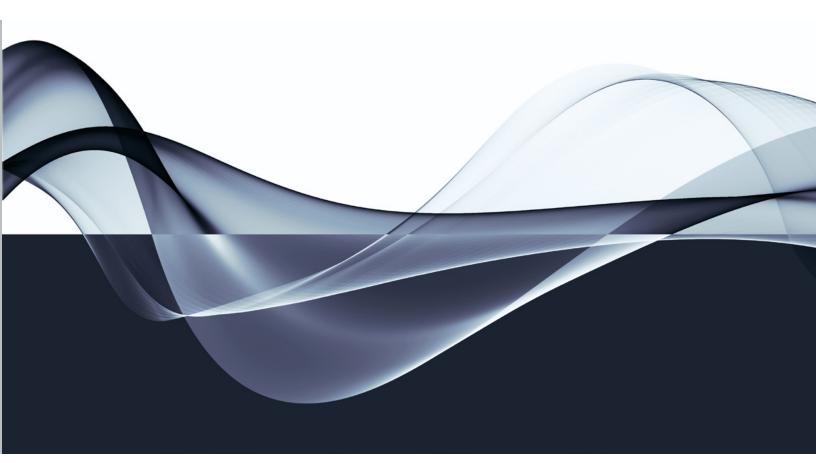
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Global payments 2021: Transformation amid turbulent undercurrents

The global payments sector is poised for a quick return to healthy growth, but the benefits will not flow evenly to all participants.

by Philip Bruno, Olivier Denecker, and Marc Niederkorn



Undoubtedly, 2020 was a tumultuous year on many levels. Payments was no exception—the sector experienced its first revenue contraction in 11 years, a consequence of the economic slowdown that accompanied the global health crisis of COVID-19. Still, government and regulatory measures such as fiscal and monetary stimulus held the decline below the 7 percent we projected in last year's report.¹ At the same time, the continued digitization of commercial and consumer transactions contributed even greater upward momentum than expected.

Global payment revenues totaled \$1.9 trillion in 2020, a 5 percent decline from 2019 (Exhibit 1), as compared to the 7 percent growth rate observed between 2014 and 2019. This result seems fairly intuitive on the surface; a granular analysis, however, reveals a series of often offsetting trends. Overall, the payments industry proved remarkably resilient to drastic economic changes even as many economies spent significant portions of the year in lockdown.

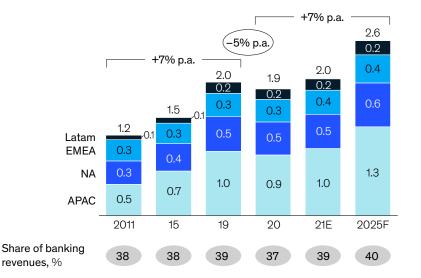
Looking forward, we see a handful of primary drivers influencing the payments revenue trajectory. On the one hand, continued cash displacement and a return to global economic growth will accelerate existing upward trends in the share and number of electronic transactions. On the other, interest margins will likely remain muted. Sustained softness in this key topline contributor will create greater incentive for payments players to pursue new fee-driven revenue sources and to expand beyond their traditional focus to adjacent areas such as commerce facilitation and identity services.

Given the above assumptions we expect global payments revenues to quickly return to their longterm 6 to 7 percent growth trajectory, recouping 2020's declines in 2021 and reaching roughly \$2.5 trillion by 2025. More importantly, however,

¹Philip Bruno, Olivier Denecker, and Marc Niederkorn, "Accelerating winds of change in global payments," October 2020, McKinsey.com.

Exhibit 1 Global payments revenues declined by 5 percent in 2020.

Global payments revenue, \$ trillion





Source: McKinsey Global Payments Map

as "payments" become further absorbed into commercial and consumer commerce journeys, established payments providers will gain access to adjacent opportunities as large as the core payments revenue pool. Of course, an opportunity of this magnitude draws attention—tech firms and ecosystem competitors are already focusing on these attractive (and often less regulated) elements of the payments value chain, rather than traditional interchange, acquiring, and transaction fees linked to payment flows.

Following a brief review of 2020 results and preliminary snapshot of 2021's projected outcome, we will explore these opportunities in greater detail.

2020-21: A period of transition

The overall 5 percent decline in payment revenues is composed of divergent regional trends: Asia–Pacific, which has consistently outpaced other regions in payments revenue growth over the past decade, registered a 6 percent pullback in 2020, while Latin America's 8 percent decline was the steepest of all regions. Europe, Middle East, and Africa (EMEA) and North America experienced revenue declines of 3 percent and 5 percent, respectively, mostly driven by continued reduction of net interest margins (NIMs) in EMEA and contracting credit card balances in North America.

Exhibit 2

Asia-Pacific dominates the global payments revenue pool.

	100%=	APAC 900	North America 485	EMEA 335	Latin America 155	
	Cross-border	8	6		5	
	transactions ¹		11	16	16	
	Account- related liquidity ²	30	10	10	12	
Com	mercial		11	24	31	1
	Domestic transactions ³	19	<u> </u>	24	12	
			18	2 3	17	
	Credit cards	4		12		
Cons	Cross-border transactions ⁴ Account- related liquidity	15	²			
	Domestic transactions	7	33	22	34	
	Credit cards	15		11		

Payments revenue, 2020, % (100% = \$ billion)

¹Cross-border payment services (B2B, B2C).

2Net interest income on current accounts and overdrafts.

³Fee revenue on domestic payments transactions and account maintenance (excluding credit cards).

⁴Remittance services and C2B cross-border payment services. Source: McKinsey Global Payments Map

Note: Figures may not sum to 100%, because of rounding.

The global contribution of net interest income (NII) to payments revenue has declined steadily from 51 percent in 2010 to 46 percent in 2020. Over the past year, a 31-basis-point contraction in global interest margins (compared to a decline of 25 bps predicted last fall) reduced payments revenue by \$66 billion—two-thirds the total global net decline.

Proportionally, the impact was felt even more sharply in EMEA, which traditionally relies more heavily on NII, and endured an absolute decline of \$42 billion over the past decade (Exhibit 2). Some banks have begun offsetting the interest revenue loss through higher account maintenance fees, while negative interest rates on accounts have materialized in some European markets—mostly on corporate accounts but increasingly on large retail deposits as well.

Cross-border payments, a natural casualty of reduced travel and global supply chain challenges, accounted for the remainder of the revenue decline. By contrast, the explosion in e-commerce and reduction in cash usage helped minimize the decline in domestic transaction fee income.

We expect pressure on both fee and processing margins to continue in many regions, while recovery in interest margins is expected to be slow and moderate at best. These combined forces disproportionally affect incumbent players reliant on traditional revenue streams, such as card issuers and banks holding significant commercial and consumer deposit balances, and thus spur a need to rethink payments revenue models and identify alternative paths to value.

As might be expected given 2021's uneven global economic recovery, payments trends are showing similar disparity by country and region; for instance, revenues in Asia-Pacific and Latin America are expected to grow in the 9 to 11 percent range, compared to EMEA and North America at 4 to 6 percent. In aggregate, a likely solid increase in 2021 should leave global payments revenues equivalent to the 2019 result while setting the stage for a broad-based recovery. From that point, we forecast five-year revenue growth rates roughly on par with those generated in the five years preceding the pandemic—excluding the realization of additional revenue sources discussed below.

Enduring shifts in behavior

The pandemic reinforced major shifts in payments behavior: declining cash usage, migration from in-store to online commerce, adoption of instant payments. These shifts create new opportunities for payments players; however, it is unclear which are permanent and which are likely to revert—at least partially—to prior trajectories as economies reopen. Nonetheless, the long-term dynamics seem clear.

Cash payments declined by 16 percent globally in 2020, performing in line with the projections we made last fall for most large countries (Brazil 26 percent decline, United States 24 percent decline, United Kingdom 8 percent decline). Although the pandemic-driven temporary shuttering of many commercial venues was the primary trigger in this dramatic shift, other actions (such as countries like Argentina, Poland, and Thailand increasing ATM withdrawal fees, and the continued downsizing of ATM networks in Europe) reinforced and accelerated behavioral changes already under way. We expect cash usage to rebound to some extent in 2021, due to a partial return to past behaviors, fewer lockdowns, and a broader economic recovery, but evidence indicates that roughly two-thirds of the decrease is permanent.

The reduction in cash demand is leading to increasing unit servicing costs for its distribution and collection, prompting banks to review ATM footprints and rethink their cash cycle management. One response has been growth in ATM sharing between network banks and greater outsourcing of ATM servicing to specialized cash-in-transit (CIT) players—first observed in Northern Europe and now in Latin America (for example, a joint venture between Euronet and Prosegur Cash to provide comprehensive ATM outsourcing services).

Regulators in countries with dramatic reductions in cash usage are preparing strategies to ensure continued availability of central bank currency and access to resilient and free payments systems for all—including the un- and underbanked. The situation is driving heightened interest in central bank digital currencies (CBDCs), as discussed in chapter 2.

Retailers, particularly digital commerce marketplaces, have elevated their competitive position, moving from traditional credit-card and consumer-finance solutions to pursue deepened customer engagement leveraging payment solutions. For example, MercadoLibre, Latin America's largest e-commerce player, owns the online payments network MercadoPago, and has built an ecosystem encompassing marketplace, payments, shipping, software-as-a-service, and advertising. The enhanced customer experience, as well as revenue and valuations generated by retailers, have challenged banks to up their game in order to preserve their market position. One example is the collective launch of mobile payments platform Modo by more than 35 Argentine financial institutions in December 2020, offering a solution for account-to-account money transfers and in-store OR payments.

New form factors, faster payments

As expected, both the pandemic's impact and the resulting economic environment led to significant shifts in spending patterns. Globally, the number of non-cash transactions grew by 6 percent from 2019 to 2020.

Digital-wallet usage surged, as consumer preferences evolved even within contactless forms. In Australia, an early success story in "tap to pay" adoption, digital-wallet transactions grew 90 percent from March 2020 to March 2021—by which point 40 percent of combined debit/credit contactless volume originated via digital wallets.² In Indonesia, the value of e-money transactions grew by nearly 39 percent between 2019 and 2020, fueled primarily by an increase in digital adoption.³

Real-time payments are playing an increasingly important role in the global payments ecosystem, with the number of such transactions soaring by 41 percent in 2020 alone, often in support of contactless/wallets and e-commerce.⁴ Over the last year growth in instant payments varied widely across countries—from Singapore at 58 percent to the United Kingdom at 17 percent.

Asia-Pacific continues to lead the way in real-time payments: India registered 25.6 billion transactions in 2020 (a 70 percent-plus increase over 2019), followed by China and South Korea. Real-time functionality also fueled mobile wallet adoption in Brazil, which introduced its national real-time payments system, PIX. Fifty-six countries now have active real-time payment rails, a fourfold increase from just six years earlier. In many cases these new clearing and settlement systems took some time to build momentum but are now delivering longpromised volumes.

The introduction of applications capitalizing on instant payments infrastructure in recent years (PhonePe and GooglePay in India, PayNow in Singapore) has given added impetus to growth. Regional solutions are also staking out ground between global networks (such as Visa and Mastercard) and incumbent domestic schemes. For example, the European Payments Initiative (EPI) is building a unified pan-European payments solution leveraging the Single Euro Payments Area (SEPA) Instant Credit Transfer (SCT Inst) scheme for point of sale as well as online usage. In the United States, The Clearing House's RTP clearing and settlement system has been steadily building volume since its 2017 launch, with Visa Direct and Mastercard Send offering related in-market functionality, and the Federal Reserve's FedNow Service scheduled to launch in 2023.

²"Digital wallets poised to overtake contactless cards as instore payment of choice in Australia," Finextra, May 19, 2021, finextra.com.
³Janine Marie Crisanto, "Indonesia e-wallet transaction to reach \$18.5 billion in 2021 amid fierce competition," *The Asian Banker*, April 9, 2021, theasianbanker.com.

⁴ "Global Real-Time Payments Transactions Surge by 41 Percent in 2020 as COVID-19 Pandemic Accelerates Shift to Digital Payments - New ACI Worldwide Research Reveals," ACI Worldwide, March 29, 2021, investor.aciworldwide.com.

Initial real-time payment growth has been primarily in peer-to-peer settings and online transactions. The next tests will be the consumer-to-business point-of-sale and billing spaces (the latter representing a B2B opportunity as well), and their more straightforward paths to monetization.

The pandemic has pushed businesses to reorient their payments operations and customer interactions. Small and medium-size enterprises (SMEs) are increasingly aware of the payment solutions available to them and are motivated to encourage the use of those that best serve their needs and those of their customers. For instance, payments providers are competing to offer customized solutions like QR code, "tap to pay," and link-based payments (processes initiated by merchants sharing a URL) that make the payment experience seamless, pleasant, and increasingly contactless. Simplification in the merchant onboarding process can also help in attracting more sellers, reducing cost, and elevating the merchant experience.

For example, Mastercard in India launched Soft POS, a multiform-factor white-label solution for banks and payments facilitators that enables a smartphone to function as a merchant acceptance device. Other examples include value-added services like virtual shops and solutions that record and store credit transactions. Network-based marketing enables SMEs to reach a larger pool of customers.

Social-media platforms have embedded payment features, enabling SMEs to execute sales through networks such as Instagram. Venmo's socialcommerce platform helps build SME brand awareness as users can see, like, and comment on each other's purchases—a useful feature for street vendors and small-business owners who often lack funds to invest in marketing and promotions.

New opportunities in payments

The push for digital identity verification systems gained momentum during the pandemic, both as a

facilitator for expanding e-commerce volumes and as a means for governments to rapidly disburse welfare and other social payments. Examples proliferated across the globe: a digital ID system enabled Chilean authorities to swiftly pre-enroll millions of beneficiaries in social programs and allowed potential recipients to confirm eligibility and, where necessary, appeal their support status online.⁵ In Thailand, more than 28 million people applied for a new benefit for informal workers affected by the pandemic: a digital ID system enabled the government to efficiently filter out those eligible for assistance through other programs.

Digital ID-enabled payment solutions achieved broader usage as well. Transactions through India's bank-led and real-time Aadhaar Enabled Payments System (AEPS) more than doubled over the two years ending in March 2021, while the value conveyed more than tripled over the same period.

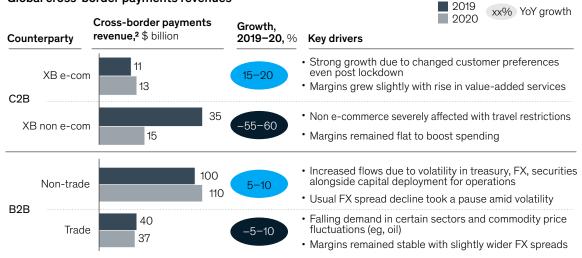
Cross-border payments remain a significant growth area (Exhibit 3). In 2020, even with travel and trade volumes in decline, cross-border e-commerce transactions grew 17 percent. Volumes for crossborder network provider SWIFT were 10 percent higher in December 2020 compared to the prior year: not only has the "re-shoring" of production chains and related shift in trade flows we expected last year so far failed to materialize, but increases in non-trade payment flows have more than offset lower transaction volumes in trade, driven by increased volatility in treasury, FX, and securities. These dynamics are leading to growth in volumes as well as record market valuations for a growing list of payments specialists such as Currencycloud (recently acquired by Visa), Banking Circle, and Wise.

The B2B payment arena is also showing strong growth internationally, especially when viewed in conjunction with invoicing and accounts receivable/accounts payable (AR/AP) management solutions. The largest transaction banks continue to invest in innovative solutions; and Goldman Sachs, a more recent entrant into the space, is developing a platform including integration with SAP Ariba. Given industry-wide initiatives—led by SWIFT and the

⁵Mari Elka Pangestu, "Harnessing the power of digital ID," World Bank Blogs, August 20, 2020, blogs.worldbank.org.

Exhibit 3

Cross-border payment results were mixed, due to nuances in the underlying segments.



Global cross-border payments revenues¹

¹Revenues include payment and collection fees, FX spread and float revenue, and documentary business fees for relevant trade flows for 46 Payments Map countries driving approximately 95% of global GDP. ²Estimates, rounded. C2C and B2C not included.

Source: McKinsey Global Payments Map

Financial Stability Board (FSB)—aiming to further increase efficiency of cross-border transactions, we project 6 percent revenue growth in total crossborder payments revenue over the next five years. We discuss this further in chapter 3.

The next frontier

The process of reexamining long-standing payments value propositions is already under way. While old tenets still hold true—scale still matters and "owning" the customer relationship remains important, for instance—sticking to them is no longer sufficient to ensure success. The absorption of payments into the full commercial/ consumer purchase-to-pay journey has given rise to ecosystems demanding new, more robust services; for example, commerce facilitation rather than a discrete payment experience. As payments become integrated into broader customer journeys, the sector's boundaries have naturally expanded. In the 1980s, we defined *payments* as the various instruments, networks, access and delivery mechanisms, and processes facilitating the exchange of value between buyers and sellers of goods and services. But this notion of payments as a discrete experience is gradually disappearing. The payments industry now encompasses the end-to-end money-movement process, including the services and platforms enabling this commerce journey.

For example, while payments as traditionally defined comprise only 5 to 7 percent of a typical merchant's software and services spending, payments providers with solid reputations for execution and innovation are well positioned to deliver solutions addressing needs constituting 40 percent of such expenses. Such opportunities help explain why less than one-third of Square's revenue would be strictly categorized as payments. Similarly, within five years, we expect 40 percent of merchant acquirer revenues to stem from activities other than payment processing.

For players with established credibility in the provision of core payments functionality, the following areas offer attractive natural extensions, although these opportunities will not be evenly distributed across regions:

 Payments and banking-adjacent software, infrastructure, and services. The largest shares of payments revenue continue to accrue at the endpoints of the value chain, where direct interaction with payers and payees is central to the proposition. Even as the payment "pipes" and underlying technology face potential commoditization, opportunities abound in the rapidly evolving payments-as-a-service space, through which traditional players provide the transactional and compliance backbone that enables partners to deliver adjacent services through reimagined front ends. Most examples to date have centered on consumerfacing solutions, but potential remains on the commercial side as well. Other important and less commoditized value-added items include digital identity, risk solutions, charge-back mitigation, and KYC-as-a-service.

Commerce, sales, and trade enablement. Non-bank market entrants often derive their value from related services, driving down payments pricing in the process. Banks must consider similar approaches to avoid being disadvantaged. In most cases, marketplaces have successfully cultivated an adequate stream of prospective buyers; attracting an ample supply of sellers with distinctive wares is a more vexing challenge—one that payments facilitators are well positioned to solve, leveraging data analytics to reduce time to revenue. Solutions focused on automating the onboarding process, increasing the stickiness of users, and improving the seller experience should find a ready market. Examples include affiliate marketing, loyalty

Asia–Pacific's \$210 billion payments revenue opportunity

Asia–Pacific has been the largest and fastest-growing payments revenue region for the past several years. Given the consistently strong growth rate of China's economy, this result is not surprising. More interesting, however, is the unique composition of Asia–Pacific's payments revenue and its implications for longer-term growth.

It is illuminating to consider the payments characteristics of the rest of Asia-Pacific apart from China. Whereas China accounts for roughly three-fourths of the region's revenue—and indeed generates more payments revenues than any of the individual major global regions—a disproportionate share of its payments revenue is generated by net interest margins earned on deposit balances—particularly those in commercial accounts. As a consequence, the majority of China's payments economics are inaccessible to institutions and providers domiciled outside the country.

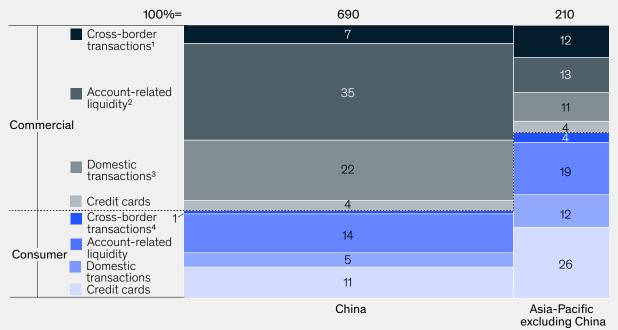
The payments dynamics for the rest of Asia–Pacific stand in stark contrast (exhibit). In fact, these characteristics bear a striking resemblance to Latin America—not only in terms of total revenue (its \$210 billion is roughly 35 percent higher than Latin America's)—but more importantly in its relative focus on consumer activity and credit cards. Only a third of Asia–Pacific's revenues outside of China are derived from account liquidity, as compared to 50 percent for China.

The pandemic has accelerated reductions in cash usage, particularly in key markets like Indonesia and Thailand, creating new digital revenue opportunities. While some transactions will return as physical storefronts reopen, a solid majority has likely moved permanently to card and wallet-based forms, as well as to emerging online categories such as telemedicine and online yoga and fitness.

Exhibit

Payments revenue dynamics vary across Asia-Pacific.

Payments revenue, 2020, % (100% = \$ billion)



¹Cross-border payment services (B2B, B2C).

²Net interest income on current accounts and overdrafts.

³Fee revenue on domestic payments transactions and account maintenance (excluding credit cards).

⁴Remittance services and C2B cross-border payment services.

Source: McKinsey Global Payments Map

Although China has served as Asia–Pacific's primary growth driver over the past decade, India's payments revenues are now growing at a faster rate, and in 2020, surpassed Japan as the region's second-largest revenue generator. Indonesia is another impressive growth story, posting a 2014–19 CAGR of nearly 9 percent, coinciding with multiple payments-related reforms launched by the regulator. A decline in NIMs reversed this trend for 2020, but indicators point to a return to rapid growth in 2021. We project India and Indonesia alone will generate \$34 billion of incremental annual revenue by 2025, representing annual growth of nearly 8 percent.

Despite low single-digit revenue growth in mature payments countries such as Japan and Australia, we forecast the Asia– Pacific region excluding China to grow at nearly 7 percent between 2021 and 2025—a rate only slightly slower than China's. The growth rates of strategically important payments categories like cross-border and instant payments are also expected to remain on similar trajectories.

The region is filled with opportunity: from rapidly expanding B2B activity to an explosion in digital wallets supporting small businesses as well as consumers, accelerated digitization fueled by rapid infrastructure developments, and integrated platforms providing access to multiple ecosystems. Increased access to real-time payment rails has fueled rapid growth in bilateral cross-border payment activity: notable early successes span the Singapore, Indonesia, and Thailand corridors—an area with significant potential for value-added services.

Players interested in the Asia–Pacific market should not overlook growth engines in countries beyond China, many of which offer clearer paths to foreign participation.

solutions, e-invoicing platforms, and B2B trade directories.

 Balance-sheet-based offerings. Banks are similarly well equipped to introduce new solutions based on emerging payment methods such as instant payment and "buy now pay later" (BNPL) models, or to integrate new solutions and technologies into existing value propositions.
 Financing and deposit models with significant regulatory requirements or higher risk profiles (including credit cards, BNPL, supply chain and SMB financing) are among the promising areas.

The payments sector is poised for a quick return to healthy 6 to 7 percent growth rates, with fresh opportunities for incumbents and new entrants alike to participate in emerging adjacent revenue streams, further brightening the future picture.

These benefits will not flow evenly to all, however. Players electing not to adapt their strategies whether by choice, inaction, or lack of investment capacity—are likely to endure below-peer growth and risk being displaced on key customer experiences.

In the remainder of this report, we outline the opportunities—as well as the threats—emerging in cryptocurrencies and CBDCs, global transaction banking, and merchant services.

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