

ELECTRONIC PAYMENTS

INTERNATIONAL



HEADING TO THE MAINSTREAM

RIPPLE AND BLOCKCHAIN LOOK TO FINALLY ACHIEVE LEGITIMACY

COUNTRY SURVEYS

Analysis and key payment market data for Iran, Uruguay and Azerbaijan

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The challenge has evolved from managing liquidity to managing velocity

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The worldwide non-cash transaction volume continues to grow

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COUNTRY SNAPSHOTS

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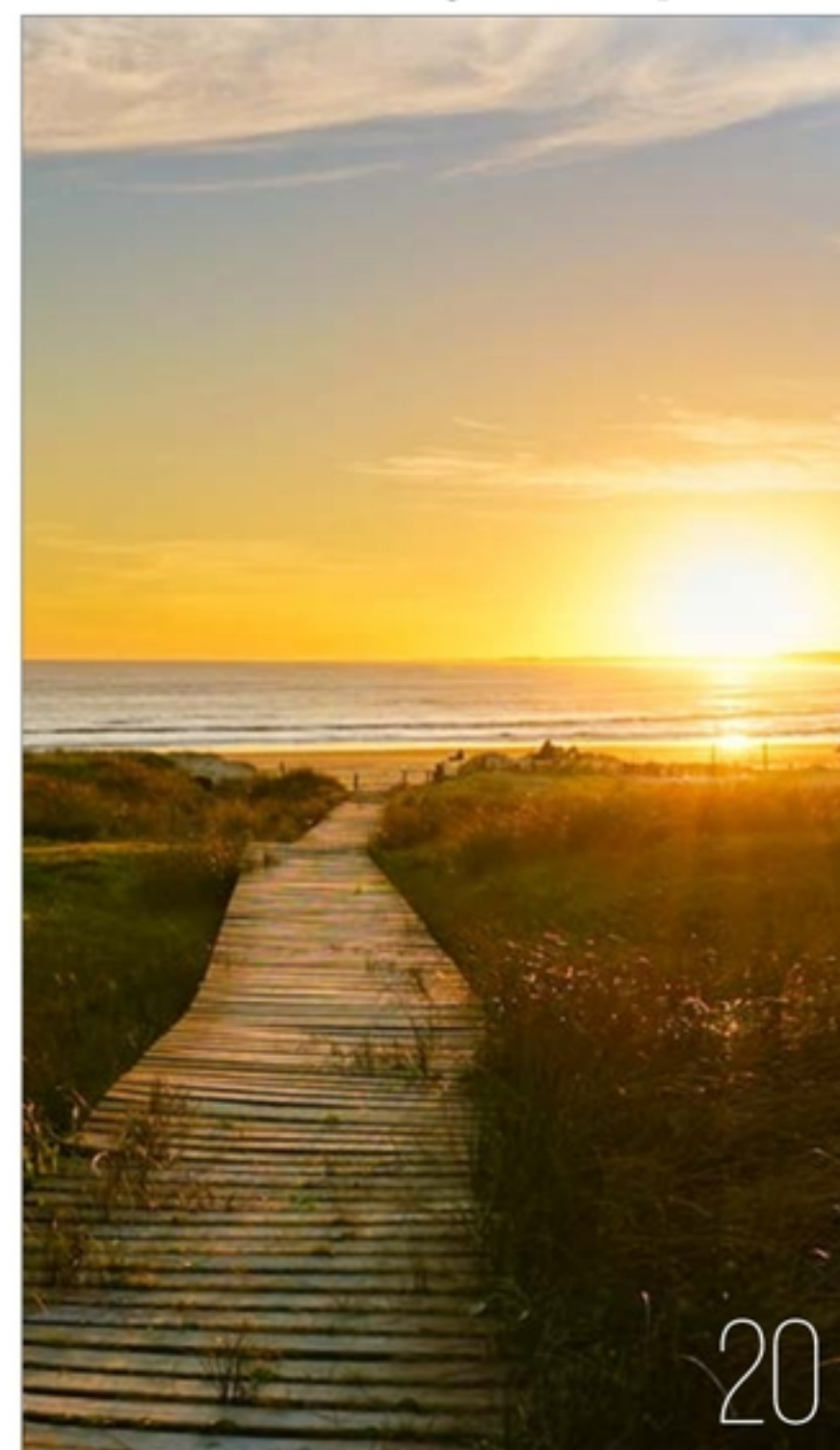
Iran's payment card market recorded robust growths in the number of cards in circulation, transaction volume and value between 2013 and 2017, supported by government initiatives to encourage electronic payments

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Uruguay recorded a gradual shift in preference towards electronic methods of payment between 2013 and 2017, with the government taking a number of steps to reduce dependence on cash

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Azerbaijan remains a cash-oriented economy, with various factors hindering the development of the country's financial system, including the payment card market, which remains at a nascent stage of development



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Poland's mobile banking sector is dynamic and ambitious. Wojciech Zatorski, COO of Braintri and the creator of Biffie, speaks to *Briony Richter* about the products and services that are transforming the industry



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With major US bank PNC joining the growing list of banks that belong to RippleNet, Ripple's blockchain technology is increasingly achieving mainstream legitimacy. *Robin Arnfield* reports

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Flexible APIs enable businesses to harness the power of the data they hold. CEO Christoph Tutsch explains how Onpex's personalised solutions can transform payments and banking. *Briony Richter* reports

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With so many different options now available for making payments, it takes effort to stand out from the crowd. Russia-based Sberbank has decided to make the process a more visual affair, writes *Patrick Brusnaban*



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The non-cash transaction volume is still growing worldwide, according to the 2018 *World Payments Report*. The growth also shows no sign of slowing – in fact, it is actually speeding up. *Patrick Brusnaban* reports

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As the world adopts real-time payments, creating huge volumes of instantaneous transfers in seconds, the challenge for banks has evolved from managing liquidity to managing velocity, says *Bhupendra Warathe*

PAYMENTS ARE BEING TRANSFORMED, BUT DO NOT WRITE OFF THE INCUMBENTS



Douglas Blakey, Editor

The consultancy annual reports season is in full swing. The annual *World Payments Report*, traditionally one of the better reports of its type, comes to hand as *EPI* goes to press, and is covered on pages 16-17.

Two reports from Accenture are also worth a read. Accenture's research attempts to quantify the level of change in the global banking and payment industry structure. It finds, for example, that 17% of industry players in 2017 – around 3,200 players – entered the industry in the last 13 years, and have grabbed one-third of revenue growth in Europe.

In the seven major markets surveyed by Accenture – Australia, Brazil, Canada, China, the EU, the UK and US – the total number of players in banking and payments fell from 24,000 in 2005 to 19,300 in 2017, due to consolidation. Of the new institutions, 91% are payments companies, while others are fintechs and digital challenger banks. The percentage of new players in the EU is even higher, with 20% of 2017 participants entering the market since 2005; this amounts to 1,400 outfits.

UK: new entrants grab 14% of revenue

According to Accenture, the 1,400 new players in Europe since 2005 have captured 6-7% of banking and payment revenue, worth around €54bn (\$62bn) in 2016.

In the UK, the revenue shift has been much more pronounced: new competitors have grabbed about 14% of revenues. The biggest gains have been made by payments processors and licensed payment institutions, which have captured about 12% of the market.

While payments players such as Adyen, iZettle and Klarna are taking revenue share, they are not taking a commensurate slice of profits. It is relatively easy to get into payments – as Accenture highlights, capital requirements are low – but turning a profit is not so simple, and, for now, many new players are operating payments businesses as loss leaders. TransferWise has grown to two million users by charging a fraction of the fees charged by banks, and on an underlying basis remains loss-making.

Another new player, Azimo, is taking on established players with Azimo Business, enabling SME owners across the UK

and Europe to pay for goods, salaries and investments in 189 countries and territories, with pricing at around 25% of that of the high-street banks.

Fintech profitability: 8-12 years?

Accenture estimates that it could take eight to 12 years for a typical fintech start-up to achieve profitability. However, the report remains silent on just what percentage of fintechs will ever achieve profitability.

Such forecasts do little to diminish investor appetite, with fintech deals showing no signs of slowing down – quite the reverse: fintech M&A deals in the first half of 2018, some 141 deals, are worth a disclosed transaction value of \$39.3bn.

According to the latest *Fintech M&A Market Report* from international technology mergers and acquisitions adviser Hampton Partners, total first-half deals are up 26% from the prior half-year. The number of deals also increased, up 8% from the second half of 2017. Again.

Payments and transaction processing deals capture the headlines with some eye-watering valuations. For example, Paypal's all-cash acquisition of payments provider iZettle, at 19x trailing revenues, resulted in a deal worth \$2.2bn.

Meantime, just in time for Sibos, another report comes to hand from SWIFT. Its white paper examines the drivers of payments transformation in Europe, and looks at the challenges and opportunities for financial institutions. The report's title, *The transformation of the European payments landscape*, is not, to be fair, over-hyped. PSD2, Open Banking, the growth of instant payments, and the Eurosystem's pan-European Target Instant Payment Settlement (TIPS) are just some of the challenges for the incumbent banks.


The fashionable argument with many is to write off the incumbents: "they don't get it, culture is dated, legacy systems, slow to reinvent themselves" are among the usual arguments.

The writer is never in danger of being accused of being fashionable. I have had the privilege this year to share a platform on the conference circuit with payments heads from banks such as ING, Nordea, BNP Paribas, UniCredit and Deutsche Bank, among many others. I would say that the major European banks are facing up to the challenges with great energy, deep pockets and sound business strategies. ■

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RIPPLE:

GAINING MOMENTUM IN CROSS-BORDER PAYMENTS



With major US bank PNC joining the growing list of banks that belong to RippleNet, Ripple's blockchain technology is increasingly achieving mainstream legitimacy. *Robin Arnfield* reports

Convenience is touted as the major advantage of virtual banking, but it is not the only one: there are many reasons to bank online, from 24/7 service and a speedy process.

In September 2018, Ripple said PNC Treasury Management is to participate in RippleNet, the US fintech's inter-bank blockchain network, enabling PNC's commercial clients to receive real-time cross-border payments via Ripple.

"Leveraging Ripple, a PNC commercial client in the US receiving a payment from an overseas buyer will receive payments against their invoices instantly, transforming the way they manage their global account receivables and allowing them to better manage their working capital," a Ripple press release noted.

"PNC is an early adopter of a lot of payments and banking technology," says senior Aite Group analyst Talie Baker. "For example, in August 2018, PNC said it would allow clients to originate payments to corporate or consumer receivers via The Clearing House's RTP [real-time payments] network, so it isn't surprising that PNC is involved with Ripple."

EVOLUTION

"We've seen an evolution from the original idea of just using cryptocurrency to the

concept of using blockchain platforms separately from cryptocurrencies to address problems in the payments industry – specifically B2B and P2P transfers – especially for smaller businesses and enterprises," says senior Celent analyst Alenka Grealish.

"In Ripple's case, this has resulted in the firm developing enterprise-level software to facilitate a variety of cross-border transfers, not just B2B. We're now at the tipping point



**WE'RE NOW AT THE
TIPPING POINT OF
ENTERPRISE AND BANK
USE OF THE BLOCKCHAIN**

in terms of enterprise and bank use of the blockchain, with early-mover banks and other enterprises moving into production and fast followers moving into pilots, which begins fuelling the network effect. The recent announcement of PNC joining RippleNet is

an indicator of this phenomenon."

Speaking at Ripple's October 2018 *Swell* conference in San Francisco, Cory Johnson, Ripple's chief market strategist, said: "The world is used to getting things, right now, on demand. They aren't waiting for anything. When we look at blockchain and the solutions it offers in cross-border payments, we have an opportunity to address their needs."

A survey of nearly 700 global payments professionals across multiple industries and in 22 countries for Ripple's *Blockchain in Payments* report found that 18% of respondents are in production or near production for blockchain-based payments. The report, released at the *Swell* conference, said that a further 27% of those surveyed are in pilot with or are close to signing with a blockchain-based payments provider.

Other payments-related blockchain initiatives include the IBM Blockchain World Wire, the JP Morgan Interbank Information Network, Visa B2B Connect, and the Stellar Development Foundation.

BRIDGING FIAT CURRENCIES

As use of blockchain for cross-border payments moves into production, the next step change will be the use of cryptocurrencies to enable real-time settlement. The cryptocurrency will act as a bridge between

THE XRAPID PROCESS

An xRapid payment flow from the US to Mexico involving Bittrex and Bitso will proceed as follows:

Bittrex and Bitso are Ripple’s preferred digital asset exchanges for xRapid transactions moving through US dollars and Mexican pesos respectively.

An FI with an account with Bittrex initiates a payment in US dollars via xRapid, which is instantly converted into XRP on Bittrex. The payment amount in XRP is settled over the XRP Ledger.

Bitso – through its Mexican peso liquidity pool – instantly converts the XRP into fiat currency, which is settled into a destination bank account.

Source: Ripple

two fiat currencies, Grealish says.

However, senior Aite Group wholesale banking analyst Erika Baumann warns that using a cryptocurrency as the bridge between two fiat currencies introduces extra FX risk, due to the volatile nature of cryptocurrencies.

Traditionally, financial institutions (FIs) provide liquidity for cross-border transfers by pre-funding Nostro accounts on each side of a transaction in each country’s native currency. According to a 2016 McKinsey *Global Payments* report, there is approximately \$5trn dollars sitting dormant in these accounts around the world.

“The big benefit is that real-time settlement eliminates the need for pre-funded accounts at correspondent banks,” says Grealish. “Blockchain’s use case in cross-border payments is meeting two of the three requirements for success: customer value and technological viability. The third, economic viability, is still a work in progress and hinges on at least one of the contenders achieving the network effect.”

RIPPLE’S PLATFORM

According to Grealish’s Celent report, *Blockchain in Action in Corporate Banking: Contenders out of the Blocks*, Ripple “is the only blockchain technology provider to FIs that offers the entire stack from the protocol and network to the applications and a native digital asset (XRP).”

Grealish wrote that Ripple “is striving to connect not only banks but also other payment providers and companies, in particular new economy companies. It is solving end users’ cross-border payment pain points and FIs’ internal challenges (e.g. legacy systems, the need to de-risk and retrench correspondent banking relationships, and liquidity constraints)”.

Ripple has three products addressing key issues related to payments:

- **xCurrent:** A messaging and settlement platform that allows FIs to communicate information about a payment with each other in real time, and settle the payment instantly;
- **xVia:** A protocol that standardises connections between different payment networks, so service providers such as money network operators (MNOs), banks and corporates can send payments via any RippleNet-participating FI. The advantage of using Ripple’s protocol is that it makes integration with other FIs and payment services companies much easier than integrating with multiple different companies’ APIs, and
- **xRapid:** A liquidity management system enabling businesses to source liquidity on demand using Ripple’s XRP cryptocurrency and its XRP Ledger. This involves exchanging fiat money for XRP and then instantly into the desired fiat currency. Ripple says on-demand liquidity means quicker payments, no more tied-up capital, and no more reliance on big banks to handle foreign exchange.

After being in pilot phase with several money-transfer firms, including MoneyGram

and Western Union, xRapid was commercially launched in October 2018 and is live with three companies: London-based MercuryFX, US-to-Mexico remittance service Cuallix, and wholesale cooperative financial firm Catalyst Corporate Federal Credit Union, which serves 1,400 US credit unions.

So far, Ripple has not publicly announced that any banks are piloting xRapid, and according to Reuters, said that major banks are unlikely to be the first to test or use it. “PNC Bank will not be using XRP or xRapid to carry out payments for now,” Asheesh Birla, Ripple’s senior vice-president for product management, told Reuters.

In May 2018, Birla said that for payments in the US-Mexico remittance corridor, companies using xRapid saved 40-70% compared to normally FX broker fees.

“An average xRapid payment took just over two minutes, compared to today’s average of two to three days when sending cross-border payments,” Birla wrote in a blog.

“The portion of the transfer that relies on the XRP Ledger takes two to three seconds, with the additional processing time attributed to movement across the intermediary digital asset exchanges and local payment rails.”

DEPLOYMENTS

Ripple CEO Brad Garlinghouse announced at *Swell* that, between quarter three of 2017 and quarter three of 2018, Ripple’s customer base grew by 100% to over 120. The company is signing up an average of two production customers per week across its suite of products, he said.

According to Garlinghouse, Ripple now has customers in over 40 countries in six

RIPPLE’S BLOCKCHAIN IN PAYMENTS REPORT: KEY FINDINGS

- **This year, blockchain moves from experiments to production:** 18% of respondents are in production or near production for the payments use case.
- **The tipping point for mass adoption of blockchain is fast approaching:** 45% of those surveyed said they are already in production, piloting or close to signing with a blockchain provider.
- **Use of digital assets in payments is experiencing breakthrough interest:** 75% of respondents state they are extremely or very interested in using a digital asset as a settlement and/or a base currency.
- **Growing blockchain connectivity facilitates digital asset adoption:** 85% of those using blockchain in production and 90% of those quickly moving to production are either extremely or very interested in using digital assets as a form of payment.
- **The size of the global market for cross-border payments is \$27trn:** Another \$20trn could be up for grabs during 2018-2026. ■

MAJOR COMPANIES USING RIPPLE:

- Brazil's Itaú Unibanco, which uses xCurrent;
- Santander, which uses xCurrent for its One Pay FX retail P2P cross-border transfer service. One Pay FX launched in April 2018 in Spain, the UK, Brazil and Poland, with other countries to follow. InnoVentures, Santander's \$200m fintech venture capital fund, invested in Ripple in 2015;
- Amex's FX International Payments business and Santander launched a partnership with Ripple to launch cross-border non-card – i.e. bank account to bank account – B2B payments via RippleNet in November 2017 between the US and the UK;
- SEB, which has now processed \$1bn over RippleNet using xCurrent;
- Indian banks Axis Bank, SBI Remit, Yes Bank and IndusInd Bank;
- UAE Exchange, one of the largest remittance providers in the Middle East, uses xCurrent;
- MoneyGram launched a pilot of xRapid in January 2018, and
- SBI Ripple Asia, a joint venture between Ripple and Japanese banking group SBI Holdings, went live in October 2018 with MoneyTap, an xCurrent-based app that lets consumers make instant domestic payments via RippleNet using a bank account or phone number or QR code. It is live with three Japanese banks, and will be gradually rolled out to the 58 banks in the SBI Ripple Asia-led Japan Bank Consortium. Japan's Ministry of Finance granted a licence to MoneyTap in September 2018. ■

continents, including new corridors in Africa, North America, South America, Europe and Asia.

“Ripple has achieved a record ‘in production’ number, because it has put in place the critical building block for success in implementing blockchain-based technology and scaling it,” Grealish wrote in her report.

“Ripple's standard applications and the RippleNet agreement enable relatively fast onboarding. Through RippleNet, Ripple has overcome the challenges of forming a consortium blockchain: governance, standards and scale. Ripple establishes an agreement with network participants to use the same technology – such as xCurrent for banks – and adhere to a consistent set of rules and standards to ensure operational consistency and legal clarity.

“Its rulebook was developed in partnership with the RippleNet Committee. On the tech side, a RippleNet member needs only to plug in once to transact with any other RippleNet member; on the commercial side, members wishing to transact with each other need to establish liquidity accounts.”

Remittance companies partnering with Ripple include RationalFX, Xendpay and InstaReM for transfers from the UK to Malaysia, Vietnam, Indonesia, Sri Lanka and Bangladesh; Remitr and FlutterWave from Canada to Nigeria; and Beetech and InstaReM

from Brazil to Spain, Italy, Germany, France and Portugal.

In September 2018, London-based TransferGo began using Ripple for real-time transfers to its Indian banking partners for the Europe-to-India corridor. TransferGo said it saw initial transfers over RippleNet take just six minutes. It is offering instant transfers via RippleNet to India for a fee, and free RippleNet-based transfers that take two to three days at a mid-market inter-bank exchange rate.

“It is notable that, so far, the banks and other companies using Ripple haven't provided much information on their success or their cost-savings with the platform,” says Baumann. “But I think Ripple is strategically positioned in terms of the partnerships it has established.”

“The blockchain is a great solution for digital remittance firms like TransferGo or Remitly, as it helps them save costs on infrastructure,” says Baker.

“But for established MNOs like MoneyGram and Western Union, the blockchain's real benefit is taking infrastructure costs out of their business.

“The remittance business is now so price-competitive due to the advent of digital-only players. So, because the MNOs are being squeezed on their margins, they aren't passing on cost-savings from the blockchain to customers.”

SWIFT'S RESPONSE

In response to blockchain initiatives such as Ripple and Visa B2B Connect, and to non-bank competitors in the cross-border space, SWIFT has developed SWIFT gpi (global payments innovation).

Elizabeth McQuerry, who heads Glenbrook Partners' global payments practice, described SWIFT gpi “as the next generation of traditional correspondent banking, implementing enhancements to make the sector more competitive through payment tracking, greater transparency, and same-day value delivery within the network of users”.

New technology offered in SWIFT gpi includes a cloud-based tracker service that uses APIs to monitor the process of all payments.

SWIFT gpi has a strong service level between the banks involved, so not only are gpi payments tracked and monitored, but they move faster as they must be processed within a certain timeframe. According to SWIFT, with gpi, payments are credited within 24 hours from initiation – and most within a few hours, or even minutes.

“SWIFT is going through its second evolution through gpi, and worked with some big US financial technology vendors, including ACI Worldwide, on gpi to really try to solve the cross-border issues involved in using SWIFT,” says Baker.

“With gpi, there are finally real-time capabilities for payments. The problem for corporates is that there is ambiguity in the market as to what solution will become the standard for cross-border transactions – for example the card networks' platforms, SWIFT or Ripple.” ■





COUNTRY SNAPSHOT: IRAN

Bank and government initiatives lead to robust card growth

Iran's payment card market recorded robust growth in terms of the number of cards in circulation, transaction volume, and value between 2013

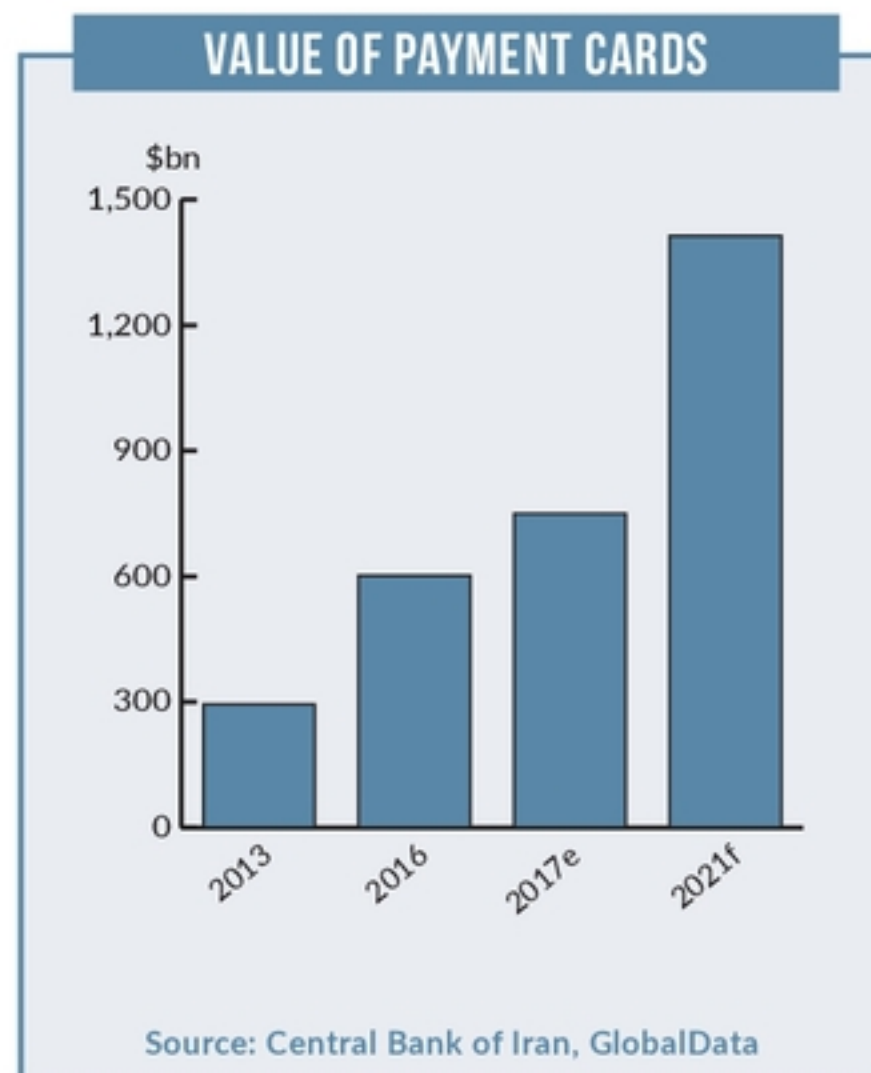
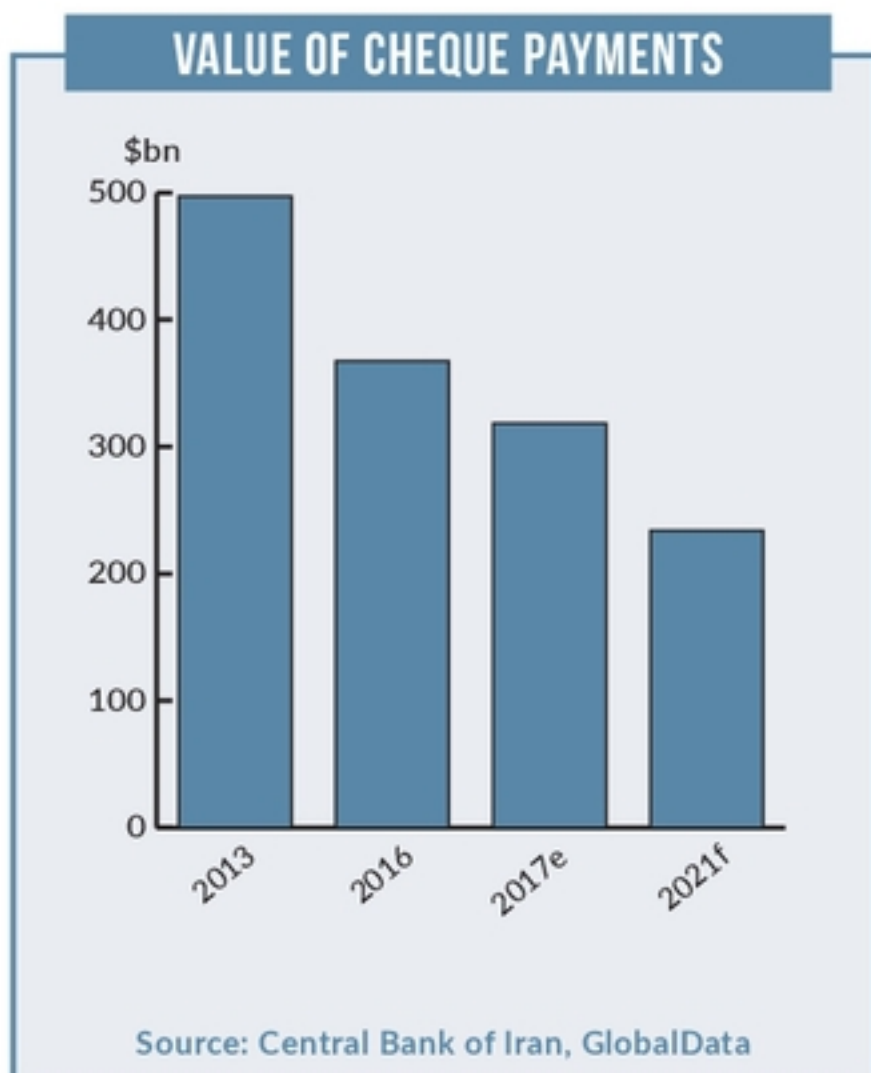
and 2017, primarily supported by government initiatives to encourage electronic payments and reduce consumer dependence on cash.

Consumers are now charged a fee for using cash to pay utility and mobile bills. In addition, many banks refuse to accept bill payments in cash, requiring consumers to use cards, and have installed barcode readers and POS terminals in branches to facilitate this.

Furthermore, many government organisations pay bonuses to employees in the form of gift cards, which can only be used to make purchases and not to withdraw cash.

These initiatives have also led to an overall increase in Iran's banked population. Consequently, the percentage of the population aged 15 or above with a bank account rose from 87.2% in 2013 to 95.8% in 2017.

The gradual adoption of contactless technology, supported by the increased availability of various alternative payment methods, is likely to drive the Iranian



payment card market's growth in the near future.

DEBIT CARDS DOMINATE

Debit cards accounted for 99.5% of the payment card transaction volume, and 99.4% of the transaction value in 2017. Consumer preference for debt-free payments and prudent consumer spending habits have resulted in the dominance of debit cards in terms of both transaction volume and value.

Growth was also supported by government efforts to encourage retailers to accept card-based payments, and banks' promotional activities to encourage retailers to install POS terminals.

Debit cards will continue to lead the Iranian payment card market, supported by the gradual migration of low-value cash payments to payment cards.

PAY-LATER CARD ADOPTION

While debit cards remain the dominant payment card type, consumer adoption and use of pay-later cards is growing at a brisk pace, primarily supported by a number of initiatives launched by the Iranian government.

Targeting low-income individuals, in April 2017 the government introduced a scheme called Yarakart, which enabled banks such as Bank Keshavarzi and Iran Post Bank to issue credit cards for the lower-income sector of the population.

Similarly, in April 2018 the government announced the launch of a new credit card project that will allow banks to offer credit card loans at lower interest rates for purchases of Iranian products.

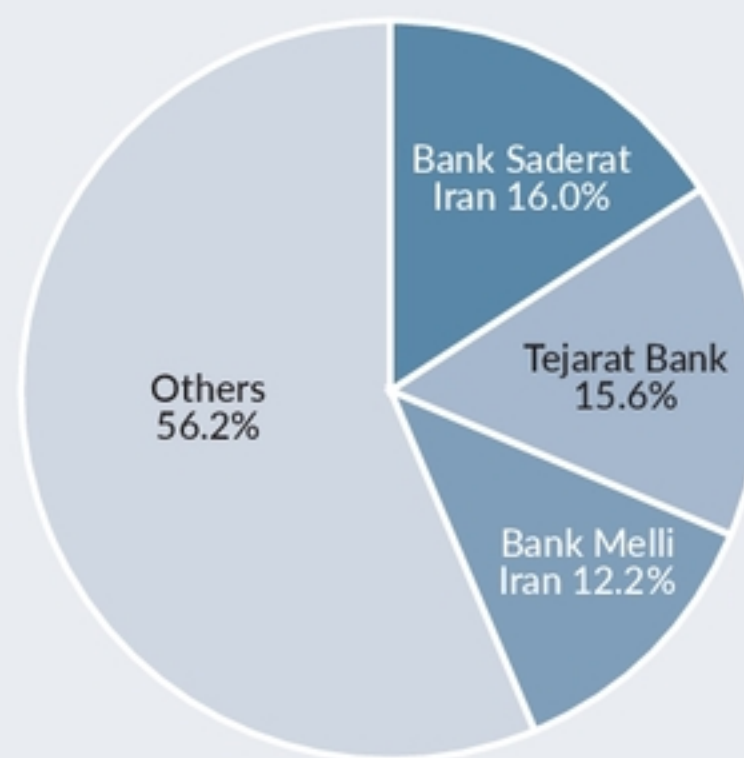
INTERNATIONAL SANCTIONS

The lifting of international sanctions against Iran is expected to encourage more foreign banks to expand operations there.

In 2016, following the implementation of the Joint Comprehensive Plan of Action for the development of Iran's banking system, the Central Bank of the Republic of Iran (CBI) partnered with numerous banks from countries including France, Austria, India, China, South Korea, Japan, Russia and Turkey.

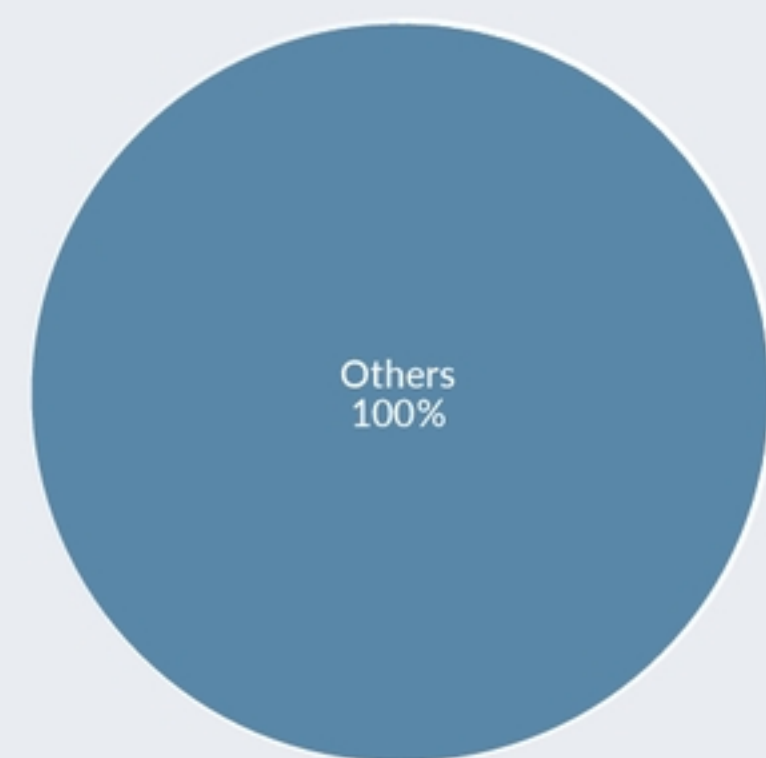
In August 2017, the CBI announced the integration of the local Shetab and Russian Mir card networks, which will allow Iranian

DEBIT CARD SHARES BY ISSUER



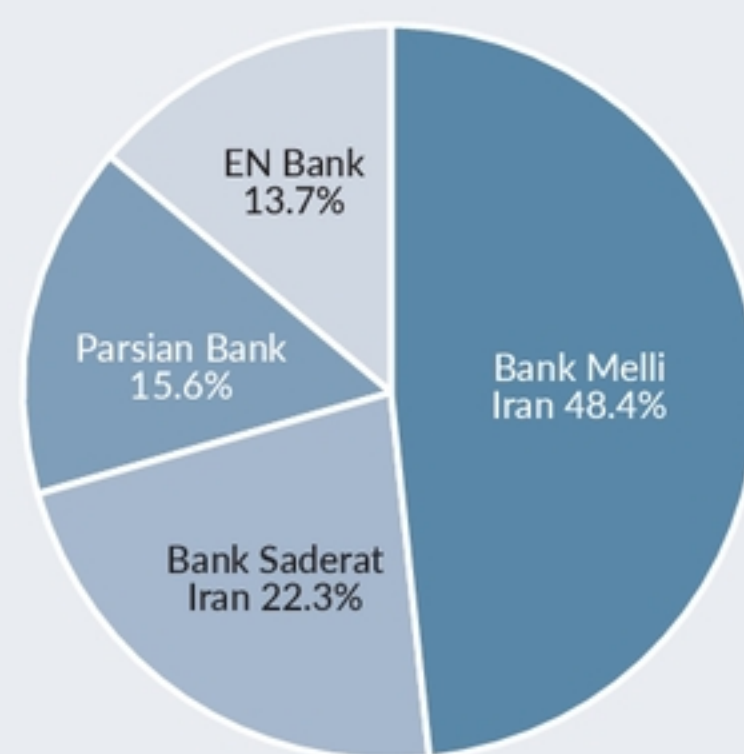
Source: GlobalData

DEBIT CARD SHARES BY SCHEME



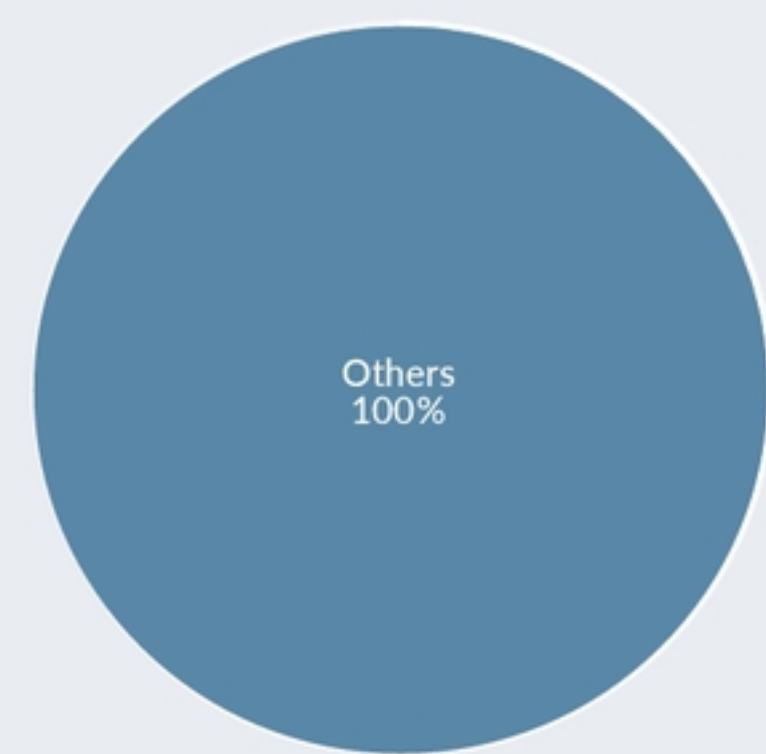
Source: GlobalData

PAY LATER SHARES BY ISSUER



Source: GlobalData

PAY LATER SHARES BY SCHEME



Source: GlobalData

payment cards to be used at Russian ATMs and vice versa.

ROBUST PREPAID GROWTH

There is substantial demand for prepaid gift cards in Iran, in both the retail and corporate markets, with demand particularly high during festival seasons.

All major banks, such as Keshavarzi Bank, EN Bank, Pasargad Bank and Bank Melli Iran, offer gift cards, which can be obtained for retail and corporate customers without an account.

To take advantage of the growing e-commerce market, banks such as Bank Mellat, EN Bank, Bank Pasargad and Parsian Bank offer prepaid cards for online shoppers, encouraging customers to use e-banking services to pay for utility bills and online shopping.

As an example, Bank Mellat offers a prepaid card that can be used for online shopping and to pay utility bills. It features

a three-digit CVV code, and the card is deactivated if the code is entered incorrectly three consecutive times.

CARD ACCEPTANCE AT POS

The number of POS terminals recorded a CAGR of 18.3% between 2013 and 2017, and is anticipated to reach 8.6 million by 2021.

The transaction volume at POS terminals increased significantly from 5.6 billion in 2013 to 16 billion in 2017, at a CAGR of 30.2%, while the transaction value increased from IRR10.6bn (\$294.38bn) in 2013 to \$749.67bn in 2017 at a CAGR of 26.3%.

Contactless POS terminals are also gaining prominence in the country. According to Tehran-based payment solution provider Sadad, the company has installed 650,000 POS terminals in Iran, of which 150,000 are equipped with NFC technology. ■

REAL-TIME PAYMENTS: TAMING THE NEW MONSTER OF FLOW

As the world adopts real-time payments, creating massive volumes of instantaneous transfers in seconds, the challenge for banks has evolved from managing liquidity to managing velocity, writes Standard Chartered CIO *Bhupendra Warathe*

Digitisation is driving the growth and future of real-time payments.

In Singapore, funds transfers between two local accounts can be done almost instantly. Hong Kong, which launched its near-instant payment scheme this month, may see bank-to-bank transfers completed just as quickly.

Such payments have not only created the need for 24/7 funds flows, but also at higher frequencies. As a result, payments and treasury departments can no longer adhere to batch and daily processes, and the need to move to real-time systems is urgent.

While most of the development in fast payments has focused on domestic transfers between individuals with a capped sum, in some jurisdictions participants have included non-bank businesses such as remittance providers and e-commerce players.

With the current pace of implementation, it is a matter of time that cross-border instant payments is fast becoming a reality. Just earlier this year, SWIFT held exploratory talks with banks from the Asia-Pacific region about the development of an Asia-Pacific cross-border real-time payments system based on SWIFT global payment innovation.

Demand for instant liquidity, dynamic FX exposure management, as well as the ability to process real-time cash flow and transaction data, mean banks have begun to deploy the combined strength of distributed ledger technologies, artificial intelligence and application programming interfaces (APIs) to transform into a highly effective, high-performing and value-added banking service for clients.

The speed of real-time payments also makes it vital for banks to perform instant fraud



Bhupendra Warathe, Standard Chartered

and identity checks before the payment is sent. At Standard Chartered, these systems are supported by as many as 12,000 coders and technologists, and they now account for about 15% of the workforce. The numbers also underline the extent to which banking has become a digital business.

SPEED AND AGILITY

As we move forward, speed and agility are two critical factors driving success. In the past, software upgrades took place once every a few months, but with the rapid changes in today's environment, the development of software, upgrades and deployment need to happen at a much faster pace.

Development operations is one way to deploy software into the production environment more quickly. With this approach, testing and deployment processes are fully automated. New code is dropped into production while the system with the previous codes will still function, allowing the end user to continue using the services.

A rapidly changing environment has also caused banks to turn to partnerships to help them adapt quickly. In recent years, the concept of open APIs has become increasingly prominent in our industry. In the next three to five years, we project a massive integration of service providers' platforms, with banks leading the charge.

Open API-led transformations will enable banks to accelerate collaborations with outside organisations and third-party developers. Increased co-created systems will allow banks to redraw the boundaries of the products and services they offer.

With ever-changing consumer needs, agile ways of working can help banks embrace new requirements. Agile software development, an approach based on iterative development that brings together small, cross-functional teams to develop solutions within weeks rather than months, allows a product to go live sooner. At the same time, a project that is not on track could 'fail fast', allowing the team to recalibrate and take a different course quickly.

The prevalence of technology in every aspect of our lives also means that IT cannot be a department that sits on its own in a corporation. As banking becomes a seamless digital process, IT professionals are now integrated with every banking department.

At Standard Chartered, besides having IT professionals across our 60 markets, four Centres of Excellence – two in India, one in Malaysia and one in China – support and provide expertise for our global operations. IT teams are now closely integrated with respective product and client solution teams for agile delivery.

Talent and resources are critical for any strategy. Besides having the best talent, there is also a need to be faster and more scalable. There is a progressive shift to cloud-based infrastructures which can connect with multiple platforms such as those of industry-specific clearing houses, e-commerce platforms, large commercial and government institutions.

Without a doubt, real-time payments are redefining the banking landscape. In the next few years, there will be a multi-fold increase in volumes, with clients expecting 24/7 availability and scalability to handle peaks and troughs.

We foresee intense competition for talent and resources – not just in the banking industry, but also with tech firms and telcos. A survival of the fastest, the organisations that can react to the change the fastest will be the true winners. ■

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