CHAPTER - 8

ARE THE STATE REGULATORS BEING CHALLENGED OR UNDERMINED BY FINANCIAL TECHNOLOGY AND BORDERLESS DIGITAL PAYMENT PLATFORMS?

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I INTRODUCTION

The application of Information Communication Technologies (ICT) for performing financial transactions in a borderless world is termed Financial Technology or FinTech in this paper. The two key elements in an international payment transaction are: movement of funds between two or more parties, and currency exchange rate mechanism, but keeping it within the context and compliance to the requirements of the regulatory authorities. Thus FinTech is capable of bypassing not only the national banking systems but can achieve seamless and borderless conquest of payments towards international settlements. In the context of trade in trillions of dollars, from the users' perspective, the movement of funds increases the costs of international procurements for various types of industries and doing business, due to additional cost of each transaction, through banks, and foreign exchange commissions (Forex). Till recently, banks and licensed financial institutions had enjoyed a privileged oligopolistic position with assured income from such transactions. The FinTech is now causing digital disruption for the banking sector and inviting an influx of new platforms and international Remittance Services Providers ("RSPs").

The starting point for debate on international cooperation for remittances for merchants, was the adoption of the United Nations Convention on International Bills of Exchange and International Promissory Notes in December 1988. It was a

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natural progression to support the two older legal regimes of international sale of goods (CISG)¹ and international commercial arbitration (UNCITRAL Model Law of Arbitration),² but did not get beyond the five signatories. At the national level in most of the developed and developing countries there are regulations for licensing, supervision and controlling payment services, stored value facility holders, credit card payments, PayPal, WorldPay, AliPay, eNets, remittance companies and money changers. The legal framework for licensing varies with jurisdictions. The licensing and operability regime, for new borderless fintech platforms, is not adequately addressed in the existing legal framework for international payments. The jurisdictions like Singapore, Hong Kong, UK and Switzerland are currently reviewing their ordinances³ to allow for such operators to function. This may enhance the status of such states from global financial centre to become e-payment or ISP nations.

The emerging fintech trends for example are empowering business entities through peer-to-peer currency swap, user driven online direct transfer platforms, and foreign exchange payment through local transfer. The fintech platforms are likely to take away the complexities between financial transactions and trade specific or contractual obligations, and thus provide seamless flow of funds from buyers to sellers of goods and services. The contractual payment terms and appropriate platform for settlement of payments may become one of the terms of international procurement contracts for goods and services. For example if a contract says, "the payment shall be made within 30 days from the date of invoice, to the seller's designated Bank account, in the currency and amount as per the invoice, by telegraphic transfer and all Bank charges to be borne by the buyer," such a term could be replaced with, "the payment shall be made through AlphaSwap platform on n'th day after receipt of invoice, to the seller's designated account stated in the invoice". It can be implied that both the buyer and seller may or may not be aware of the place and jurisdiction under which the payments by international swap and transfer ("IST") platform is executed. It is very likely that such an IST entity is licensed and registered in a country different from both the buyer's and seller's countries. In the event of delay in payment, loss of transaction or insolvency of the IST entity, for the protection and recovery of funds, an uncertainty looms in the background. The other common risks associated with the

¹ UN Convention on Contracts for International Sales of Goods 1980.

² UNCITRAL Model Law on International Commercial Arbitration 1985, with amendments as adopted in 2006.

³ The Acts related to Payment Systems (Oversight), Money Changing and Remittances Businesses, New Licensing Categories for *fintech* innovators etcetera.

banking sector like cybersecurity, data protection, biometric or multi-steps access controls, breakdowns and networks downtime are accentuated in the new or unknown FinTech platform owners and operators. The track record of governance, risk management and compliances ("GRC") with the rules of national or international regulatory authorities is yet to be developed.

Thus without a well-structured legal regime, faster inclusion of FinTech based IST platforms may create unprecedented risks for international trade. This paper endeavours to address an urgent need for the development of UNCITRAL Rules for International Payment Systems for Trade. The FinTech Convention should be encompassing cross-border recognition of uniform licensing regimes, protection of users, and security of funds, dispute resolution and international arbitration forums. The "United Nations Convention on International Bills of Exchange and International Promissory Notes" may be put to rest or repealed. However, the need for UN Convention on International Payments, in the context of FinTech, besides the role of BIS, is essential, due to the lack of supervisory oversight by the states and direct agreements between the trading entities and payment services platform operators.

II REVIEW OF KEY REGULATORY REQUIREMENTS

The remittance services provider needs a licence to operate in a country, in compliance with the relevant state regulations. The regulatory authorities are like the Finance Conduct Authority UK ("FCA"), Monetary Authority of Singapore ("MAS"), Hong Kong Monetary Authority ("HKMA") and Australian Securities and Investments Commission ("ASIC") with similar regulators in other countries. The common requirements for obtaining a licence to operate as a payment services provider are generally similar and not so stringent, as for banks under relevant laws for acquiring banking licences. The typical basic requirements⁴ are:

- **Local Entity**: Licensee must be registered and maintain operating office in the country.
- **Minimum paid up capital** in the range of US\$100,000 only.
- Customers' funds shall be kept in a separate bank account and the funds should not be used for any other purposes by the licensee, and prohibited from currency speculations.
- **Protection of Customers' Funds**: The moneys in a customers' account maintained by a licensee at a Bank shall not be liable to be attached,

⁴ See FCA, MAS, HKMA and ASIC regulations related to Finance Services providers under Remittance and Payment Services.

sequestered or levied upon for or in respect of any debt of the licensee or any claim whatsoever against the licensee, and if the licensee is declared insolvent or is wound up by an order of court, the moneys in the customers' account shall be deemed not to form part of the property of the licensee⁵.

Foreign Regulator's Jurisdiction: Regulating authorities with an oversight on the activities of the licensee will provide assistance to foreign authorities for legitimate and duly authorized investigations into the affairs or transaction of a licensee.

The complaints and breaches of payment service agreements between the customer (user of the platform) and the service provider will be in accordance with the procedures and complaints or dispute resolution forums available within the country. However, if the Payment Service Provider is through internet and is not actively available in the country of the user, then the user has taken a risk of pursuing a legal action in a foreign jurisdiction. The first question arises, how such an operator is allowed to offer the payment services in the country. A second question will be, can the regulators monitor and block foreign operators from offering such services in the country without first obtaining a licence.

In terms of remittances through banks, the degree of protection against loss of funds in a transaction is at low risk. Further as a customer of a bank, one has access to multiple channels for redress of complaints, which are well regulated and there is a long history of track records for the banks. The licensed banks share and transfer risk of such incidents, to intermediary banks or correspondent banks in cross-border transactions. This layer of risk sharing and collaboration between banks offers a window of opportunity for FinTech payment services providers, to disrupt the monopoly of the banks in cross-border business transactions. The benefits for the customers are:

- (a) The faster speed with which FinTech platforms can make a payment transfer;
- (b) Transparency of the flow of funds; and
- (c) The cost of transaction is not only made known to the customer upfront but is also lower due to an absence of fees of intermediary banks.

Traditionally the banks have been and continue to lag in providing the final value of a transaction fee and the exchange rate applied, until after the transfer is

⁵ Singapore Money Changing and Remittance Businesses Act Cap 187, section 26(6).

made. Furthermore the customer is not in control of the exchange rate fluctuations overnight or during the week when bank is still processing a transaction.

III SUCCESSION TO RECENT TRENDS IN INTERNATIONAL PAYMENT SYSTEMS

The need of the present and future era provides impetus for the creation of online platforms, which can allow registered customers to make payments crossborder, by swapping their local currency to the currency of their purchases. This can be done either as a spot transfer for real-time payments or through booking of forward contracts, thus hedging the risk of currency fluctuations and mitigating the impact on their project costs. No doubt the banks of the developed and developing economies, have been offering such services with increasing rigor and speed over the last two decades. However as identified in a latest survey report published in Singapore, the real users of such services ie the business community has not been consulted, when developing or enhancing systems for such cross-border transactions. The promoters of FinTech platforms offer to the real customers, an opportunity for the first time, to bypass the need of domestic banks and foreign intermediaries, thus saving cost, time and often unbearable exposure of their business deals, due to interference under the pretext of KYC (Know Your Customer) policies of the banks.

3.1 Current Forex and Payment Platforms excluding Banks and Financial Institutions

The current FX and payment services providers other than banks and financial institutions (FI) are largely for consumers to business payments encompassing ecommerce and online bookings for travel and hotels. A brief overview shows the gap for B2B payment services providers.

- **PayPal**: A platform for online payments by consumers (C2B) for online shopping, for which the consumer is not in control of exchange rate but there is no service fee unlike in banks. However the business entity has to pay transaction fee of about 3.9% to 4%.
- AliPay: Similar to PayPal but levies an account opening fee, nominal deposit as a guarantee from the business entity and about 7% per transaction. The target consumers are of Mainland China for online shopping. The FX rate is based on the spot rates and business has the option to hold for FX rate to be applied before depositing the funds in the respective seller's accounts.
- WorldPay: This also is relevant for (C2B) payments and requires businesses to pay the initial account opening and annual fee in addition to a

transaction fee of about 4%. The consumers may also be charged depending on the type of credit card used.

• WU EDGE and Money Transfer: This platform initially was for the transfer of funds from a person to person like ancient Money Order scheme administered by Post Offices. The feature for B2B transfers and FX rates is also made available on WU EDGE Platform now but still in its early stages to capture the market share.

In addition to above some less well known B2B platforms with a limited number of currencies and countries of operations as part of the research selected for this paper are:

- Currency Fair of Ireland, based in Dublin
- Kantox from London, UK
- Midpoint based in London, UK
- OzForex from Australia
- Transwap based in Hong Kong and Singapore
- Transferwise from Estonia and registered in London, UK
- TransferGo from Lithuania and registered in London, UK
- nanoPay from Canada, based in Toronto, upcoming payments platform
- SWIFT and ICC jointly developed BPO (Bank Payment Obligation) platform.

The development and trials of new concepts are being launched aggressively in several countries simultaneously. It will be a matter of time when the clouds are cleared and the platforms which pass the test of time, volume, integrity and compliances in multiple jurisdictions will survive. The risks for the users in the interim period are not well supported by prevailing regulatory mechanisms.

IV DRIVERS FOR FUTURISTIC TRENDS AND FINTECH PLATFORMS

World trade in merchandise and services alone has exceeded US\$25 trillion⁶ in 2015 which is reflected in cross-border transactions of USD254 billion per day netnet basis in Foreign Exchange⁷ (FX) in 2016. Small and Medium Enterprises (SME) cross-border transactions are in the range of USD50 billion per day in FX (assuming 20% of the total OTC value). The cost of transactions through banks is a significant factor for SMEs operating on low margins. Imagine paying an average of about 3% to 6% to the banks in FX and an uncontrolled transaction fee. The

⁶ WTO Trade Profiles Report 2016.

⁷ See daily volumes on <www.stats.bis.org/statx/srs/table/d11.1> accessed on 2 Dec 2016.

FinTech based platforms do have the momentum to disrupt the monopoly of the banks in an unprecedented manner.

The introduction of such platforms was around the year 2010 and by now the trial run of such platforms in US and Europe is nearly over. The clock is ticking for either banks to catch-up or more such platforms will be introduced worldwide. It is anticipated that with the encouragement of FinTech hubs created by governments of countries like Australia, Hong Kong, India, Indonesia, Ireland, Malaysia, Singapore, Switzerland and UK, that FinTech based International Swap and Transfer (IST) platforms will be a viable solution for businesses and individuals as consumers.

The initiatives and FinTech projects launched by the banks for efficiently processing the business payments are gaining pace. The sample of most talked about projects are for example block-chain to streamline payments, distributed ledger, inter-bank payment systems for business finance and cross-border payments and trading on stock exchanges. The other projects in progress are between banks and collaborations with service providers like credit card companies, SWIFT and Earthport.

V REGULATORY INFRASTRUCTURE FOR FINTECH BASED INTERNATIONAL PAYMENT PLATFORMS

In order to encourage innovation and development of technology in the financial services sector, the governments and the regulatory bodies 9 of most of the developed countries at present are encouragingly giving a free hand with limited oversight by creating FinTech hubs and "Regulatory Sandbox." This flexible approach is also being extended to insurance service providers to innovate. The historical regulatory regime as described in the preceding section encompasses licensing requirements for operating within the country as a domestic company, as well as for a foreign company doing business in the country, through an agent or representative office. The sandbox mechanism provides temporary relief for a period in terms of usual requirements for security deposits by the founders of a Financial Services Provider ("FSP"). Some of the formal requirements which are

⁸ Currency Fair Limited, Ireland incorporated in 2010, appears to be the first truly Business Payment Platform for cross-border transactions.

⁹ On 6 June 2016 a public consultation paper was launched by Monetary Authority of Singapore on proposed guidelines for a regulatory sandbox to enable FIs and non-FIs to experiment with *FinTech* solutions. (See news at <www.mas.gov.sg>) A similar approach was first adopted by FCA UK in 2015, see <www.fac.org.uk> followed by a Regulatory Guidebook 255 on sandbox and *Fintech* 101 release in Australia by ASIC, on 8 June 2016 and several inter-governmental cooperation MOUs.

relaxed include: ¹⁰ Asset maintenance requirement, board composition, cash balances, credit rating, financial soundness, fund solvency and capital adequacy, licence fees, management experience, relief from compliance to MAS guidelines such as: technology risk management guidelines and outsourcing guidelines, minimum liquid assets, minimum paid-up capital, relative size, reputation, and track record.

The review of regulatory requirements in other economies also reveals that all the requirements are focussed on operations within the jurisdiction. There are no specific requirements for FinTech firms to undertake any added responsibility for international exposure or risks imposed on the customers within the foreign country. Therefore, the lacuna for two key elements remains to be filled, which are: 1) Protection of customers' funds in transit to the destination country and 2) what is the security if the Payment Service Provider ("PSP") suddenly declares bankruptcy in its country of registry and licence, or disappears. This will subject the foreign recipients and the senders to unknown risks. It also adds the hardship and cost of dispute resolution in case of any other breaches, due to apparent lack of clarity about the applicable regulatory regime and appropriate dispute resolution forum.

In EU and UK the Payment Services Regulations 2009 and Payment Services Directives provide a framework for PSPs to operate and offer cross-border payment services within EEU, by obtaining a licence in one member state. The single licence within EEU also encouraged competition thus reducing the costs of cross-border transactions to the level similar to domestic online transfers. The licensed PSPs within UK or EEU could also avail themselves of the benefit of inter-governmental collaboration between Australia, Germany, Hong Kong, Singapore and USA, by registering as a foreign FSP without the need for duplication of compliances in each of these countries. However, the regulations are limited to ensuring compliance with a stringent code of conduct, cybersecurity, privacy and procedural compliances of each of the backend processes. The regulations do not address the added risks of exposure of mobile and virtual platforms of such entities dealing in real cash in billions across the globe. It is common knowledge that the risk of global financial markets is no less than a financial tsunami in times to come.

¹⁰ Monetary Authority of Singapore, Annex A of Fintech Regulatory Sandbox Guidelines (16 November 2016).

VI CHALLENGES AND VULNERABILITIES OF FINTECH-BASED INTERNATIONAL PAYMENT PLATFORMS

The underlying fundamental challenge for PSPs of the future is to develop FinTech platforms which can provide FX rates better than the banks and make transaction fee/cost on a par with costs of domestic transfers through Inter-Bank-Giro (IBG) or RGTS online transfers in real-time 24x7. Within domestic territories, the businesses make payment by cheques or IBG at zero or minimal cost. The risk of loss during transfer is minimal or remote. The protection of funds is through national judicial systems and forums established by relevant regulatory authorities. In the backdrop of such benefits, for a FinTech to promote a borderless world, these benefits are to be packaged first in the value proposition.

Next the infrastructure for engaging payer and payee in currency speculation to agree on a FX contract or through intermediary brokers on spot rates or forward contracts implies established organizations besides networks and technology. This has been the biggest strength for the banks, which made the entry barrier for start-ups or new entities next to impossible. If one takes a snapshot of last three decades to survey how many new international banks have been incorporated as compared to FSPs, it will be evident that PSPs will face stiff competition in the short to medium term. At present the relaxed regulations, financial grants and apparently insatiable customer base, the Greenfield is ripe to be harvested for PSPs with little or no capital, thus no entry barriers. In a keynote address by Mr Ravi Menon, MD, MAS in November 2016 he stressed that, the new regulation in context of FinTech innovation, "will be modular and activity based, so that firms need to meet only those regulations pertinent to the specific payment activities they undertake, rather than full gamut of payments regulations."

The consolidated regulation or FinTech oriented regulations in most of the countries encouraging Sandbox strategies, is yet to be developed. The Payment Systems is undoubtedly the bloodline of national and global economies, which have an impact on every individual and business entity alike. The focus of this paper is on cross-border protection of business entities and relevant regulations governing the PSPs irrespective of the country of incorporation. World trade can only continue to prosper through uniform and mutual recognition of regulations. Instead of each country developing its regulations and collaborating with a select few partner countries like bilateral or reciprocal recognition treaties, it is important that such legislation be developed at international level either under the auspices of

¹¹ Ravi Menon, MD, Monetary Authority of Singapore, Keynote address on "An Electronic Payment Society" (Sim Kee Boon Institute Conference on *FinTech* and Financial Inclusion, 10 November 2016).

WTO or UNCITRAL. Thus a Model Law for International Payment Services Regulations for PSPs, which are neither banks nor FIs may be developed, saving time and cost of all member nations engaged in FinTech innovations. The second advantage of such an initiative will be that while bank processes are conducting pilot projects and trials of FinTech processes like blockchain, 12 independent PSPs can expand and commence international operations.

The significant features of a Model Law for International Payment Services Providers shall include recognition of charges, hypotheques and liens acquired by an entity or individual against a PSP in any country. These should be enforceable against the assets of a PSP simultaneously in the convention countries. The PSP, who has obtained a licence in one of the convention countries, need not be required to obtain the licence in another convention country, except for additional compliances and reporting requirements, similar to bilateral investment treaties. The most relevant articles in a convention but for dissimilar purpose, are Articles 1 to 5 of the International Convention on Maritime Liens and Mortgages. Though this Convention is meant for ships, the objectives, intent and purpose are fitting for FinTech Platforms used as vehicles, for conducting the business by PSPs. The governance and control related provisions essential for international and cross-border trade are: 13

- (a) Customer accounts, mortgages, "hypothèques" and registrable charges (Charges) effected on PSPs shall be recognized and enforceable in States Parties provided that such charges have been effected and registered in accordance with the law of the State in which the PSP is licensed;
- (b) the register and any instruments required to be deposited with the Regulatory Authority in accordance with the law of the State in which the PSP is licensed are open to public inspection, and that extracts from the register and copies of such instruments are obtainable from the Registrar;
- (c) either the register or any instruments referred to in subparagraph (b) specifies at least the name and address of the person in whose favour the charge has been effected or that it has been issued to bearer, the maximum amount secured, the date and other particulars which, according to the law of the State of registration, determine the ranking in relation to other registered charges; and

¹² Blockchain is the distributed ledger technology (being developed under a research project), through which blocks of batches of transactions can be connected, thereby decentralizing the digital registers.

¹³ International Convention on Maritime Liens and Mortgages 1993, arts 1-5.

(d) in the event of default, breach or liquidation either due to insolvency or by court order, the bearers of the charges in (b) and the customer's accounts should be untouched and disbursed to the named parties only, as "protected holders" or beneficiaries of funds.

The UN Convention on International Bills of exchange and International Promissory Notes, 1988 did not cover extensively the provisions as in the Convention on Liens and Mortgages. The UN Convention for Bills of exchange was limited in scope and narrowly addressed unification of the diversity of laws, to encourage trade. Perhaps due to its limitations and the fast changing electronic age, it was not received well. The UNCITRAL Legal Guide on Electronic Fund Transfers 1987 also did not envisage the role played by present time and future generation PSPs.

In the World Bank Payment Systems Consultative Report¹⁵ published in 2006, the issues on regulatory regime were limited to money laundering, data protection and know-your-customer related provisions. However the report also identified in detail various risks posed by independent non-banking RSPs (Remittance Service Providers) or PSPs as termed in this paper. For instance, the need for regulation aimed at preventing or correcting market failures in the provision of the services, not the institutional structure used to deliver these services, was identified in the report, and is one of the key objectives of this paper. The public policy identified by the World Bank states, "International remittance services should be safe and efficient. To this end, the markets for the services should be contestable, transparent, accessible and sound". The World Bank task force had identified principles covering five key areas: ¹⁶

- (a) Transparency and consumer protection;
- (b) Payment system infrastructure;
- (c) The legal and regulatory environment;
- (d) Market structure and competition; and
- (e) Governance and risk management.

Since the concerns raised by the World Bank Report, ten years have passed and FinTech innovations have overtaken the modus operandi faster than the regulatory authorities are able to catch-up. In the wake of disruption to traditional banking

¹⁴ The term defined in United Nations Convention on International Bills of Exchange and International Promissory Notes, 1988 in context of Civil Law and Common Law regimes.

¹⁵ See BIS-CPSS /World Bank "Consultative report on remittances" (March 2006) Sections 2, 3 and 4.

¹⁶ Ibid n 17.

infrastructure and governance through the Bank for International Settlements (BIS), it is prudent for UNCITRAL to take the initiative by creating a working group for the development of a new UN Convention for PSPs.

The ongoing developments for protection against terrorism and financing of terrorist activities have to be taken into consideration for FinTech PSPs. Instruments like Anti-Money Laundering Conventions ("AML"), combatting the Financing of Terrorism ("CFT") and Financial Action Task Force ("FATF") Standards are yet to be applied to such upcoming PSPs. The proposed working group of UNCITRAL can address not only the financial transactional risk but also incorporate revised terms which may have impact on trade and commerce and international dispute resolution mechanism.

VII CONCLUSION AND RECOMMENDATIONS

The trial and pilot study period for FinTech based PSPs is now over. It is time to establish a robust, unified and international regulatory framework for governance and risk management of financial markets. The PSPs may at present be a subset of larger financial and investment markets, but can become a significant force to disrupt the global financial system, if continues unchecked in smaller regional clusters. The risks due to the cross-border movement of funds are of transitory nature but cumulative effect can impact businesses and trade. The benefits of non-banking PSPs are attractive to induce SMEs and large MNCs to adopt FinTech based payment services and realize significant savings in terms of cost and time. The associated risks are access to the dispute resolution forum, recognition and enforcement of regulations of the sender's country, receiver's country, and host country of a PSP and protection of funds against insolvency of a PSP.

It is recommended that UNCITRAL create a working group to identify the need and scope of a UN Convention for Governance and Risk Management of International Payment Service Providers. The aim of the convention could be to unify regulations in tandem with national regulatory authorities 17 currently engaged in FinTech projects, BIS, World Bank and WTO studies, recommendations, protocols and guidelines. Trade related instruments like bills of lading, letters of credit, escrow accounts, futures and freight forward agreements may soon be included in the portfolio of PSPs for businesses. Therefore the UN Convention and the regulations should be focussed on future trends while addressing the current lacunas.