Virtual Roundtable

Building the digital market infrastructure for MSME supply chain finance

13/14 June 2022

ROUNDTABLE REPORT

Note: This Report reflects the views of participants as presented during the Roundtable and not necessarily the positions of the organizers.

The world today is in the midst of a digital revolution that is radically transforming society. In spite of this, however, more than half of all transactions by small retailers globally are still in cash, and for Pacific Asia that portion is more than two-thirds. This remains a big challenge as data continue to be largely underutilized. Many micro-, small and medium enterprises (MSMEs) remain daunted by security risks and unable to clearly see the potential benefits for their businesses.

While this is a big challenge, it is also an opportunity, where the financial sector can play an important role in catalyzing and accelerating MSMEs' migration from cash to digital transactions. For the financial sector to be able to play this catalytic role, the development of the digital infrastructure for financial services and the ecosystem around it needs to be accelerated.

Of particular importance is the digital market infrastructure for supply chain finance. Innovative financial technology firms are establishing partnerships with vendors, suppliers, resellers and merchants and interconnecting the entire supply chain ecosystem to drive loan origination and enhance verification. This is enabling access to large amounts of data and generating more data such as alternative credit scores that lower the costs of onboarding and lending, and help banks expand their services to MSMEs. These successful cases illustrate the huge potential of digitalizing supply chain finance for empowering all enterprises across our region.

The challenge is how to scale up these successes. There is much that needs to be done, as the data show that the benefits for MSMEs of the global supply chain finance market remain significantly untapped. There are many promising catalysts such as digital delivery, fintech innovation, industry utilities, distributed ledger technology and application programming interface. However, their uses are still often focused on multinational enterprises and their first-tier suppliers, while smaller enterprises down the chain continue to face barriers to access.

Among the various factors that limit the capacity of many institutions to offer the full range of supply chain finance products is the fragmentation of supply chain platforms and data-sharing processes in both domestic and cross-border contexts. In the context of APEC, where enabling MSMEs' wider participation in regional cross-border business is a priority, these challenges also need to be addressed with a view to future inter-operability of supply chain platforms across member economies.

The roundtable explored ways for digitalization to address these challenges. Participants discussed how cross-border data flows and new technologies are reshaping global value chains. They also focused on how regulators and policy makers could support and address challenges arising from the cross-border nature of supply chain finance.

Digitalizing Trade and Supply Chain Finance

The COVID-19 pandemic shone a light on the power of digitalization of business processes such as purchasing, inventory management, invoicing, payments, returns and dispute adjudication, even as it provided a significant impetus for the adoption of digital technology by MSMEs. In addition to providing a way to continue business operations even when a pandemic disrupts face-to-face interactions, these digital processes enable automation and produce data flows that can drive down costs and broaden access to finance. They also address the lack of trust between unfamiliar sellers and buyers by making information more available. These were illustrated by several examples of companies that have found innovative ways to deploy these technologies and in the process provide solutions to the needs of MSMEs.

- ***Air8*** is a global supply chain finance company that was spun off from the Li & Fung Group, focused on apparel and general merchandise. Technologies like distributed ledger, artificial intelligence and machine learning enable the company to penetrate through value chains, extracting data within the ecosystem that can be used to serve the needs of buyers, sellers and funders. Suppliers benefit from end-to-end supply chain financing from pre- to post-shipment, accessing the most competitive funders and insights into the supply chain to help manage working capital more efficiently. Buyers get a one-stop-shop for their supply chain financing needs that can connect their suppliers to a pool of reliable funders and is able to structure financing based on their needs. Funders get access to asset classes that have little correlation with traditional asset classes and can be tailored to suit their own risk appetite and goals.
- ***Kountable*** is a global B2B marketplace that addresses the needs of MSMEs that remain undercapitalized and underutilized due to being invisible and unmeasurable by enterprise standards. By incorporating payments and credit into its trade and technology platform, it enables qualified small businesses to be engaged as part of supply chains that offer creditworthiness, traceability and quality. It provides data to multinational corporations, governments and investors, including impact and ESG investors, that helps them find the right local partners, even in markets where data are not easily available.
- ***India Factoring and Finance Solutions Pvt. Ltd. is*** a subsidiary of Malta-based FIMBank p.l.c. specialized in providing working capital solutions through factoring. Starting out with a traditional business, the company has gone digital by introducing a platform that enables end-to-end transaction flow between buyers and sellers. Using distributed ledger technology, the platform efficiently checks the validity and authenticity of invoices, lowering the risks of fraud and the costs of its services. With a 53 percent share in India's factoring market, the company is able to offer many MSMEs the opportunity to leverage the technology for their participation in global and domestic supply chains.
- As the world's largest provider of working capital with 5 global operating centers (USA, UK, India, Australia and China), ***C2FO*** created a platform matching accounts payable with accounts receivables from highly rated corporates. This allows the company to leverage risk-free assets enabling MSMEs to access capital at a low price. As of the first quarter of 2022, it has been able to provide USD202 billion of working capital since 2010, with a customer base of 1.75 million in more than 160 economies, including women- and minority-owned businesses.
- With a network of over 10,000 companies composed of buyers, suppliers, financial institutions and technology partners, Mexican fintech company ***eFactor Network*** serves corporate buyers from 8

markets and their suppliers from 28 markets by improving payment terms and giving them access to working capital. Its digital platform provides flexibility with access to over 35 Mexican and global financial institutions, allowing clients to receive funding in multiple currencies and markets, leveraging supply chains to be able to liquefy invoices and democratize access to liquidity for MSMEs.

Among the key success factors are the following:

- Foreign exchange policies that allow access to liquidity with competitive prices for local suppliers through multi-bank and multi-currency platforms in serving global buyers.
- Legal and regulatory frameworks that recognize the validity of digital agreements.
- Mandatory digitalization of large invoices
- A wide ecosystem that enables market participants to access trade data and tools to digitalize their operations.
- Deep-tiered financing that penetrates to the lower tiers in the supply chain, such as through reverse factoring solutions and allowing MSMEs in these tiers to leverage the credit grade of anchor buyers to obtain financing at lower cost.

The use of central bank digital currencies (CBDCs) are currently being explored and tested by regulators in various markets, and may have relevant application to cross-border payments in the future. There are, however, still a number of issues around CBDCs that remain to be examined before they can be adopted.

Digitalizing and Sustainability for Distribution Chains

The experiences of various innovative firms illustrate the key building blocks of a digital ecosystem that can enable more MSMEs to fully benefit from supply chains and promote sustainability through ESG finance.

WeBank, which is China's first digital bank, currently serves over 320 million individual customers and 2.7 million MSMEs, with peak transactions reaching as high as 798 million per day. It also initiated the economy's largest blockchain open source community, with over 3,000 participating institutions from the finance, insurance, fintech, logistics, trade and other sectors. Its community of more than 70,000 developers, users and researchers leverage the platform's comprehensive technical resources to create a wide variety of blockchain applications. These range from financial services (e.g., payment, clearance, reconciliation, asset digitalization, supply chain finance, among others) and supply chain management (e.g., goods tracing and fraud prevention) to health care (e.g., digital medical record, health care management), intellectual property (e.g., patent and copyrights protection, digital documents and art franchise) and education (e.g., transcripts, educational certificates, proofs of course credits).

WeBank's collaborative ecosystem is based on open source technology that allows participants to experiment with their own technologies. It leverages four key technologies – artificial intelligence, blockchain, cloud and big data. Blockchain enables the platform to respond to ESG financing requirements such as trusted data and privacy protection, credible collaboration and incentive mechanisms and trusted governance by providing multi-party consensus, privacy protection, trust verification, incentive compatibility and full traceability. This is illustrated by two use cases.

- Carbon exchange platform on blockchain: The bank collaborated with the Green Inclusive Co. and the Beijing Environment Exchange in 2020 to launch the Green Mobility Platform powered by blockchain technology. Through this project, users are rewarded for certain green behaviors such as choosing public transportation with points that can be used to redeem discount vouchers.
- Digitalization and greening of Longjing Tea production: All the key data of the Longjing Tea Garden's operations from control to production and processing are hashed on blockchain using WeBank's blockchain technology platform to ensure data authenticity and traceability.

The case of Peru-based Trefi, the first business clearing house of its kind, provides a new approach to scaling MSME finance through electronic invoicing (e-invoicing). E-invoicing solutions help eliminate errors, reduce supplier inquiries, speed approvals, and improve compliance. It leverages the Capital Tool Company's platform that combines big data, artificial intelligence, and blockchain concepts to develop full-stack root core solutions for MSME order-to-cash, purchase-to-pay, insurance, finance, risk management, dispute resolution, and administration. The business clearing house also contributes to several of the UN Sustainable Development Goals through its operations that benefit MSMEs.

Trefi provides tools that help liquefy trade and enable financial institutions to provide financing solutions with low costs and risk. While e-invoicing has been adopted in most Latin American economies, Russia and Australia through legislation, it is furthest developed in Peru, where the legislation provided for a business clearing house that acts as the security registry of e-invoices that connects the buyer, the seller, financial institutions and the tax authority. The law mandates the clearing house to treat e-invoices equally regardless of the size of the transaction, thus placing MSMEs at the same level of priority as large companies.

The Contour Network is a global network of banks, corporates and trade partners that is digitalizing letters of credit (LCs) and creating a decentralized global trade finance network that enables seamless, secure and real-time collaboration on one common platform. It provides a solution for verifying data that enables MSMEs to leverage technology to access trade financing in a cost-effective way, and a distribution network for trade assets. It uses blockchain technology to sync individual data bases while complying with data localization requirements and connect large corporate buyers with MSME suppliers. This has resulted in time savings of up to 90 percent and has provided MSMEs a convenient way of accessing trade finance through the web with their MNC counterparties.

The foregoing examples illustrate the important role of digital infrastructure in driving down transaction costs, which benefit MSMEs. Scaling up and enabling these platforms to promote wider participation by MSMEs in global supply chains will require support from policy makers and regulators. Among the measures that could be undertaken are the following:

- Developing legal frameworks that allow electronic documents to be used in trade finance across jurisdictions.
- Digitizing invoices, which will facilitate the development of a digital ecosystem for supply chain and ESG finance through technologies such as blockchain.
- Promoting the standardization of e-invoices to ensure consistency and inter-operability across member economies' jurisdictions.

Governments can establish supporting infrastructure to assist in the efficient operations of supply chain finance, as demonstrated by the case of Peru's business clearing house. An important consideration in

the design of the infrastructure is to avoid monopolistic or oligopolistic control over the data. The open sourcing of technology in the platform is also important to promote wider participation and innovation. Ensuring data quality is key to further driving down costs.

These discussions highlight the importance of collaboration among government, market participants across industries and stakeholders providing finance and technology in building the supply chain ecosystem needed by MSMEs. An important focus of such collaboration should be the development of standards. International collaboration among governments and among the domestic market infrastructure of member economies, such as the establishment of a global chain of clearing houses, will be needed to ensure cross-border inter-operability.

Policy Considerations

The development of the digital infrastructure is an important task for policy makers and regulators. The Roundtable discussed a study by the Monetary Authority of Singapore[1] For the digital economy infrastructure to support MSMEs' effective participation in supply chains, it needs to be supported by key pillars.

- The first is a ***trusted digital ID*** that gives confidence to participants that the party they are dealing with is who they say they are. This requires mechanisms for authentication and validation of identity that are also secure and meet the requirements for privacy.
- The second is a ***framework for authorization and consent*** that enables consumers and entrepreneurs to use their data for their benefit, while also enabling these data to be used to generate information that will benefit the whole ecosystem. This mechanism should allow individuals to gain an understanding of how their data are being collected, used and shared and enable them to own, manage and control their own personal data.
- The third is ***payments inter-operability*** for digitalized transactions and operations. This includes clearing and settlement and the governance and technical components of an electronic payment system that is efficient and inter-operable within and eventually across jurisdictions.
- The fourth is ***data exchange,*** which enables individuals or businesses to make their data stored in a data provider (e.g., a financial institution) available to third parties to use for their own benefit. This enables consumers and businesses to access various services such as payments, financial planning, the creation of a digital identity, the creation of credit files, and others necessary to enable a digital economy.

Conclusions and Recommendations

While the COVID-19 pandemic – as have all major crises – significantly affected MSMEs, it has also shone a light on the powerful impact that digitalization can bring to business processes, including purchasing, inventory management, invoicing, payments, returns and dispute adjudication. In addition to providing a way for MSMEs to continue operating even when in-person transactions become impossible in times of pandemic, these digital processes enable automation and produce data flows that can drive down costs and broaden access to finance. COVID-19 also served to highlight the fact that traditional systems

[1] Monetary Authority of Singapore, *Foundational Digital Infrastructures for Inclusive Digital Economies*, https://www.mas.gov.sg/-/media/MAS/Fintech/FDI/Foundational%20Digital%20Infrastructures%20for%20Inclusive%20Digital%20Economies.pdf

underpinning trade and its financing are outdated, even if it was already clear before the pandemic that they were very unfriendly to MSMEs.

The power and potential of digitalization is particularly strong in the area of trade and supply chain finance, where deeper data penetration allows greater visibility and improves risk management. This is opening access to finance to MSMEs such as second- and third-tier suppliers, for which traditional credit underwriting have proven to be very difficult if not impossible at the earlier stages of the order-to-payment cycle. Today, automation is making it feasible to process credit transactions at lower cost, enabling smaller loan sizes to be economically viable for lenders, and low-value letters of credit to be viable for bankers. The discussions have showed how trillions of dollars in low-risk transactions can be supported by matching accounts payable to accounts receivable on digital platforms, providing new lending opportunities for both large buyers and regulated financial institutions.

Encouraging the development of e-invoicing, digital ID and e-KYC are key foundations for digital supply chain finance, along with acceptance of other digital versions of contracts, including digital signatures, and removing unnecessary requirements for paper documentation wherever possible. India and Peru provided specific examples of government-backed initiatives to create platforms building upon digital data and opening up competitive financing opportunities for smaller firms involved in both domestic and cross-border supply chains. Distributed ledger technology enables economies to retain their own systems governing trade, while providing a cross-border transparent and trusted system that enables cross-border supplier and distributor financing.

CBDCs also hold promise to make cross-border settlement quicker, more efficient and more competitive for MSMEs. While various issues around CBDCs still need to be carefully studied, regulators and policy-makers should give them due consideration. Governments and APEC as a region should also look to creating open ecosystems that encourage collaboration in responsible data sharing, and move away from supporting data silos that might offer short-term solutions, but which in the longer run could constrain competition and continued innovation. Overall, policy makers should focus on building core foundations of an open, trusted data ecosystem, and then allow the private sector to innovate on top of these rails.

Considering that trade is larger than supply chain finance, financial regulators need to coordinate with other relevant authorities to ensure that systems covering logistics, contracts, clearance and customs can talk to each other once they become digital. This is an area where APEC could serve as a platform to encourage and support efforts by member economies. It would probably not be necessary for one common standard to emerge for all these systems, but infrastructure for trusted and responsible data sharing across them is imperative to provide better access to markets and financing for MSMEs. One example is the MAS' Business Sans Borders initiative, which aims to create a foundation for connecting different economies' marketplaces.

Following are recommendations to APEC that emerged from the Roundtable discussions for the purpose of building the digital market infrastructure for MSME supply chain finance:

- Encourage the introduction of digital invoices throughout the region's economies and the establishment of the supporting infrastructure for its use in collaboration with market participants and other stakeholders providing finance and technology solutions.

- Assist member economies in accelerating the development of key pillars of the digital economy infrastructure, including a trusted digital ID system, enabling financial services data ecosystems, and inter-operable payment systems for digitalized transactions and operations.
- Facilitate regional cooperation within APEC to promote inter-operability of member economies' digital supply chain platforms, particularly through joint undertakings to develop inter-operable standards for digital invoices and legal frameworks around the use of digital documents and linkages among domestic digital market infrastructure such as business clearing houses.

ANNEX: ROUNDTABLE AGENDA (*Times displayed are Thailand Time on 14 June 2022*)

0800-0815	**OPENING SESSION** **Welcome Remarks** Mr. Veerapong Malai, Director General, Office of SMEs Promotion, Thailand **Opening Remarks** Mr. Hiroshi Nakaso, Chair, ABAC Finance and Economics Working Group; and Chairman, Daiwa Institute of Research
08:15-09:15	**PANEL 1** **DIGITALIZING TRADE AND SUPPLY CHAIN FINANCE** Moderator: Dr. Matthew Gamser, CEO, SME Finance Forum/IFC
	Mr. Alvin Ho TM, President, Air8 Mr. Christopher Hale, Founder and CEO, Kountable Mr. Ravi Valecha, Chief Executive Officer, India Factoring and Finance Solutions Ms. Basant Kaur, Managing Director and Chief Operating Officer, India, C2FO Mr. Hector de la Garza Ramos, Director General, E Factor Network
09:15-10:15	**PANEL 2** **DIGITALIZING AND SUSTAINABILITY FOR DISTRIBUTION CHAINS** Moderator: Mr. Matthew Saal, Principal Industry Specialist, IFC
	Mr. Gaurav Chaudhari, Head of Technology Collaborations (Ecosystems), WeBank.com Mr. Carl Wegner, Chief Executive Officer, Contour Mr. Rob Grimberg, CEO, Trefi
10:15-10:35	**FIRESIDE CHAT** **POLICY CONSIDERATIONS** Moderator: Dr. Matthew Gamser, CEO, SME Finance Forum/IFC
	Mr. Alan Lim, Head, FinTech Infrastructure Office, Monetary Authority of Singapore
10:35-10:45	**SUMMARY AND CLOSING** **Closing Remarks** Mr. Kobsak Duangdee, Chair, Asia-Pacific Financial Forum; ABAC Thailand Member; and Secretary General, Thai Bankers' Association