Digitisation of trade finance transactions

Goods and services are becoming increasingly digitised. That said, the flow of information largely takes place in hard copy. Trade finance has historically relied on paper-based documents. A typical trade finance transaction requires the involvement of over 20 entities for the production and processing of between 10 and 20 paper documents and some cross-border deals have been known to include up to 200 interactions between the relevant parties. Documents include invoices and packing lists, bills of lading or similar documents, insurance certificates, and certificates of origin. The tender of these documents is essential to the fulfilment of several forms of international sale contracts, and to the operation of letters of credit.

This process is slow, duplicative and a considerable amount of time is spent simply waiting for documents to be processed. As trade routes have lengthened, these administrative burdens have increased. Some of these burdens include the onerous compliance duties required on the part of banks, delays in shipment as a result of continuous checks, and delayed payments as a result of numerous verification processes These issues force banks and financial institutions to request substantial collateral and put in place onerous information requirements. The paper-based nature of trade finance also presents a significant risk of error and fraud.

The COVID-19 pandemic has brought renewed energy to the efforts towards digitisation, because the transport of these documents is dependent on courier services and the processing is dependent on in-person handling. Countries around the world have adopted restrictive lockdown measures which has reduced the flow of commodities and increased the necessity for the trade world to embrace digitisation. The International Chamber of Commerce (ICC) called on governments and central banks in April 2020 to take emergency measures to enable an immediate transition to paperless trading to mitigate the effect of COVID-19 related workplace restrictions.

In 2017 the ICC launched a Working Group on Digitalisation in Trade Finance to serve as a coordinating body for work related to the digitisation of trade finance. According to a survey conducted by the Working Group on the legal status of electronic bills of lading, there are three main challenges to the digitisation of trade finance:

- the development of adequate technology;
- uncertainty over the legal status of electronic trade documents; and
- coordination between stakeholders.

Technological developments

Blockchain technology (the technology that also underlies the Bitcoin Cryptocurrency) is increasingly being used to streamline trade practices and to solve the challenges posed by the over-reliance on paper-based processes. Put simply, blockchain enables transactions to be recorded on a distributed ledger across a network of users which are stored in blocks of information. This technology has a number of potential benefits in the trade finance context, including immutability; reduced transaction fees by virtue of automated contracts; improved traceability by virtue of lasting audit trails; the ability to review financial documents in real time, thereby reducing the delays in shipping; new levels of connectivity; and protecting privacy and ownership rights. There are a number of platforms currently utilising blockchain technology to offer entry into the world of digital trade, including Contour, Marco Polo and Trade Information Network. Despite the benefits of using blockchain technology, digitisation comes with its own risks as well however, including fraud, cybercrime, and a lack of interoperability between the various blockchain networks, which can impede the ability to access and share information in cases where stakeholders make use of different platforms.

The first commercially viable trade finance transaction via blockchain was carried out in November 2018 by HSBC India and ING Bank Brussels for Cargill. A letter of credit for the soybean trade between Argentina and Malaysia was executed using a single electronic bill of lading platform, and took under 24 hours to complete once the banks had shared the relevant details. A number of banks have launched, or have been involved in the development of, platforms to encourage corporations to move towards digital trade. DBS for example, in collaboration with Trafigura and the ICC, has been involved in the development of the ICC Tradeflow platform, an open-sourced blockchain trade platform.

Challenging legal environment

One of the key challenges to the digitisation of trade is the legal environment, with many jurisdictions not formally recognising electronic negotiable instruments. The challenges posed by the legal status of electronic trade documents is particularly significant in transactions for the shipment of commodities and other goods which are financed by banks. In such cases, the shipments usually require a bill of lading, which is a document of title that gives the holder specific legal rights in relation to the goods being traded. A bill of lading also serves

as evidence of the contract of carriage and as a receipt for cargo. Electronic bills of lading present a number of principle issues to banks, such as what rights and obligations the bank will have as a holder of an electronic bill of lading and when the effective date of an electronic bill of lading is.

There are a number of international conventions and model laws relevant to the electronic transfer of trade documents, but these have not been widely adopted. In fact, the UNCITRAL Model Law on Electronic Transferable Records (2017), which provides a framework for the acceptance of documents in electronic form, has only been adopted by Bahrain.

In South Africa in 2000 the Sea Transport Documents Act was promulgated, and provides that a sea transport document, which includes a bill of lading, can be transferred through the use of a telecommunication system or an electronic or other information system with the proviso that this is subject to the Minister of Transport publishing regulations which prescribe the circumstances and conditions which will apply to electronically transferred sea transport documents. Such regulations have however never been published. Although the Electronic Communications and Transactions Act 2002, which allows for the recognition and use of electronic signatures, does not specifically refer to bills of lading, the Act generally applies to any electronic transaction or data message. As a result, and without an indication to the contrary, one could reasonably infer that the use of electronic signatures in terms of the Act applies to bills of lading. A bill of lading must, however, be signed by an authorised representative from the carrier, shipper and receiver given its function to serve as a receipt for the cargo described in the bill and as evidence of the contract of carriage. This also becomes relevant when a bill of lading constitutes a document of title allowing for the transfer of ownership of goods. The Electronic Communications and Transactions Act provides that where the signature of a person is required by law and such law does not specify the type of signature, that requirement in relation to a data message is met only if an advanced electronic signature is used. However, despite such recognition, the Act does not provide legal certainty as to the transferability of rights under documents of title to the holder of the document, in cases where such documents are electronically signed and transmitted. The Act specifically exclude bills of exchange from being signed electronically.

Coordination amongst stakeholders

While the digitisation of trade finance is appealing based on the potential for reduced costs, streamlined processes, increased trade, better access to financing, and security, it is now necessary for banks and financial institutions to put in place mechanisms, and for those who have already, to ensure such mechanisms are sustainable, to ensure business continuity in a changing world. This requires coordination and cooperation between corporates, financial institutions, logistics companies, banks, insurers, chambers of commerce and policy-makers, in order to develop a set of standards for digital connectivity.

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