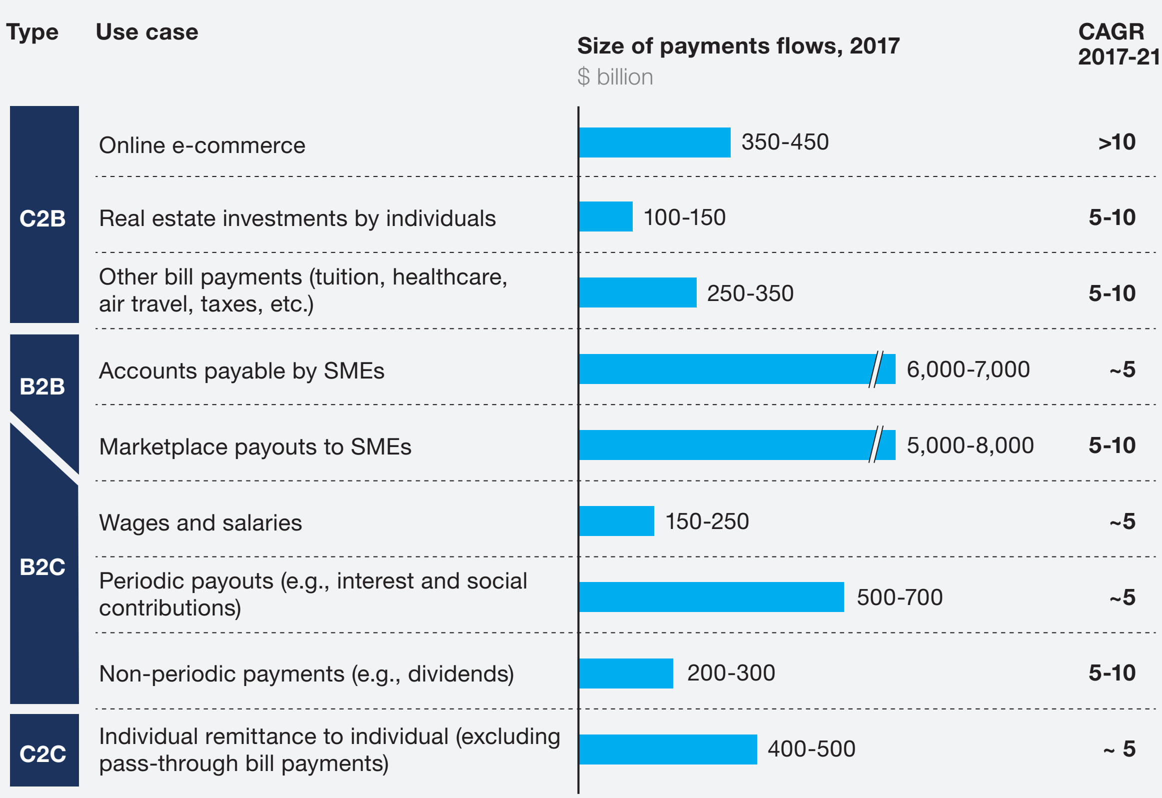
Cross-border ecommerce is not the only C2B payments category with double-digit growth rates (Exhibit 9, page 14). International bill payments—for items such as tuition, rent, or subscriptions—are growing substantially, as they remain hard to manage if not facilitated from an "in-country" bank account. The same is true for loan repayments (for instance, the mortgage on a second home abroad) or investments.

The new face of remittances: Higher customer value

While the traditional cash-to-cash remittance market, serving low-to-middle income migrants,

Exhibit 8

Cross-border flows will continue to grow—especially in ecommerce.



Source: McKinsey GCI Cross border Model

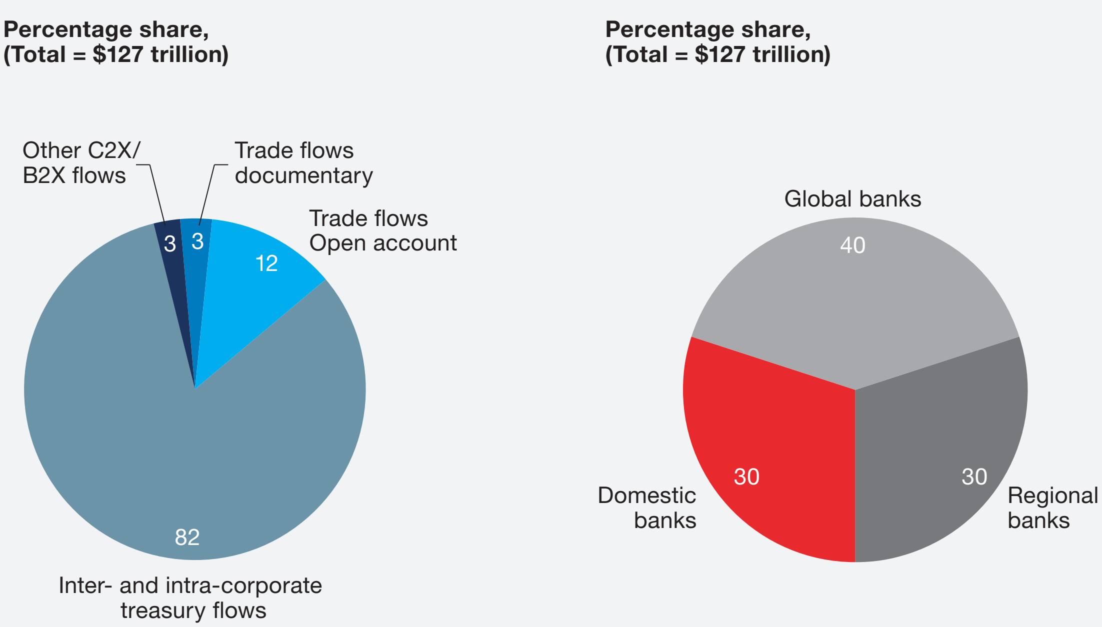
remains an important market, it has been under significant economic pressure due to increasing adoption of digital solutions by migrants and growing price competition.

To date, digital disruption has been concentrated in specific geographies and segments. According to McKinsey's disruption readiness index, which assesses 13 indicators including technology adoption, financial inclusion, and demographic factors, the largest sender markets are among those that are likely to transition to digital faster—for example, the US, UK, Canada, and Saudi Arabia. Major receiver markets such as India, Mexico and the Philippines, are poised to stay cash-centric longer. High banking penetration in the large sender markets also implies that the account-to-cash transfer arena is ripe for disruption and presents real opportunities

In this context, affluent segments are a lucrative growth space. Although affluent transactions may be less frequent, they relationship and convenience focused, and thus less subject to price elasticity. Digital firms such as Transferwise, OFX, and HiFX are targeting this segment with advantageous FX pricing, digital ease of use, and high-touch customer service—and encroaching on banks, which still own 60 to 70 percent of the high-end market ($5,000 average principal per transaction, comprising approximately 55 percent of total global money transfer market flows). It is more difficult to scale money transfer than e-commerce across corridors, however, so these firms must

Exhibit 9

Trade accounts for 15 percent of cross-border payments flows, with domestic banks accounting for 30 percent.



Source: Coalition; ECB Correspondent banking survey 2017; SWIFT; McKinsey interviews continue to innovate to maintain their above-market growth.

Client acquisition cost poses a major hurdle for digital remittance newcomers lacking a customer base. This makes partnerships with banks increasingly likely, allowing access to a better integrated customer experience while shielding fintech bottom lines from high acquisition costs.

Accelerated growth in SME B2B payments

Although they account for nearly 30 percent of global imports and regularly execute international payments, the needs of SMEs are frequently underserved. Currently treated as either simple corporates or complex consumers, SMEs are often lost between correspondent banking and the premium affluent cross-border market. Evidence from the creation of SEPA, however, indicates that with the right payments experience SMEs will represent a growing share of cross-border trade, and therefore revenues. In Europe, SME-related cross-border revenues more than doubled following the creation of a single payments market.

Addressing evolving needs

Success will require different strategies depending on use case, ranging from expanded roles in payments processing to custom APIs integrated with existing technologies to alleviate pain points and create unified global solutions. C2B and C2C offerings will require payments providers to focus on renewed value propositions with global and emerging affluent consumers at the core, presenting them with a truly borderless service supporting expanding needs.

For incumbents—banks and nonbanks alike—maintaining or growing market share will require competing with a rising tide of digital firms to meet an evolving set of demands. Success will hinge not only on price differentiation, but also on embracing a larger role in reshaping the end-to-end payments experience and creating new platforms with features such as receipt validation, supported with a robust marketing budget or partnership strategy for customer acquisition.

Within C2C payments, research indicates that 43 percent of first-time users search online for a service aligned with their delivery preferences, such as account, mobile wallet, and merchant payments capabilities. Banks serving this segment must craft solutions across dimensions including currency, ticket size, validation of receipt, and transaction tracking. Targeted marketing may also be needed to attract first-time users and to dispel the perception of banks as expensive and non-transparent.

An enhanced payments experience in the SME-linked B2B payments space will involve linking payments to purchase orders or embedding a link for payments to connect with a range of accounting systems, providing the ability to solicit early payments or financing from buyers or others in the value chain. Banks can achieve this goal by expanding corporate-to-bank connectivity and incorporating treasury tools enabling seamless connectivity. Third parties focused on B2B payments involving SMEs may choose to connect with enterprise resource planning systems or create wallet-style accounts offering instant transfers, both in and out of network, with full reconciliation. While some existing solutions leverage a background bank account, the experience can be upgraded by adding functionality to centralize payments and offer true multi-bank capabilities, including transparency and cash-flow forecasting. Third-party firms can partner to offer such features; for example, selective dynamic discounting.

Banks and non-banks alike should pursue seamless connectivity and thought partnering with customers for improved experience, full transparency (e.g., into payments methods, transaction details), and simplified onboarding of accounts, suppliers, and platforms. Improved straight-through processing will also reduce the incidence of, for example, costly manual exceptions, claims, and Office of Foreign Assets Control checks. The resulting customer experience and expense savings should drive the volumes necessary to counter margin pressure and heightened competition.

Digital commerce and alternative payments methods open new horizons

Consumer digital payments—that is, browser-based ecommerce and "in-app" purchases—are growing rapidly. Global digital commerce volume exceeded $3 trillion in 2017—13 percent of total commerce—and will more than double by 2022. Mobile commerce is the dominant factor in this trend, already accounting for 48 percent of digital commerce sales, and forecasted to reach 70 percent by 2022.

The growing popularity of ecommerce in general—digital checkout solutions as well as new payments solutions—further contributes to payments' overall trend toward electronification. Additionally, there are new B2B payments opportunities arising from the digital commerce ecosystems developing today.

It is instructive to understand how we reached this point. Early-stage shifts to digital commerce (Internet 1.0) provided a boon to the card business, given the lack of viable payments alternatives and the substandard experience (for both payor and payee) of the few that did exist. Further complicating matters, debit cards are blocked from online transactions in many countries and credit card penetration varies markedly by region.

While the online card experience has improved over the past decade, particularly with regard to security, alternative payments methods (APMs) have gained far greater traction by tackling a variety of pain points. Alipay began as an escrow service, addressing the fact that many Chinese consumers lacked trust that sellers would fulfill their order. The "cash on delivery" model was a perceived gap for traditional card networks, one that provided an opening for APMs.

Also, the early stages of online commerce were almost entirely browser based, a model well aligned with traditional card functionality. The evolution of in-app and omnichannel order-ahead models gives rise to a host of adjacent services. Digital firms define the commerce value chain more broadly than traditional firms, creating new use cases covering the "consider-shop-buy-bond" value chain. We have identified more than 140 new APMs globally that are fueling digital commerce.

The primary impetus for most APMs is to deliver an improved shopping or checkout experience with payments as a component, rather than approaching payments as a business in itself. For instance, some firms see owning the checkout experience as their top motivation (Amazon, Flipkart, Mercado Libre), while others (Walmart, Starbucks) are focused on lowering acceptance cost. Still others (Adyen, Klarna, Shopify, Stripe) approach payments as a platform business and aim to supplement it with value-added services.

The result is that significant portions of the fast-growing digital commerce segment are opting for solutions that operate outside the traditional card system to fulfill their payments and adjacent needs (Exhibit 10). For instance, Ideal—a bank-driven solution leveraging transfers rather than card rails—executes 40 percent of ecommerce volume in the Netherlands. Leading pizza brands in the both the UK and US originate more than 60 percent their orders either in-app or online, a rate far exceeding even well publicized leaders like Starbucks and demonstrating the perceived consumer benefit of an order-ahead model.

While these solutions have helped to fuel overall growth in ecommerce, and arguably growth in commerce overall, the improved experience has inevitably cannibalized existing form factors—mainly credit and debit cards. Based on McKinsey's analysis, US card revenues would have been nearly $5 billion higher in 2017 if APMs had not diverted volumes; this figure is expected to grow to as much as $20 billion by 2022. Similarly, McKinsey analysis indicates that if APM volumes in China were run across traditional channels, banking system revenues would be roughly $20 billion higher.

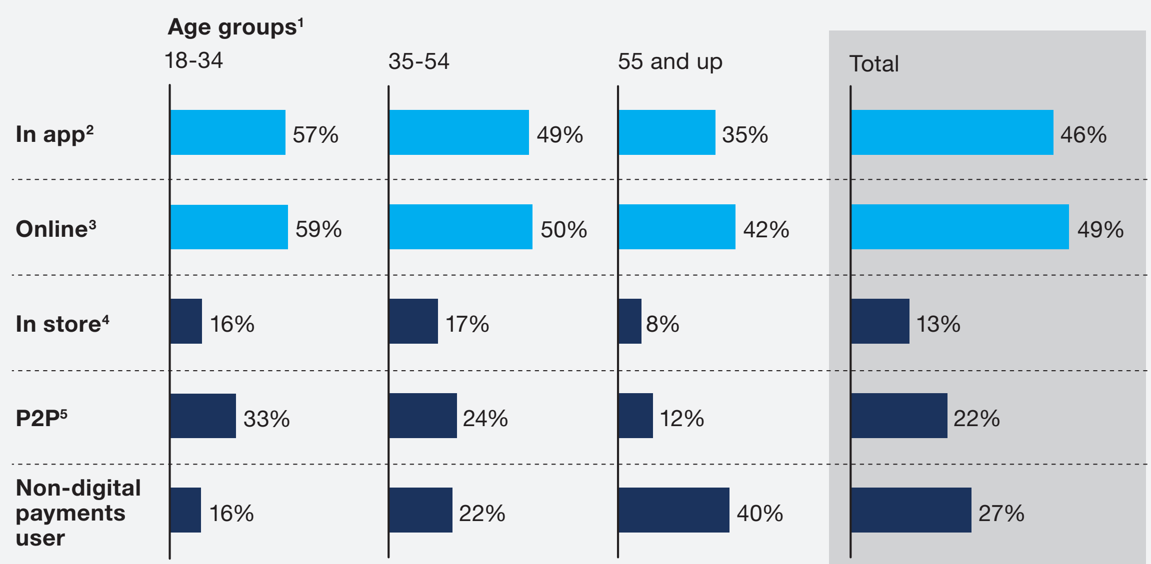
Consumers and merchants alike are increasingly embracing app-based commerce and in-app payments. Retailers are ramping up investments in mobile apps with innovative use cases to provide omnichannel shopping experiences for customers. Over 70 percent of US customer journeys are already omnichannel. Mobile apps accounted for more than 30 percent of total digital commerce volume (as compared to desktop and mobile web browsers) globally in 2017, and are expected to continue strong growth in all regions. Asia-Pacific alone comprises over half of global digital commerce, due to the fast-growing Chinese market, and will continue to deliver robust growth through 2022. Digital wallets are estimated to have added approximately 40 billion to global payments revenues in 2017.

Retail examples blurring the line between on- and offline shopping experiences are plentiful. The Gap has launched "virtual dressing rooms"

Exhibit 10

In the US, digital payments penetration is highest among younger users, especially for in-app and online payments.

In the past 12 months, have you performed any of these activities?
% of respondents, US



[1] N= 18-34 (283); 35-54 (396); 55 and up (422); total (1,101)
[2] Buy things and/or pay for services using a retailer's app on my device (e.g., Amazon, Starbucks, Uber).
[3] Buy things through a website on my device (e.g., Target.com).
[4] Use my device to pay at retail locations by interacting with a terminal (e.g., Apple Pay, Android Pay, Samsung Pay, LevelUp).
[5] Transfer money to friends, family, or acquaintances through an app (e.g., PayPal, Venmo, Square Pay).
Source: McKinsey Digital Payments Survey, 2016

for specially enabled smartphones, enabling customers to “try on” clothing in augmented reality before purchasing online. Lotte Smart Shopper, in South Korea, addresses the “last mile problem” through on-site shopping via scanners (without the need to fill a cart), prompt checkout at dedicated terminals, and guaranteed prompt delivery. Hema food stores in China employ e-labeling for fresh produce spanning 3,000 SKUs and 103 countries, enabling efficient price management. Retail Hema outlets double as warehouses and “picking” centers (where staff “shop” for customers), enabling online orders to be delivered within 30 minutes.

The outlook for in-store mobile payments varies significantly by country and region. In the US, in-person use of digital wallets will increase at a 45 percent CAGR to reach $400 billion in annual flows by 2022.

Another key development is the increasingly cross-border nature of digital commerce. In developed countries, more than half of all retail sales volume is transacted by companies that sell in at least two other countries, pointing to a significant opportunity. Similarly, McKinsey’s Digital Commerce Benchmark reveals that of the top 200 US merchants, over 60 percent do business in at least two cross-border markets.

Events that previously had been processed as cross-border retail transactions—and which had also been less frequent—are now processed in-country, with enhanced security and higher authorization rates, creating wholesale payments and cash management opportunities that banks and card companies are well positioned to fulfill.

In several countries, real-time payments systems are fuelling commerce. In Denmark, Mobile Pay, launched as a peer-to-peer system, is now employed at the point of sale and has developed a digital commerce solution. Solutions such as Sofort in Germany and Ideal in the Netherlands have sprung up to fill the gap, as Alipay has done with Taobao. M-Pesa remains the shining example of mobile penetration, its transaction throughput accounting for 23 percent of Kenyan GDP. Combined, Kenya’s six leading mobile wallet providers play a role in facilitating nearly half of GDP. Three-quarters of Chinese digital commerce employs “nontraditional” payments forms like Tencent and Alipay; and this share is expected to reach 85 percent by 2020.

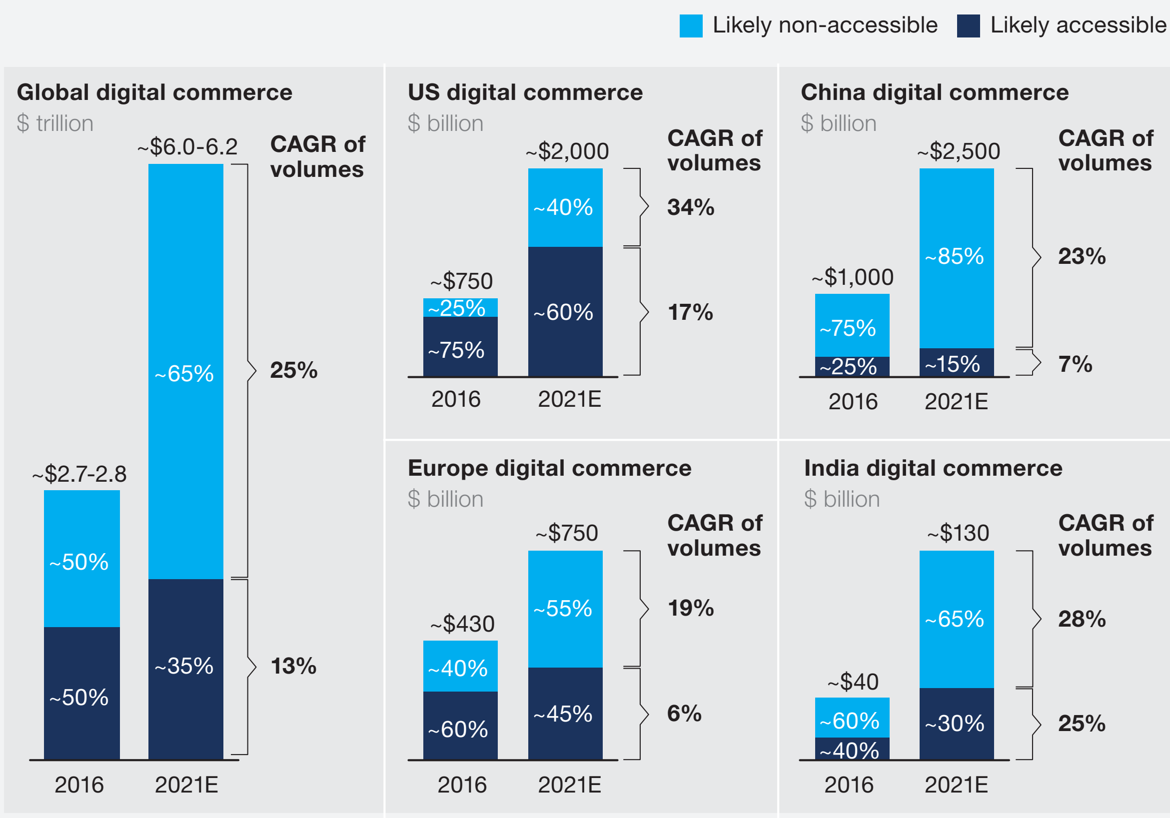
Add to this shift the emergence of solutions like “pay-by-loan,” in which instant decisioning enables providers to extend dynamic installment payments offers in real time (a particularly powerful product in regions with limited credit card penetration), and the potential for incremental gains becomes evident. McKinsey’s Digital Payments Survey finds that more than one in five US digital shoppers have pursued a digital POS loan to complete a purchase. Millennials are unsurprisingly the most frequent users, but adoption exceeds double digits across all age brackets. PayPal is the most common solution, but Swedish challenger Klarna has developed a solid US following among Millennials.

More than half of overall global purchase volume growth over the next five years will be generated by digital channels. Digital payments will double in volume over the next five years to represent approximately 29 percent of consumer POS payments, with in-app payments exceeding browser based e-commerce by 2021 (with POS “tap and pay” a distant third). Consequently, issuers and networks must ensure brand acceptance across the key digital environments (e-commerce, in-app, “tap & pay” at the POS), particularly for bank wallets.

Exhibit 11

The share of digital volume inaccesible to issuers and networks will increase from 50 to 65 percent by 2021.

Digital commerce (including travel) and accessibility forecast



Card issuers cannot afford to maintain their strict focus on the payments event itself while APMs build a broader value proposition across the value chain. We estimate that half of global digital commerce volume is already inaccessible to traditional issuers/networks, with that share potentially growing to two-thirds over the next several years (Exhibit 11). Many of these APMs are bank-led initiatives, however, and the potential to tap into adjacent value-added revenue streams in a rapidly growing market provides ample opportunity.

Many payments service providers and gateways are offering merchants the opportunity to process cross-border transactions locally; for instance, when a Brazilian customer makes a purchase on a Spanish website, the transaction can be authorized and processed in the consumer's home market rather than the seller's. This model improves the consumer experience, and at the same time creates an opportunity to extend the merchant relationship with commercial cash management services such as cash concentration, commercial FX, and hedging.

Global transaction banking: Defending the incumbent advantage

Global transaction banking (GTB) is a thriving business, with revenues approaching $1 trillion in 2017—nearly 50 percent of total payment revenues and half of wholesale banking revenues (Exhibit 12). Institutions apply various definitions to these revenue pools, some focusing on “core” products like trade finance and cash management while excluding the largely liquidity-derived inflows that are a byproduct of such services. Both categories are growing nicely; nonetheless, incumbent banks face difficult choices as the pace of digital disruption accelerates across the commercial payments value chain, with digital attackers and other fintech firms chipping away at barriers to entry.

Banks can safeguard their client relationships, expand advisory services, and strengthen margins only if they take the lead in developing new strategies to address digital disruption in GTB. There is significant risk that banks will cede important aspects of the business to emerging digital challengers if they do not take advantage of recent advances in technology, regulatory changes, and new partnership models.

Exhibit 12

Global transaction banking revenues are estimated at nearly $1 trillion, or 43 percent of wholesale banking revenues.

Core global transaction banking products

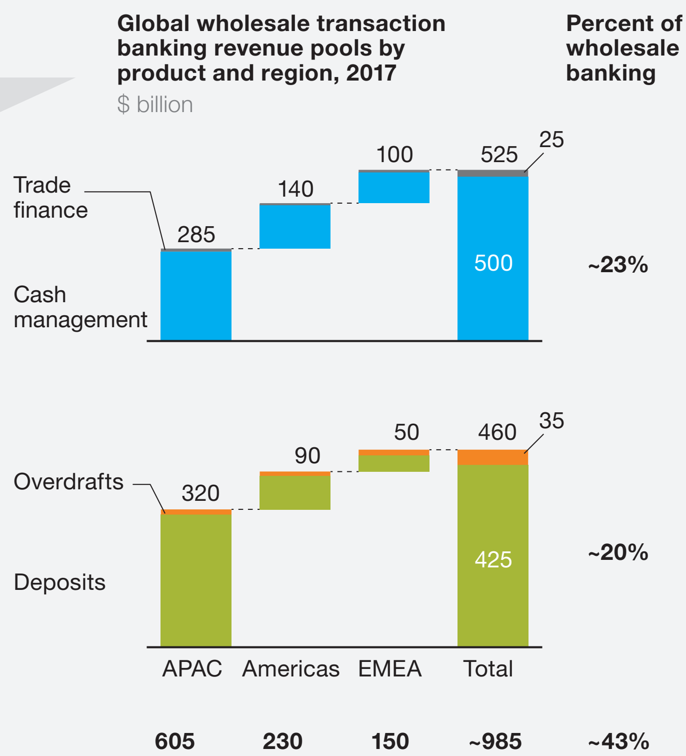
Trade finance: All documentary business for international trade, including letter of credit confirmation.

Cash management: domestic and cross-border payments, including liquidity management.

Other working capital instru-ments

Overdrafts: Pre-arranged or unarranged overdrafts at domestic banks.

Deposits: C/As and transactional savings deposits at domestic banks.



Source: McKinsey Panorama Global Banking Pools; McKinsey Global Payments Map

Since the financial crisis, global fee-based revenue for core GTB products has grown 9 percent per year. Asia-Pacific is the largest market and is creating the most growth, at 20 percent per year over the past five years. The Americas (5 percent) and EMEA (4 percent) have also performed well.

This growth masks underlying structural shifts, however. The transaction banking industry is facing six main challenges in the short- to medium-term:

- **Determine who will be the next competitor** in a fast-moving and crowded global digital business buffeted by numerous competitive forces. The number and diversity of organizations competing in the transaction banking market—among them fintechs, digital C2B payments platforms/ecosystems, IT companies, export credit agencies, logistics companies—have risen significantly over the past decade. These firms have distinct objectives and value propositions; the open question is which will resonate in the marketplace.

- **Harness the next digital innovation** in a sustainable way, striking a balance between the scarcity of capital and development resources and proliferation of technologies and initiatives. Two innovations in particular merit closer inspection: proprietary and third-party automated supply-chain finance platforms and the integration of open banking/PSD2 with real-time payments and advanced analytics.

- **Leverage digital platforms** to meet clients' expectations for a seamless end-to-end experience. Today's transaction banking model is constrained by highly specialized product sales and high-touch processes, which are ripe for digital disruption. These shifts are particularly evident among SMEs and mid-cap corporations. Banks must approach the market with a coherent ecosystem strategy.

- **Digitize to improve operational efficiencies** to counterbalance pressure on margins, potentially adopting new partnership models. Finding the appropriate partner and best industry model are essential steps.

- **Develop digital services** to create new revenue streams that extend deeper into the payments value chain, applying advanced analytical tools to proprietary data sets.

- **Manage change and attract new talent** to develop an agile culture and evolve toward a "test-and-learn" model of digital innovation to address challenges in execution and an aging workforce. Developing the next generation of GTB leaders will be a key factor in long-term success.

Improving the operating model with new technology

Recent advances such as machine learning, robotic process automation (RPA), natural language processing, and predictive analytics hold the potential to reduce costs and provide the foundation for a new operating model (Exhibit 13). Looking at trade-finance use cases, we estimate that banks can improve productivity by between 30 and 40 percent through well-planned adoption of advanced analytics and artificial intelligence.

The distributed ledger, or "blockchain," stands out as a technology with the potential to catalyze change in these areas. Smart contracts are merely the highest-profile opportunity to leverage blockchain technology in trade finance. Not only do distributed ledgers rely heavily on digital data, but they constitute closed data ecosystems, creating new avenues for bank collaboration, a high-potential area that has long lacked an effective mechanism due to the need for end-to-end transparency and integrity.

Boosting sales effectiveness

While each of these technology levers offers the opportunity for significant operational efficiency improvement, they also afford banks the chance to draft a new blueprint for technology architecture, process optimization, and solutions innovation. This depends on the broad application of predictive analytics to optimize data assets and deliver a commercial payments value proposition that addresses the full scope of customer activity. To be effective, value propositions must be based on a precise understanding customer behavior, emerging service needs, and price elasticity. Banks can use these tools to create value and strengthen relationships. Channel analytics can boost the impact of cross-sell recommendations, with tailored automated communication and digital workbenches to support specialist and relationship manager interactions.

Exhibit 13

New technologies could reduce costs significantly and provide the foundation for a new operating model.

		Estimated productivity increase: Documentary business	Estimated productivity increase: Receivable finance in open account
Robotic process automation	Virtual workforce for automation of repetitive manual tasks Execution of workflow and business orchestration rules	0 - 5%	30-40%[1] (combined)
Machine learning	Advanced calculation engines and predictive analytics to automate support for decision-making	55 - 60%	15 - 20%
Artificial intelligence/ natural language processing	Automated processing of structured text through NLP/document digitization for the end-to-end process, including data extraction, document classification, verification, and storage	35 - 40%	15 - 20%
Smart contracts and other distributed ledger technology	Smart contracts through distributed ledger technology can allow for full end-to-end transparency for all participants	0 - 5%	

100% = 30-40% productivity improvement

[1] DLT also facilitates syndicated participation of third-parties in open account transactions (e.g. credit insurers, export credit agencies) improving not only operations but also risk profile.

Source: McKinsey Panorama Global Banking Pools; McKinsey Global Transaction Banking Service Line

While transaction banks often struggle to craft a holistic data strategy, large digital ecosystem firms capitalize on data reserves and predictive analytics to build scale rapidly in new markets. Digital challengers, including B2B logistics providers and B2C retailers, are chipping away at profitable links in the financial supply chain and seeking to own client relationships. We believe that the winners will act decisively to address the needs of an increasingly diverse market of SME, mid-corporate, and large corporate clients at varying stages of the digital transformation. Laggards will be left with the unprofitable pieces of clearing and settlement systems.

The pace of digital disruption is accelerating across all components of the GTB value chain, placing traditional business models at risk. If they fail to pursue these disruptive technologies, banks could become laggards servicing less lucrative portions of the value chain as digital attackers address the friction points. To avoid this fate, banks must embrace digitized transaction banking with a goal of eliminating discrepancies, simplifying payments reconciliation, and streamlining infrastructure to operate profitably at lower price points. They must take proactive strategic steps to leverage their current favorable market position, or watch new market entrants pass them by.

Banks and fintechs have shown increased willingness to collaborate in bringing these new solutions to market, as opposed to engaging in market-slowing and costly head-on competition. Both parties bring meaningful knowledge and expertise to the table—banks with compliance platforms, network infrastructure, and established data-rich client relationships, fintechs with agile development capabilities and fresh perspectives on meeting customer expectations. This powerful combination will serve to speed the realization of benefits for all in a changing business scenario.

Contact

For more information about this report, please contact:

Philip Bruno
Partner, New York
philip_bruno@mckinsey.com

Olivier Denecker
Partner, Brussels
olivier_denecker@mckinsey.com

Marc Niederkorn
Partner, Luxembourg
marc_niederkorn@mckinsey.com

Madhav Goparaju
Senior Expert, Chicago
madhav_goparaju@mckinsey.com

Sukriti Bansal
Knowledge Expert, Gurgaon
sukriti_bansal@mckinsey.com

The authors would like to acknowledge the contributions of Aaron Caraher, Octavio Gonzalez, Reema Jain, Vishakha Khemka, Baanee Luthra, Pavan Kumar Masanam, Tamas Nagy, Glen Sarvady, and Michelle Zhou to this report.

Global Banking Practice
October 2018

www.mckinsey.com/clientservice/financial_services