McKinsey & Company

Global Banking Practice

A perspective on German payments

What is the long-term relevance for banks, cash, and cards?

September 2019

Authors and acknowledgements

Dr. Franca Germann
Associate Partner
Frankfurt

Reinhard Höll
Associate Partner
Dusseldorf

Marc Niederkorn
Partner
Luxembourg

The authors would like to acknowledge and thank Dr. Dr. Helmut Heidegger, Dr. Philipp Koch, Kai Schindelhauer, Prof. Dr. Uwe Stegemann, Birgit Teschke, Dr. Andreas Thurn, and Dr. Eckart Windhagen for their contributions to this paper.

A perspective on German payments

What is the long-term relevance for banks, cash, and cards?

Germany has a reputation for being a high-tech country with a cash-dominated economy. Its cash usage is indeed high (67 percent of total number of consumer-to-business transactions in 2018), but the payments infrastructure is well developed, with approximately 165 million cards, roughly 1.1 million terminals, and a well-established processing landscape (Exhibit 1, next page).

For incumbents, payments are an important source of revenue and the most important customer touchpoint. The question now is whether developments such as Apple Pay or Alipay, ubiquitous card acceptance, and emerging specialists such as Adyen and Wirecard lead to a leapfrogging moment that relegates banks to the role of high-cost providers of cash, cards, and infrastructure, pushing them further away from the heart of the vibrant payments industry. Or more succinctly, will nonbanks and fintechs be able to reap the benefits of the shift away from cash?

Noncash payments are growing

Payments can be defined as covering issuing activities—transactions made through accounts, credit and debit cards, and (new) payments types such as PayPal, Apple Pay, and Amazon Pay. It also covers payments acquiring (terminals, merchant payments solutions) and ranges from the "traditional" point of sale (POS) to the growing e- and m-commerce channels, as well as the underlying processing and current-account, cash supply, and logistics activities. More than 80 percent of payments revenues in Germany are fee based (either directly or usage based from merchants, current accounts, or instruments); the remaining 20 percent are generated from interest margins.

Importantly, most customer touchpoints with their bank are payments related and linked to current accounts, generating approximately €12 billion in associated revenue in Germany. Leaving aside interest rate effects on the net interest income on current accounts, the revenue from payments has increased in recent years (Exhibit 2, next page). The growth has been driven by the following trends:

— A steady 1 to 2 percent annual decline in cash usage across all age groups, leading to an increase in use of card and digital payments

— A steady 5 percent annual increase in card usage, albeit with moderate revenue growth (mostly due to regulations such as MIF—Multi-Interchange Fee—regulation)

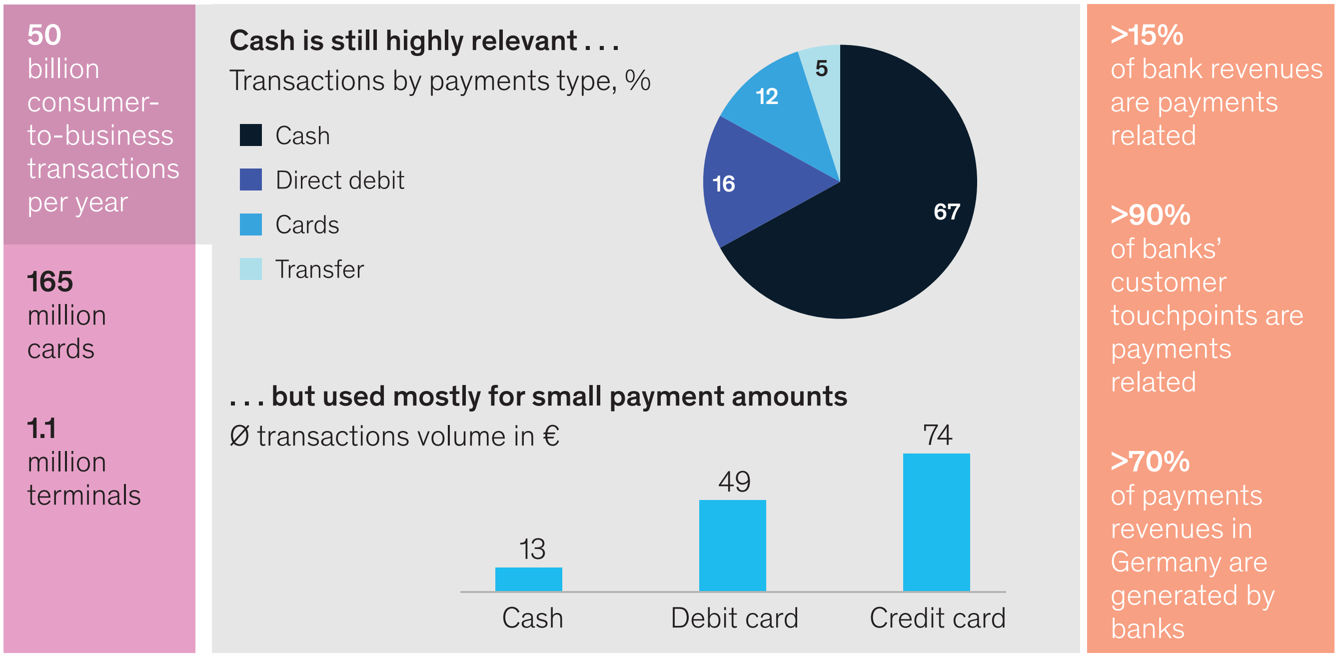
— An increase of approximately 10 to 15 percent per year in e- and m-commerce channel usage

In a European context, German payments revenues are lower than average; at about €22 billion, they amount to 0.7 percent of German GDP, compared with the 1.0 percent European average and the 1.3 percent US average. German banks rely more on account-related liquidity than most other markets

Exhibit 1

An overview of the German payments market.

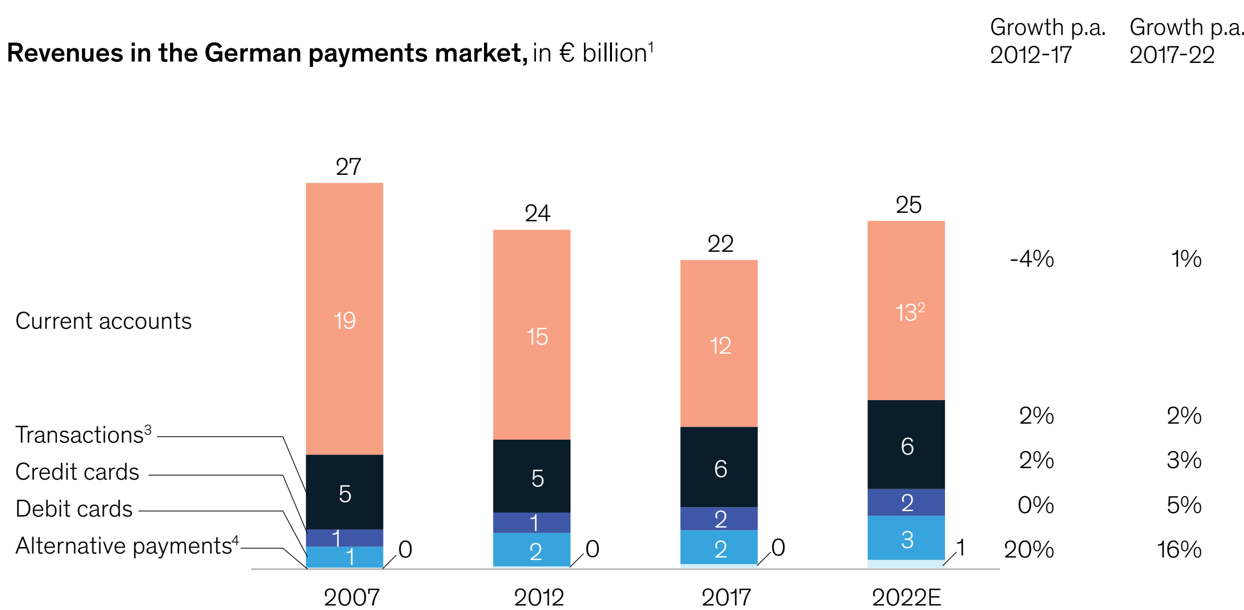
Payments in Germany



Source: McKinsey analysis

Exhibit 2

German domestic payments are dominated by current accounts, transactions, and debit cards.

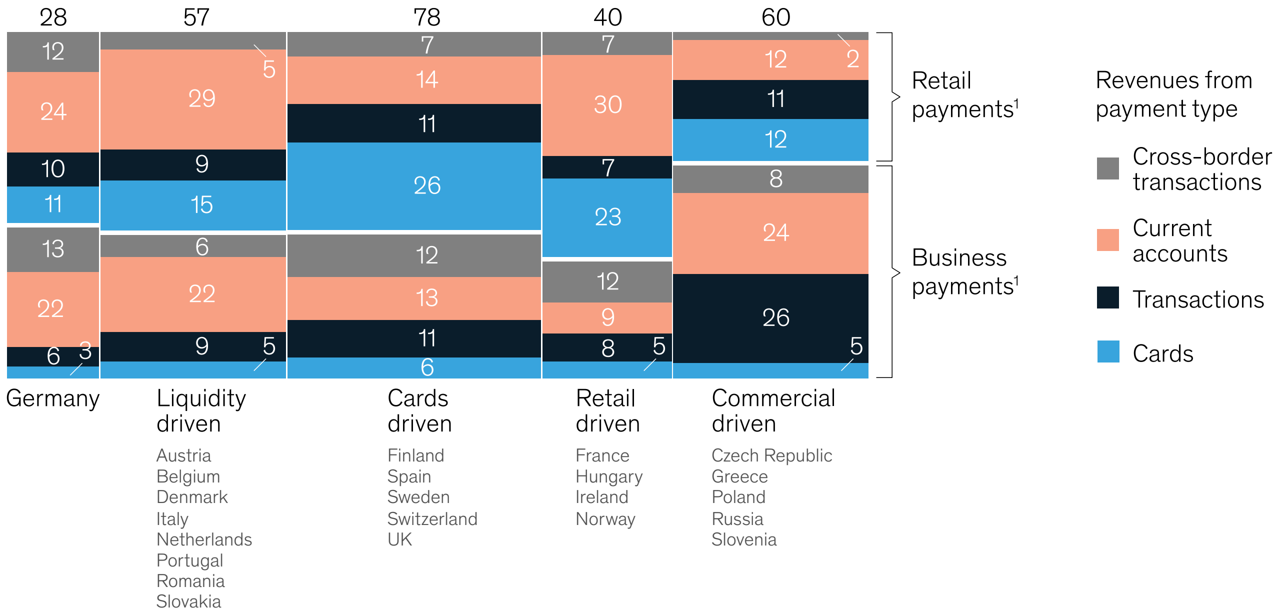


[1] Excluding cross-border business.
[2] €13 billion assuming constant interest rates, 2017-22; €17 billion assuming rising interest rates.
[3] Includes cash, checks, transfers, direct debit, documentary business, remittances.
[4] E.g., AmazonPay, PayPal, Sofort, paydirekt, giropay, ApplePay, GooglePay.
Source: McKinsey Global Payments Map

Exhibit 3

Germany falls into the current account-related-liquidity-driven country archetype.

Payments revenue drivers for different country archetypes in 2017, share in %, total in € billion



[1] Retail versus business split dependent on revenue recipient.
Source: McKinsey Global Payments Map

(Exhibit 3), making them more vulnerable to the current low-interest-rate environment.

While German payments behavior is unlikely to suddenly rival that of China, where mobile payments methods such as Alipay are now used for 28 percent of consumer-to-consumer and consumer-to-business payments, some trends are evident:

— The number of digital payments methods will continue to increase in the near term, enabled by increased adoption of mobile technology. However, other than in niche applications, this growth in payments methods will likely be temporary, with merchants and consumers pushing for convenience and less complexity.

— Germany may follow the trend in other European markets and experience a continuing decline in cash usage to 30 to 50 percent in the next three to five years, as increasing numbers of people pay by smartphones or cards.

— The customer interface remains the competitive focus of banks, card schemes, and payments specialists. Nonbanks—that is, payments specialists and utilities—will continue to gain ground, particularly in non-customer-facing areas such as cash logistics and processing. Banks will continue to hold the balance sheet, and big technology firms are likely to focus on the customer interface to support their core business.

We believe that customers, not technology, will be the key driver of change, as they increasingly expect seamless experiences across channels.

A short-term proliferation in digital payments methods

Online, Germans still mostly pay through traditional means: direct debit and bill pay account for 63 percent of all transactions, with PayPal and credit cards carving out most of the rest (20 percent and 11 percent, respectively). Meanwhile, mobile payments are still seen as distinct from online and brick-and-mortar payments. Actual mobile payments are still very low (less than 1 percent of all transactions) in Germany compared with countries such as Denmark, where mobile payments now make up 14 percent of total noncash payments.

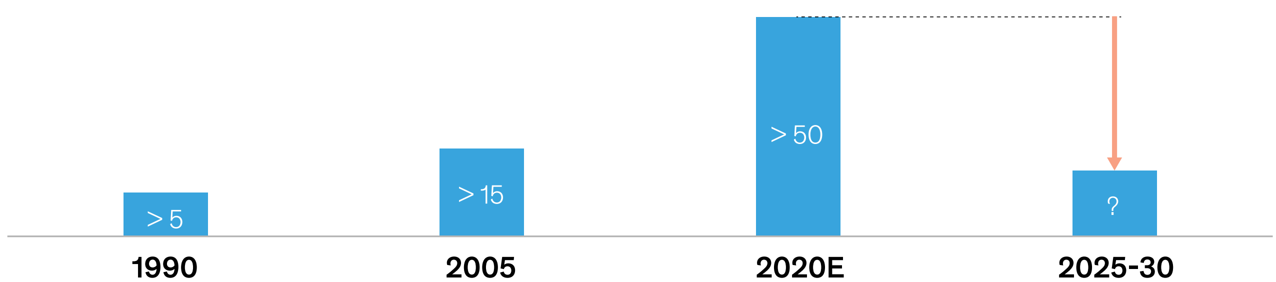
However, digitization, the advent of PSD2, and strong e-commerce growth have paved the way for the development of many new payments methods (Exhibit 4). The emergence of Apple Pay, Google Pay, and mobile payments solutions from banks, such as Kwitt, are likely to fuel mobile growth. It remains to be seen, however, how deeply digital payments will penetrate, given German consumers' skepticism toward new providers. Experiences from other markets such as Switzerland, where the increased usage of TWINT has not led to a fall in card usage, imply that cards are here to stay (mostly at the expense of cash) and are likely to continue growth in either physical, contactless, or digital form.

Overall, we expect both mobile and online payments volumes in Germany to continue to grow in the high single digits. However, the number of payments methods may decline, given that merchants and customers prefer simplicity and that payments solutions are highly scale sensitive. This may even lead to a leapfrogging moment when market volatility leads to more fluid customer preferences where alternative payments methods may gain a significant market share. In this competitive environment, it is unlikely that payments providers will be able to charge payers significantly, as a large user base will be crucial in gaining scale and ensuring enough merchant access. Moreover, in some very specific, niche use cases (e-gambling, for example), distinct digital payments methods are likely to endure.

To succeed in this race, many payments providers have already started to enhance their offers with omnichannel service and more seamless shopping experiences—for example, allowing consumers to

Exhibit 4

The estimated number of payments methods in Germany has grown significantly, but in the midterm future, we expect this number to decline.



Examples

1990	2005	2020E	
	Plus	*Plus*	
Cash[1]	Maestro/VPay[6]	VisaDebit/Debit Mastercard	Kwitt
Bank transfer[2]	Geldkarte	Masterpass	Transferwise
Checks	OLV/ELV	paydirekt	ApplePay
Eurocheque Cards[3]	giropay[6]	Amazon Pay	GooglePay
Mastercard/Visa/ American Express	PayPal	BarPay	AliPay
	T-Pay[7]	RatePAY	bluecode
	ClickandBuy[8]	MyBank	Payback Pay
	Paysafecard	Skrill	Paymorrow
	Sofortüber-weisung[4]	BillPay[5]	Barzahlen
	…	Billsafe	…
		Klarna	

[1] Includes cash on delivery.
[2] Includes payments in advance.
[3] Later girocard.
[4] Since 2014 part of Klarna.
[5] Since 2017 part of Klarna.
[6] Since 2006.
[7] Until 2010.
[8] Until 2016.
Source: McKinsey analysis

use the same PIN and password credentials online and on mobile. PayPal has significantly updated its mobile payments app; Visa and Mastercard are facilitating connectivity to multiple channels including third-party digital wallets; and Alipay is working with acquirers to offer an omnichannel experience (so far focused on Chinese tourists). Admittedly, banks have not yet been able to translate their relevance in POS transactions to the online and mobile arena. Still, girocard as a national debit system has around 58 percent of noncash transaction volumes, and banks have led several initiatives to upgrade girocard (for example, by allowing contactless payments) and their digital assets such as paydirekt.

The future of cash in Germany

Although the number of cards per capita in Germany is comparable with that of other European countries, domestic card usage is comparatively low, with 75 transactions per capita per year, versus 84 in Spain, 173 in France, 279 in the United Kingdom, and 401 in Norway.

Cash usage in Germany today is like that of Sweden in 2003, Italy and Poland in 2015, and Europe overall in 2006 (Exhibit 5). Cash remains a major value proposition for most banks: ATMs are a key customer touchpoint and major reason for charging current-account fees.

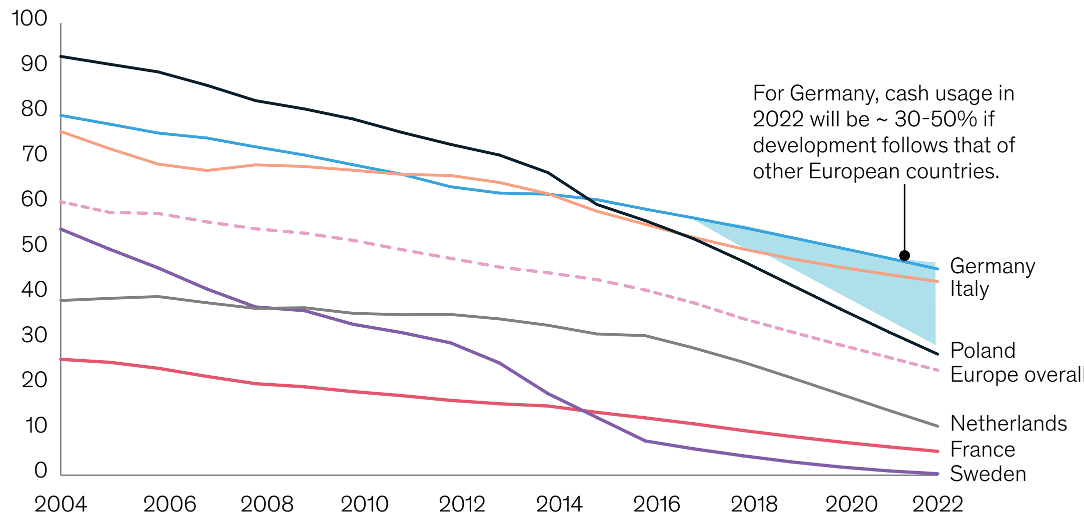
The trend in cash usage in these markets has been a steady decline. In some countries (for example, the Netherlands, Poland, and Sweden), this decline accelerated in recent years. Germany will likely follow the same trend with an acceleration of noncash usage within the next three to five years.

As cash becomes less relevant, so too do the existing cash/ATM value propositions, particularly at a time when supermarkets are offering free cash withdrawals. According to McKinsey analysis, banks in Germany currently spend about €2 billion on services to support cash transactions: a combination of setup and maintenance of ATM networks, cash logistics, and other related costs. It is likely, therefore, that banks will cut cash-related

Exhibit 5

Strongly declining cash usage in Germany expected given experience from other European countries.

Cash usage in selected European countries, in % of card and cash consumer-to-business transactions



[1] Includes Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the UK.
Source: McKinsey Global Payments Map

costs aggressively while actively managing potential public reactions. While market forces may prefer no use of cash at all, this seems unlikely, as there are some groups (tourists and senior citizens, for example) who lack easy access to noncash payments methods, and access to ATMs is often seen as a public good.

Germany's banks will therefore need to address the costs of running the roughly 50,000 ATMs in the country. The number has been relatively stable, as falling usage is counteracted by branch substitution (ATMs replacing bank branches). Banks could follow the example of payments markets in Sweden and the Netherlands and pool their existing networks. This approach could likely start with banks' non-customer-facing, back-office areas, and potentially result in a model like the Dutch Geldmaat, in which all banks pooled their cash/ATM activities in 2015 and rebranded all ATMs under a common brand in 2019.

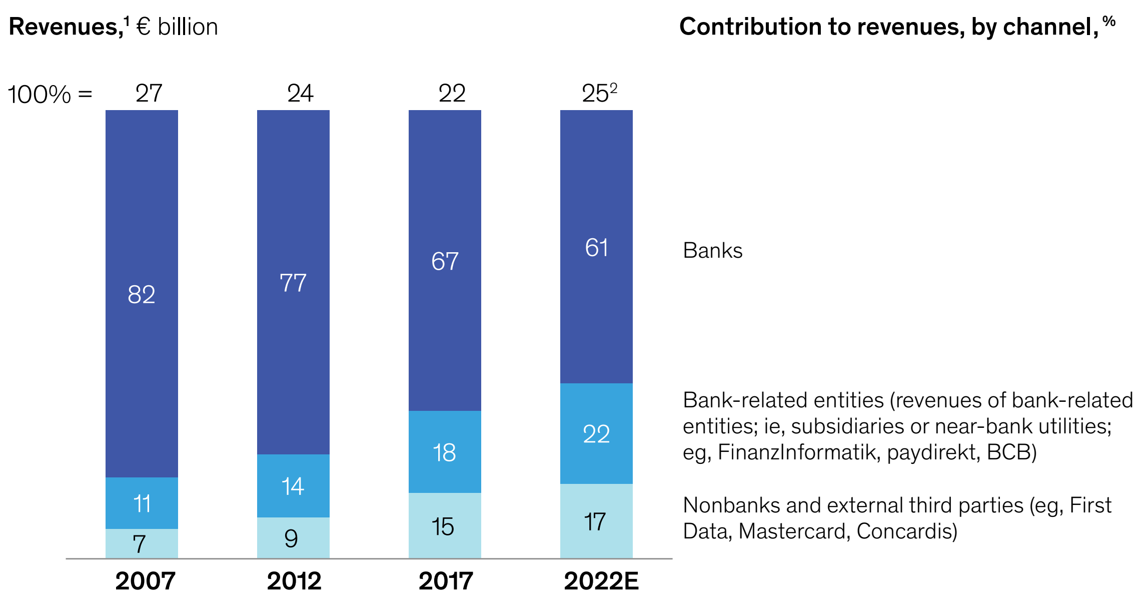
A value chain of specialists: Are banks falling behind?

Germany has mirrored European trends toward a non-bank-driven consolidation in payments as banks' value chain share has steadily decreased over the past decade (Exhibit 6). This is particularly the case in digital payments and non-customer-facing areas:

— **Issuing** revenue shares are dominated by bank-related entities and nonbanks. In **debit cards,** girocard—the national debit card run by the banks—is the market leader, with cards held by around 95 percent of the adult population. However, girocard has very limited online and mobile capabilities, which constrains its contributions to related bank-internal revenue growth. Germany has low **credit card** penetration, serving around 36 percent of the adult population. International schemes (Mastercard, Visa) have focused on their debit solutions (for example, Debit Mastercard) and

Exhibit 6

German banks' share of revenue generation in payments is declining.



[1] Excluding cross-border business.
[2] In the event of rising interest rates 2017-2022, total revenues reach €29 billion (67% banks, 19% near-bank, 14% non-bank).
Source: McKinsey analysis

started to add online/mobile capabilities that were originally developed for credit cards. **Digital and mobile payments** are growing rapidly from a low base, with only small market shares for bank-based solutions.

— **Acquiring** is mainly performed by nonbanks, which account for more than 80 percent of these revenues. It has not been a focus for banks of late, either in Germany or across Europe. The bank-owned Concardis was divested in 2017, and currently only the Sparkassen continue to own a significant (albeit minority) share in Ingenico's German operations after Ingenico's acquisition of BS PAYONE.

— **Payments processing** in Germany is still relatively fragmented, mainly between bank-related entities and nonbanks. While Commerzbank and the cooperative banks have partially outsourced processing to larger European nonbank players, the market-leading Sparkassen still run their own system (i.e., near-bank), as do some of the private banks, such as Deutsche Bank.

— C**urrent accounts, cash supply, and logistics** have remained firmly in the hands of banks, with the help of their contractors; related revenues are mainly earned by banks and bank-related entities. Unlike in other European countries, such as the Netherlands, the United Kingdom, Sweden, and Finland, cash supply and logistics utilities across sectors have so far not emerged at scale.

Overall, the trend toward specialists and utilities in noncustomer areas is set to continue; scale effects in processing and cash, as well as regulation (such as PSD2) and security remain important. In customer-facing areas (cards and digital payments, for example), the picture is complex. Specialists such as PayPal are focusing heavily on digital payments but have not achieved broad market leadership. Banks clearly aim to strengthen and defend their customer touchpoints. They have an asset in girocard, a significant stake in credit cards, and at least a foothold in digital payments with paydirekt, giropay, and other methods. Customers seem to trust banks with sensitive payments data, but so far banks have not significantly benefited from this advantage. Card schemes are both their allies and competitors; their networks act in direct competition to girocard and may siphon significant value away from banks. They may, however, still be beneficial to banks, providing them with customer and data access.

What should market participants do?

As cash loses relevance, cards and digital payments expand, regulation fuels competition, and consolidation looms, firms need a clear strategy for strengthening their value proposition. While German banks are struggling to generate returns on equity (ROEs) of more than 5 to 10 percent and losing their share in the payments value chain, the valuation and total shareholder returns (TRS) of payments specialists have been high. For example, Wirecard's price-to-earnings ratio is about 43 (as of September 6, 2019), with a 21 percent ROE in 2018, and the overall payments TRS since 2010 is more than 20 percent per year. Given that payments-related activities are a primary customer touchpoint and a key to cross-selling, payments should be a central theme for almost everyone.

Individually, banks should decide on their payments strategy and whether they will be a differentiator—that is, play for a competitive advantage—or aim to just keep pace with market developments. Independent of the strategy, for most banks a significant share of their banking revenues will still be payments related, and banks should make sure to have clear management responsibility. Similarly, all banks should focus on achieving operational excellence, particularly pricing power (for example, considering fees for cash usage by businesses), the ability to accelerate sales, new product and service propositions, and further digitization.

A more ambitious differentiation will require strengthening the bank's current position through integrated offers, ecosystem plays, and partnerships with fintechs and—selectively—big technology firms. Regulation such as PSD2 and the proliferation of APIs may support such moves but will also put pressure on laggards as third parties can more easily gain access. As advances in technology and the accelerated growth of digital commerce rapidly reduce the viability of legacy systems, banks should consider divestment or outsourcing of assets where scale or differentiation cannot be achieved. An example is payments processing, where leading European players (such as Worldline) generated an estimated €2.2 billion in revenue, compared with €5.7 billion in revenue in Germany for transactions overall. Nonetheless, selective insourcing of assets appears possible, when they may play into a differentiation strategy.

Moreover, for certain players, such as small private-banking players, a complete exit from offering payments services may be advantageous.

Banks as a group need to acknowledge the threats inherent in industry trends but also grasp the opportunities, such as where they may want to cooperate to enable superior propositions vis-à-vis payments specialists and new market entrants. They should give industry utilities serious consideration, given successful examples such as TWINT for digital payments in Switzerland aiming at the customer interface and Geldmaat for ATMs in the Netherlands aiming at cost efficiency.

For customers, banks need to accelerate the development of payments solutions and create highly convenient, omnichannel offers. With girocard, banks have an asset, but compared with their peers in other European countries, German banks' response to non-cash-related payments has been fragmented. Offers focus on separate solutions, such as girocard (offline), paydirekt and giropay (e-commerce), and Kwitt (peer-to-peer). Banks could also link their current accounts more directly with the digital world (for example, by making online banking credentials/apps usable for e-commerce payments).

Banks may want to consider acting on statements by European politicians on the development of a European consumer-to-business/business-to-consumer scheme (potentially involving girocard, Europe's largest domestic scheme). They might even reach into payments issues around mobile-to-mobile payments and the Internet of Things, with applications to, for example, machinery, automotive, and insurance.

With regard to cost, banks need to collectively improve their structure, ensuring that cash stays affordable, through cross-industry consolidation and optimization of cash infrastructure and by redistributing the true costs of cash between all users (banks, consumers, and merchants). This means banks will almost certainly need to develop new value propositions without cash. Indeed, withdrawals may even become free for customers of all banks, as they are in many other EU markets, to compete against payments specialists.

Specialists should be cognizant of what leads to success: mainly convenience and scale. Further consolidation might be a smart strategy. Acquisitions—often of payments assets divested by banks—can deliver cost synergies or extend a provider's services to less penetrated markets. Specialists should continuously evaluate technology architecture and options for integrating systems as part of any deal. This consideration should also encompass evaluation of the strategic focus, whether to partner up or compete with other specialists in the market. Specialists may also extend their payments offers to leverage into cash management, corporate accounts, and even other areas such as leasing and factoring for large merchants. Some specialists (e.g., Adyen) have already obtained a banking license and are offering services such as cash management and foreign exchange. Similarly, credit card schemes may want to focus on enriching their omnichannel offers to solidify and expand their business in both the offline (particularly in debit) and digital channels.

So far, **big technology firms** have not treated German payments as a core target and have generally been agnostic toward payments methods used on their platforms. Most digital wallets, for example, have been open to what payments methods they consider to work with. Some big tech firms look at payments methods in terms of control of the customer interface. Others see payments as a value driver from a sales funnel management perspective, meaning they favor the methods that will increase the number of consumers who click, buy, and pay while minimizing risk and complexity. Of course, they may still try to introduce their own payments methods, which could lead to a marginalization of banks. An example of this might be an overarching customer interface for payments where all scheme/interchange as well as transaction fees are captured. However, if truly distinctive, omnichannel offers emerge from banks or specialists, tech players are likely to integrate them into their platforms.

Merchants should take a more holistic view of the cashless trend and focus on the effects of payments complexity on buying behavior, data generation, and costs. The growth of digital payments opens possibilities for creating transparency on revenues and actively using payments data to manage sales funnels. These advantages are also more and more accessible for smaller retailers. Larger merchants may also opt to actively push selective payments methods.

In **conclusion,** all players, and banks in particular, need to decide whether payments is a differentiator; they can play for a competitive advantage or just keep pace with market developments. Playing for competitive advantage requires a flexible approach that can deliver superior value propositions to customers. Here technology is important but not decisive, whereas keeping pace with changing customer needs, as well as a sharp focus on creating scale at selected points along the value chain is always essential. On the other hand, a fast-follower strategy will rely on third-party providers and may be more cost-efficient. In each case, customers can continue to expect more convenient payments offers and more tailored solutions.

www.mckinsey.com/industries/
financial-services/our-insights

@McKBanking