

White Paper

Addressing E-Payment Challenges in Global E-Commerce

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Introduction

Payments have been a critical part of the daily lives of individuals, businesses and governments for over two millennia – from the first coin minted around 600 BC, which steadily replaced barter and exchange, to the rise of the cryptocurrencies that capture headlines today. The history of payments is characterized by constant technological and societal change, as well as by increasing indispensability to economic activity.

Modern technological developments have altered the way consumers interact with financial institutions, disrupting the payments system. The rise of the internet, digitization, shifting consumer preferences and, in some but not all cases, regulatory reform, has accelerated the uptake and use of electronic payments (e-payments).¹ Once dominated by banks, the sector is witnessing both increasing competition from new entrants and the emergence of e-payment methods that involve partnerships among different players, from telecom operators to express delivery companies and retail agents.

The acceleration of e-payments has supported e-commerce and brought significant benefits. For small businesses, the combination of e-payments and other online tools can mean easier access to a much wider customer base throughout a country or region, or across the globe. In turn, this has provided customers with greater convenience and choice. However, while the digital world is theoretically borderless, national and regional boundaries have not gone away. Global e-commerce still faces a range of challenges. Restrictions on the international supply, use and availability of e-payment services are among them.

This white paper aims to inform discussion on e-payment challenges and solutions in the context of global e-commerce.² It provides brief context on the e-payment system, the opportunities the sector presents for small business global e-commerce and the payment-related hurdles faced by players dealing digitally across borders. The paper then surveys some regulatory principles that could ensure accessibility and security for users, efficiency for e-payments processing and proportionate prudential oversight. Given that trade frameworks can address international commercial frictions and support e-payment development, the paper seeks to enhance the understanding of relevant efforts in this area and reflects on what else could be done.

The paper does not prescribe a specific path forward for countries' trade policies. Nor does the paper seek to address broader issues of financial services or e-payments liberalization and regulation beyond the context of cross-border e-commerce. It aims to serve, under the responsibility of the World Economic Forum and following input from stakeholders, as a conversation starter within the context of the [Enabling E-commerce](#) public-private dialogue initiative.

The evolving e-payments system

Individuals and businesses worldwide need to make and receive payments on a daily basis. E-payment services are how transactions involving different types of payment instruments are processed and through which transfers of funds are managed. While the term “e-payments” encompasses a broad range of instruments, their distinctive feature is that the whole transaction is carried out through electronic means.

In mid-20th century, breakthroughs in mainframe computing enabled inter-bank settlement, which gave rise to open-loop payment cards. In the 1960s and 1970s, magnetic stripe technology brought the digitization of the point of sale. By the late 1990s, electronic commerce had become mainstream, creating new opportunities for internet payments. The advent of smartphones and connected devices in the 2010s gave rise to mobile and omni-channel commerce, blurring the boundaries between in-store and online shopping. To keep pace, online marketplaces, bricks and mortar retailers, participants in the sharing economy, and government agencies are all demanding new ways to pay and be paid. Payment technology companies are extending network capabilities to support the long tail of innovation. The retail payments industry is characterized by specialization and collaboration, with many companies working together to deliver a secure and reliable service.

Non-traditional providers are challenging incumbents at every stage of the payments value chain. At the same time, partnerships between incumbents and non-traditional players are proliferating. Some business models aim to disrupt traditional infrastructure, while others overlay new services on top of existing systems.

The next section provides a brief overview of how e-payment services work. It is intended to give a rough sense of the e-payments landscape for those discussing improvements

to the e-commerce enabling environment. Given rapid technological change and the breadth of the system, the section cannot be considered either comprehensive, or time-proof. Further, in the context of creating an e-commerce-enabling environment, too much focus on specific e-payment forms, actors and business operating models may not be particularly useful moving forward. Efforts would instead be well spent on ensuring that cross-border e-payments suppliers can offer services and forge business partnerships on a level playing field with domestic competitors in order to ensure wide consumer and merchant choice.

Participants: The demand and supply sides

The cross-border e-payment environment is dynamic and complex, bringing together many different participants: the end-users of payment services (the payer and the payee), as well as the front-end and back-end payment service suppliers. To understand how it all works, it helps to think of the system as consisting of a demand-side and a supply-side that interact with each other.

The demand-side of this system consists of the end-users of payment services. End-users differ in terms of their size, needs, requirements and capabilities. In the context of cross-border e-commerce, the most important types of transactions in which end-users engage are person-to-business (P2B) and business-to-business (B2B).

- In a P2B transaction, “the payer is an individual and the payee is a business. Important P2B transactions include payments for purchases of retail goods and services from businesses abroad via the internet, payment of bills (e.g. school fees or utilities) directly to a provider abroad, and payments resulting from international tourism or business travel.”³
- In a B2B transaction, the payer and the payee are both businesses. B2B transactions “vary widely and can involve large payments by multinational corporations for raw materials, semi-finished goods and wholesale products, as well as smaller and less frequent payments by small and medium-sized enterprises (SMEs).”⁴

In a cross-border transaction, the payer and payee are typically located in different jurisdictions. These actors require intermediaries as well as many different arrangements and processes to enable the transaction (and the corresponding payment) to be completed. Underlying everything are “the contracts, schemes and legal and regulatory frameworks.”⁵

The supply-side of the cross-border e-payments market can be broken down into front-end and back-end payment service suppliers (PSPs) working with global payment technology networks. The latter are distinguished by the international breadth and depth of their respective acceptance footprints – i.e. where the payment brand/ acceptance mark is readily recognized as an accepted form of payment – typically covering all major markets and regions of the world. Underpinning global payment networks is a myriad of relationships with financial institutions and merchant partners, a commonly understood and observed

set of proprietary rules for participating with the network, and sophisticated data-processing systems.

Front-end PSPs offer services directly to end-users of payment services, such as consumers, merchants and businesses/corporates. Back-end PSPs offer services to banks.⁶ Front-end processing includes taking care of the authorization process and receiving confirmations of incoming payment, while back-end processing includes back-office data processing, hosting of payments-enabled websites and the settlement of funds against approved orders and the remittance of collected funds to the merchant/payee.⁷ In either case, PSPs may operate under their own proprietary brands, or on behalf of clients, and the supply of front-end and back-end services is not mutually exclusive. A distinctive feature of cross-border e-payments is that a payer’s financial institution in one jurisdiction needs to exchange messages and clear and settle payments with a payee’s financial institution in another jurisdiction and often in another currency, which typically calls for a foreign-exchange transaction. These complex transactions are usually facilitated through a single global payment technology network and/or various PSPs operating together.

As we have seen, the landscape of e-payments services has changed tremendously in recent years, creating a multitude of options for global e-commerce. But generally, in a typical e-commerce transaction, the payer usually agrees with the payee which payment instrument to use and initiates the payment via one of the service channels or access points available in the payee’s e-commerce website (at least in P2B transactions). Payment methods used in e-commerce can include account-based payment instruments, such as credit, debit and pre-paid accounts; e-wallets; or bank transfers.

E-payments and e-commerce: The opportunities

E-payments help overcome the complicated and extremely costly process of physically collecting cash payments for a product purchased or sold online. Simply put, e-payments make e-commerce possible and practical.

For example, high use of cash-on-delivery in some countries can lead to more failed deliveries due to the absence of the consumer to pay for the goods, which can add to the labour costs of making repeated last-mile deliveries.⁸ By contrast, cash-on-delivery is used as payment in less than 1% of overall orders on the Indian e-commerce platform Paytm Mall, with many users already connected to the company’s associated e-wallet. Reported wastage on failed deliveries from the platform is negligible.

The internet combined with e-payments has also driven the sale and purchase of new digitized products and services. Nevertheless, problems associated with cross-border payments remain a major barrier. According to one survey, e-services exporters reported issues with international e-payments as the largest bottleneck in the process chain, compared with other elements such as establishing an online business.⁹

E-commerce opportunities can also be boosted by particular innovations in e-payments that have eased or revolutionized access to financial services for the billions of adults who lack them.¹⁰ According to the World Bank, formal banking reaches about 40% of the population in emerging markets, compared with a 90% penetration rate for mobile phones. Providing payment options via mobiles (m-payments) allows easier market access for consumers, and possibly merchants, who would not qualify for bank accounts and would have previously been unable to engage in e-commerce. The rapid spread of m-payments solutions is highlighted in Box 1. M-payments are relatively popular in the Asia-Pacific region, with 53% of connected consumers using mobiles to pay for goods or services at point of sale via apps in 2016. This compares with 33% in North America and 35% in Europe.¹¹ While not all m-payment or mobile wallet options may be tailored for online shopping, and even fewer if any for global e-commerce, these are worth noting as part of broader efforts towards financial inclusion.¹²

A myriad of other e-payment options in emerging and developing countries has also opened e-commerce possibilities – though many currently function only at a national level, or are offered in several markets without the possibility of interconnecting. Box 2 provides a snapshot of e-payment companies with headquarters in developing and emerging economies. For example, across South-East Asia, an AirPay e-wallet offered by Sea Limited operates in Thailand, Vietnam, Indonesia and the Philippines through just under 178,000 registered partner-operated services counters serving as “reverse ATMs” by taking cash deposits. The AirPay e-wallet can be used as an online shopping platform, as well as for making e-payments for everyday products and settling bills, and offers a financial inclusion option for the 60–70% of citizens in these countries without a bank account.

Box 1: Mobile money and m-payment growth

According to the Global System for Mobile Communications (GSMA), there were 690 million mobile money accounts worldwide in 2017 – a 25% increase from 2016. Around 66% of the combined adult population of Kenya, Rwanda, Tanzania and Uganda use mobile money on an active basis.¹³ The M-Pesa service in Kenya – now over a decade old after launching in March 2007 – is among the best-known examples of a pioneering system for transferring money from one phone to another, with local agents providing an entry and exit point for cash. Today, M-Pesa is available in 10 markets, and as of March 2017 was used by 31 million customers, serviced by a network of 330,000 agents, resulting in 6 billion transactions. Many of its clients may not otherwise have benefited from the security and timing savings that come with shifting to electronic payments as opposed to cash. Mobile money payment examples in other regions include Easypaisa in Pakistan launched by Tameer Bank and Telenor Pakistan, Tigo Money in Latin America and Tigo Cash/Tigo Pesa in Africa, both by Millicom, and ventures by Orange, MTN and Airtel in sub-Saharan Africa. PayPal has recently entered into a partnership with M-Pesa, introducing a new service that will allow movement of funds between M-Pesa and PayPal accounts. Qualifying M-Pesa customers in Kenya can link their PayPal accounts to their M-Pesa wallets, allowing them to easily and securely buy goods and services from merchants around the world.¹⁴

Source: World Economic Forum network

The Bank for International Settlements (BIS) Committee on Payments and Market Infrastructures (CPMI) and the World Bank advocate that financial inclusion efforts undertaken from an e-payments angle should target a number of objectives. Ideally, “all individuals and businesses should be able to have access to and use at least one transaction account operated by a regulated PSP to (1) perform most, if not all, of their payment needs, (2) safely store some value and (3) serve as a gateway to other financial services.”¹⁵ Balanced, proportionate and globally minded regulatory approaches to e-payment innovations as part of national payment systems could result in win-win outcomes for financial inclusion and e-commerce. Key questions remain, however, on the extent to which these conditions are already in place and, if not, how best to achieve them.

Box 2: E-payment companies in developing and emerging economies

Africa: 3G Direct Pay, CashU, Cellulant, ConnectAfrica, DirectPay Online, Dusupay, HyperPay, InterSwitch, i-Pay EFT Payment, Kobocoin, KongaPay, M-NAIRA, M-Pesa, MyGate, Nomanini, Paga, PayDunya, PayFast, Paystack, Peach Payments, Remit, SimplePay, SnapScan, VCpay, Veneka, Verifone Mobile Money, VugaPay, Walletec, WeCashUp, WeChat Wallet, Zeepay.

Asia: 2C2P, Alipay, AsiaPay, Econtext Asia, MOLPay, NTT Com Asia, PayEase, PaySec, PayTM, Red Dot Payment, Sea/AirPay, Tenpay.

Latin America: Allpago, AstroPay, Banwire, Boletto Bancario, Braspag, maxiPago, MercadoPago, Pago Facil, PagSeguro.

Middle East: CashU, HyperPay, MEPS, Network International, PayFort.

Note: The list is non-exhaustive.

E-payments and e-commerce: The challenges

The opportunities outlined notwithstanding, e-payments often arise as a challenge facing businesses trying to expand global e-commerce, particularly small businesses.¹⁶ For example, a recent survey of merchants in 15 emerging economies in Latin America, Asia and Africa identified e-payments as a moderate obstacle to e-commerce, and more problematic for small firms.¹⁷ Regardless of whether e-payments are the most cumbersome barriers to global e-commerce, there is a general sense among some stakeholders that more could be done to support an enabling environment.¹⁸ Further, while e-payments are increasingly embedded into consumers’ digitally connected lifestyles, suppliers of payment services face a rising range of regulatory and trade barriers.

In a general regulatory sense, e-payment service suppliers can face issues relating to, among others, ensuring payment safety and reliability;¹⁹ interoperability of bank and non-bank financial service providers; divergence between know your customer (KYC) and anti-money laundering (AML) processes; the difficulty of licensing requirements and

procedures for new types of financial services; outdated technology; underdeveloped and inefficient distribution channels; risk mitigation for infrastructure failures; and inadequate infrastructure – whether related to information communication technology or in terms of power supply. In the case of international bank transfers, isolated payment networks bring delays, limited transparency and high costs that the customer often has to bear. Another major pain point for banks, and some money transfer services, is local currency liquidity and associated foreign exchange risks. On the demand side, cash-on-delivery remains popular in many developing countries often due to lack of trust, apparent safety,²⁰ financial illiteracy, sociocultural factors favouring face-to-face interactions, slow or no internet connections and inadequate product design.²¹

Many e-payment impediments that appear to arise on either the demand- or the supply-side are traceable to outdated or poorly structured regulatory frameworks – such as ill-adapted or poorly written consumer protection regulations; restrictions on the establishment and operation of non-bank payment providers; disproportional KYC regulation; stringent reserve and currency requirements; or skewed playing fields for participants in the payments system. Institutional weaknesses such as poor contract enforcement may also create impediments to the development of a robust payment system.

The ability of regulatory frameworks to navigate change is critical in helping to ensure new commercial solutions are made available for merchants and consumers. For example, while regulators in more than half of mobile money markets have embraced an enabling regulatory framework, a significant number of countries have policies discouraging or complicating the emergence of mobile money services.²² Conversely, 12 of the 14 fastest-growing mobile money services in 2012 were in markets with enabling regulatory frameworks.²³ Ensuring mobile money interoperability with the financial system can be tricky when national payment legacy systems are not yet adapted – although a willingness by institutional financial systems to do so is now growing, encouraged by policies and the desire to find practical solutions to reach more customers. Integrating mobile money into e-commerce platforms can be challenging too from an operational perspective – including lengthy technical integration and the risk of poor customer experience.²⁴

Divergent regulatory requirements, standards and systems between countries translate into costs and hassle for suppliers and consumers. It is possible, however, to build global networks that are tolerant of unique domestic regulation and satisfy consumer needs; indeed, that is a fundamental value offered by the leading global payment technology networks. Issues more squarely within the realm of the trade community arise in relation to regulations requiring domestic processing and ownership (among other requirements) that prohibitively favour local over international suppliers. Other related challenges include country-specific data-flow barriers and data localization rules that can either make it difficult for payment service suppliers to operate within a market or raise the costs of doing so.

Some countries have enacted regulations in the name of prudential oversight that tilt the competitive playing field to favour national over international suppliers of e-payment

services. Regulations that create local monopolies stifle innovation, introduce further inefficiencies and could ultimately result in less secure and reliable payment systems. By contrast, enabling international suppliers to compete on a level playing field may result in more interoperable and efficient options for businesses and consumers. In such an environment, suppliers must compete on price and can also reduce operating costs through global economies of scale. This can also encourage e-payment suppliers to deploy advanced cybersecurity and anti-fraud systems in order to win over consumer trust.

From a merchant's perspective, although global e-commerce offers the opportunity to sell in multiple countries, requirements to use a specific payment method in a country can discourage market entry. In other cases, a foreign merchant selling in a country may not be able to offer a full array of local payment options, and may either be compelled to or prohibited from partnering with domestic payment gateways. Related merchant frustrations include policy prohibitions on the use of credit cards for online transactions; preventions on the use of credit or debit cards outside of a country; requirements to use banks only for settling international payments; or obligations to carry out transactions in the local currency.²⁵

From a small business standpoint, according to an International Trade Centre (ITC) survey, 23% of 2,200 micro, small and medium-sized enterprise respondents engaging in e-commerce in 100-plus countries identified inadequate “links between third-party e-payment service providers and local banks”²⁶ as a top e-payment obstacle. A greater number of companies in African countries signalled this concern (28%) compared with those in developed countries (16%). Foreign exchange controls featured as the next highest barrier to international e-payments (20%), with some respondents also noting the cost and risk of currency exchange, as well as difficulties in processing wire transfers and accepting foreign credit cards. Around 18% of respondents identified limited in-country availability of international e-payment solutions, with more frequency in developing countries (20%) than in developed ones (14%). If regulations prohibit or make it excessively costly for an international e-payment solution to offer a service in a given market, small e-retailers with global customers will need to rely on interbank cash transfers.²⁷

From a regional emerging economy perspective, cross-border bank payments among the 10 member states of the Association of Southeast Asian Nations (ASEAN)²⁸ remain highly complex due to currency conversion costs, volatile exchange rates, significant variations in internet speeds and the absence of basic payments infrastructure systems in some countries, as well as the lack of a common messaging standard.²⁹ All of these factors contribute to higher costs for e-payment suppliers. They also illustrate the complex hurdles faced in trying to establish an efficient and interoperable payment system at the regional level. Regulatory debates on how to manage bank-led versus non-bank digital payment service providers are ongoing across ASEAN – with payment integration efforts to date focused on the former.

In Africa, despite major increases in phone use with associated m-payment potential, cash-on-delivery is the preferred payment method, used in just under half of all

e-transactions by value.³⁰ Top barriers for e-payment uptake include poor infrastructure – particularly in terms of internet and telecommunications – as well as financial illiteracy. Issues also exist around withdrawal from international payment service suppliers – for example, payments cannot be received or withdrawn from PayPal in a number of African countries.³¹ A range of combined regulatory and operational issues can make providing cost-effective e-payment services difficult, as can limitations on the type of services e-payment suppliers may provide or partnerships that can be established.

In Latin America, e-payment solutions also tend to be highly localized due to cross-border regulatory friction that in turn affects cross-border e-commerce. Although some countries are implementing regulatory schemes relevant for e-payments, these can differ – with some adopting a licensing approach and others not. No significant regional initiative exists to coordinate e-payment regulatory approaches.³² Volatile exchange rates, as elsewhere, also complicate running a pan-regional business and navigating payment options.

E-payment regulatory principles

For many of the reasons outlined above, some stakeholders wishing to improve the global e-commerce enabling environment have raised questions on international e-payment supply, use or availability. Many are also keen to create a healthy e-payments system that drives financial inclusion.

Financial services are among the most heavily regulated areas in any advanced economy. Regulatory goals generally include preserving confidence in the financial system, ensuring its integrity and stability, protecting users – whether consumers, business or investors – and promoting efficiency through competition. Policies may be put in place to ensure minimal risk of loss, prevent systemic meltdowns, address illicit or fraudulent activities, deliver compensation to users in the event of a problem, and encourage enough choice to support various types of economic activity.

The international supply of financial services, including e-payments, can improve the quality and quantity of consumer choices and the overall e-commerce experience for buyers and sellers. For financial regulators, these activities need to be balanced with overall system management. Regulators can have concerns about how to effectively supervise financial services suppliers physically located beyond their borders. However, just as technology enables the cross-border supply of financial services, financial innovators are developing digital solutions to more easily facilitate regulatory compliance across multiple jurisdictions. Indeed, recent growth in the so-called “reg-tech” sector suggests that technology and market-driven tools should be essential elements for balanced and effective regulation of digital services.³³

Open and competitive markets for e-payments fundamentally enhance e-commerce by promoting investment and innovation in a wider range of e-payment solutions, which in turn supports greater consumer choice and expands financial inclusion. Literature over the past few years has

identified some regulatory principles that could support the development of safe, inclusive, global and competitive e-payment systems. The following short list is intended as a starting point for further deliberations on improving the enabling environment for global e-payments and e-commerce. It would need to be further developed and tailored in a trade policy context.

a) Sound legal and regulatory frameworks. E-payment regulatory frameworks should provide clear definitions of the roles and responsibilities of the various parties involved in the payment system, including which laws and regulations apply to each of these, and how any relevant supervisory authority may conduct appropriate oversight. Overall financial regulatory frameworks should also look to implement e-payment-related rules in a coherent manner. In some instances, particularly around e-payment service innovations, different regulatory authorities may require specific information or impose specific processes, but may not be collaborating with each other, leading to further fragmentation.

b) Balanced oversight and supervision. Oversight and supervision of payment systems are crucial for maintaining their integrity and stability. One of the main objectives of oversight and supervision is the reduction of systemic risk, which could result from legal, liquidity, credit, operational, settlement and/or reputational risk in the payment system. To the greatest extent possible, oversight should proceed on a collaborative basis with industry to ensure policy and regulations reflect actual operating conditions and the overall business environment. Oversight should also take into account the possibility that unnecessarily broad regulations could have unintended consequences that may inhibit investment and innovation in e-payment systems.

c) Technology-neutral regulatory approaches. As far as possible, regulatory frameworks should be neutral with regard to the payment technology, and should focus on the functions of the service being offered. A functional approach allows banks and non-bank PSPs to compete in the different market segments and to establish all sorts of partnerships for the supply of e-payment services. The ability of frameworks to stay up to date with technological developments to ensure balanced outcomes is also important.

d) Encouraging innovation. In the face of technological change, it has become increasingly common practice to enable innovation by creating regulatory safe zones. These “regulatory sandboxes” are controlled environments in which certain requirements are temporarily suspended or additional support measures are provided to allow experimentation with new products, most likely with a limited number of consumers. The approach enables technology firms and financial institutions to collaborate in a less regulated, closed marketplace, with the end result being more effective technology that benefits both business and consumers. It also enables regulators to better understand the benefits and impacts of a potential technology or payment method being applied more widely.

e) Wide access to the payment system. The regulatory framework should be flexible enough to accommodate innovative payment services and to allow increased access by new participants, such as non-bank PSPs, and other niche service suppliers. Policy-makers may also want to think

about the degree to which licensing requirements for the provision of e-payment services are transparent, objective and accessible – including by suppliers not based within the territory.

f) Risk-based policies and regulations. Policies and regulations dealing with issues such as KYC, anti-money laundering/combating the financing of terrorism (AML/CFT), preventing fraud and cybercrime, currency and reserve requirements, and data protection should all be applied in a way that is commensurate with associated risk – regardless of who is supplying that service. For example, a payment service supplier that processes transactions and conducts transfers is not performing the same functions as a financial services entity that makes loans from customer deposits. An active and engaged approach from regulators around e-payment innovations can lead to regulatory frameworks that are sound and that also drive financial inclusion. Increasingly complex regulation and compliance procedures can result in e-payment or other financial service suppliers “de-risking” – which has a clear knock-on impact on the poorest parts of the population. Further, from a cross-border perspective, efforts could be made to standardize risk-based models. A group of countries could, for example, align on the risk threshold below which simplified due diligence KYC measures would apply.

Underlying infrastructure

Appropriate payment system infrastructure is a vital aspect underpinning these regulatory principles. A World Bank Group and CPMI report on the Payment Aspects of Financial Inclusion (PAFI) identifies seven categories of infrastructure necessary for an inclusive national payment system and for the deployment of modern payment instruments. These include data-sharing platforms; identification mechanisms; automated clearing houses; interbank payment card processing platforms; and large-value interbank gross settlement systems – all supported by information communication technology (ICT) infrastructure and a reliable electric grid. ID systems reliant on new technologies – such as the Aadhaar digital identity scheme in India and elsewhere – can help e-payment suppliers reduce KYC and due diligence costs.³⁴ Additional thinking and innovation around new ID systems could help support financial inclusion.

The PAFI report outlines four additional characteristics of the infrastructure that are essential for functional payment systems able to deliver financial inclusion. These include interoperability (involving the interaction of different payment products and the payments system); accessibility; efficiency and standardization; and safety and reliability. In addition, public policies and programmes can be – and have in many countries already been – put in place to encourage the use of e-payments as a way of overcoming cash preferences and reducing administrative costs, such as paying social and welfare benefits, salaries and pensions electronically.³⁵

E-payments and trade policy

Working out a trade policy response to e-payment-related issues specifically requires digging into general services trade concepts, experiences from recent years and developments in regional trade negotiations. This section seeks to familiarize readers with the concepts and principles contained in trade agreements that relate to electronic payment services.

The WTO’s (World Trade Organization) architecture provides the basic foundation for all bilateral and regional trade deals. Where efforts focus on regulatory best practices for an open and competitive e-payments environment, rather than market access, these could eventually be taken up on a country-by-country basis. It would nonetheless be important to achieve a degree of consensus among stakeholders on what constitutes “best practice”. A common framework of regulatory principles – with those listed above serving as a non-prescriptive example to frame this thinking – agreed among several nations could help to underline any applicable services market access commitments made.

Unpacking trade in services

The WTO General Agreement on Trade in Services (GATS) provides the underlying framework for government commitments on trade in services. Understanding how the international supply of e-payments fits under its auspices requires familiarity with the GATS framework (including its Annex on Financial Services), as well as the members’ schedules of specific commitments and lists of exemptions to the most-favoured nation (MFN) principle.

GATS sectoral coverage is broad: all services are included, except for the so-called “services supplied in the exercise of governmental authority”³⁶ and most services in the air transport sector. Trade in services is defined by the GATS as the supply of services through four modes: cross-border (mode 1), consumption abroad (mode 2), commercial presence, including the supply of services to local consumers by a foreign provider investing in a local presence (mode 3) and temporary movement of natural persons (mode 4).

In turn, “supply” of services is defined as including the “production, distribution, marketing, sale and delivery of a service”.³⁷ The definition of trade in services as “supply” of services has implications for policies affecting such supply, which would then be subject to GATS obligations not only at the time of delivery but throughout the supply process. The approach is relevant, for example, to regulations governing cross-border data flows as discussed in more detail below.

The GATS provides for *general obligations* – which apply to all WTO members – and *specific commitment* where members agree to grant market access and national treatment in explicitly identified sectors. The MFN obligation sits in the former category. It requires WTO members to extend the best treatment granted to a service and service supplier from one country to like services and suppliers of another member. WTO members must apply this principle in relation to policies governing payment services and payment

services suppliers. Some exceptions are possible, using an exemption to the MFN principle, but these have not yet been registered with regard to payment services. Preferences granted in an economic integration agreement would equally not fall under this rule.³⁸

On the second category, there is no explicit obligation in the GATS to liberalize trade in any specific sector. While usually done in the context of negotiations, individual WTO members decide – and ultimately remain free to decide – which sectors will be subject to specific commitments, in other words, to market access and national treatment disciplines.³⁹ Market access levels and national treatment obligations across different services sectors are indicated in national schedules of specific commitments. For each service included commitments on market access and national treatment must be identified in relation to each of the four modes of supply.⁴⁰

It should be noted that liberalization in the GATS sense – the granting of market access and national treatment – is not synonymous with deregulation of service activities. In fact, even against the backdrop of comparable commitments on market access and national treatment, different members may operate completely different regulatory frameworks, ranging from those providing completely unregulated activities to those applying stringent regulatory requirements.⁴¹ By virtue of the so-called additional commitments,⁴² WTO members may collaborate around other measures. Unlike market access and national treatment obligations, which imply the absence of “limitations”, the additional commitments represent “undertakings” that members may make, as a way of streamlining access into and fostering competition within their markets.

A few WTO members have made additional commitments on financial services – including Albania, Brazil, China, Chinese Taipei, the EU, Japan and the US. Of potential relevance to e-payment operations by analogy, the EU committed to consider complete applications for licences to conduct different types of services, such as direct insurance underwriting, or banking and investment services within specific deadlines (e.g. six months, 12 months). See below the discussion on potential additional commitments applicable to e-payments.

Applying the GATS to e-payment services

What's being supplied

The GATS, and indeed all free trade agreements covering financial services, can apply to measures affecting trade in payment services. The GATS Annex on Financial Services defines payment services as “all payment and money transmission services, including credit, charge and debit cards, travellers cheques and bankers drafts”.⁴³ The scope of these services was addressed by a dispute settlement panel in the case of *China-Electronic Payment Services* (see Box 3), which defined the sector broadly. According to the panel, “payment and money transmission services include those that ‘manage’, ‘facilitate’, or ‘enable’ the act of paying or transmitting money”.⁴⁴ Furthermore, the panel concluded

that the use of the term “all” “manifests an intention to cover comprehensively the entire spectrum of payment and money transmission service ...”.⁴⁵ More particularly, the panel argued, the term “all” indicates “an intention to include all services essential for payment and money transmission, all means of payment and money transmission (e.g. paper-based, card-based and others), and all associated business models (e.g. four-party, three-party and any variations thereof).”⁴⁶

Who's supplying

The GATS Annex on Financial Services defines a “financial service supplier” as “any natural or juridical person of a member wishing to supply or supplying financial services”.⁴⁷ A “financial service” in turn is defined as “any service of a financial nature offered by a financial service supplier of a member”.⁴⁸ The Annex clarifies that “financial services” comprises a list of activities, which includes “all payment and money transmission services” referenced above.

The use of the expression “wishing to supply” financial services indicates that the rights and privileges which flow from the agreement are available to natural or juridical persons not yet offering financial services in the territory of the prospective host member or even in the territory of the member where they reside. In other words, a company looking to expand into e-payment offerings could be considered as covered, if a corresponding commitment existed.

The combination of both definitions – financial service and financial service supplier – suggests that it is the nature of the service that matters and that controls its definition and classification. The nature of the supplier is irrelevant – it may be a bank or a non-bank e-payment service provider – but rather it is the “financial nature” of the service being supplied that is important – in this case, payment or money transmission services. In practice, different types of entities supply financial services and may therefore qualify as “financial service suppliers” under the GATS.

Supplying where and how

WTO modes of services supply “are essentially defined on the basis of the origin of the service supplier and consumer, and the degree and type of territorial presence which they have at the moment the service is delivered”.⁴⁹ When considered through the GATS lens, the typical business model for trade in electronic payment services concerns mode 1 (because the payment services are supplied “from the territory of one member into the territory of any other member”)⁵⁰ and mode 3 (because the payment services are supplied “by a service supplier of one member, through commercial presence in the territory of any other member”),⁵¹ often in combination.

The supply of payment services often requires the cross-border flow of customer and business data, not only in the case of settling cross-border transactions – a client in one country purchasing a product from a merchant in another country – but also in the case of purely domestic transactions – when both the merchant and the consumer are located in the same market but the processing of the transaction (or parts of it) are carried out elsewhere.

The WTO dispute settlement system has established that cross-border supply does not require the supplier's presence or operation in the destination market. In *Mexico-Telecoms*, the panel addressed whether the cross-border supply of services between two members under mode 1 occurs only if the supplier itself operates, or is present, on the other side of the border, or if cross-border supply can occur also if a supplier simply "hands off" traffic at the destination country's border. The panel concluded in that regard that the services "handed off" at the Mexican border by US telecom suppliers without these operating, or being present in some way, in Mexico, are services which "are supplied cross-border within the meaning of Article I:2(a) of the GATS".⁵²

The lesson from this case that can be applied to the supply of payment services through electronic means is that the supply of services "from the territory of one member into the territory of any other member"⁵³ without any operation or presence in the destination country constitutes the supply of services under mode 1, which is protected if commitments have been made. So where a member has scheduled full market access and national treatment commitments for the supply of payment services under mode 1, it may not make that cross-border supply contingent upon the presence or the operation of the foreign supplier within its territory, which may be of potential relevance to certain data localization requirements.

Technology neutrality

An important element of the GATS framework for anything digital-related is the principle of technology neutrality. In other words, the agreement makes no distinction between the different technological means by which a service may be delivered. The principle has been clarified through dispute settlement. The panel in the *US-Gambling* case – a dispute brought by Antigua and Barbuda on US commitments on gambling services under mode 1 – observed that the mode 1 definition does not contain any indication of the means that can be used to supply services across the border. For the panel, this meant that the GATS does not limit the various technologically possible means of delivery.⁵⁴ The panel ultimately concluded that "a market access commitment for mode 1 implies the right for other members' suppliers to supply a service through all means of delivery, whether by mail, telephone, Internet etc., unless otherwise specified in a member's Schedule".⁵⁵ The panel further noted that "this is in line with the principle of 'technological neutrality', which seems to be largely shared among WTO members".⁵⁶

Box 3: The China – Electronic Payment Services case

A WTO dispute settlement panel determined in 2012, in a case brought by the US, that China maintained a number of measures that treated foreign electronic payment services (EPS) suppliers less favourably than the domestic EPS provider, China Union Pay (CUP). The contested measures included: 1) requirements that establish CUP as the sole supplier of EPS for all domestic Renminbi (RMB) payment card transactions; 2) requirements that payment cards issued by banks in China bear the "Yin Lian"/"UnionPay" logo (the logo of CUP's network); 3) requirements that all ATMs, merchant card processing equipment and point-of-sale terminals in China be capable of accepting payment cards bearing the "Yin Lian"/"UnionPay" logo; 4) requirements that

acquiring institutions post the "Yin Lian"/"UnionPay" logo and be capable of accepting all payment cards bearing the "Yin Lian"/"UnionPay" logo; 5) prohibitions on the use of non-CUP cards for inter-bank and cross-region payment card transactions; and 6) establishment of CUP as the sole supplier of EPS for RMB transactions involving payment cards issued in China and used in Hong Kong or Macao and payment cards issued in Hong Kong or Macao that are used in China.⁵⁷

The US argued that China had undertaken market access and national treatment commitments under the GATS on "[a]ll payment and money transmission services, including credit, charge, and debit cards ...",⁵⁸ which allowed the supply of EPS from either an entity located outside of China (cross-border supply or mode 1 in the GATS jargon) or through an entity located in China (commercial presence or mode 3).

The panel agreed with the US that EPS for payment card transactions fell within "all payment and money transmission services" and this was a sector in which China had indeed made specific trade opening commitments. The panel rejected, however, the US allegation that China's schedule includes a market access commitment to allow the supply of EPS into China by foreign EPS suppliers not established in Chinese territory (cross-border supply). It did nonetheless find that China's had made a market access commitment that allows foreign EPS suppliers to supply their services through commercial presence (mode 3), as long as the supplier meets certain qualifications requirements related to local currency business. It also concluded that China's commitments contain an unqualified national treatment commitment for the benefit of cross-border suppliers of EPS (mode 1) as well as a national treatment commitment under mode 3 (commercial presence) that is subject to certain qualifications requirements related to local currency business.⁵⁹

Due to lack of evidence, the panel also rejected the US argument that China maintained CUP as an across-the-board monopoly supplier for the processing of all domestic RMB payment card transactions, in breach of its market access obligations. The panel did agree with the US that, contrary to its commitments, China granted CUP a monopoly for the clearing of RMB-denominated payment card transactions involving RMB payment cards issued in China and used in Hong Kong or Macao, or RMB payment cards issued in Hong Kong or Macao and used in China.

The panel backed the US around other Chinese requirements, namely the requirements that all bank cards issued in China must bear the "Yin Lian"/"UnionPay" logo (i.e. the logo of CUP's network) and be interoperable with that network; that all terminal equipment in China must be capable of accepting "Yin Lian"/"UnionPay" logo cards; and that acquiring institutions post the "Yin Lian"/"UnionPay" logo and be capable of accepting all payment cards bearing the "Yin Lian"/"UnionPay" logo) were inconsistent with China's national treatment obligations on the supply of payment services through both modes 1 and 3. The requirements modified the conditions of competition in favour of CUP and to the detriment of foreign EPS suppliers.

Surveying trade policy developments

WTO members' commitments to liberalize or address impediments to the supply of payments and money transmission services – not to mention e-payments specifically – are somewhat patchy. Often, this is due to a lack of focus on the sector, which has nonetheless managed to become highly globalized. It may also be linked to the inability of trade policy-makers to distinguish between, on the one hand, large-value wholesale clearing and settlement payment services that present obvious systemic risks and, on the other, retail e-payment services, where the systemic or financial stability risks involved are less pronounced. Policy differences between the trade and financial regulatory communities no doubt compound the knowledge gap.

Several preferential negotiations have tried to establish additional disciplines related to some forms of e-payment services – but these too may not yet be comprehensive enough in the context of a rapidly evolving digital environment, nor suited to the kinds of innovations aimed at meeting user needs, either from the e-commerce or financial inclusion perspective. Further deliberations may make for more targeted interventions moving forward.

Global commitments

At the global level, in the GATS, only 53 WTO members⁶⁰ have fully or partially liberalized the cross-border supply of “payment and money transmission services” (22 schedules have full market access commitments and 31 have partial market access commitments on payment and money transmission services). The situation is not much different with regard to mode 3: only 22 schedules of commitments allow the supply of payment and money transmission services through commercial presence without market access limitations, while 77 schedules also allow the supply of those services by established foreign operators, albeit with some limitations. In total, 32% and 60% of WTO members have full or partial market access commitments on mode 1 and mode 3, respectively.

CPTPP liberalization

For its part, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) financial services chapter makes a distinction between cross-border financial service suppliers of parties (i.e. a business supplying a financial service in one party that seeks to or supplies across a border) and financial institutions (i.e. any financial intermediary or other enterprise that is authorized to do business and is regulated or supervised as a financial institution under the law of the party where it is located). A comprehensive definition of financial services, similar to that found in the GATS, is provided.⁶¹ E-payment services may technically be provided either by a cross-border financial services supplier or by a financial institution. The CPTPP adopts a “positive list” of financial services that may be freely supplied on a cross-border basis (Annex 11-A), which does not include payment services, and a “negative list” of services that may be supplied by financial institutions – the latter meaning that parties' markets are fully open except for the specific reservations that each participant may have filed.⁶²

Going beyond the positive list in its Annex 11-A, the CPTPP financial services chapter includes another Annex – Annex 11-B – with specific commitments on electronic payment card services, requiring parties to allow the cross-border supply into their territories of “electronic payment services for payment card transactions”. In theory, this commitment could limit the imposition of regulatory requirements to locate processing infrastructure on-soil in each country, although bearing in mind an exception for personal data protection.⁶³

Further, parties may condition cross-border supply on the fulfilment of one or more of the following requirements: a) registering with or being authorized by relevant authorities; b) being a supplier who supplies such services in the territory of the other party; or c) designating an agent or maintaining a representative or sales office in the party's territory. The text also does not guarantee non-discriminatory treatment – meaning that countries can provide preferential treatment to local e-payment service providers as long as foreign networks also have a right to supply.

It is equally important to note the limited scope of these commitments in the context of the broad e-payments system. The definition of “electronic payment services for card transactions” is fairly restrictive. It focuses on the liberalization of services provided by payment network services that use proprietary networks to process payment transactions – i.e. credit cards – and on a business-to-business basis. The chapter further provides for each party's own definition of payment cards, with some requiring the use of a physical card and others including electronic services.

Certain countries have also reserved the right to take specific regulatory measures. For example, Chile and Mexico may require e-payment card suppliers to provide services only to entities that are regulated participants in the payment network and are contractually responsible for such services. Malaysia states that its commitments do not extend at all in this area. A series of bilateral side letters between New Zealand and Chile, Malaysia and Vietnam clarify the status of existing domestic regulatory requirements, some of which may authorize non-conforming measures that appear to discriminate against foreign e-payment suppliers and include local presence requirements.

The financial services chapter does, however, have some provisions that may smooth costs related to regulatory divergences – in a general sense but equally for e-payment operations. These include the obligation to extend the possibility to seek recognition for prudential measures where this has been given to a party or non-party; commitments to regulatory transparency; and the establishment of a committee on financial services for continued dialogue between the parties. A provision on “new financial services” requires parties to allow financial institutions of other parties to supply new services as would their own. Although only applicable to “financial institutions”, this is an interesting development and merits exploration more broadly in the context of technological change.⁶⁴ It could be relevant for “regulatory sandbox” initiatives that encourage innovation.

Cross-border data flows

Some of the most important challenges faced by e-payment suppliers relate to data transfer or data localization requirements. Various GATS commitments and obligations may be relevant. For example, a measure that bans the cross-border electronic transmission of data that constitutes the service being supplied in a committed service (i.e. provision and transfer of financial information and financial data processing as referred to in subparagraph 5(a)(xv) of the Annex on Financial Services)⁶⁵ would be inconsistent with relevant market access commitments.

Similarly, it has been argued that some forms of local data processing or storage requirements that adversely affect the conditions of competition faced by foreign services and service suppliers (providing them with less favourable treatment than that enjoyed by similar domestic services and service suppliers) would infringe relevant national treatment commitments.⁶⁶

Provisions in the GATS Annex on Telecommunications are also relevant. These require members to ensure that foreign-service suppliers are allowed to use basic telecommunications for the movement of digitized information both within and across borders, including for intra-corporate communications. WTO members may, nonetheless, take measures necessary to protect the security and confidentiality of messages, so long as these are not arbitrary, unjustifiably discriminatory or used to conceal trade restrictions.⁶⁷ Notably, the provision recognizes information flows not only as essential to transmitting services, but also as a means of conducting business operations.⁶⁸

Some WTO members have assumed obligations regarding the transfer and processing of information in relation to financial services on the basis of the Understanding on Commitments in Financial Services.⁶⁹ These WTO members pledge not to “take measures that prevent transfers of information or the processing of financial information, including transfers of data by electronic means, or that, subject to importation rules consistent with international agreements, proven transfers of equipment, where such transfers of information, processing of financial information or transfers of equipment are necessary for the conduct of the ordinary business of a financial service supplier”.⁷⁰ The provision does protect the right of parties to adopt measures to protect personal data, personal privacy and the confidentiality of individual records and accounts so long as such right is not used to circumvent the provisions of the GATS.

A handful of FTAs have addressed the data-flow question – though most do so through a soft approach emphasizing regulatory cooperation, such as the Canada-South Korea and Costa Rica-Colombia FTAs. The Pacific Alliance Additional Protocol commits to consider further negotiations related to the cross-border flow of information in the future.

The CPTPP’s e-commerce chapter includes a cross-border data-flow provision and a groundbreaking prohibition of forced data localization as a condition for conducting business in a country. Parties “shall allow the cross-border transfer of information by electronic means,

including personal information, when this activity is for the conduct of the business of a covered person”,⁷¹ and are forbidden from requiring covered persons to use or locate computing facilities in their territories as a condition for conducting business. However, the chapter and so the specific provisions apply only to “covered persons”, which do not include “financial institutions” and “cross-border financial service suppliers”, thereby in all likelihood limiting its relevance for e-payment service suppliers. A revised Australia-Singapore FTA and the Japan-Mongolia Economic Partnership Agreement (EPA) equally sought to ban governments from requiring companies to use or locate computing facilities in their territories as a condition for doing business. Again, the prohibition applies only to “covered persons”, i.e. not to financial institutions.

The CPTPP financial services chapter meanwhile, which applies to the supply of payment services among parties, contains an explicit obligation to allow financial institutions of the other parties to “transfer information in electronic or other form, into and out of its territory, for data processing if such processing is required in the institution’s ordinary course of business”.⁷² The provision does protect the right of parties to adopt measures to (a) protect personal data, personal privacy and the confidentiality of individual records and accounts; or (b) require a financial institution to obtain prior authorization from the relevant regulator to designate a particular enterprise as a recipient of such information, based on prudential considerations, provided that this right is not used as a means of avoiding the Party’s commitments or obligations under this section.⁷³ However, contrary to the chapter on e-commerce, this chapter does not include a prohibition of local data storage/processing requirements.

In relation to e-payments, careful attention must once again be paid to the issues of to whom those disciplines apply (e.g. “financial institutions”) and how those terms are defined. The CPTPP financial services chapter defines financial institutions as “any financial intermediary or other enterprise that is authorised to do business and regulated or supervised as a financial institution under the law of the Party in whose territory it is located”.⁷⁴ The definition leaves it up to each party’s laws to determine what constitutes a financial institution. In many jurisdictions, an e-payment service supplier would not qualify as a “financial institution”. The distinction affects the scope of these legal disciplines as far as electronic payments are concerned. The issue does not necessarily arise in the GATS, which, as has already been explained, does not refer to financial institutions, but to “financial service supplier”, which is more broadly and neutrally defined.

Other regional models

A few FTAs include other relatively soft language designed to promote cooperation between parties on e-payment systems. For example, both the FTA between Hong Kong and New Zealand and that between Chinese Taipei and New Zealand state that the parties agree to cooperate in promoting the interoperability of infrastructure to promote the use of e-commerce, such as secure electronic payment systems. In some instances, e-payments simply emerge as one of several consumer-related issues concerning e-commerce, which the parties agree they will draw to the

attention of e-commerce providers. Australia's FTAs with both Chile and China include language that each party shall encourage business to adopt fair practices which ensure consumers will be provided with easy-to-use secure payment mechanisms and information on the level of security such mechanisms afford.

Financial services integration has been pursued in some regional integration contexts. These have not targeted e-payments in a meaningful way yet, but could provide a foothold for further e-payments discussion. ASEAN nations committed to a Roadmap for Monetary and Financial Integration in 2003. Financial services liberalization has subsequently been carried out through rounds under ASEAN Framework Agreement on Services (AFAS) negotiations. These take into account commitments granted in ASEAN-plus FTAs.⁷⁵ The current Singapore ASEAN chairmanship aims to conclude a basic e-commerce agreement in 2018 – considering e-payment-related measures in this context could be useful. The Pacific Alliance Additional Protocol includes a chapter on financial services and may be another area on which to build. The newly launched African Continental Free Trade Area (AfCFTA) commits to further negotiating rounds on services trade liberalization.⁷⁶

What next?

The prospect of both scaling e-commerce opportunities and driving financial inclusion makes a compelling case for examining the steps towards an enabling environment for e-payments. Efforts to date have been variable and knowledge siloes exist between policy communities. The technical details of trade frameworks may prove too forbidding or complex for many e-payment actors – particularly those involved on the operational side. It may be unclear how trade frameworks can address any of the e-payment supply and demand challenges faced. The landscape of global trade talks also remains highly uncertain and complex.

That said, in an ideal world, trade policy could contribute to an international e-payment-enabling environment by (1) ensuring a diversity of services through liberalization, (2) lending credibility to domestic reform processes and (3) promoting a predictable business environment – including greater coherence on definitions of financial and non-financial institutions and commitments around the treatment of data. The extent to which policies allow the deployment of new technologies and new suppliers, improve the domestic regulatory framework and encourage the necessary infrastructure development may bring benefits for both home-grown and foreign payment services suppliers alike. Doing so would require examining market access commitments for e-payment services, as well as market access for underpinning ICT and other infrastructure services, complemented by common principles on e-payments-friendly regulatory frameworks – including eventually rules on cross-border data flows, transparency of regulation, licensing of suppliers, etc.

Concerning e-payment-related market entry and discriminatory regulations, such as rules that create local monopolies, the GATS could be used. There is no technical

impediment preventing WTO members from deploying the GATS to deliver similar, or even better, outcomes than those achieved in the CPTPP. WTO members interested in encouraging a competitive e-payments environment could improve their specific commitments and initiate dialogue with stakeholders – both domestic and international – to identify apparent market access barriers and discriminatory measures with a view to addressing these or affirming current coverage where appropriate.

More creative thinking may be needed to effectively target regulatory challenges. The goal of regulatory cooperation on e-payments should not necessarily be harmonization, but rather enhancing trust and confidence around global e-commerce, as well as promoting the ease of doing business. It has been done before within the GATS context through the negotiated pro-competitive regulatory principles contained in the *Basic Telecommunications Reference Paper*⁷⁷ that was innovative in this regard.⁷⁸ While the Reference Paper additional obligations were primarily designed to prevent the erosion of market access commitments, these in turn helped promote and consolidate domestic telecommunications governance processes widely considered “best practice” from a competitiveness standpoint by both industry and governments. The approach used – drafting of a common text while allowing governments the flexibility to draw selectively from it – might serve as a model for e-payment services.⁷⁹

At a time when many economies were making the transition from a monopoly-based to a market-based model in telecommunications the Reference Paper proved instrumental in supporting the successful introduction of competition and in enabling the telecommunications sector to grow on a sound basis. Competition safeguards introduced include obligations imposed on major suppliers to avoid anti-competitive practices and to provide interconnection to their networks under non-discriminatory, transparent and reasonable terms and rates, among other conditions. Other Reference Paper provisions on interconnection provide for greater transparency and require the setting up of dispute-resolution mechanisms.

A clear example of the GATS balanced approach to regulation and trade is provided by the Reference Paper's obligation on universal service – WTO members retain the right to define the universal service obligation they wish to maintain (which will not be regarded as anti-competitive in itself), provided it is administered in a transparent, non-discriminatory and competitively neutral manner and is not more burdensome than necessary for the kind of universal service defined by the member. To ensure timely access to the market, the Reference Paper also imposed obligations regarding transparency of licensing criteria, on top of the obligations on domestic regulation already contained in the GATS, notably in Articles III and VI, and in the Annex on Telecommunications.⁸⁰ The independence of the regulator, understood as separate from and non-accountable to any supplier, is another relevant principle, which may prove critical in services where supply might have been concentrated in the hands of a single firm.

The GATS definition of additional commitments is open-ended – the regulatory issues that may be addressed through this device are determined only by WTO members' concerns. Apart from the competition-related principles of the Reference

Paper highlighted above, WTO members have used the GATS additional commitment approach in financial services to address a variety of regulatory concerns, such as opaque regulatory and licensing criteria and procedures; discretionary and unpredictable approval of new services and products; absence of mandatory deadlines for regulators' decisions on licence applications; or absence of domestic dispute resolution mechanisms.⁸¹ Overall, additional commitments have provided for transparency of regulation, licensing criteria and procedures, and interconnection arrangements; speedy approval and introduction of specific products; mandatory time periods to reach decisions on licence applications; and availability of domestic dispute-resolution mechanisms.

The content of additional commitments or an actual Reference Paper for e-payment services would require careful consideration by policy-makers, industry participants and consumer stakeholders. Those conversations could be guided by two goals linked to the international supply dimension. First, to reduce overly burdensome regulatory requirements and discriminatory approaches; and second, to encourage enabling frameworks towards boosting global e-commerce and financial inclusion. The rough e-payment regulatory principles outlined above – sound legal and regulatory frameworks, balanced oversight and supervision, technology neutrality and functional regulatory approaches, wide access to the payment system, risk-based policies, and fostering innovation – could provide context. Theoretically speaking, applied in a Reference Paper-type approach, some possible elements could include:

- Encouragement for regulators to move towards a functional and proportional regulatory approach, prompting PSPs to compete but also giving them the freedom to establish different types of partnerships for the provision of e-payment services.
- Encouragement for regulators to move towards the integration, or indeed interconnection, of the various regional payment systems, so as to avoid regional isolation.
- Obligation to allow the introduction of specific products or services in a timely and speedy manner, or encouragement for regulators to make use of “regulatory sandboxes” for the introduction of new products and services.
- Specific disciplines on the transfer of data across borders, subject to the necessary regulatory safeguards.
- Further provisions on the transparency of regulation (e.g. product approval, licensing criteria and procedures, and technical standards), including the obligation (1) to make those requirements and procedures (including the period of time normally required to reach different types of decisions) publicly available, (2) to take decisions only on the basis of publicly available criteria and (3) to make the reasons for the denial of a licence or authorization known to applicants upon request.
- Prevention of anti-competitive practices.
- Independence of the regulatory authority from any market participant.

Discussing and elaborating in more detail on each area, and eventually identifying others, would be necessary. Useful input from the e-payments ecosystem could take two forms: first, clearer and detailed explanations of the international

supply- and demand-related challenges elaborated in domestic, regional and international forums between industry, policy-makers, consumer groups and experts. Doing so in local contexts may be particularly important to understand and explore specific regulatory nuances. E-payment suppliers and consumers need to articulate issues, while policy-makers need to coordinate across areas and reflect on appropriate models for their economy. Second, these conversations could be complemented by forging common convergence – even if in general terms – across the e-payments environment on enabling principles for global e-payments.

Potentially, these principles could be developed through public-private dialogue. A diverse set of e-payment players could outline common fundamentals of what such international e-payment principles would look like. Subsequent discussion by the group with trade and financial regulators could build bridges both between the operational aspects of e-payments supply and between policy communities typically separated from one another. Though there are many differences across the e-payments environment, and specificities related to e-commerce, consensus on general best practices would be a way of moving forward the debate on upgrading trade frameworks for the 21st century with widespread benefits for consumers and small businesses. Regional discussion, or even concrete regulatory cooperation initiatives on specific issues such as risk-based KYC approaches, common licensing procedures, or mutual recognition of certain regulatory aspects, could be another complementary approach.

Advancing trade policy solutions for e-payment challenges in the context of e-commerce requires cross-policy work, stakeholder consultations and country-specific choices to pursue an open environment. The effort could have significant benefits for inclusive growth in a digital age. That alone is reason enough for reflecting on and actioning solutions that ensure the possibilities brought by technological change and e-commerce are widely spread.

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²⁴ Francesco Pasti. Integrating mobile money and e-commerce: What are the challenges to overcome? GSMA. 18 July 2017.

²⁵ E-commerce – New Opportunities, New Barriers: A survey of e-commerce barriers in countries outside the EU. Kommerskollegium, November 2012.

²⁶ International Trade Centre (ITC). New Pathways to E-commerce: A Global MSME Competitiveness Survey. ITC, 2017; International Trade Centre (ITC). Bringing SMEs onto the E-commerce Highway. ITC, 2016.

²⁷ Ibid.

²⁸ ASEAN is composed of Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.

²⁹ HSBC. Payments in ASEAN post AEC. Available at: https://www.hsbc.com.my/1/PA_ES_Content_Mgmt/content/website/commercial/cash_management/PDF_141107/5-Payments-in-ASEAN-post-AEC.pdf.

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³¹ PayPal Offerings Worldwide. Available at: https://www.paypal.com/cgi-bin/webscr?cmd=_display-country-functionality-outside&dispatch=5885d80a13c0db1f8e263663d3faee8dc3f308debf7330dd8d0b0a9f21afd7d3.

³² Building a Digital Single Market Strategy for Latin America. Cullen International/CAF.2016.

³³ RegTech companies offer solutions that use technology to solve compliance and regulatory issues. See Inside Magazine, Edition 2017. The Reg-Tech universe on the rise. Deloitte. For more, see also Kassai, Husayn. The rise of 'RegTech' and why it's the next big thing in banking. World Economic Forum Agenda. 20 June 2017.

³⁴ Committee on Payments and Market Infrastructures, World Bank Group. Payment aspects of financial inclusion. Bank for International Settlements/World Bank Group, April 2016.

³⁵ A paradigmatic case is Brazil's "Bolsa Familia" social safety net programme, through which the government saved 75% on administrative costs by going electronic. Massimo Cirasino, Hemant Bajjal, Garcia Garcia Luna, Jose Antonio, Rahul Kitchlu. 2012. General guidelines for the development of government payment programs (English). Financial infrastructure series; payment systems policy and research. Washington, D.C.: World Bank.

³⁶ GATS Article I.

³⁷ GATS Article XXVIII(b).

³⁸ No MFN exemptions have been taken by any WTO member with regard to measures affecting payment services.

³⁹ Roughly speaking, market access (Article XVI of the GATS) refers to whether a foreign supplier can actually supply services into another member's territory through any of the four modes of supply referred to before, while national treatment (GATS Article XVII of the GATS) refers to whether the same conditions apply to "like" domestic and foreign services and service suppliers. In Article XVI, the GATS identifies explicitly – it is an exhaustive list – six categories of limitations on or impediments to access, namely numerical quotas (including monopoly rights), limitations on the total value of assets, limitations on the total number of operations, limitations on the number of natural persons that may be employed, requirements on type of legal entity, and foreign equity caps. A WTO member is said to grant "full" market access into its market, if none of these six restrictions is imposed on foreign services and services suppliers in the relevant mode of supply.

⁴⁰ In other words, members must indicate for the sector concerned (e.g. all payment and money transmission services) the level of access and (national) treatment that is guaranteed for the supply of such services on a cross-border basis, via consumption abroad, through the commercial presence of foreign companies and through the temporary presence of natural persons. There are three levels of commitment possible: full (no limitations on market access or national treatment), partial (subject to limitations that the members may have scheduled), or unbound (equivalent to no commitment at all for the service and mode of supply concerned).

⁴¹ For example, the EU and the US (as some other WTO members) have made commitments in accordance with the Understanding on Commitments in Financial Services, a sort of formula approach to liberalization under the GATS. While the level of liberalization undertaken at the WTO by these members is more or less comparable, there is no denying that their financial regulatory frameworks differ, sometimes significantly.

⁴² GATS Article XVIII.

⁴³ GATS Annex on Financial Services 5 – Definitions.

⁴⁴ Panel Report China-Electronic Payment Services, para. 7.201.

⁴⁵ Panel Report China-Electronic Payment Services, para 7.100.

⁴⁶ Panel Report China-Electronic Payment Services, para. 7.99. Furthermore, based on a previous ruling (Panel Report, China-Publications and Audiovisual Products, para. 7.1014), the Panel in China-Electronic Payment Services held that "a 'sector' may include 'any service activity that falls within the scope of the definition of that sector', whether or not these activities are explicitly enumerated in the definition of that sector or subsector." Panel Report, China-Electronic Payment Services, para. 7.183.

⁴⁷ GATS Annex on Financial Services 5 – Definitions.

⁴⁸ GATS Annex on Financial Services 5 – Definitions.

⁴⁹ The Guidelines for Scheduling of Specific Commitments Under the GATS, para. 26.

⁵⁰ GATS Article I.

⁵¹ GATS Article I.

⁵² Panel Report Mexico – Telecoms, para. 7.45.

⁵³ GATS Article I.

⁵⁴ Panel Report, US – Gambling, para. 6.281.

⁵⁵ Panel Report, US – Gambling, para. 6.285.

⁵⁶ Panel Report, US – Gambling, para. 6.285.

⁵⁷ WTO Panel Rules Against China in Dispute over Electronic Payment Services. Mayer Brown Legal Update, 31 July 2012.

⁵⁸ Panel Report China-Electronic Payment Services, para. 7.78.

⁵⁹ World Trade Organization (WTO). WTO Dispute Settlement: One-Page Case Summaries (1995-2016). WTO, 2017.

⁶⁰ Counting the "EU15" countries as one WTO member. The bloc's GATS commitments have some scheduling nuances to do with its expansion over the years.

⁶¹ This definition includes the category "all payment and money transmission services, including credit, charge and debit cards, travellers cheques and bankers drafts".

⁶² Reservations may be taken for existing non-conforming measures and for future measures. These may be filed with regard to the application of the following obligations: National Treatment, MFN, Market Access for Financial Institutions, Cross-Border Trade, and Senior Management and Boards of Directors).

⁶³ General clarifications are outlined regarding the e-payment card services section's relationship with other public policy objectives, noting that CPTPP countries are not prevented from taking measures to protect personal data; personal privacy and the confidentiality of individual records, transactions and accounts – such as restricting the collection or transfer of cardholder names to a cross-border services supplier in another country. Countries may also impose regulatory supervision fees or those associated with the development of their payment system infrastructure as appropriate. Similar disciplines were to be discussed in the Trade in Services Agreement (TiSA) talks that would have involved some 50 economies – but which remain suspended for the moment.

⁶⁴ The WTO Understanding on Commitments in Financial Services includes a similar obligation: “A member shall permit financial service suppliers of any other member established in its territory to offer in its territory any new financial service.” In turn, a new financial service is defined as “a service of a financial nature, including services related to existing and new products or the manner in which a product is delivered, that is not supplied by any financial service supplier in the territory of a particular Member but which is supplied in the territory of another member”.

⁶⁵ WTO Understanding on Commitments in Financial Services.

⁶⁶ Daniel Crosby, 2016. Analysis of Data Localization Measures Under WTO Services Trade Rules and Commitments. E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, 2016. www.e15initiative.org/. See also Lee Tuthill, 2016. Cross-border Data Flows: What role for Trade Rules? In Pierre Sauvé and Martin Roy (eds.) Research Handbook on Trade in Services, Edward Elgar.

⁶⁷ This language reflects disciplines like those of the GATS general exceptions clause.

⁶⁸ Annex on Telecommunications, para. 5c states: “Each member shall ensure that service suppliers of any other member may use public telecommunications transport networks and services for the movement of information within and across borders, including for intra-corporate communications of such service suppliers, and for access to information contained in data bases or otherwise stored in machine-readable form in the territory of any member. Any new or amended measures of a member significantly affecting such use shall be notified and shall be subject to consultation, in accordance with relevant provisions of the Agreement.”

⁶⁹ The WTO Understanding on Commitments in Financial Services emerged at the end of the Uruguay Round. It is not part of the GATS, but was appended to the Final Act of the Uruguay Round. It is an alternative (and optional) formula to make specific commitments in financial services. Being alternative and optional, it imposes obligations only on the members having adopted it, and to the extent of the limitations/reservations included in their schedules of commitments. The Understanding adopts a positive list for the liberalization of cross-border supply, which does not include payment services (see paragraph B.3 of the Understanding). The Understanding has been adopted by 31 WTO members, namely Australia, Bulgaria, Canada, Czech Republic, European Communities (EC15), Hungary, Iceland, Japan, Liechtenstein, New Zealand, Nigeria, Norway, Slovak Republic, Sri Lanka (excluding insurance), Switzerland, Turkey, and the United States.

⁷⁰ WTO Understanding on Commitments in Financial Services 8 – Transfers of Information and Processing of Information.

⁷¹ CPTPP 14.11.2.

⁷² CPTPP Annex 11-B, Section B.

⁷³ Several CPTPP parties (Chile, Mexico, Peru, Singapore and Vietnam) have added conditions on those obligations, requiring authorization from a regulator before the transfer and processing of financial data, and specifying that their own privacy laws would be the ones governing the data being transferred or processed.

⁷⁴ CPTPP 11.1

⁷⁵ ASEAN, Regional Cooperation in Finance. Available at: <http://asean.org/asean-economic-community/asean-finance-ministers-meeting-afmm/overview/>.

⁷⁶ African Leaders Launch Continent Free Trade Area, ICTSD, Bridges. 22 March 2018.

⁷⁷ The text of the Reference Paper is available here: https://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm.

⁷⁸ The adoption of the Reference Paper principles by a large majority of participants in the WTO negotiations on basic telecommunications in 1997 was – and remains – one of the major achievements of the WTO to date. It was the first move by countries to take additional commitments in the GATS.

⁷⁹ Lee Tuthill. The GATS and New Rules for Regulators, Telecommunications Policy, Vol. 21, No. 9/10, pp. 783–798, 1997.

⁸⁰ In addition to the general obligation in Article III to make laws and regulations public, Article VI requires governments to administer general application measures in a “reasonable, objective and impartial manner” where a service is listed in commitments. Another provision on domestic regulation requires governments to provide recourse for service suppliers, whether or not subject to liberalization commitments, for administrative decisions. Finally, article VI also makes it mandatory for the relevant regulatory authorities – if any form of authorization is required – to inform applicants of the decision and provide information on the application status in a timely manner.

⁸¹ Some of the principles and obligations enshrined in additional commitments have been developed collectively with a view to consolidating and promoting regulatory best practice – as in the case of the Reference Paper on Basic Telecommunications – while in other cases the additional commitments have been tailored to the concerns raised by country-specific regulations – as in the case of the additional commitments on financial services undertaken by Japan, the EU and the US in 1997. For a thorough description of additional commitments in the GATS, including the Reference Paper on Basic Telecommunications, see Additional Commitments under Article XVIII of the GATS, Note by the Secretariat, S/CSC/W/34, 16 July 2002.



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